Desk Based Contaminated Land Assessment

Nursery Fields,
West Bersted

ARUN DISTRICT COUNCIL BE/87/21/OUT

Desk Based Contaminated Land Assessment

Nursery Fields, West Bersted

Client: Landform Bersted Limited

Reference: 73002B/R/001

Status: For LA Comment

Date: 8th October 2020

Prepared by:

Name Katy Allen BEng (Hons)

Signature

Title **Senior Engineer**

Checked and Approved by:

Name Ed Bullivant BSc (Hons) CGeol SiLC FGS

Signature

Title **Director**

Issued by: **Nott Group**

Unit L26
Hastingwood Industrial Park
Wood Lane
Birmingham
B24 9QP

[redacted]

This report has been prepared by Nott Group with all reasonable skill, care and diligence within the terms of the Contract with the client, incorporation of our General Terms and Condition of Business and taking account of the resources devoted to us by agreement with the client.

We disclaim any responsibility to the client and others in respect of any matters outside the scope of the above.

This report is confidential to the client and we accept no responsibility of whatsoever nature to third parties to whom this report, or any part thereof, is made known. Any such party relies on the report at its own risk.

ARUN DISTRICT COUNCIL BE/87/21/OUT

CONTENTS

EXECUTIVE SUMMARY

1. **BRIEF** **1**
   1.1 Proposed Development 1
2. **SITE DESCRIPTION AND RECONNAISSANCE** **2**
   2.1 Site Walkover 2
3. **SITE HISTORY** **3**
   3.1 Historical Summary 5
4. **GEOLOGY, HYDROLOGY AND HYDROGEOLOGY** **6**
   4.1 General Geology and Ground Conditions 6
   4.2 Radon 7
   4.3 Mining, Extraction and Natural Cavities 8
   4.4 Historical Surface Ground Working Features 9
   4.5 Historical Underground Workings Features 9
   4.6 Landfills and Waste Sites 9
5. **REVIEW OF ENVIRONMENTAL DATABASES** **10**
   5.1 Industrial Sites Holding Authorisations, Permits and Licenses 10
   5.2 Designated Environmentally Sensitive Sites 10
   5.3 Environment Agency (EA) Recorded Pollution Incidents 10
   5.4 Sites Determined as Contaminated Land Under Part2A 10
   5.5 Records of Potentially Contaminative Industrial Sites 11
   5.6 Records of Historical Potentially Contaminative Industrial Sites 11
   5.7 Records of Historical Tanks 12
   5.8 Historical Petrol, Fuel, Garage and Motor Vehicle Repair Sites 12
   5.9 Petrol and Fuel Sites 12
   5.10 Records of Potentially Infilled Ground 13
6. **DEVELOPMENT OF PRELIMINARY CONCEPTUAL MODEL** **14**
   6.1 Contaminated Land Background Information 14
   6.2 Potential Sources 14
   6.3 Potential Receptors 16
   6.4 Risk Assessment 17
   6.5 Findings of Preliminary Conceptual Model 19
7. **CONCLUSIONS AND RECOMMENDATIONS** **20**
   7.1 Contamination Assessment and Recommendations 20

APPENDICES

APPENDIX A **SITE PLANS**
APPENDIX B **HISTORICAL MAPS**
APPENDIX C **ENVIRONMENTAL DATABASES**
APPENDIX D **RISK RATING MATRIX**
APPENDIX F **ENVIRONMENTAL RECEPTORS**

ARUN DISTRICT COUNCIL BE/87/21/OUT

EXECUTIVE SUMMARY

Scope

Purpose of the report	Desk based contaminated land assessment.
Future Site End-use	The proposed development comprises the construction of residential properties with an access road. The proposals seek outline planning permission for up to 225 dwellings with all matters reserved bar access in detail.

Site Information

Grid Reference	49165, 100641	***Site Area (approx.)***	14.04 hectares
Current Site Status	The site comprises fields used for crop growing purposes and a plant nursery in the south eastern corner of the site.		
History	The historical maps indicate that from 1875 until 2020 the site has been used for agricultural purposes (crop growing). From 1940 to 1958 possible earthworks are shown in the eastern corner of the site. The southern eastern corner of the site has been used as a plant nursery from the 1940s to the present.		
Published Geology	Superficial deposits of the River Terrace Deposits (Sand and gravel, locally with lenses of silt, clay or peat.) are mapped across the entire site. The solid geology of the Lambeth Group (mainly clay, with some sands and gravels) is mapped across the majority of the site whilst White Chalk subgroup is mapped across the northern border of the site. A small amount of made ground is mapped in the eastern corner of the site by the BGS.		
Hydrogeology	The River Terrace Deposits (natural superficial geology) is classed as a Secondary A aquifer while the Lambeth Group (solid geology) is also classed as a Secondary A aquifer and the White Chalk subgroup (solid geology) is also classes as a Principal aquifer. The site is not located within a source protection zone.		
Hydrology	There are thirteen recorded on ground and underground water network entries on site and a further eighteen within 250m of the site from 2m to 229m northwest of the site. There are ten unspecified surface water features recorded within 250m of the site.		

Contamination Assessment and Recommendations

Assessment and Recommendations	The potential on-site sources of contamination identified include infilled ground associated with the possible earthworks, made ground associated with the plant nursery and activities associated with farming the land. Based upon the development of the preliminary conceptual site model, the risk of encountering contamination during development has been assessed as medium. As a result, it is recommended that prior to development a site investigation to include chemical testing of soil samples is undertaken. Due to the made and infilled ground noted a ground gas risk assessment is recommended following ground gas monitoring of installed boreholes. A geotechnical and foundation assessment should also be undertaken. Based upon the findings of the investigation the conceptual site model should be updated and remedial works undertaken if required. The findings of this report and subsequent testing and monitoring should be forwarded to the Local Authority for discussion.

ARUN DISTRICT COUNCIL BE/87/21/OUT

1. BRIEF

The Nott Group have been instructed by Landform Bersted Limited to undertake a desk based contaminated land assessment at Nursery Fields, West Bersted. A similar report has been prepared for the adjacent Plant Nursery Site.

This report has been prepared for the exclusive use of the client for assisting them in evaluating the potential risks associated with contaminated land at the site.

The information presented within this report is based upon observations made on site, a review of available historical, geological, hydrogeological sources and other environmental information obtained for the site.

The Nott Group has endeavoured to assess all information provided to them during this assessment but makes no guarantees or warranties as to the accuracy or completeness of this information obtained and reviewed.

The scope of this report does not include an assessment of the presence of asbestos containing materials within the buildings (if present) at the site or the identification of Japanese Knotweed, or other invasive species, on site.

1.1 PROPOSED DEVELOPMENT

The proposed development comprises the construction of residential properties with an access road within the eastern part to the site. The proposals seek outline planning permission for up to 225 dwellings with all matters reserved bar access in detail.

The proposed layout is shown in drawing 2, Appendix A.

ARUN DISTRICT COUNCIL BE/87/21/OUT

2. SITE DESCRIPTION AND RECONNAISSANCE

A description of the site and the surrounding area is summarised in Table 1. A site location plan is included in Appendix A - drawing No. 1.

TABLE 1: SITE DESCRIPTION AND SURROUNDS

Data	Information	
Address	Land off Chalcraft Lane, Bersted, Bognor Regis PO21 5TS (nearest postcode to site)	
Current Site Use and Description:	The site comprises fields used for crop growing purposes and a plant nursery in the south eastern part of the site.	
National Grid Reference:	491655, 100641	
Site Area:	Approximately 14.04 hectares	
Surrounding Land Use	North	Agricultural land (fields)
	East	Residential and Highway (Chalcraft Lane)
	South	Chalcraft Lane Cemetery
	West	Agricultural land (fields)

2.1 SITE WALKOVER

Ed Bullivant of the Nott Group undertook a site walkover on the 17th August 2020. The weather was warm, overcast with occasional showers. During the walkover the following issues were noted:

- The south eastern part (plant nursery) of the site has been used for the storage of construction materials and construction rubble/soil (made ground) had been spread across this part of the site. The soil in this area contained metal, wood, tiles, bricks and concrete (construction rubble).
- No geotechnical constraints were noted.

ARUN DISTRICT COUNCIL BE/87/21/OUT

3. SITE HISTORY

Historical maps dating from 1875 have been obtained and reviewed. The relevant information is summarised in the following table. The historical maps obtained have been included in Appendix B.

TABLE 2: HISTORICAL REVIEW OF SITE AND ADJACENT AREAS

Date	On Site Observations	Off Site Observations
1875 – 1876	The site is shown to be made up of several large fields. A footpath and watercourse is shown in the central part of the site.	The site is bounded to the north, east, west and south by fields and to the southeast by a series of buildings labelled 'Chalcraft Barn', an area of landscaping and a highway (present day Chalcraft Lane). Pond features are shown approximately 10m, 30m, 40m south, 230m and 470m northeast of the site. Farm buildings labelled Tinhale Barn are located approximately 250m west of the site The surrounding area is predominately agricultural land
1896-1898	No significant changes from previous mapping	An additional pond is located within the grounds of 'Chalcraft Barn' 55m from the site boundary. Farm buildings labelled 'Strouds Barn' and 'New Barn' are shown approximately 180m south and 275m northeast of the site respectively. A smithy is located approximately 340m east of the site.
1910-1912	No significant changes from previous mapping	A sheepfold is labelled within the 'Chalcraft Barn' compound east of the site. The smithy is no longer present approximately 340m northeast of the site. A brickfield is shown approximately 380m northeast of the site.
1932	No significant changes from previous mapping	A number of residential properties are now shown adjacent to the site on the north-eastern boundary. Additional brickfields are shown approximately 135m and 230m northeast of the site. Allotment gardens are labelled approximately 260m east of the site.
1938-1940	Possible earthworks are shown in the eastern corner of the site. A plant nursery is shown in the south eastern part of the site.	A nursery is shown in the area adjacent to the eastern boundary of the site. An estate comprised of residential properties is now shown approximately 75m east of the site. The sheepfold is no longer within the 'Chalcraft Barn' compound east of the site. An area adjacent to the north-eastern boundary of the site is labelled brickfields whilst the brickfields 135m and 230m northeast are absent.

ARUN DISTRICT COUNCIL BE/87/21/OUT

Date	On Site Observations	Off Site Observations
1957-1961	The unspecified earthworks are no longer shown in the eastern corner of the site indicating that they may have been infilled.	The brickfields are no longer shown adjacent to the site and 380m northeast of the site. Allotment gardens are shown approximately 315m east of the site. The pond features approximately 55m east and 230m northeast of the site are shown to have been reduced to the width of their associated watercourses indicating that they may have been partially infilled.
1974-1976	No significant changes from previous mapping	The building in the area adjacent to the eastern boundary of the site is now labelled as 'Chalcraft Farm House'. Coal yards are labelled approximately 10m and 240m northeast of the site. The pond features approximately 10m and 40m south of the site are shown to have been reduced to the width of their associated watercourses indicating that they may have been partially infilled. A fencing yard is labelled approximately 20m northeast of the site A pump house is shown approximately 110m east of the site Electricity substations are identified approximately 110m east, 190m, 225m, 315m northeast and 390m south of the site. Strouds Barn is no longer shown 180m south of the site. A garage is labelled approximately 350m northeast of the site. Additional residential development has occurred to the southeast of the site.
1979	No significant changes from previous mapping	The pond features 30m south and 470m northeast the site are shown to be absent indicating that they may have been infilled. The coal yards and fencing yard 10m, 240m and 20m northeast of the site respectively are absent. The pump house and garage 110m east and 350m northeast of the site respectively are no longer labelled. 'Chalcraft Farm', 'Charlcraft Barn' and 'New Barn' are no longer shown east, southeast and 275m northeast of the site respectively A fire station is located approximately 315m south of the site. Allotment gardens are no longer shown approximately 260m and 315m east of the site.
1993-1994	No significant changes from previous mapping	A cemetery is located in the site adjacent to the southern boundary of the site. Additional residential development has occurred in the area between the site and Chalcroft Lane to the east of the site replacing 'Chalcroft Barn'. Tinhale Barn is no longer shown 250m west of the site

ARUN DISTRICT COUNCIL BE/87/21/OUT

Date	On Site Observations	Off Site Observations
2001-2003	No significant changes from previous mapping	'No significant changes from previous mapping
2010	No significant changes from previous mapping	No significant changes from previous mapping
2020	No significant changes from previous mapping	No significant changes from previous mapping

3.1 HISTORICAL SUMMARY

The historical maps indicate that from 1875 until 2020 the site has been used for farming purposes (fields for crop growing). From 1940 to 1958 possible earthworks are shown in the eastern corner of the site. The southern eastern corner of the site has been used as a plant nursery from the 1940s to the present.

The potential on-site sources of contamination identified from the historical review are infilled ground associated with possible earthworks, farming activities and activities associated with a plant nursery.

A number of potential off-site sources of contamination have been identified within a 500m of the site and these include infilled ground (associated with the infilling of various ponds features, brickfields and earthworks), a nursery, former brickfields, a cemetery, former agricultural activities, former coal yards, a former fencing yard, a pump house, electricity substations, former allotments, a fire station, a former smithy and a garage.

ARUN DISTRICT COUNCIL BE/87/21/OUT

4. GEOLOGY, HYDROLOGY AND HYDROGEOLOGY

4.1 GENERAL GEOLOGY AND GROUND CONDITIONS

The geology beneath the site has been established from the British Geological Survey (BGS) 1: 50,000 digital geological maps of Great Britain. In addition, the hydrology and hydrogeology are summarised in the following tables.

TABLE 3: SITE GEOLOGY, HYDROLOGY AND HYDROGEOLOGY

Data	Information
Solid Geology	The Lambeth Group is mapped across the majority of the site and is described by the BGS as Vertically and laterally variable sequences mainly of clay, some silty or sandy, with some sands and gravels, minor limestones and lignites and occasional sandstone and conglomerate. White Chalk subgroup is mapped across the northern border of the site including Lewes Nodular Chalk Formation, Seaford Chalk Formation, Newhaven Chalk Formation, Culver Chalk Formation and Portsdown Chalk Formation (Undifferentiated)
Superficial Geology	The River Terrace Deposits are mapped across the entire site and is described by the BGS as Sand and gravel, locally with lenses of silt, clay or peat.
Made Ground	A small amount of Worked Ground (undivided) is mapped in the eastern corner of the site by the BGS.
Closest Surface Waters	There are thirteen recorded on ground and underground water network entries on site and a further eighteen within 250m of the site from 2m to 229m northwest of the site. There are ten unspecified surface water features recorded within 250m of the site.
Surface Water Abstractions within 1000m	There are no surface water abstractions recorded.
Groundwater Vulnerability	River Terrace Deposits (superficial geology): Secondary A aquifer Lambeth Group (solid geology): Secondary A aquifer White Chalk subgroup (solid geology): Principal aquifer
Groundwater Abstractions within 1000m	There are three groundwater abstraction license locations recorded as described below • 331m Northwest- Details: General Use Relating to Secondary Category (Medium Loss) • 796m Northwest- Spray Irrigation – Direct • 846m Northwest- Spray Irrigation – Storage/ Direct
Potable Water Abstractions within 1000m	There are no potable water abstractions recorded.
Source Protection Zones (SPZs)	The site is not located within a source protection zone.

ARUN DISTRICT COUNCIL BE/87/21/OUT

TABLE 4: SUMMARY OF HYDROGEOLOGICAL PROPERTIES OF THE MAIN GEOLOGICAL STRATA

Strata	Hydrogeological Significance	Classification (Environment Agency)
River Terrace Deposits, (superficial geology)	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers	Secondary A aquifer
Lambeth Group (solid geology)	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers	Secondary A aquifer
White Chalk subgroup (solid geology)	Geology of high intergranular and/or fracture permeability, usually providing a high level of water storage and may support water supply/river base flow on a strategic scale.	Principal aquifer

4.2 RADON

A radon report obtained from the British Geological Survey and Health Protection Agency indicates that the site is not located within a radon-affected area, as less than 1% of properties are above the action level therefore protective measures are not necessary. No further work or assessment is required in respect to radon on site.

ARUN DISTRICT COUNCIL BE/87/21/OUT

4.3 MINING, EXTRACTION AND NATURAL CAVITIES

A review of the available information obtained indicates the following in respect to mining activities, mineral extraction, natural cavities and non-coal mining cavities within 1000m of the site.

- There are no recorded natural cavities within 500m of the site.
- There are no recorded historical underground workings within 1000m of the site
- There are no recorded historical mineral planning areas recorded within 500m of the site
- There are no recorded non-coal mining areas within 1000m of the site
- There are no recorded mining cavities within 100m of the site
- There are no recorded coal mining areas on-site.
- There are no recorded brine or gypsum extraction areas on-site.
- There are no recorded tin or clay mining areas on-site

There are several British Geological Survey (BGS) minerals working features (referred to as BritPits) within 500m of the site as summarised in the table below:

TABLE 5: RECORDS OF MINERAL WORKING FEATURES

Distance	Direction	Commodity:	Details
45m	Northeast	Clay & Shale	Name: North Bersted Brick Field Address: Bersted, BOGNOR REGIS, West Sussex Status: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Type: Ceased
191m	Northeast	Clay & Shale	Name: North Bersted Brick Field Address: Bersted, BOGNOR REGIS, West Sussex Status: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Type: Ceased
280m	Northeast	Clay & Shale	Name: North Bersted Brick Field Address: Bersted, BOGNOR REGIS, West Sussex Status: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Type: Ceased
408m	South	Clay & Shale	Name: Chalcroft Lane Brick Works Address: Bersted, BOGNOR REGIS, West Sussex Status: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Type: Ceased
421m	East	Clay & Shale	Name: North Bersted Brick Field Address: Bersted, BOGNOR REGIS, West Sussex Status: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Type: Ceased

ARUN DISTRICT COUNCIL BE/87/21/OUT

4.4 HISTORICAL SURFACE GROUND WORKING FEATURES

There are several recorded historical surface ground working features within 250m of the site as summarised in the table below.

TABLE 6: RECORDS OF HISTORICAL SURFACE GROUND WORKING FEATURES

Distance	Direction	Details
0.0m	On-site	Unspecified Pit
0.0m	On-site	Brickfield
5m	South	Cemetery
32m	South	Ponds
50m	Northeast	Pond
132m	Northeast	Brickfield
132m	Northeast	Unspecified Pit
142m	East	Pond
219m	Northeast	Brickfield
240m	Northwest	Pond

4.5 HISTORICAL UNDERGROUND WORKINGS FEATURES

There are no recorded historical underground working features within 1000m of the site boundary.

4.6 LANDFILLS AND WASTE SITES

A review of the available information obtained indicates that no landfill and waste sites are located within specified distances from the site boundary as summarised below:

- There are no recorded Environmental Agency (EA) landfill sites within 1000m of the site
- There are no recorded BGS/DoE non - operational landfill sites within 1500m
- There are no recorded Local Authority landfill sites within 1500m
- There are no recorded waste treatment, transfer or disposal sites within 500m
- There are no recorded Environmental Agency (EA) waste sites within 1500m of the site
- There are no recorded Environmental Agency (EA) historic landfill sites within 1500m of the site

ARUN DISTRICT COUNCIL BE/87/21/OUT

5. REVIEW OF ENVIRONMENTAL DATABASES

Environmental information has been obtained from Groundsure. This information comprises data provided by the British Geological Survey, Environment Agency, Health Protection Agency and the Coal Authority and has been reviewed and summarised below. A full copy of this report has been enclosed in Appendix C.

5.1 INDUSTRIAL SITES HOLDING AUTHORISATIONS, PERMITS AND LICENSES

Information obtained from the Environment Agency and Local Authority indicates there are no records of Part A(1) and IPPC Authorised Activities within 500m of the site.

5.2 DESIGNATED ENVIRONMENTALLY SENSITIVE SITES

The following designated sites have been identified within 500m of the site boundary as summarised in the following table.

TABLE 7: RECORDS OF DESIGNATED ENVIRONMENTALLY SENSITIVE SITES

Distance	Direction	Details
0.0m	On-site	Aldingbourne Rife Nitrate vulnerable zone (NVZ)
0.0m	On-site	SSSI Impact Risk Zone

5.3 ENVIRONMENT AGENCY (EA) RECORDED POLLUTION INCIDENTS

There is a single recorded EA pollution incident within 250m of the site as summarised the following table.

TABLE 8: RECORDS OF ENVIRONMENT AGENCY POLLUTION INCIDENTS

Distance	Direction	Details
59m	Northeast	Incident Date: 19/09/ Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Other Atmospheric Pollutant or Effect Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)

5.4 SITES DETERMINED AS CONTAMINATED LAND UNDER PART2A

No designated contaminated sites have been identified within 500m of the site.

ARUN DISTRICT COUNCIL BE/87/21/OUT

5.5 RECORDS OF POTENTIALLY CONTAMINATIVE INDUSTRIAL SITES

There are several recorded potentially contaminative industrial sites within 250m of the site as summarised the following table.

TABLE 9: RECORDS OF POTENTIALLY CONTAMINATIVE INDUSTRIAL SITES

Distance	Direction	Details
3m	Northeast	Mast (Telecommunication)
19m	East	Vehicle Repair, Testing and Servicing
23m	East	Gas Governor Station
40m	Northeast	Motoring (New Vehicles)
59m	South	Transport, Storage and Delivery (Distribution and Haulage)
74m	East	Consumer Products (Jewellery, Gems, Clocks and Watches)
114m	Southeast	Electricity substation
115m	Southeast	Water Pumping Stations
176m	East	Electricity substation
181m	South	Electricity substation
187m	Northeast	Electricity substation
206m	Southeast	Construction Services (Building and Component Suppliers)
218m	Northeast	Electricity substation

5.6 RECORDS OF HISTORICAL POTENTIALLY CONTAMINATIVE INDUSTRIAL SITES

There are several recorded sites with a potentially contaminative past land use within a 500m radius of the site as summarised the following table.

TABLE 10: RECORDS OF HISTORICAL POTENTIALLY CONTAMINATIVE INDUSTRIAL SITES

Distance	Direction	Details
0.0m	Onsite	Brickfield
0.0m	Onsite	Nursery
2m	East	Nursery
5m	South	Cemetery
132m	Northeast	Brickfield
219m	Northeast	Brickfield
250m	South	Fire Station
332m	East	Smithy
377m	East	Brickfield
381m	East	Unspecified Pit
450m	East	Brickfield

5.7 RECORDS OF HISTORICAL TANKS

There are no recorded historical tank features within a 500m radius of the site.

5.8 HISTORICAL PETROL, FUEL, GARAGE AND MOTOR VEHICLE REPAIR SITES

There are two recorded historical petrol, fuel, garage and motor vehicle repair sites within a 500m radius of the site as summarised in the following table.

TABLE 11: RECORDS OF HISTORICAL GARAGE SITES

Distance	Direction	Details
304m-305m	Northeast	Filling station
313m	Northeast	Garage

5.9 PETROL AND FUEL SITES

There is a single recorded petrol or fuel site recorded within a 500m radius of the site as summarised in the following table.

TABLE 12: RECORDS OF PETROL STATIONS

Distance	Direction	Details
350m	Northeast	Company:Esso Address: 449, Chichester Road, Brazwick Avenue, North Bersted, Bognor Regis, West Sussex, PO21 5DS LPG: No Status: Open

ARUN DISTRICT COUNCIL BE/87/21/OUT

5.10 RECORDS OF POTENTIALLY INFILLED GROUND

The following historical potentially infilled features have been identified within 500m of the site as summarised in the following table.

TABLE 13: RECORDS OF HISTORICAL POTENTIALLY INFILLED FEATURES

Distance	Direction	Details
0.0m	Onsite	Brickfield
32m	South	Ponds
50m	Northeast	Pond
132m	Northeast	Brickfield
142m	East	Pond
219m	Northeast	Brickfield
240m	Northwest	Pond
377m	East	Brickfield
381m	East	Unspecified Pit
450m	East	Brickfield

ARUN DISTRICT COUNCIL BE/87/21/OUT

6. DEVELOPMENT OF PRELIMINARY CONCEPTUAL MODEL

6.1 CONTAMINATED LAND BACKGROUND INFORMATION

The Environmental Protection Act 1990 Part IIA, as amended, provides a statutory definition of contaminated land. To fall within this definition, it is necessary that, as a result of the condition of the land, substances may be present in, on or under the land such that:

(a) Significant harm is being caused or there is a significant possibility of such harm being caused; or

(b) Significant pollution of controlled waters is being caused or there is a significant possibility of such pollution being caused.

Risk from contamination is assessed by consideration of possible linkages between contaminant sources and potential receptors via pathways, which is usually termed a conceptual model.

6.2 POTENTIAL SOURCES

TABLE 14: POTENTIAL CONTAMINATION SOURCES AT OR ADJACENT TO THE SUBJECT SITE

Source	Location	Activity	Potential Contaminants
On-Site			
Infilled ground	Eastern part of the site	Associated with the infilling of earthworks feature with unknown materials	Gas, hydrocarbons, metals and leachate
Made ground	In south eastern part associated with plant nursery activities	Storage of soil and other construction material	Gas, hydrocarbons, metals and leachate
Farming activities	Fields used for crop growing	Use of chemicals	Pesticides and herbicides
Off-Site			
Infilled ground	Various locations from adjacent to the site to 470m northeast of the site	Infilling of various ponds features brickfields and earthworks	Gas, hydrocarbons, metals and leachate
Plant Nursery	East of the site	Associated with Chalcraft Nursery	Metals, inorganic chemicals, asbestos, pesticides and hydrocarbons
Brickfields	Various locations from adjacent to the site to 380m northeast of the site	Former brickfields	Metals, inorganic chemicals and hydrocarbons
Cemetery	South of the site	Cemetery	

ARUN DISTRICT COUNCIL BE/87/21/OUT

Source	Location	Activity	Potential Contaminants
Agricultural activities	Various locations from adjacent to the site to 275m northeast of the site	Former agricultural activities Associated with Chalcraft Farm, Strouds Barn and New Barn.	Metals, inorganic chemicals, asbestos, pesticides and hydrocarbons
Telecommunication	3m northeast of the site	Telecommunications Mast	Metals, inorganic chemicals, asbestos, PCBs and hydrocarbons
Coal yard	10m and 240m northeast of the site	Former coal yards	Metals, inorganic chemicals, VOCs, SVOCs and hydrocarbons
Repair and Servicing	19m east of the site	Vehicle repair, testing and servicing	Oils and hydrocarbons
Gas governor station	23m east of the site	Gas Governor Station	Metals, inorganic chemicals, asbestos and hydrocarbons
Fencing yard	20m northeast of the site	A former fencing yard	Metals, inorganic chemicals, VOCs, SVOCs and hydrocarbons
Motoring	40m northeast of the site	New vehicles	Oils and hydrocarbons
Transport, storage and delivery	59m northeast of the site	Distribution and haulage	Oils and hydrocarbons
EA pollution incident	59m northeast of the site	Pollutant: atmospheric pollutants and effects	Atmospheric pollutants and effects
Consumer products	74m east of the site	Jewellery, gems, clocks and watches	
Electricity substations	Various locations from 110m east to 390m south of the site	Electricity substations	Metals, inorganic chemicals, asbestos, PCBs and hydrocarbons
Construction services	206m southeast of the site	Building and component suppliers	Metals, inorganic chemicals, VOCs, SVOCs and hydrocarbons
Former allotments	260m and 315m east of the site	Former allotments	Metals, inorganic chemicals, asbestos, pesticides and hydrocarbons
Fire station	315m south of the site	A fire station	
Garages	Various locations from 304m to 350m northeast of the site	Former and existing garages and filling stations.	Oils and hydrocarbons
Former smithy	340m east of the site	Former smithy	Metals, inorganic chemicals and hydrocarbons

ARUN DISTRICT COUNCIL BE/87/21/OUT

6.3 POTENTIAL RECEPTORS

Receptors that are required to be considered under Part IIA of the Environmental Protection Act 1990 are summarised in Appendix D.

The potential environmental receptors identified during this study are summarised in the following table.

TABLE 15: POTENTIAL RECEPTORS IDENTIFIED FOR THE SITE AND SURROUNDING AREAS

Category	Receptor	Location	Comments
Humans	Existing site users	On-site	Site is occupied by fields
	Site end users	On-site	Residential - areas of the site will have new garden and landscaped areas (potential future receptor)
	Construction workers	On-site	Identified receptor
Property (materials)	Site structures and buildings	On-site	Primarily foundations and services (proposed)
Property (crops)	None Identified		
Ecological systems	None Identified		
Controlled waters	Secondary A aquifer	Under the site	Superficial Geology – River Terrace Deposits
	Secondary A aquifer	Under the site	Solid Geology – Lambeth Group
	Principal aquifer	Under the site (north)	Solid Geology – White Chalk subgroup.
	Detailed river network entries	Various locations from onsite to 229m northwest of the site	Recorded on ground and underground water network entries
	Unspecified surface water features	Within 250m of the site	

ARUN DISTRICT COUNCIL BE/87/21/OUT

6.4 RISK ASSESSMENT

The risk of significant harm or pollution of controlled waters has been assessed qualitatively as low, medium or high using the criteria shown in Appendix E.

A risk estimation matrix for all pollutant linkages identified is shown below.

TABLE 16: PRELIMINARY CONTAMINATION RISK ASSESSMENT

Receptor	Sources	Risk	Justification
Human Heath			
Existing site users	On-site: infilled ground, made ground and farming activities	Low	No source or feasible human health receptor identified
	Off-site: infilled ground, nursery, brickfields, cemetery, agricultural activities, telecommunication, coal yard, repair and servicing, gas governor station, fencing yard, motoring, transport, storage and delivery, EA pollution incident, consumer products, pump house, electricity substations, construction services, former allotments, fire station, garages, former smithy	Low	No feasible human health receptor identified
Future site users	On-site: infilled ground, made ground and farming activities	Medium	Further work warranted to confirm risk
	Off-site: infilled ground, nursery, brickfields, cemetery, agricultural activities, telecommunication, coal yard, repair and servicing, gas governor station, fencing yard, motoring, transport, storage and delivery, EA pollution incident, consumer products, pump house, electricity substations, construction services, former allotments, fire station, garages, former smithy	Low	Further work warranted to confirm low risk. Gas migration unlikely but clay geology needs confirming along with low risk rating.
Construction workers	On-site: infilled ground, made ground and farming activities	Medium	Further work warranted to confirm low risk
	Off-site: infilled ground, nursery, brickfields, cemetery, agricultural activities, telecommunication, coal yard, repair and servicing, gas governor station, fencing yard, motoring, transport, storage and delivery, EA pollution incident, consumer products, pump house, electricity substations, construction services, former allotments, fire station, garages, former smithy	Low	Further work warranted to confirm low risk

ARUN DISTRICT COUNCIL BE/87/21/OUT

Receptor	Sources	Risk	Justification
Property			
Site structures (dangerous gas migration)	On-site: infilled ground, made ground and farming activities	Low	Further work warranted to confirm low risk. Gas migration unlikely but gas monitoring recommended,
Site structures (concrete structures)	Concrete aggressive ground conditions	Low	Further work warranted to confirm low risk
Potable water plastic pipes	Hydrocarbon contamination	Low	Further work warranted to confirm low risk
Controlled Waters			
Secondary A aquifer	On-site: infilled ground, made ground and farming activities	Low	Further work warranted to confirm low risk
	Off-site: infilled ground, nursery, brickfields, cemetery, agricultural activities, telecommunication, coal yard, repair and servicing, gas governor station, fencing yard, motoring, transport, storage and delivery, EA pollution incident, consumer products, pump house, electricity substations, construction services, former allotments, fire station, garages, former smithy	Low	Further work warranted to confirm low risk
Secondary A aquifer	On-site: infilled ground, made ground and farming activities	Low	Further work warranted to confirm low risk
	Off-site: infilled ground, nursery, brickfields, cemetery, agricultural activities, telecommunication, coal yard, repair and servicing, gas governor station, fencing yard, motoring, transport, storage and delivery, EA pollution incident, consumer products, pump house, electricity substations, construction services, former allotments, fire station, garages, former smithy	Low	Further work warranted to confirm low risk

ARUN DISTRICT COUNCIL BE/87/21/OUT

Receptor	Sources	Risk	Justification
Principal Aquifer	On-site: infilled ground, made ground and farming activities	Low	Further work warranted to confirm low risk
	Off-site: infilled ground, nursery, brickfields, cemetery, agricultural activities, telecommunication, coal yard, repair and servicing, gas governor station, fencing yard, motoring, transport, storage and delivery, EA pollution incident, consumer products, pump house, electricity substations, construction services, former allotments, fire station, garages, former smithy	Low	Further work warranted to confirm low risk
Recorded on ground and underground water network entries	On-site: infilled ground, made ground and farming activities	Low	Further work warranted to confirm low risk
	Off-site: infilled ground, nursery, brickfields, cemetery, agricultural activities, telecommunication, coal yard, repair and servicing, gas governor station, fencing yard, motoring, transport, storage and delivery, EA pollution incident, consumer products, pump house, electricity substations, construction services, former allotments, fire station, garages, former smithy	Low	Further work warranted to confirm low risk
Unspecified surface water features	On-site: infilled ground, made ground and farming activities	Low	Further work warranted to confirm low risk
	Off-site: infilled ground, nursery, brickfields, cemetery, agricultural activities, telecommunication, coal yard, repair and servicing, gas governor station, fencing yard, motoring, transport, storage and delivery, EA pollution incident, consumer products, pump house, electricity substations, construction services, former allotments, fire station, garages, former smithy	Low	Further work warranted to confirm low risk

6.5 FINDINGS OF PRELIMINARY CONCEPTUAL MODEL

Based upon the development of the preliminary conceptual site model, the risk of encountering contamination during development has been assessed as medium. As a result, it is recommended that prior to development a site investigation to include chemical testing of soil samples is undertaken. Due to the made and infilled ground noted a ground gas risk assessment is recommended following ground gas monitoring of installed boreholes. Based upon the findings of the investigation the conceptual site model should be updated and remedial works undertaken if required.

ARUN DISTRICT COUNCIL BE/87/21/OUT

7. CONCLUSIONS AND RECOMMENDATIONS

The Nott Group have been instructed by Landform Bersted Limited to undertake a desk based contaminated land assessment at Nursery Fields, West Bersted.

The Nott Group has undertaken a review of available information obtained for the above site. A conceptual model for the site in accordance with the current Contaminated Land Legislation has been developed with the following conclusions and recommendations.

7.1 CONTAMINATION ASSESSMENT AND RECOMMENDATIONS

The historical maps indicate that from 1875 until 2020 the site comprised fields used for crop growing purposes. From 1940 to 1958 possible earthworks are shown in the eastern corner of the site. From the 1940s to the present a plant nursery is shown in the south eastern part of the site.

The potential on-site sources of contamination identified include infilled ground associated with the possible earthworks, made ground associated with the plant nursery and activities associated with farming the land.

A number of potential off-site sources of contamination have been identified within a 500m of the site and these include infilled ground (associated with the infilling of various ponds features, brickfields and earthworks),a nursery, brickfields, a cemetery, agricultural activities, a telecommunication mast, coal yards, vehicle repair and servicing, a gas governor station, a fencing yard, motoring, transport, storage and delivery, an EA pollution incident, consumer products, a pump house, electricity substations, construction services, former allotments, a fire station, garages and a former smithy.

Based upon the development of the preliminary conceptual site model, the risk of encountering contamination during development has been assessed as medium. As a result, it is recommended that prior to development a site investigation to include chemical testing of soil samples is undertaken. Due to the made and infilled ground noted a ground gas risk assessment is recommended. A geotechnical and foundation assessment should also be undertaken.

Based upon the findings of the investigation the conceptual site model should be updated and remedial works undertaken if required.

The findings of this report and subsequent testing and monitoring should be forwarded to the Local Authority for discussion.

ARUN DISTRICT COUNCIL BE/87/21/OUT

Glossary

For the purpose of this report the following terms and definitions apply (see BS 10175:2001).

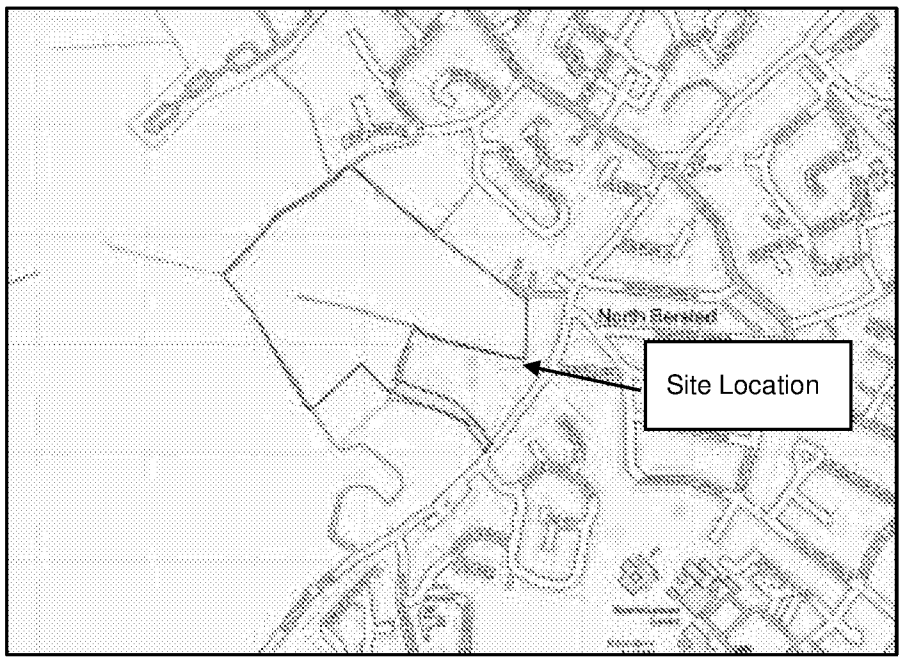
Accuracy	Level of agreement between true value and observed value.
Conceptual model	Textual and or schematic hypothesis of the nature and sources of contamination, potential migration pathways (including description of the ground and groundwater) and potential receptors, developed on the base of the information from the preliminary investigation and refined during subsequent phases of investigation and which is an essential part of the risk assessment process. **Note 1:** The conceptual model is initially derived from the information obtained by the preliminary investigation. This conceptual model is used to focus subsequent investigations, where these are considered to be necessary, in order to meet the objectives of the investigations and the risk assessment. The results of the field investigation can provide additional data that can be used to further refine the conceptual model.
Contamination	Presence of a substance which is in, on or under land, and which has the potential to cause significant harm or to cause significant pollution of controlled water. **Note 1:** There is no assumption in this definition that harm results from the presence of the contamination. **Note 2:** Naturally enhanced concentrations of harmful substances can fall within this definition of contamination. **Note 3:** Contamination may relate to soils, groundwater or ground gas.
Controlled water	Inland freshwater (any lake, pond or watercourse above the freshwater limit), water contained in underground strata and any coastal water between the limit of highest tide or the freshwater line to the three-mile limit of territorial waters. **Note 1:** See Section 104 of The Water Resources Act 1991.
Harm	Adverse effect on the health of living organisms, or other interference with ecological systems of which they form part, and, in the case humans, including property.
Hazard	Inherently dangerous quality of a substance, procedure or event.
Pathway	Mechanism or route by which a contaminant comes into contact with, or otherwise affects, a receptor.
Precision	Level of agreement within a series of measurements of a parameter.
Receptor	Persons, living organisms, ecological systems, controlled water, atmosphere, structures and utilities that could be adversely affected by the contaminant(s).
Risk	Probability of the occurrence of, and magnitude of the consequences of, an unwanted adverse effect on a receptor.
Risk assessment	Process of establishing, to the extent possible, the existence, nature and significance of risk.
Sampling	Methods and techniques used to obtain a representative sample of the material under investigation.
Soil	Upper layer of the earth's crust composed of mineral parts, organic substance, water, air and living matter. **Note 1:** In accordance with BS 10175:2001 the term soil has the meaning ascribed to it through general use in civil engineering and includes topsoil and subsoil; deposits such as clays, silt, sand, gravel, cobbles, boulders and organic deposits such as peat; and material of natural or human origin (e.g. fills and deposited wastes). The term embraces all components of soil, including mineral matter, organic matter, soil gas and moisture, and living organisms.
Source	Location from which contamination is, or was, derived. **Note 1:** This could be the location of the highest soil or groundwater concentration of the contaminant(s).
Uncertainty	Parameter, associated with the result of a measurement that characterizes the dispersion of the values that could reasonably be attributed to the measurement.

ARUN DISTRICT COUNCIL BE/87/21/OUT

Appendix A Site Plans

Drawing 1 – Site Location Plan

Not to scale



Drawing 2 – Proposed Layout – on separate sheet



N

Do Not Scale

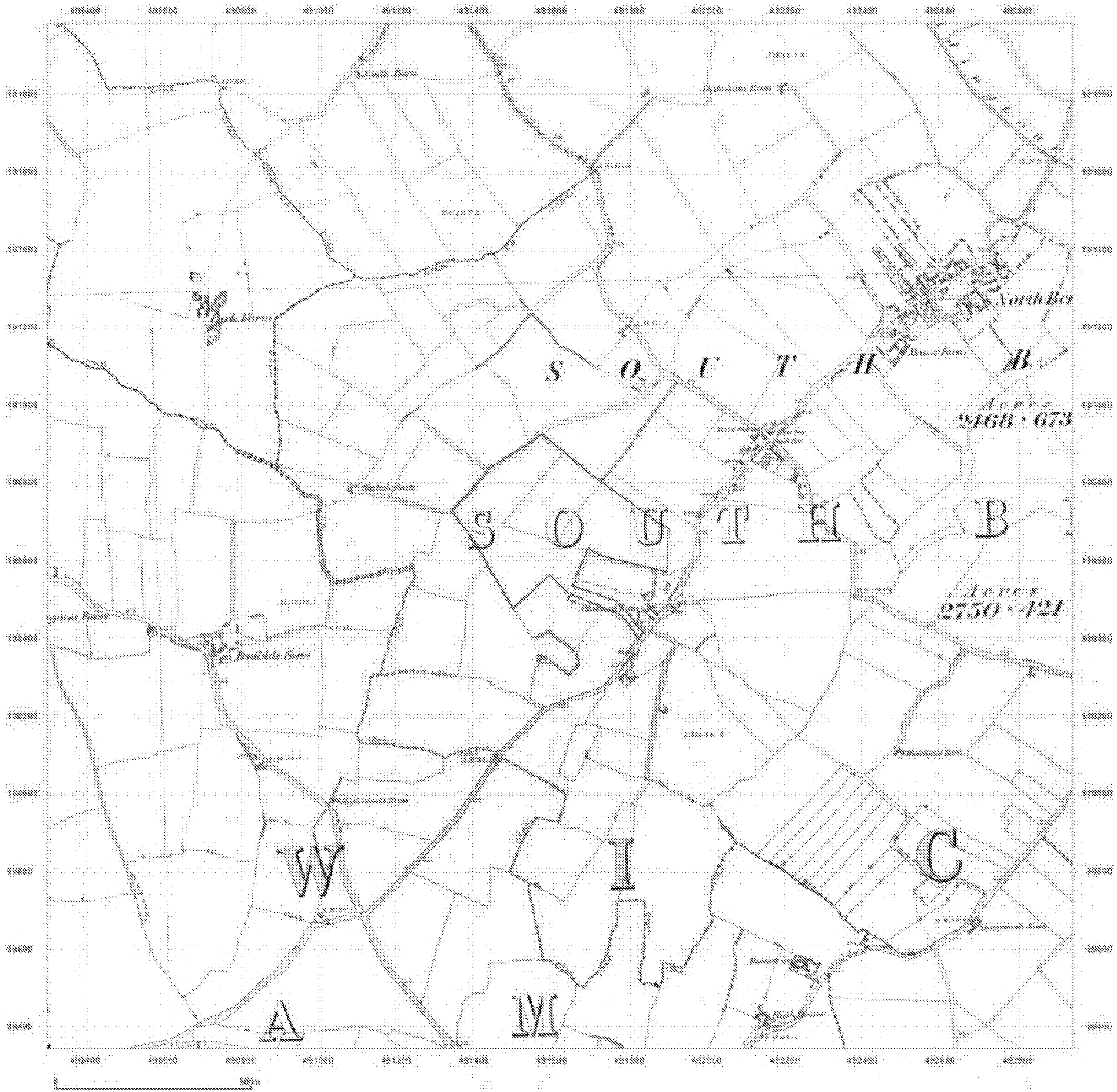
NottGroup

Title:	**Appendix A – Proposed Development**
Project Name:	**Nursery Fields**
Client:	**Landform Bersted Limited**
Project No: **72302**	Date: **10/09/2020** Drawing No **2**

ARUN DISTRICT COUNCIL BE/87/21/OUT

Appendix B Historical Maps

ARUN DISTRICT COUNCIL BE/87/21/OUT



F!ND
PROFESSIONAL MAPPING INTELLIGENCE

Site Details:

Client Ref: West Bersted
Report Ref: FIND-65962
Grid Ref: 491621, 100664

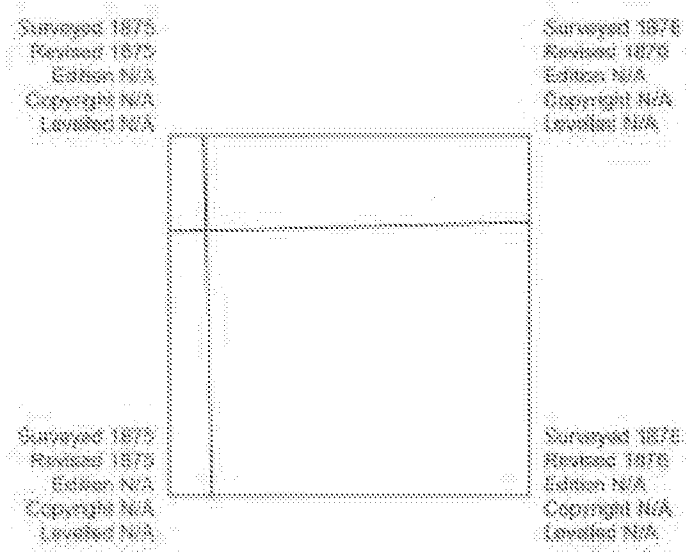
Map Name: County Series

Map date: **1875-1876**

Scale: 1:10,560

Printed at: 1:10,560

N
W E
S



Groundsure

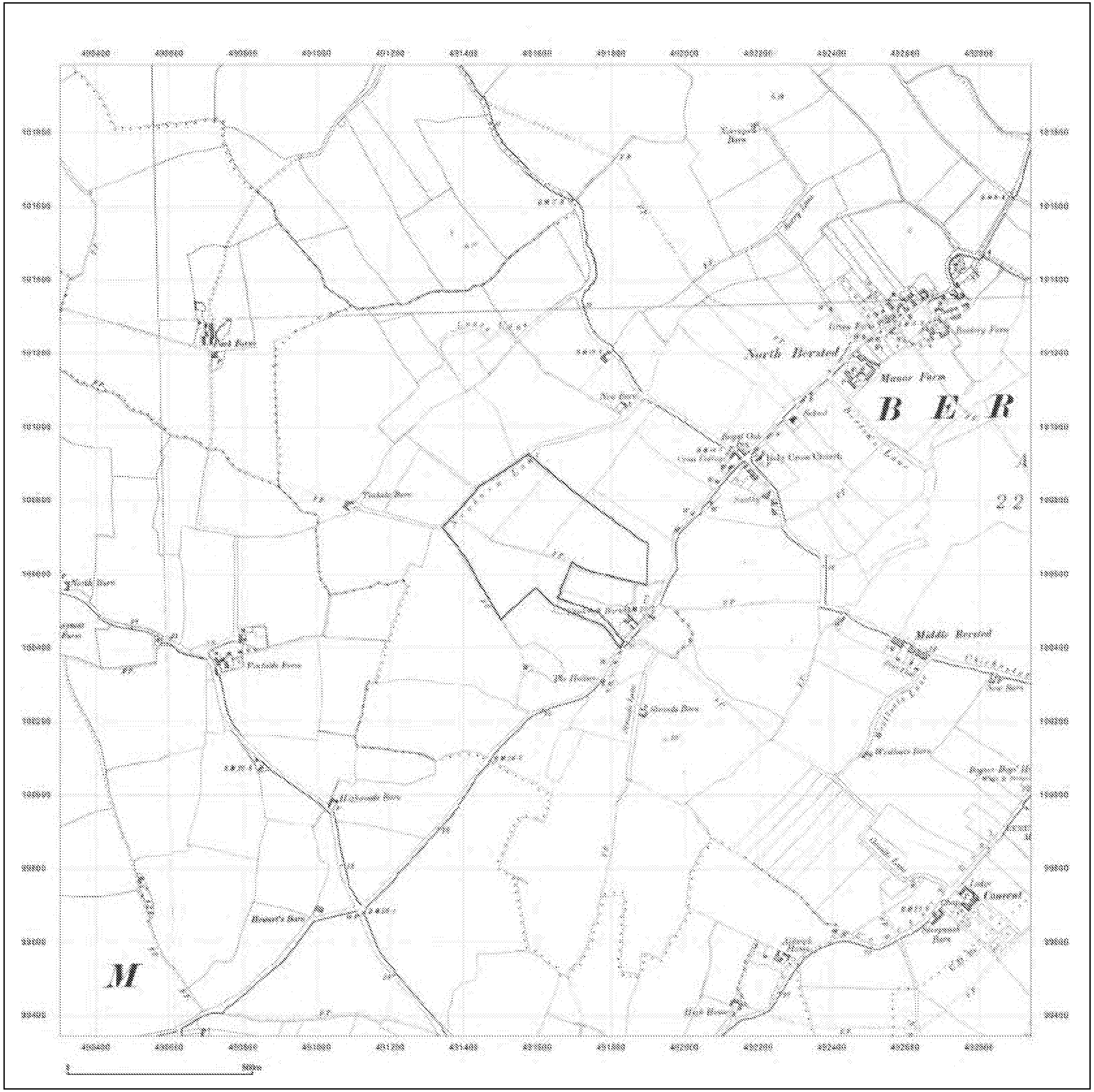
Produced by
Groundsure Insights
www.groundsure.com
Supplied by:
www.findmaps.co.uk
support@findmaps.co.uk
Tel: 0845 521 1410

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 September 2020

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

ARUN DISTRICT COUNCIL BE/87/21/OUT



FIND
PROFESSIONAL MAPPING INTELLIGENCE

Site Details:

Client Ref: West Bersted
Report Ref: FIND-65962
Grid Ref: 491621, 100664

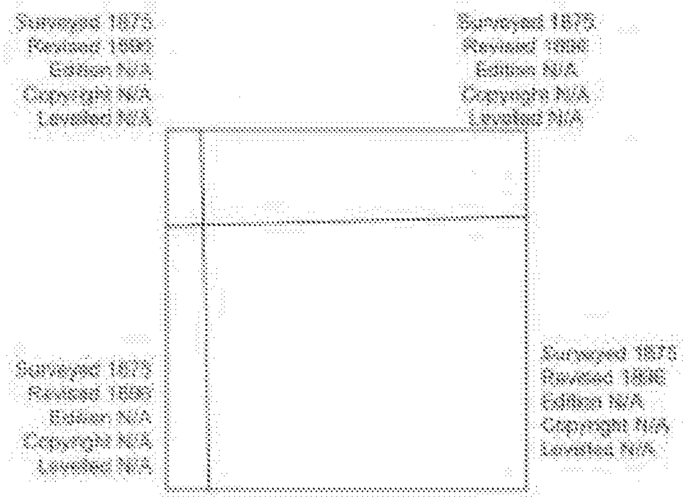
Map Name: County Series

Map date: **1896**

Scale: 1:10,560

Printed at: 1:10,560

N
W E
S



Groundsure

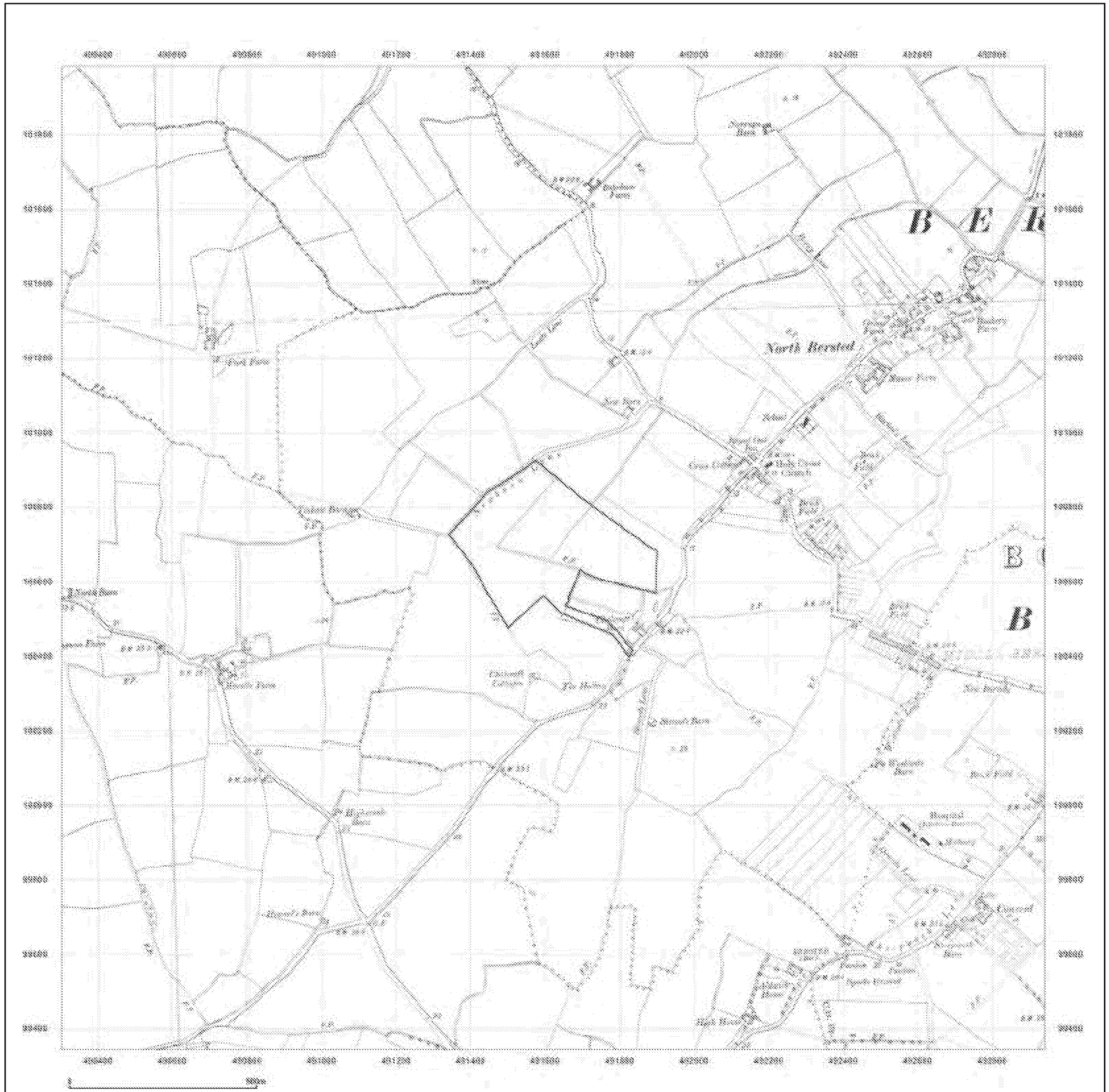
Produced by
Groundsure Insights
www.groundsure.com
Supplied by:
www.findmaps.co.uk
support@findmaps.co.uk
Tel: 0845 521 1410

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 September 2020

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

ARUN DISTRICT COUNCIL BE/87/21/OUT



FIND
PROFESSIONAL MAPPING INTELLIGENCE

Site Details:

Client Ref: West Bersted
Report Ref: FIND-65962
Grid Ref: 491621, 100664

Map Name: County Series

Map date: **1909-1910**

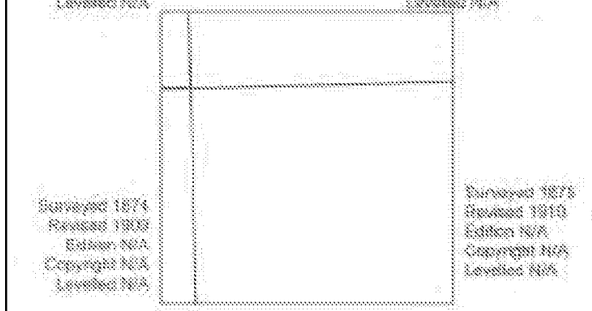
Scale: 1:10,560

Printed at: 1:10,560

N
W E
S

Surveyed 1874
Revised 1909
Edition N/A
Copyright N/A
Levelled N/A

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



Surveyed 1874
Revised 1909
Edition N/A
Copyright N/A
Levelled N/A

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

Groundsure Insights

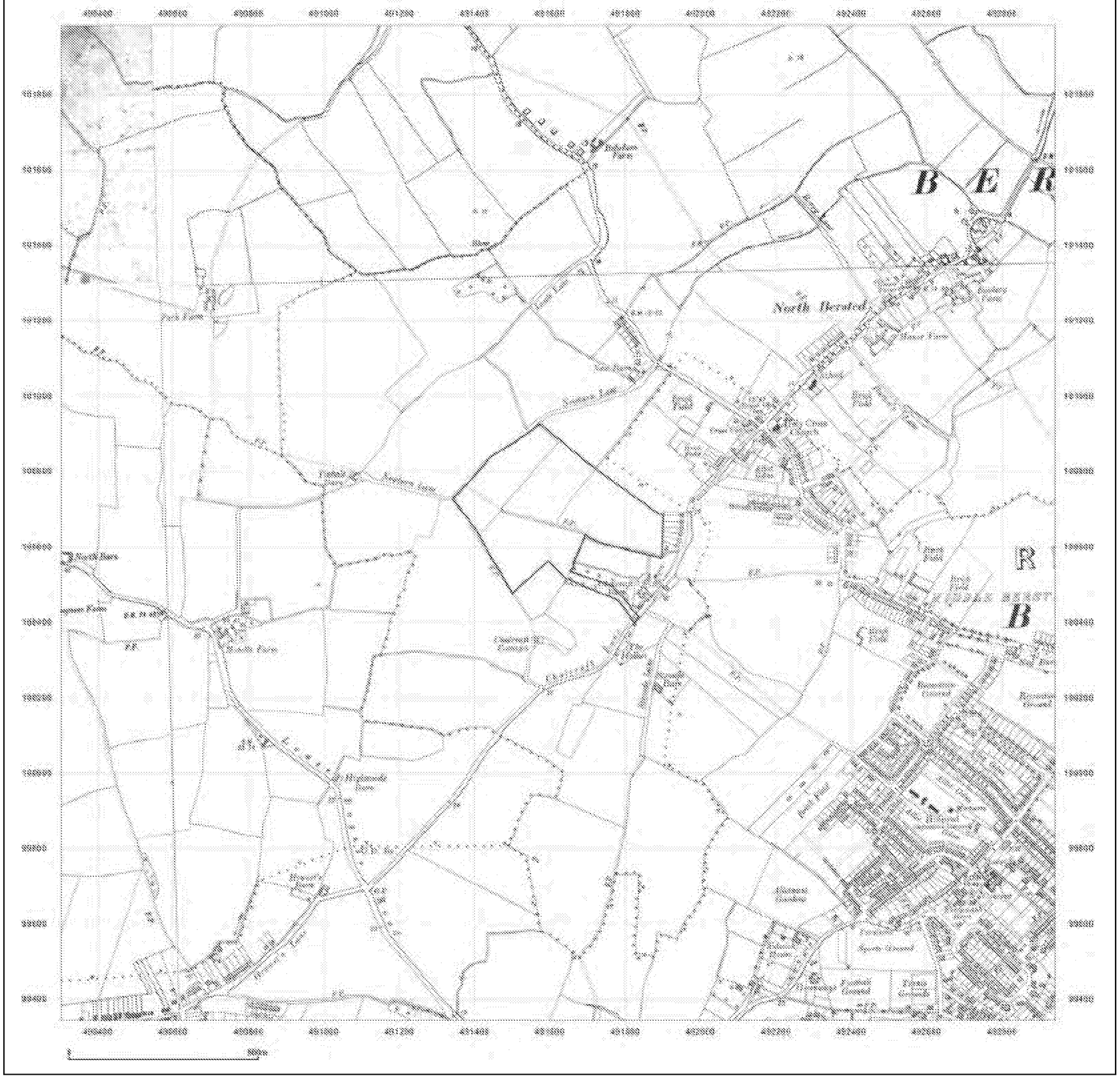
Produced by
Groundsure Insights
www.groundsure.com
Supplied by:
www.findmaps.co.uk
support@findmaps.co.uk
Tel: 0845 521 1410

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 September 2020

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

ARUN DISTRICT COUNCIL BE/87/21/OUT



FIND
PROFESSIONAL MAPPING INTELLIGENCE

Site Details:

Client Ref: West Bersted
Report Ref: FIND-65962
Grid Ref: 491621, 100664

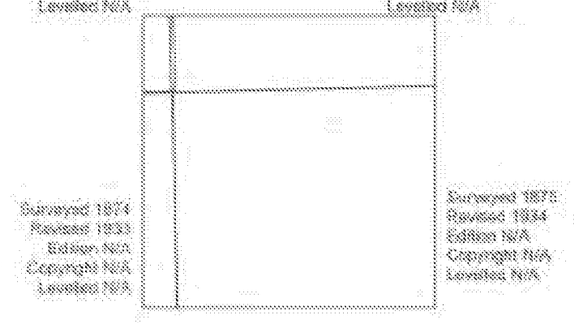
Map Name: County Series

Map date: **1933-1938**

Scale: 1:10,560

Printed at: 1:10,560

N
W E
S



Groundsure Insights

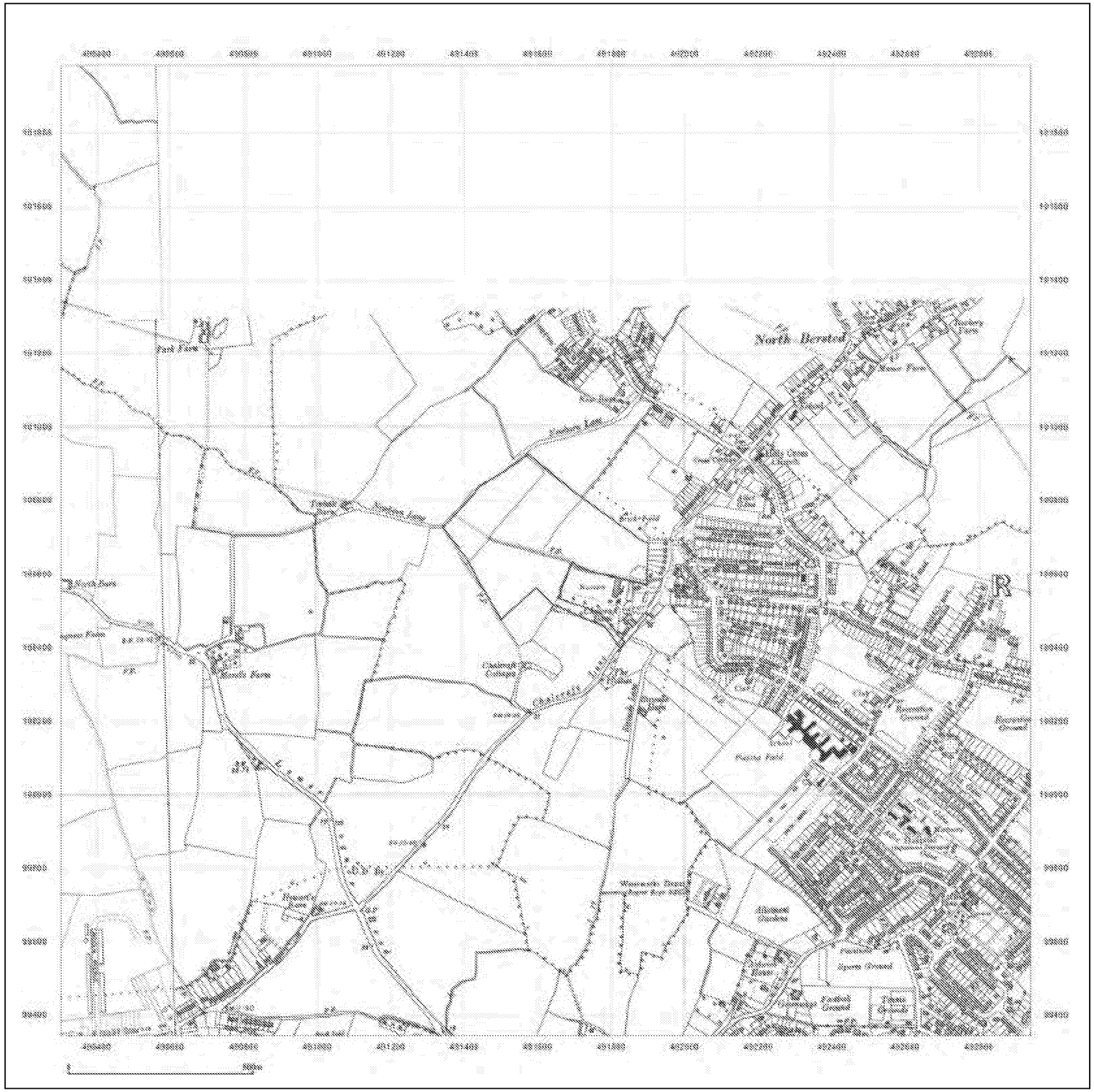
Produced by
Groundsure Insights
www.groundsure.com
Supplied by:
www.findmaps.co.uk
support@findmaps.co.uk
Tel: 0845 521 1410

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 September 2020

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

ARUN DISTRICT COUNCIL BE/87/21/OUT



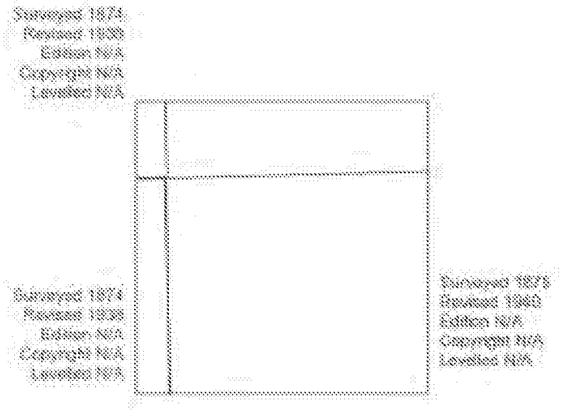
FIND
PROFESSIONAL MAPPING INTELLIGENCE

Site Details:

Client Ref: West Bersted
Report Ref: FIND-65962
Grid Ref: 491621, 100664

Map Name: County Series
Map date: **1938-1940**
Scale: 1:10,560
Printed at: 1:10,560

N
W E
S



Groundsure

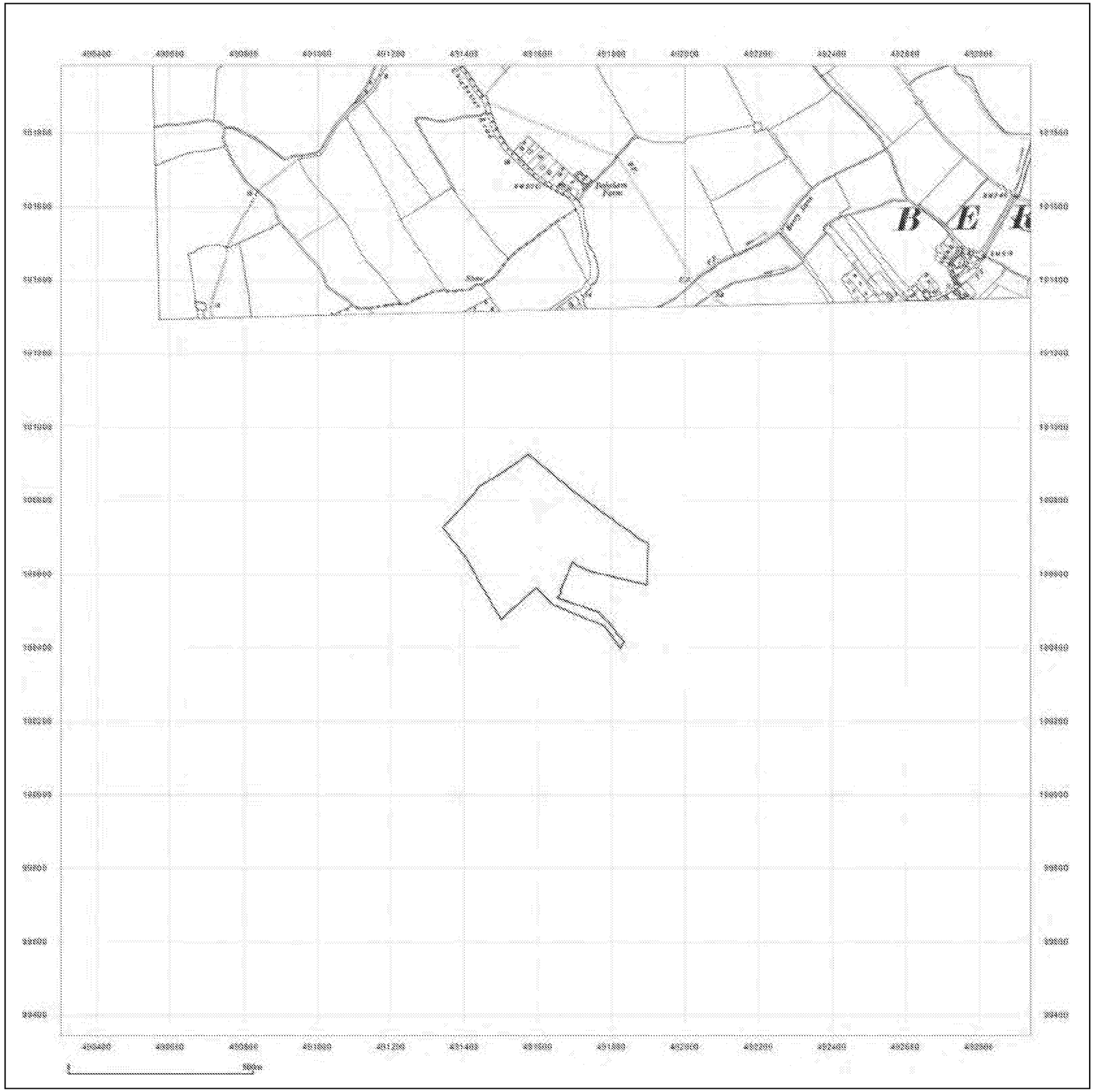
Produced by
Groundsure Insights
www.groundsure.com
Supplied by:
www.findmaps.co.uk
support@findmaps.co.uk
Tel: 0845 521 1410

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 September 2020

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

ARUN DISTRICT COUNCIL BE/87/21/OUT



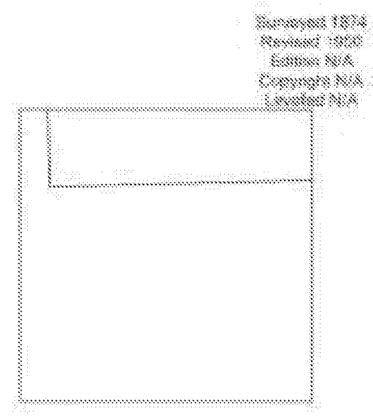
FIND
PROFESSIONAL MAPPING INTELLIGENCE

Site Details:

Client Ref: West Bersted
Report Ref: FIND-65962
Grid Ref: 491621, 100664

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

N
W E
S



Groundsure Insights

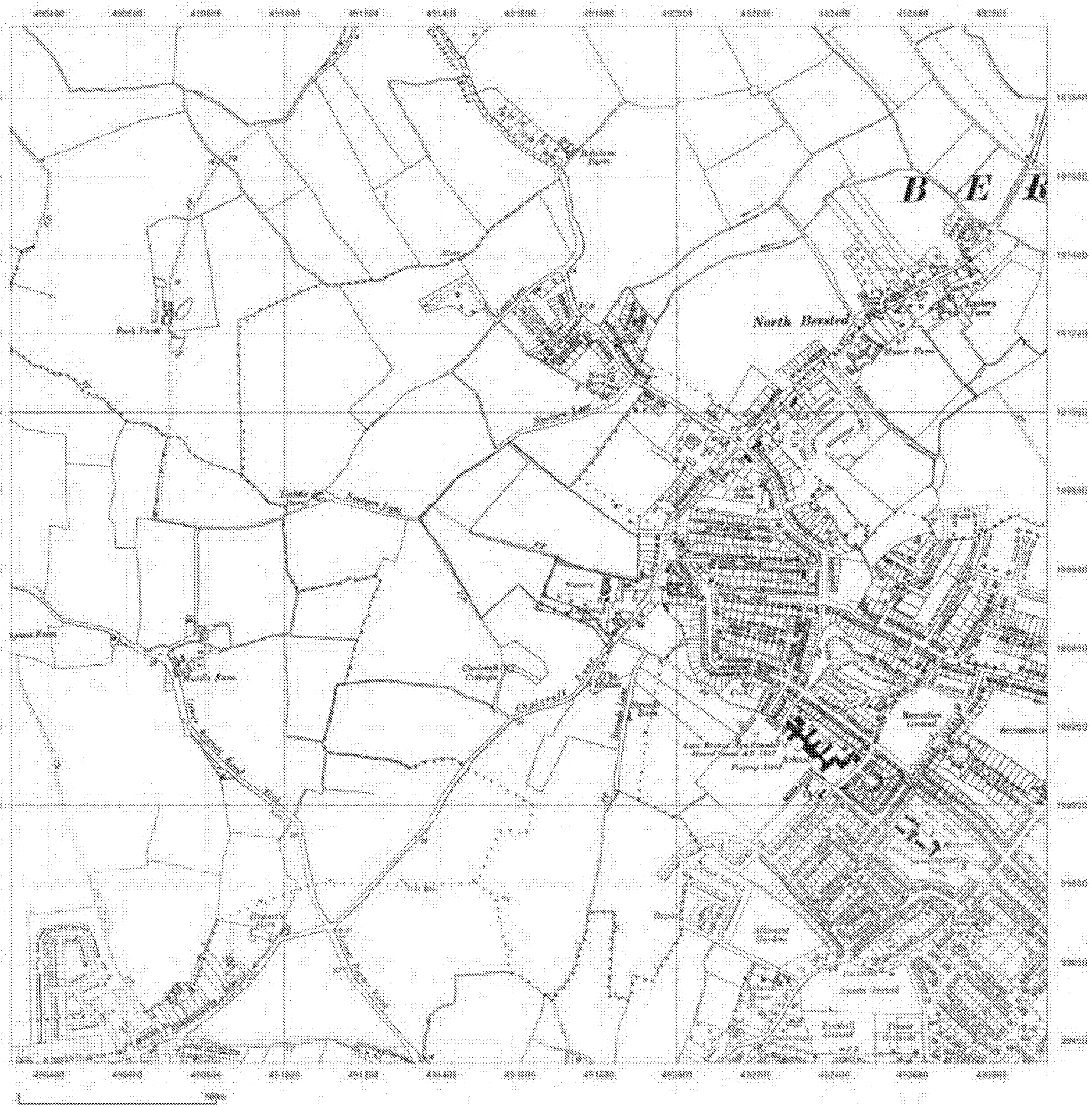
Produced by
Groundsure Insights
www.groundsure.com
Supplied by:
www.findmaps.co.uk
support@findmaps.co.uk
Tel: 0845 521 1410

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 September 2020

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

ARUN DISTRICT COUNCIL BE/87/21/OUT



PROFESSIONAL MAPPING INTELLIGENCE

Site Details:

Client Ref: West Bersted
Report Ref: FIND-65962
Grid Ref: 491621, 100664

Map Name: Provisional

Map date: **1957-1961**

Scale: 1:10,560

Printed at: 1:10,560

N
W E
S

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

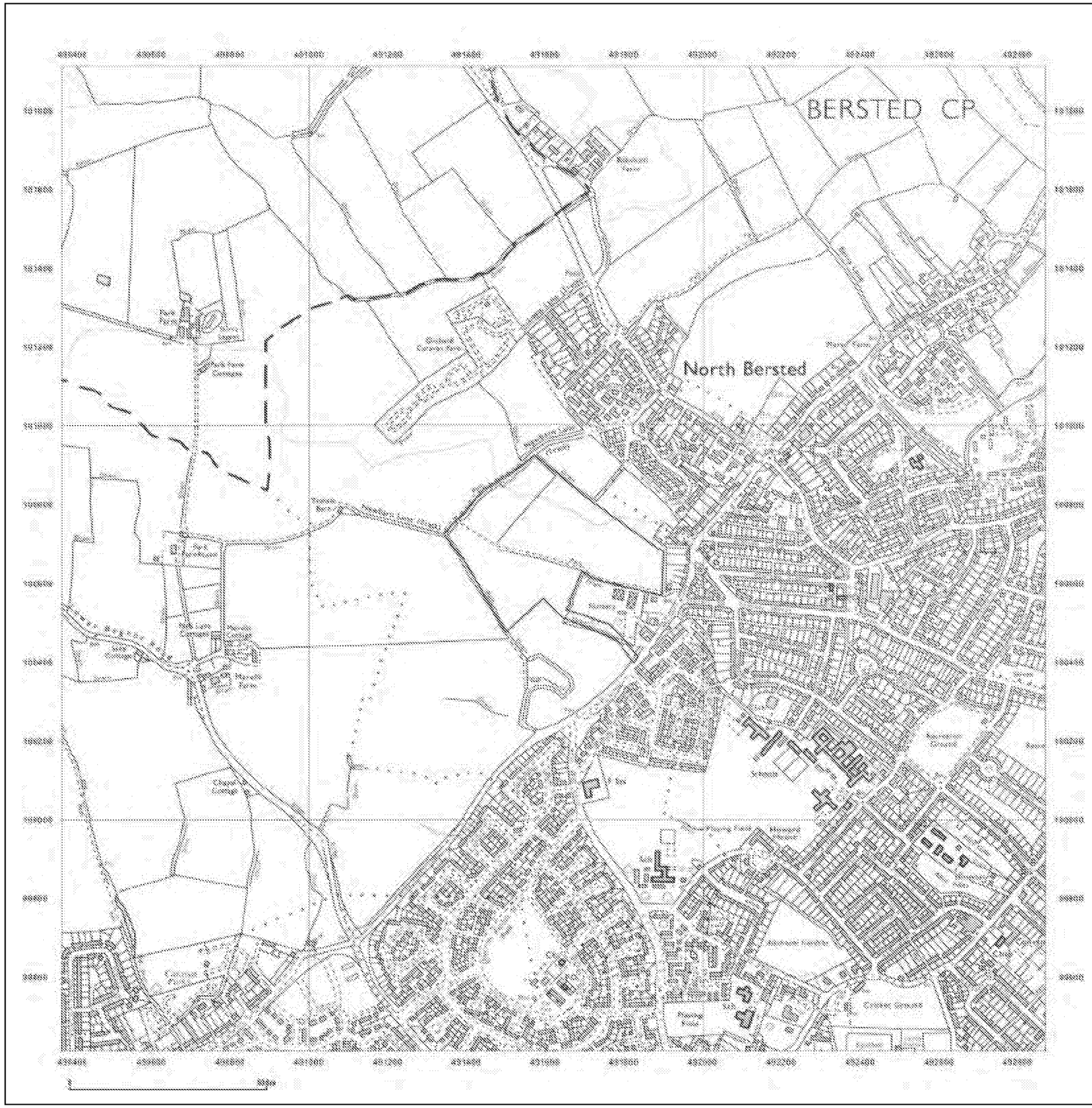
Produced by
Groundsure Insights
www.groundsure.com
Supplied by:
www.findmaps.co.uk
support@findmaps.co.uk
Tel: 0845 521 1410

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 September 2020

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

ARUN DISTRICT COUNCIL BE/87/21/OUT



FIND
PROFESSIONAL MAPPING INTELLIGENCE

Site Details:

Client Ref: West Bersted
Report Ref: FIND-65962
Grid Ref: 491621, 100664

Map Name: National Grid

Map date: **1975-1979**

Scale: 1:10,000

Printed at: 1:10,000

N
W E
S

Surveyed 1975
Revised 1978
Edited N/A
Copyright 1979
Levelled 1979

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

Groundsure

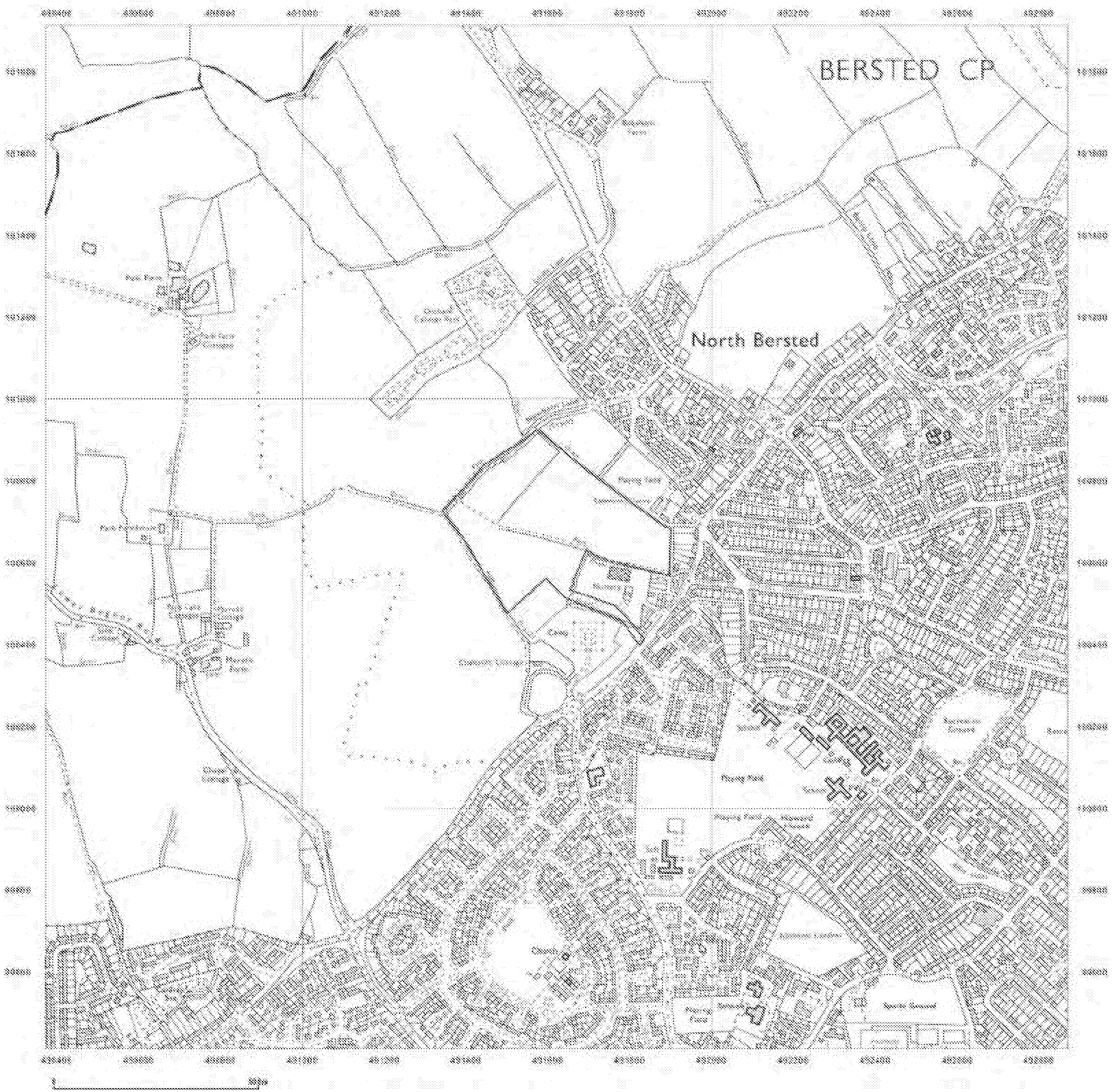
Produced by
Groundsure Insights
www.groundsure.com
Supplied by:
www.findmaps.co.uk
support@findmaps.co.uk
Tel: 0845 521 1410

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 September 2020

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

ARUN DISTRICT COUNCIL BE/87/21/OUT



F!ND
PROFESSIONAL MAPPING INTELLIGENCE

Site Details:

Client Ref: West Bersted
Report Ref: FIND-65962
Grid Ref: 491621, 100664

Map Name: National Grid

Map date: **1989-1993**

Scale: 1:10,000

Printed at: 1:10,000

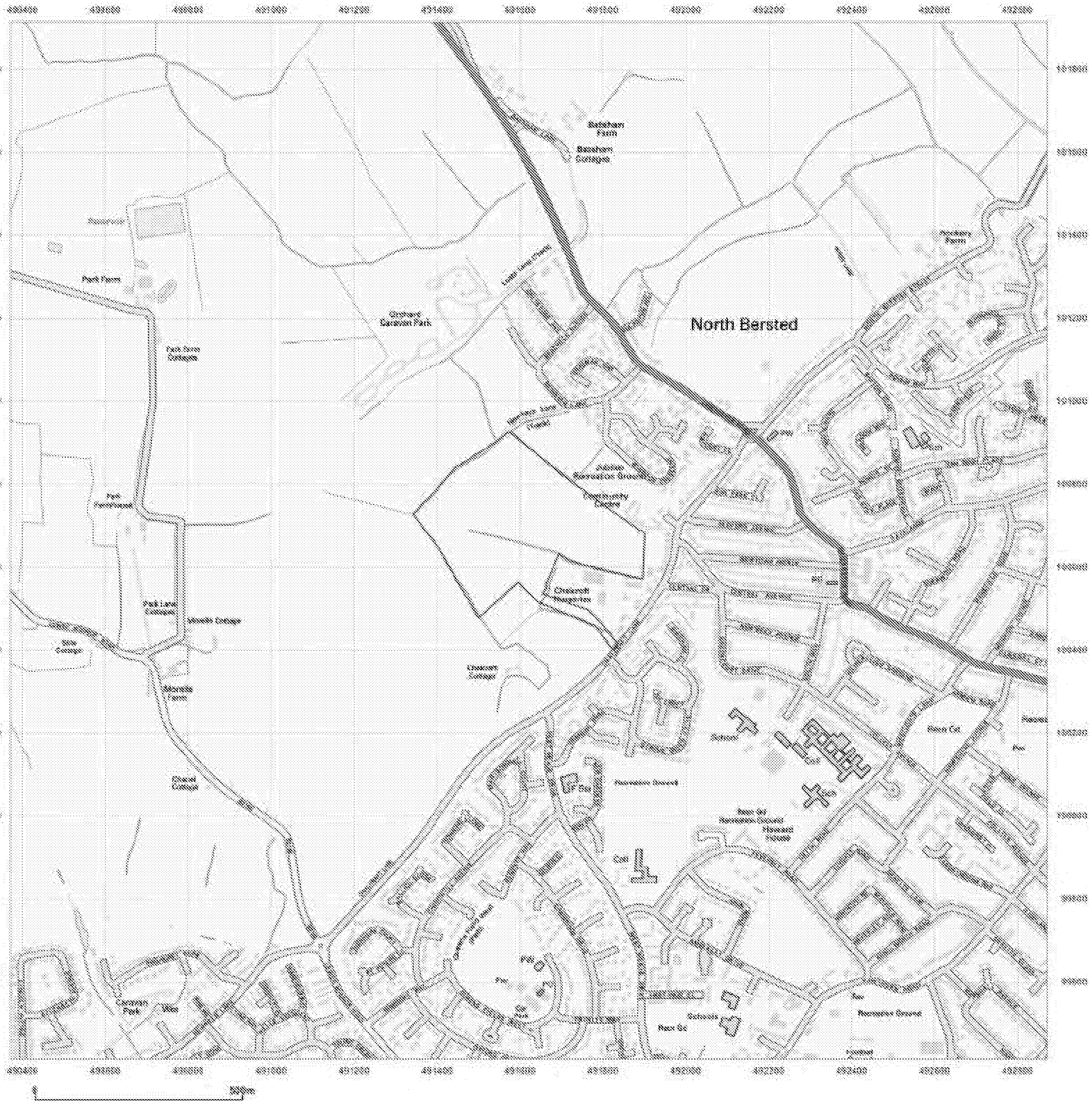
Produced by
Groundsure Insights
www.groundsure.com
Supplied by:
www.findmaps.co.uk
support@findmaps.co.uk
Tel: 0845 521 1410

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 September 2020

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

ARUN DISTRICT COUNCIL BE/87/21/OUT



F!ND
PROFESSIONAL MAPPING INTELLIGENCE

Site Details:

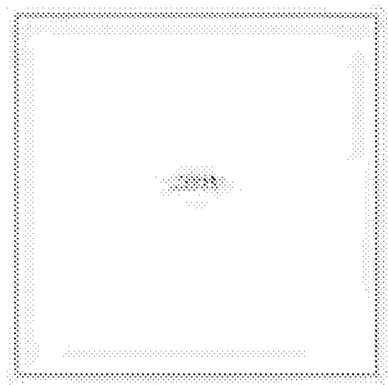
Client Ref: West Bersted
Report Ref: FIND-65962
Grid Ref: 491621, 100664

Map Name: National Grid

Map date: **2001**

Scale: 1:10,000

Printed at: 1:10,000



Produced by
Groundsure Insights
www.groundsure.com
Supplied by:
www.findmaps.co.uk
support@findmaps.co.uk
Tel: 0845 521 1410

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 September 2020

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

ARUN DISTRICT COUNCIL BE/87/21/OUT



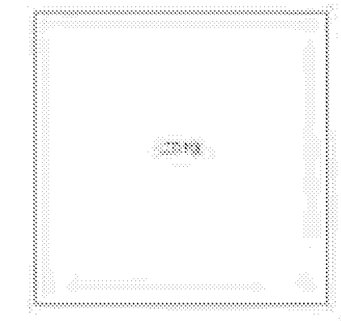
FIND
PROFESSIONAL MAPPING INTELLIGENCE

Site Details:

Client Ref: West Bersted
Report Ref: FIND-65962
Grid Ref: 491621, 100664

Map Name: National Grid
Map date: 2010
Scale: 1:10,000
Printed at: 1:10,000

N
W E
S



Groundsure Insights

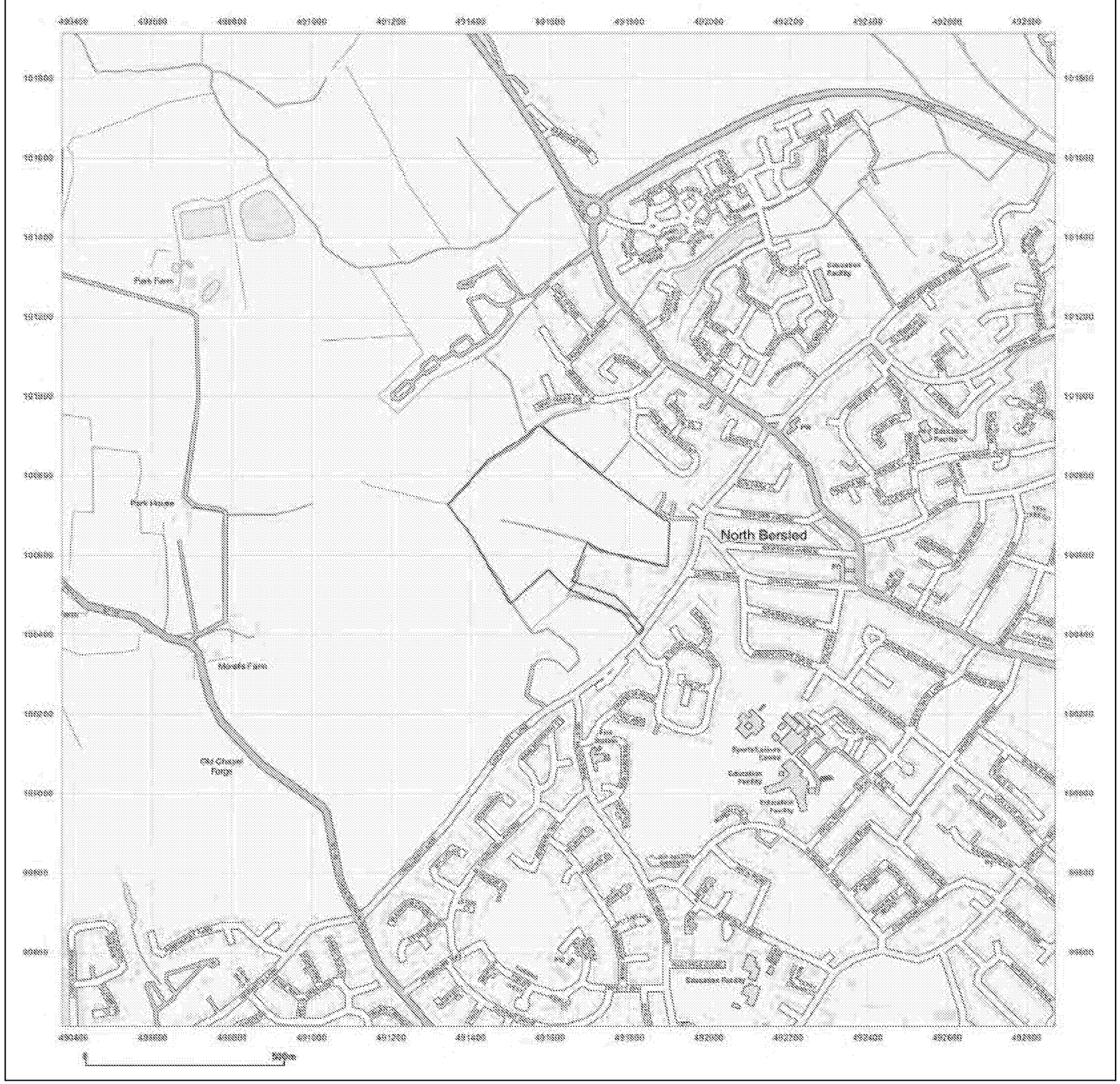
Produced by
Groundsure Insights
www.groundsure.com
Supplied by:
www.findmaps.co.uk
support@findmaps.co.uk
Tel: 0845 521 1410

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 September 2020

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

ARUN DISTRICT COUNCIL BE/87/21/OUT



FIND
PROFESSIONAL MAPPING INTELLIGENCE

Site Details:

Client Ref: West Bersted
Report Ref: FIND-65962
Grid Ref: 491621, 100664

Map Name: National Grid

Map date: 2020

Scale: 1:10,000

Printed at: 1:10,000

N
W E
S

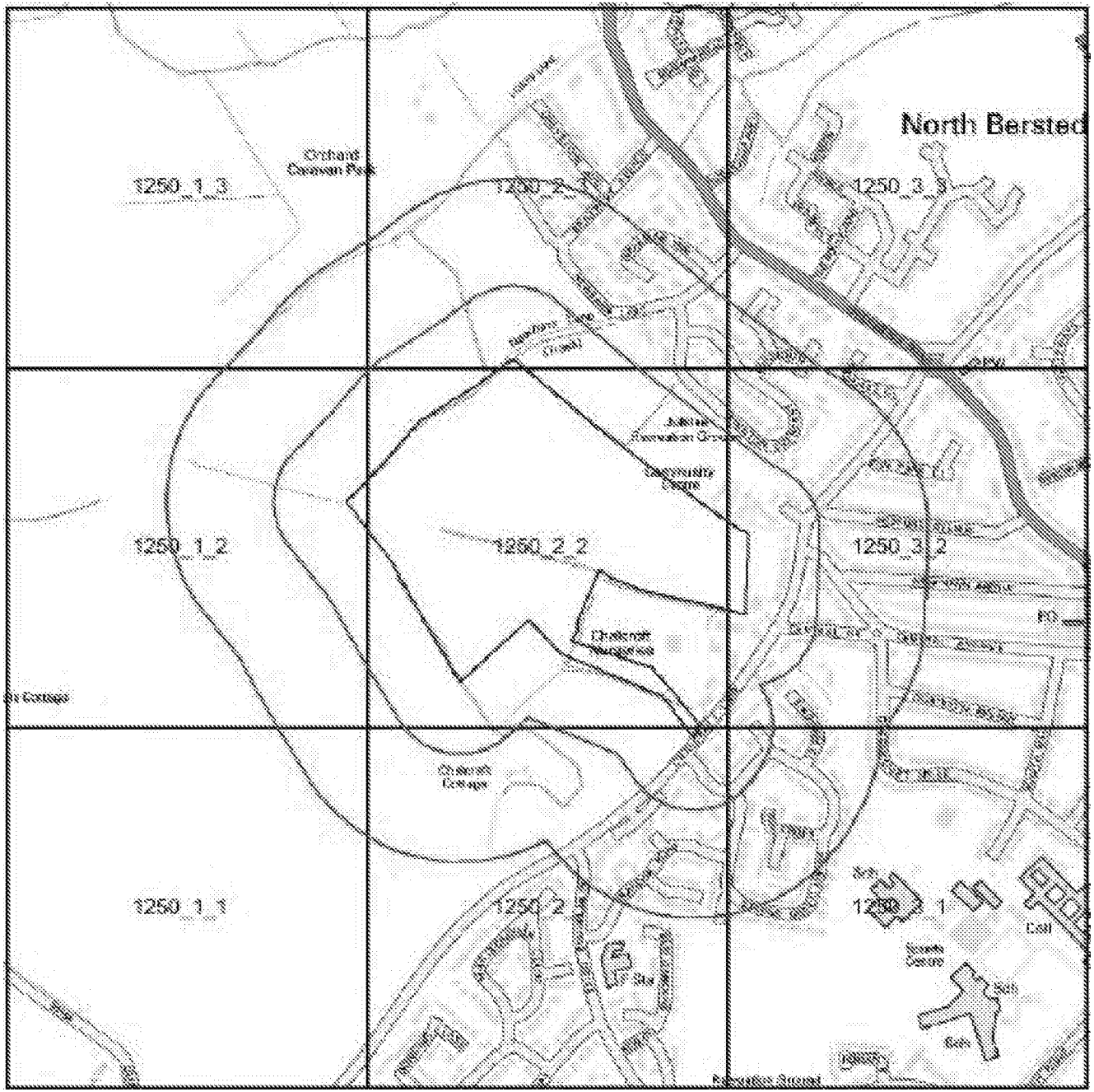
Groundsure Insights

Produced by
Groundsure Insights
www.groundsure.com
Supplied by:
www.findmaps.co.uk
support@findmaps.co.uk
Tel: 0845 521 1410

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 September 2020

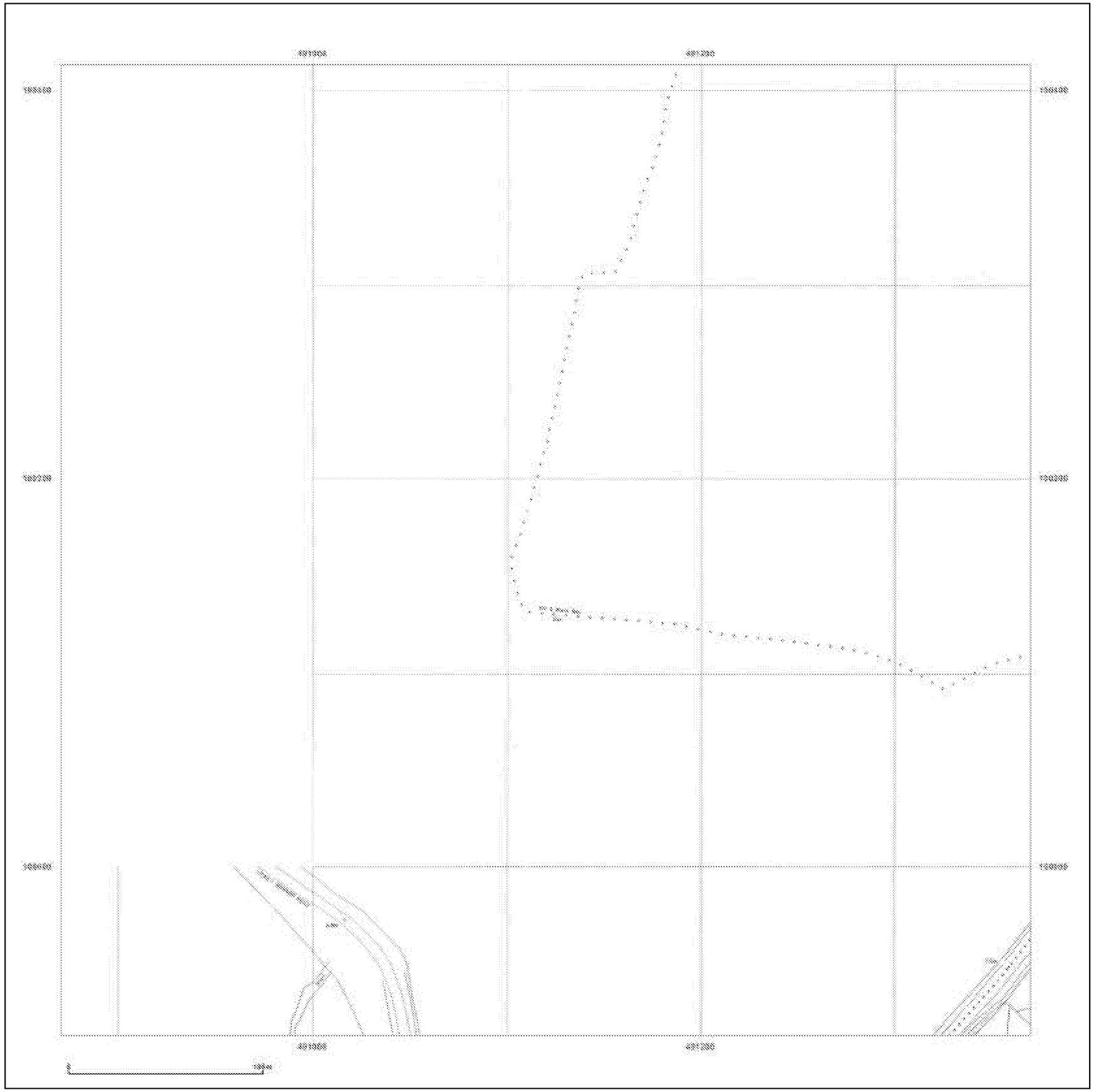
Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf



Groundsure
INSIGHTS

1:1250 Scale Grid Index

ARUN DISTRICT COUNCIL BE/87/21/OUT



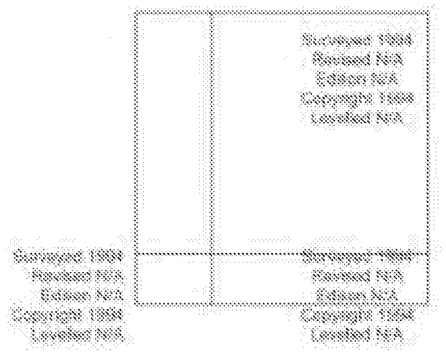
FIND
PROFESSIONAL MAPPING INTELLIGENCE

Site Details:

Client Ref: West Bersted
Report Ref: FIND-65962_1250scale_1_1
Grid Ref: 491120, 100163

Map Name: National Grid
Map date: **1994**
Scale: 1:1,250
Printed at: 1:2,000

N
W E
S



Groundsure Insights

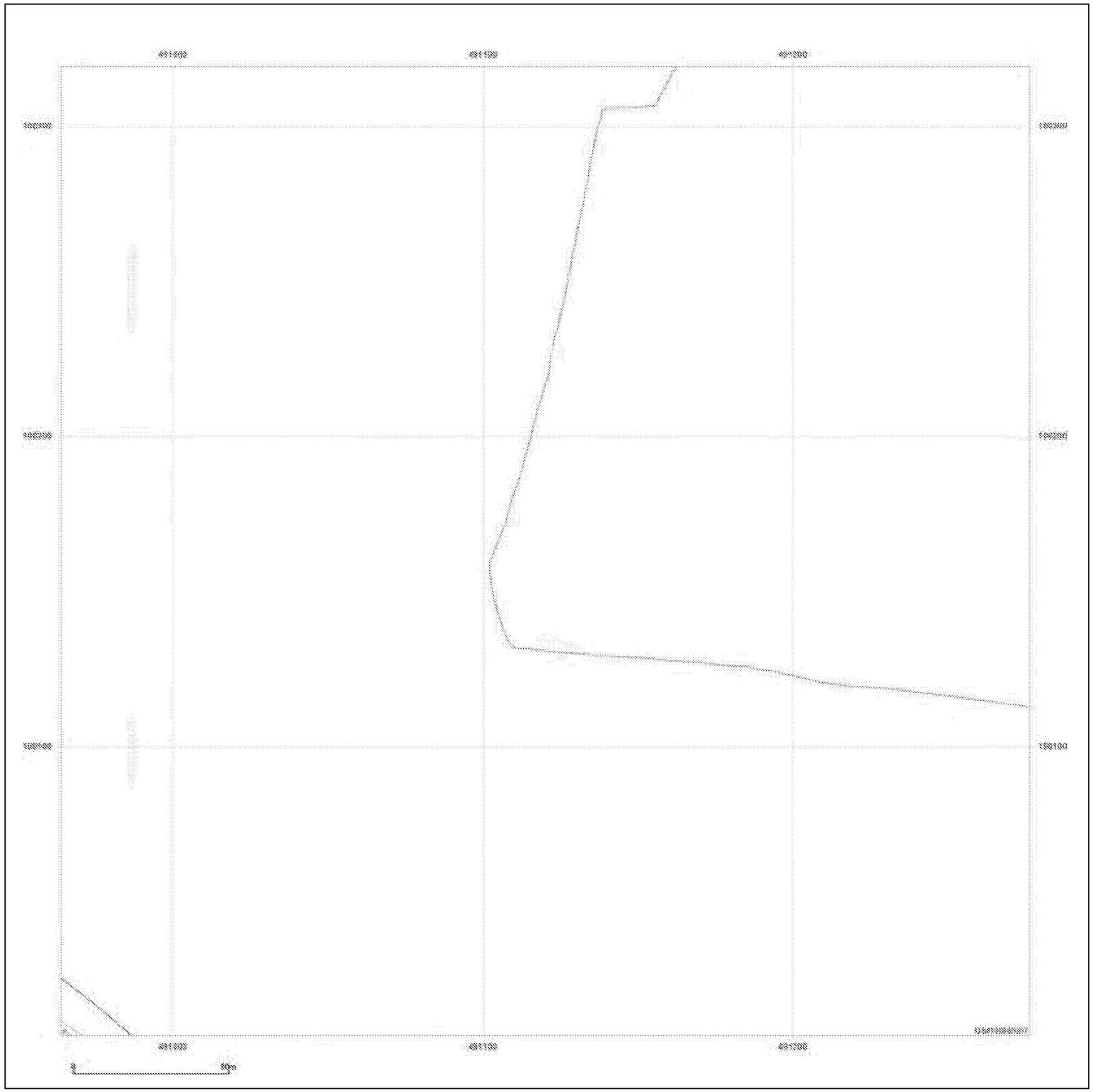
Produced by
Groundsure Insights
www.groundsure.com
Supplied by:
www.findmaps.co.uk
support@findmaps.co.uk
Tel: 0845 521 1410

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 September 2020

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

ARUN DISTRICT COUNCIL BE/87/21/OUT



FIND
PROFESSIONAL MAPPING INTELLIGENCE

Site Details:

Client Ref: West Bersted
Report Ref: FIND-65962_1250scale_1_1
Grid Ref: 491120, 100163

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

N
W E
S



Groundsure Insights

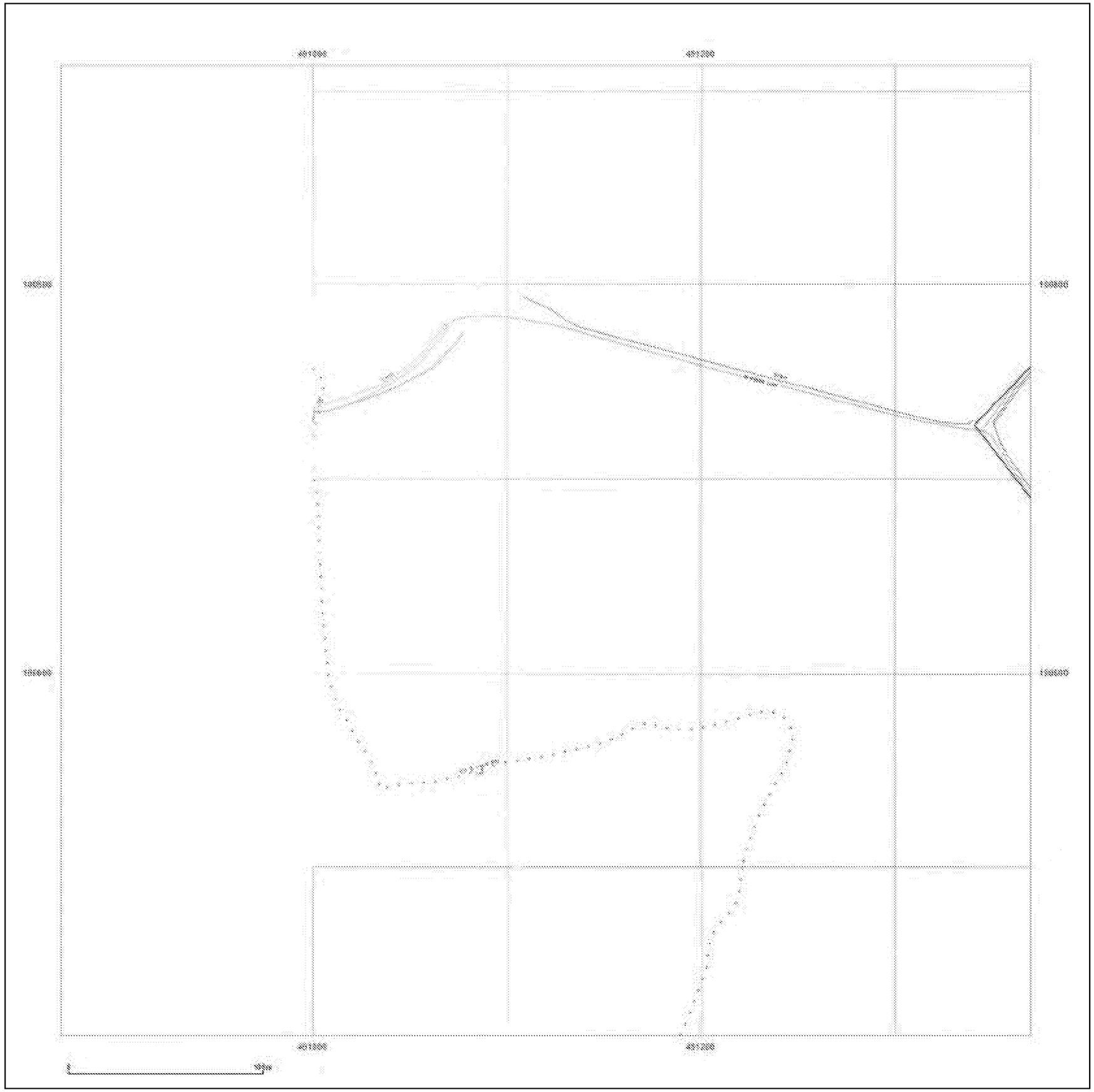
Produced by
Groundsure Insights
www.groundsure.com
Supplied by:
www.findmaps.co.uk
support@findmaps.co.uk
Tel: 0845 521 1410

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 September 2020

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

ARUN DISTRICT COUNCIL BE/87/21/OUT



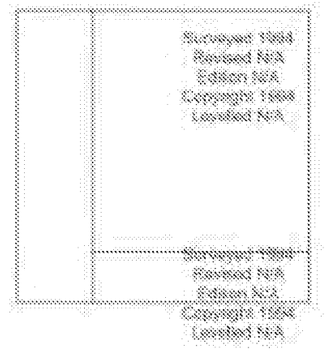
FIND
PROFESSIONAL MAPPING INTELLIGENCE

Site Details:

Client Ref: West Bersted
Report Ref: FIND-65962_1250scale_1_2
Grid Ref: 491120, 100663

Map Name: National Grid
Map date: **1994**
Scale: 1:1,250
Printed at: 1:2,000

N
W E
S



Groundsure Insights

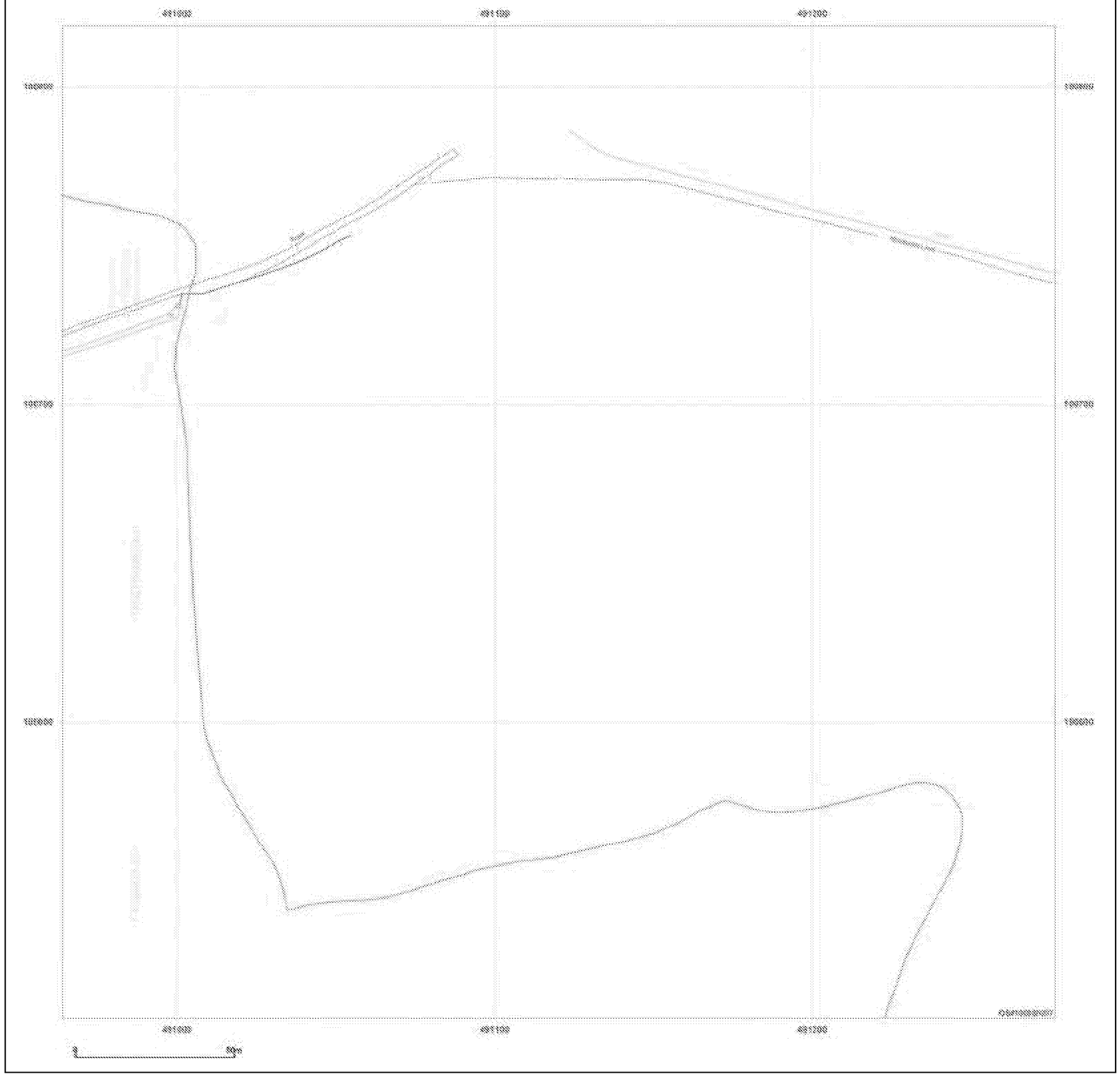
Produced by
Groundsure Insights
www.groundsure.com
Supplied by:
www.findmaps.co.uk
support@findmaps.co.uk
Tel: 0845 521 1410

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 September 2020

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

ARUN DISTRICT COUNCIL BE/87/21/OUT



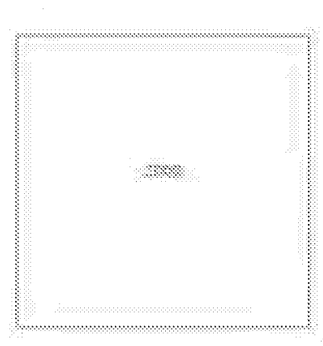
FIND
PROFESSIONAL MAPPING INTELLIGENCE

Site Details:

Client Ref: West Bersted
Report Ref: FIND-65962_1250scale_1_2
Grid Ref: 491120, 100663

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

N
W E
S



Groundsure Insights

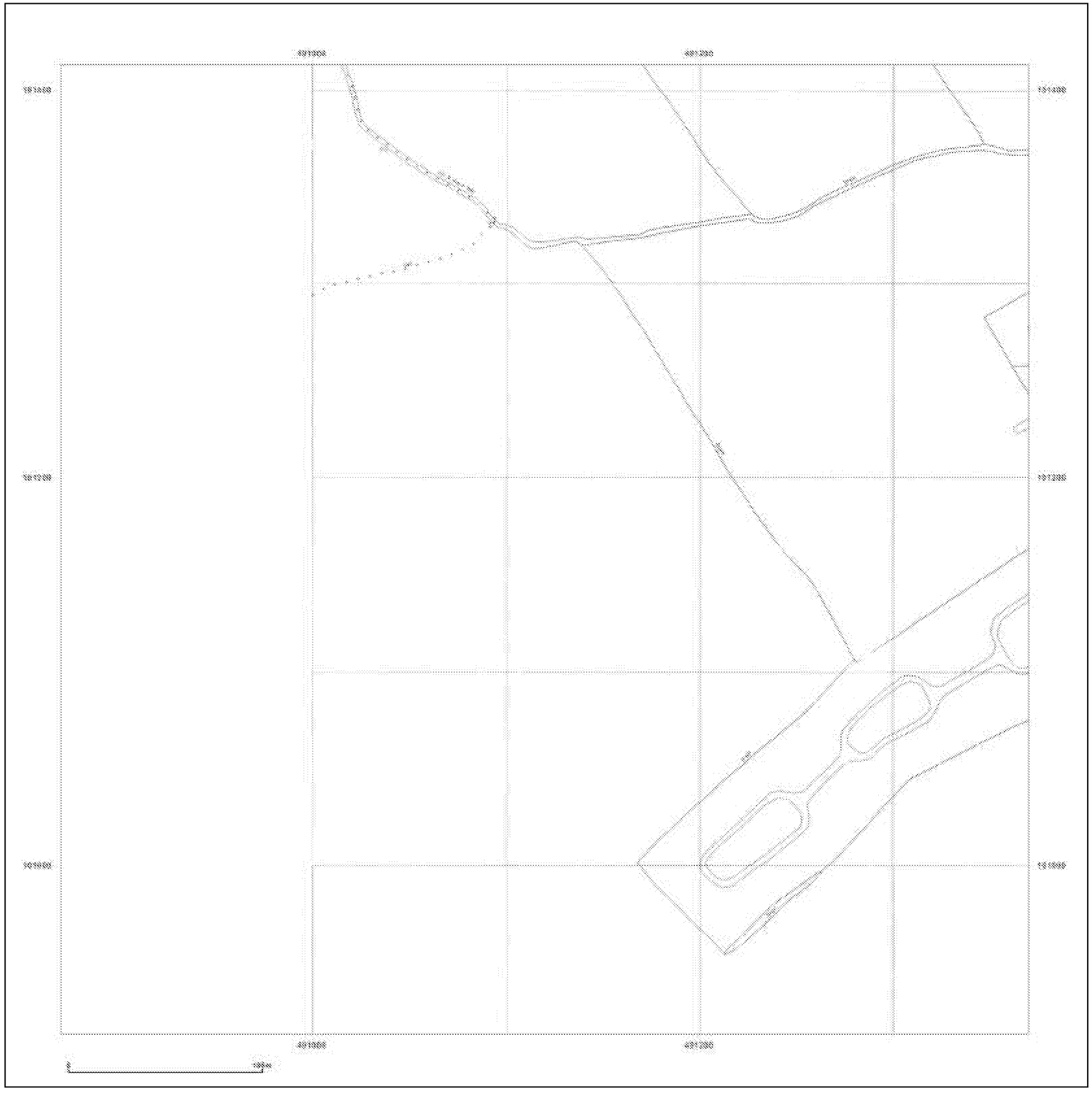
Produced by
Groundsure Insights
www.groundsure.com
Supplied by:
www.findmaps.co.uk
support@findmaps.co.uk
Tel: 0845 521 1410

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 September 2020

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

ARUN DISTRICT COUNCIL BE/87/21/OUT



FIND
PROFESSIONAL MAPPING INTELLIGENCE

Site Details:

Client Ref: West Bersted
Report Ref: FIND-65962_1250scale_1_3
Grid Ref: 491120, 101163

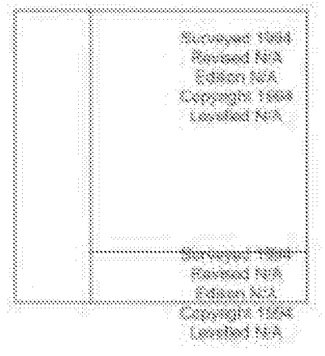
Map Name: National Grid

Map date: **1994**

Scale: 1:1,250

Printed at: 1:2,000

N
W E
S



Groundsure

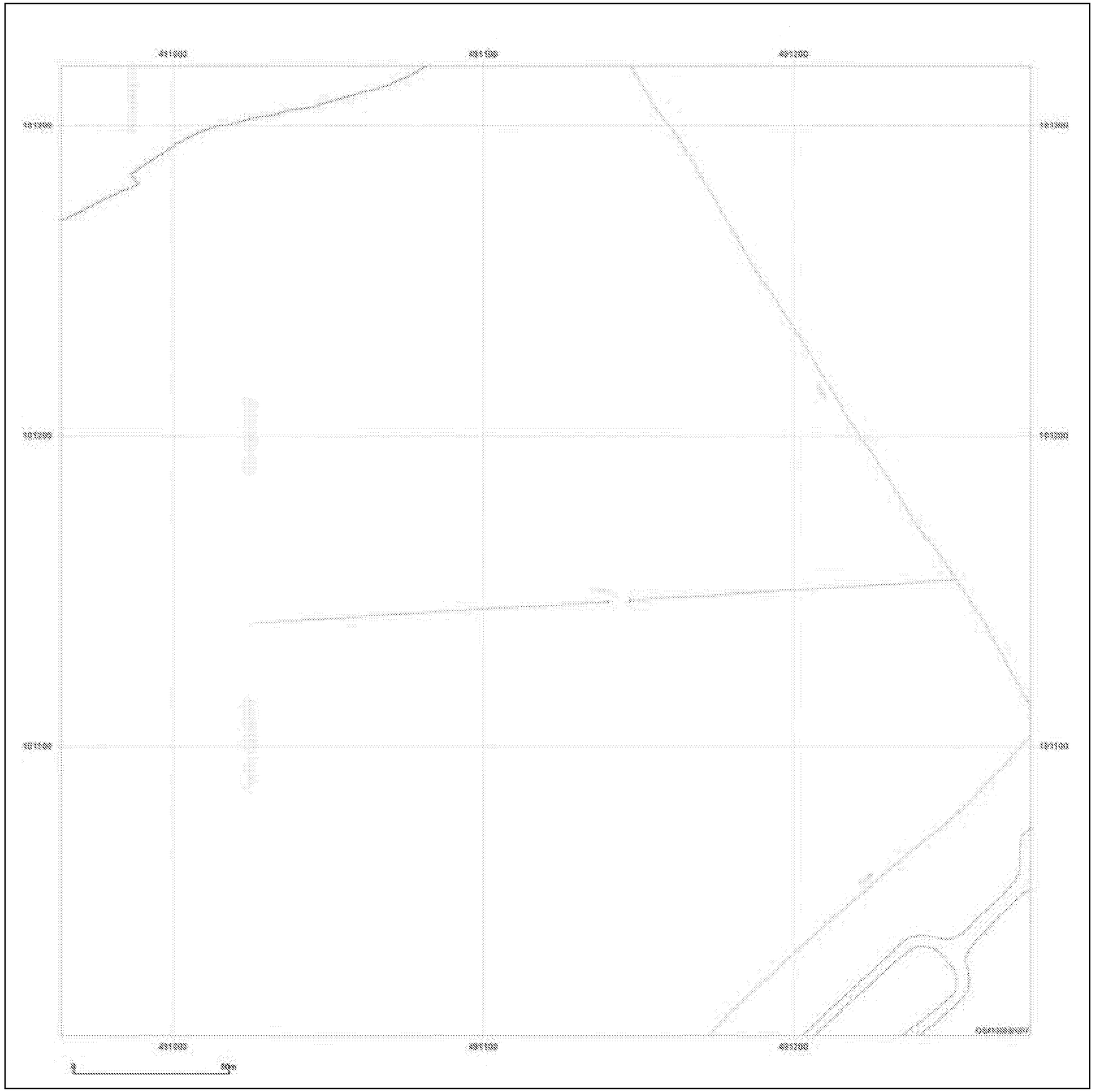
Produced by
Groundsure Insights
www.groundsure.com
Supplied by:
www.findmaps.co.uk
support@findmaps.co.uk
Tel: 0845 521 1410

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 September 2020

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

ARUN DISTRICT COUNCIL BE/87/21/OUT



FIND
PROFESSIONAL MAPPING INTELLIGENCE

Site Details:

Client Ref: West Bersted
Report Ref: FIND-65962_1250scale_1_3
Grid Ref: 491120, 101163

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





Groundsure

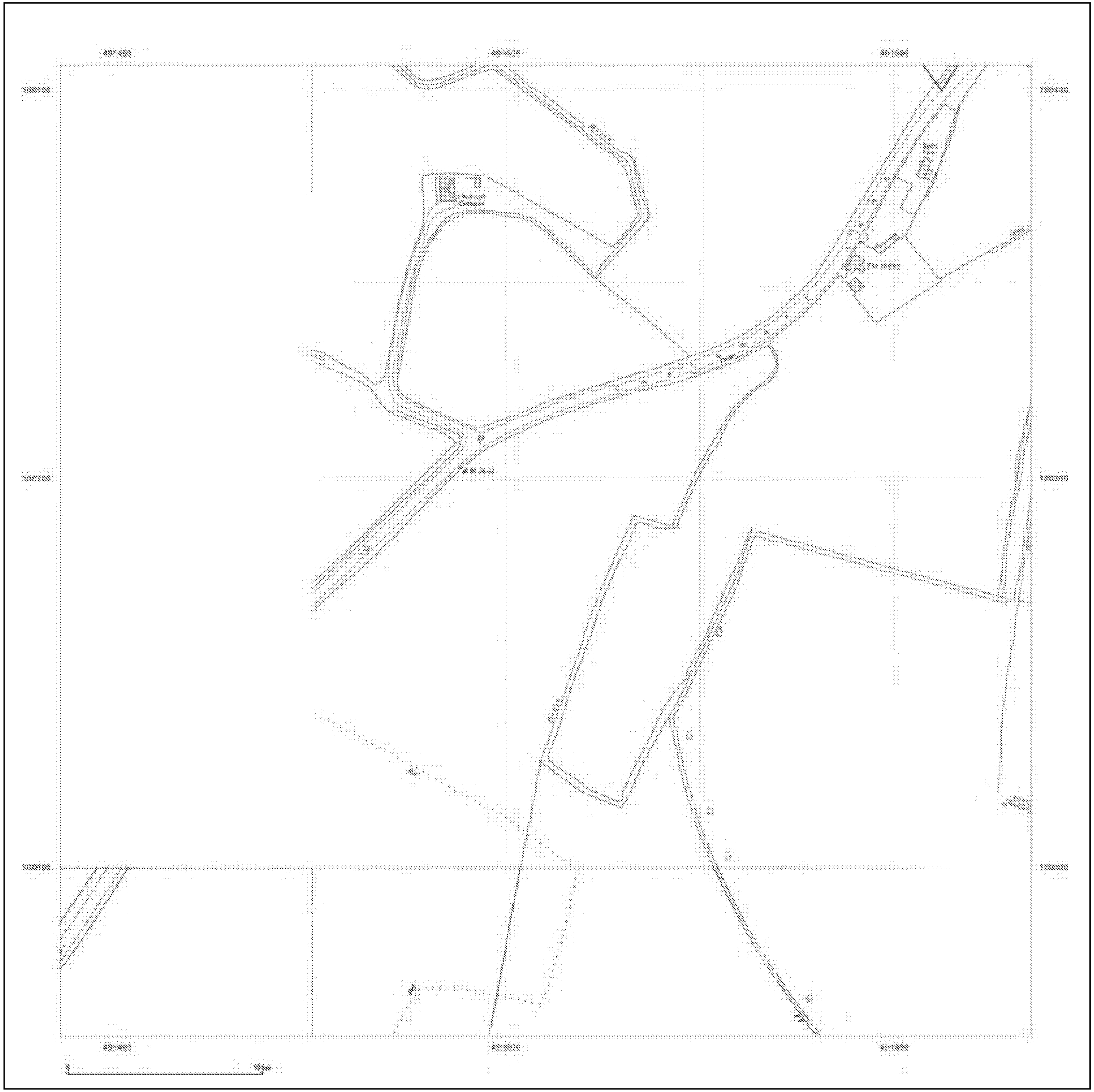
Produced by
Groundsure Insights
www.groundsure.com
Supplied by:
www.findmaps.co.uk
support@findmaps.co.uk
Tel: 0845 521 1410

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 September 2020

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

ARUN DISTRICT COUNCIL BE/87/21/OUT



FIND

PROFESSIONAL MAPPING INTELLIGENCE

Site Details:

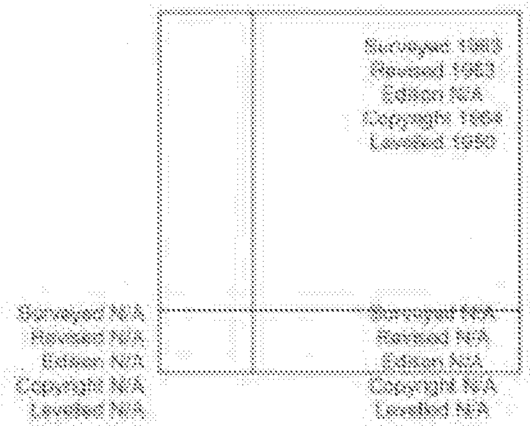
Client Ref: West Bersted
Report Ref: FIND-65962_1250scale_2_1
Grid Ref: 491620, 100163

Map Name: National Grid

Map date: **1962-1964**

Scale: 1:1,250

Printed at: 1:2,000



Produced by
Groundsure Insights
www.groundsure.com
Supplied by:
www.findmaps.co.uk
support@findmaps.co.uk
Tel: 0845 521 1410

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 September 2020

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

ARUN DISTRICT COUNCIL BE/87/21/OUT



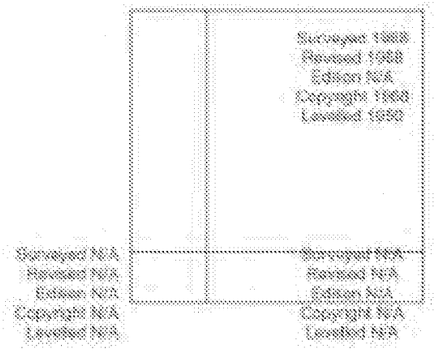
FIND
PROFESSIONAL MAPPING INTELLIGENCE

Site Details:

Client Ref: West Bersted
Report Ref: FIND-65962_1250scale_2_1
Grid Ref: 491620, 100163

Map Name: National Grid
Map date: **1967-1968**
Scale: 1:1,250
Printed at: 1:2,000

N
W E
S



Groundsure Insights

Produced by
Groundsure Insights
www.groundsure.com
Supplied by:
www.findmaps.co.uk
support@findmaps.co.uk
Tel: 0845 521 1410

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 September 2020

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

ARUN DISTRICT COUNCIL BE/87/21/OUT



FIND
PROFESSIONAL MAPPING INTELLIGENCE

Site Details:

Client Ref: West Bersted
Report Ref: FIND-65962_1250scale_2_1
Grid Ref: 491620, 100163

Map Name: National Grid
Map date: **1968-1970**
Scale: 1:1,250
Printed at: 1:2,000

N
W E
S

Groundsure Insights

Produced by
Groundsure Insights
www.groundsure.com
Supplied by:
www.findmaps.co.uk
support@findmaps.co.uk
Tel: 0845 521 1410

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 September 2020

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

ARUN DISTRICT COUNCIL BE/87/21/OUT



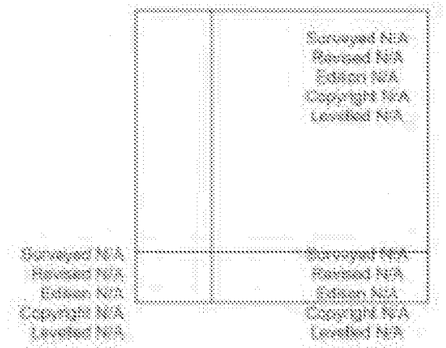
FIND
PROFESSIONAL MAPPING INTELLIGENCE

Site Details:

Client Ref: West Bersted
Report Ref: FIND-65962_1250scale_2_1
Grid Ref: 491620, 100163

Map Name: National Grid
Map date: **1973**
Scale: 1:1,250
Printed at: 1:2,000

N
W E
S



Groundsure Insights

Produced by
Groundsure Insights
www.groundsure.com
Supplied by:
www.findmaps.co.uk
support@findmaps.co.uk
Tel: 0845 521 1410

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 September 2020

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

ARUN DISTRICT COUNCIL BE/87/21/OUT



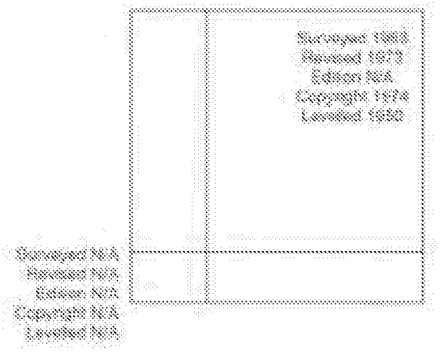
FIND
PROFESSIONAL MAPPING INTELLIGENCE

Site Details:

Client Ref: West Bersted
Report Ref: FIND-65962_1250scale_2_1
Grid Ref: 491620, 100163

Map Name: National Grid
Map date: **1974**
Scale: 1:1,250
Printed at: 1:2,000

N
W E
S



Groundsure Insights

Produced by
Groundsure Insights
www.groundsure.com
Supplied by:
www.findmaps.co.uk
support@findmaps.co.uk
Tel: 0845 521 1410

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 September 2020

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

ARUN DISTRICT COUNCIL BE/87/21/OUT



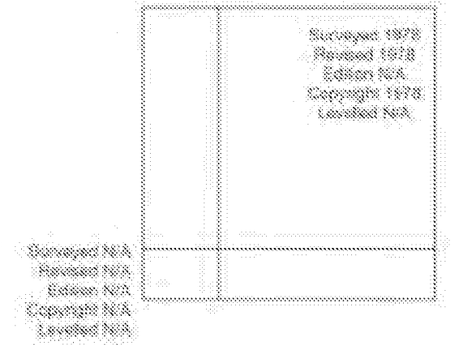
FIND
PROFESSIONAL MAPPING INTELLIGENCE

Site Details:

Client Ref: West Bersted
Report Ref: FIND-65962_1250scale_2_1
Grid Ref: 491620, 100163

Map Name: National Grid
Map date: **1977-1978**
Scale: 1:1,250
Printed at: 1:2,000

N
W E
S



Groundsure Insights

Produced by
Groundsure Insights
www.groundsure.com
Supplied by:
www.findmaps.co.uk
support@findmaps.co.uk
Tel: 0845 521 1410

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 September 2020

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

ARUN DISTRICT COUNCIL BE/87/21/OUT



F!ND

PROFESSIONAL MAPPING INTELLIGENCE

Site Details:

Client Ref:	West Bersted
Report Ref:	FIND-65962_1250scale_2_1
Grid Ref:	491620, 100163

Map Name:	National Grid
Map date:	**1984-1989**
Scale:	1:1,250
Printed at:	1:2,000

N W E S

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

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

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

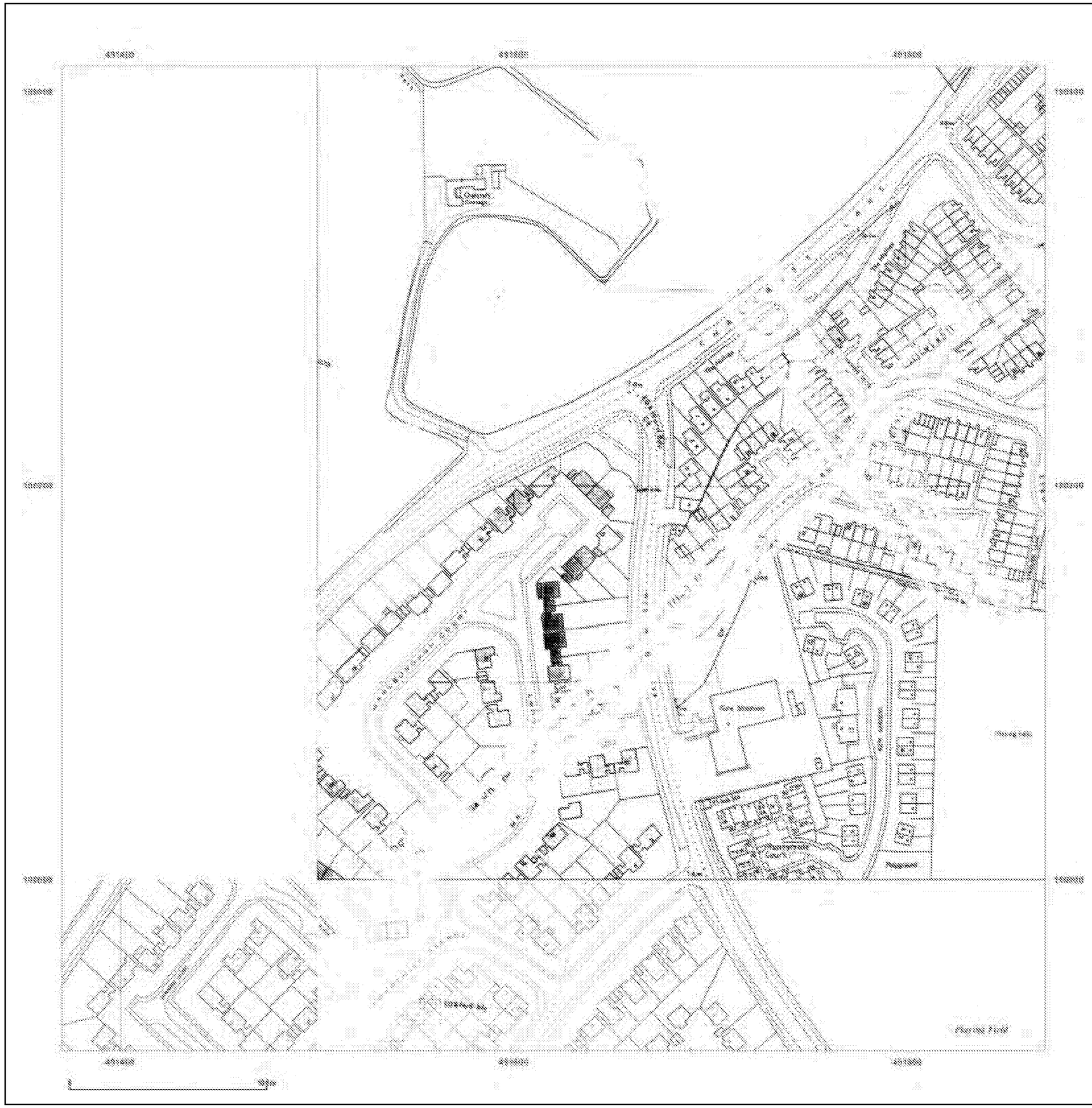
Produced by
Groundsure Insights
www.groundsure.com
Supplied by:
www.findmaps.co.uk
support@findmaps.co.uk
Tel: 0845 521 1410

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 September 2020

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

ARUN DISTRICT COUNCIL BE/87/21/OUT



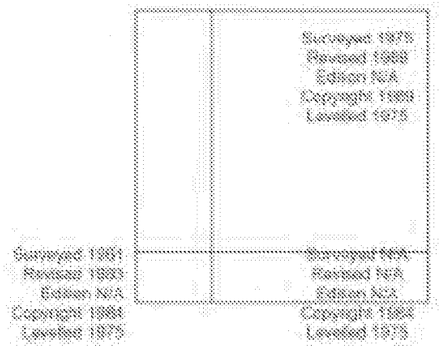
FIND
PROFESSIONAL MAPPING INTELLIGENCE

Site Details:

Client Ref: West Bersted
Report Ref: FIND-65962_1250scale_2_1
Grid Ref: 491620, 100163

Map Name: National Grid
Map date: **1984-1989**
Scale: 1:1,250
Printed at: 1:2,000

N
W E
S



Groundsure Insights

Produced by
Groundsure Insights
www.groundsure.com
Supplied by:
www.findmaps.co.uk
support@findmaps.co.uk
Tel: 0845 521 1410

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 September 2020

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

ARUN DISTRICT COUNCIL BE/87/21/OUT



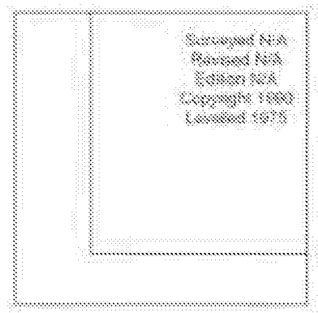
FIND
PROFESSIONAL MAPPING INTELLIGENCE

Site Details:

Client Ref: West Bersted
Report Ref: FIND-65962_1250scale_2_1
Grid Ref: 491620, 100163

Map Name: National Grid
Map date: **1990**
Scale: 1:1,250
Printed at: 1:2,000

N
W E
S



Groundsure

Produced by
Groundsure Insights
www.groundsure.com
Supplied by:
www.findmaps.co.uk
support@findmaps.co.uk
Tel: 0845 521 1410

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 September 2020

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

ARUN DISTRICT COUNCIL BE/87/21/OUT



FIND
PROFESSIONAL MAPPING INTELLIGENCE

Site Details:

Client Ref: West Bersted
Report Ref: FIND-65962_1250scale_2_1
Grid Ref: 491620, 100163

Map Name: National Grid

Map date: **1990-1994**

Scale: 1:1,250

Printed at: 1:2,000

N
W E
S

Produced by
Groundsure Insights
www.groundsure.com
Supplied by:
www.findmaps.co.uk
support@findmaps.co.uk
Tel: 0845 521 1410

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 September 2020

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

ARUN DISTRICT COUNCIL BE/87/21/OUT



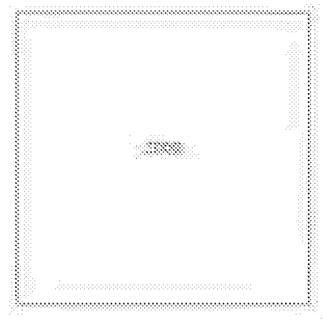
FIND
PROFESSIONAL MAPPING INTELLIGENCE

Site Details:

Client Ref: West Bersted
Report Ref: FIND-65962_1250scale_2_1
Grid Ref: 491620, 100163

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

N
W E
S



Groundsure Insights

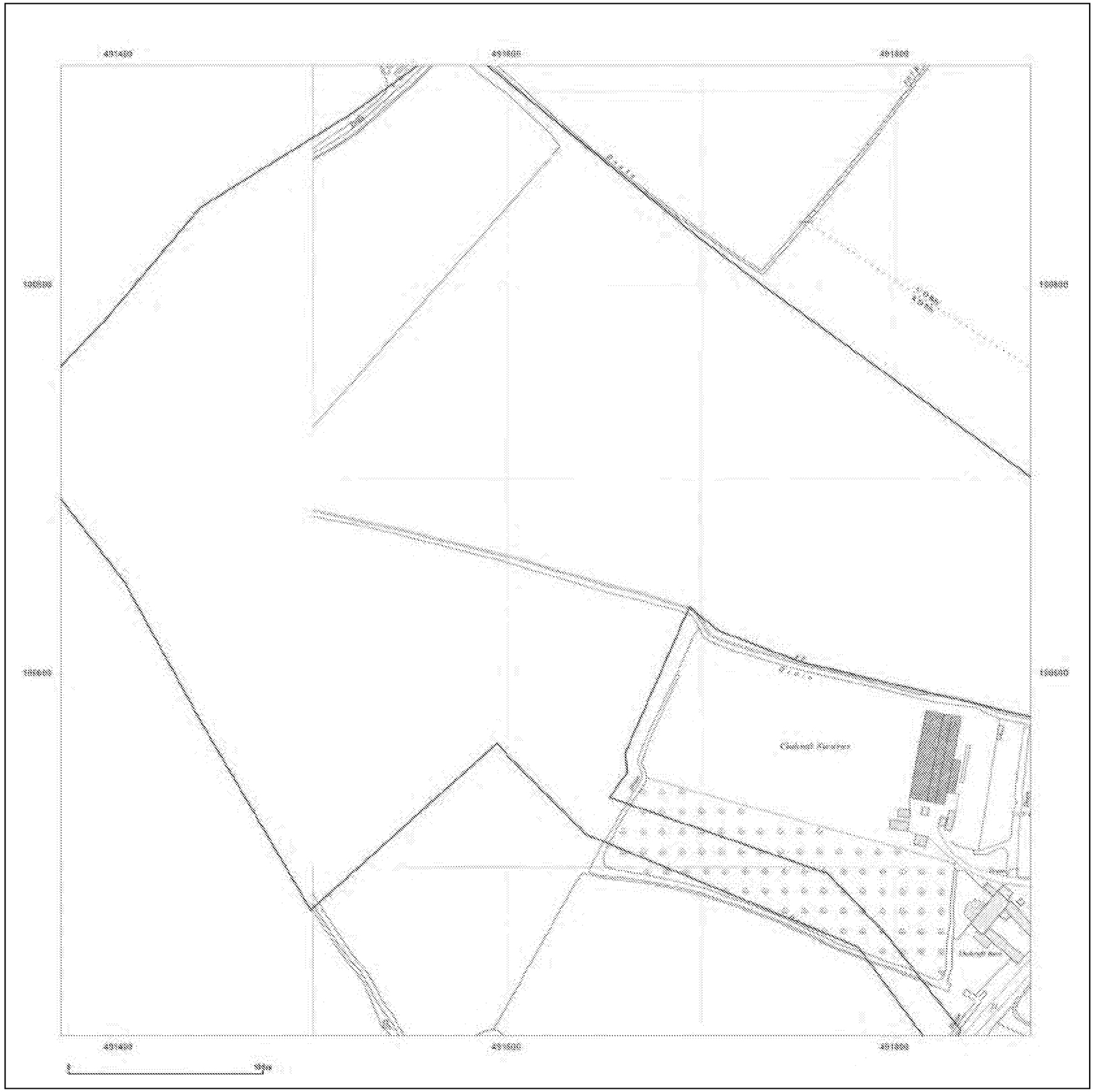
Produced by
Groundsure Insights
www.groundsure.com
Supplied by:
www.findmaps.co.uk
support@findmaps.co.uk
Tel: 0845 521 1410

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 September 2020

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

ARUN DISTRICT COUNCIL BE/87/21/OUT



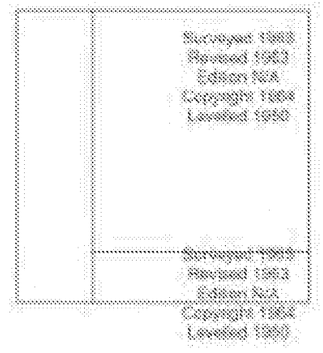
FIND
PROFESSIONAL MAPPING INTELLIGENCE

Site Details:

Client Ref: West Bersted
Report Ref: FIND-65962_1250scale_2_2
Grid Ref: 491620, 100663

Map Name: National Grid
Map date: **1964**
Scale: 1:1,250
Printed at: 1:2,000

N
W E
S



Groundsure Insights

Produced by
Groundsure Insights
www.groundsure.com
Supplied by:
www.findmaps.co.uk
support@findmaps.co.uk
Tel: 0845 521 1410

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 September 2020

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

ARUN DISTRICT COUNCIL BE/87/21/OUT



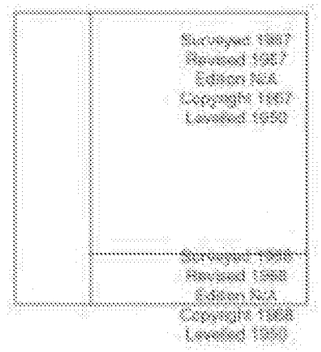
FIND
PROFESSIONAL MAPPING INTELLIGENCE

Site Details:

Client Ref: West Bersted
Report Ref: FIND-65962_1250scale_2_2
Grid Ref: 491620, 100663

Map Name: National Grid
Map date: **1967-1968**
Scale: 1:1,250
Printed at: 1:2,000

N
W E
S



Groundsure Insights

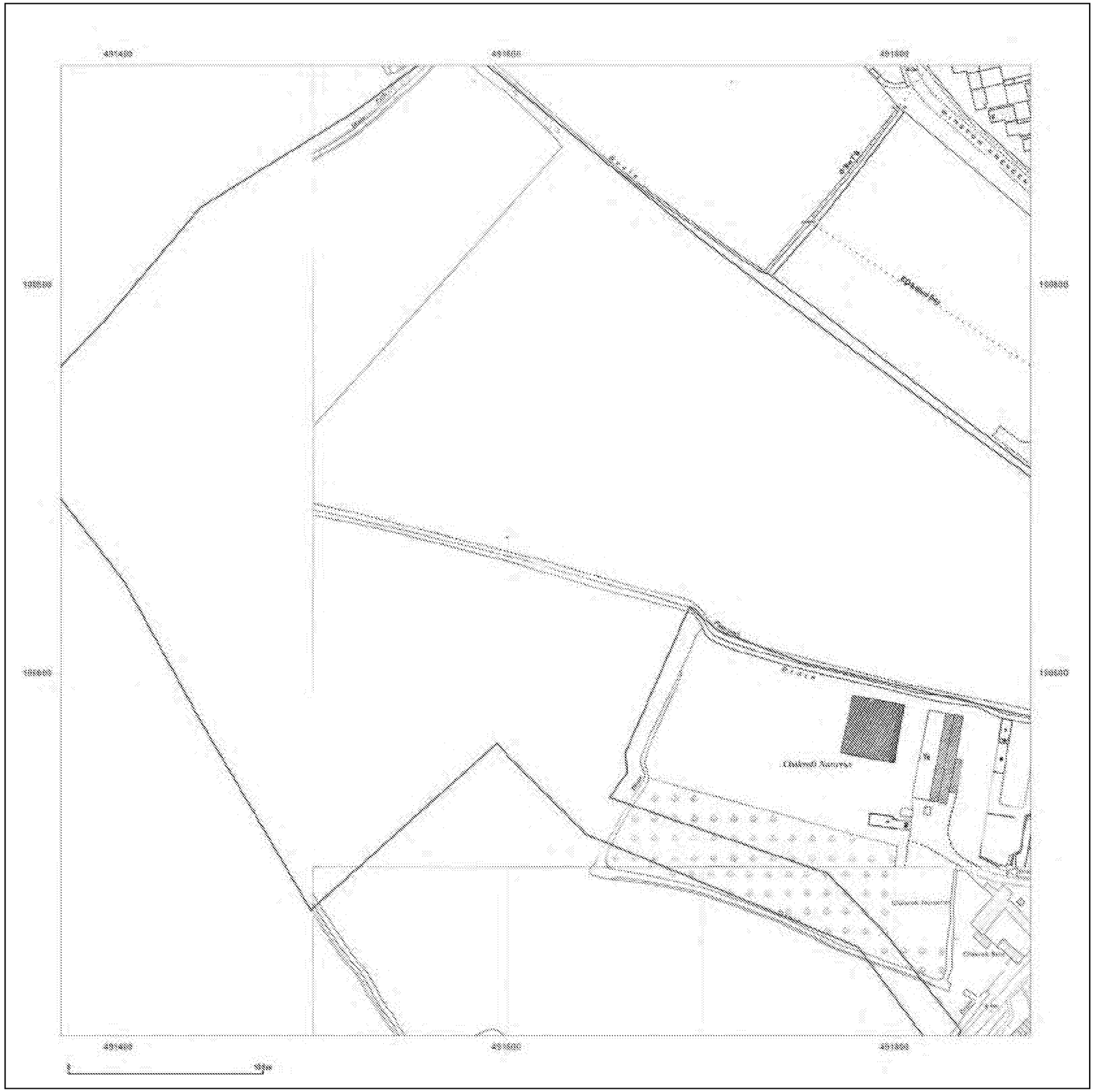
Produced by
Groundsure Insights
www.groundsure.com
Supplied by:
www.findmaps.co.uk
support@findmaps.co.uk
Tel: 0845 521 1410

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 September 2020

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

ARUN DISTRICT COUNCIL BE/87/21/OUT



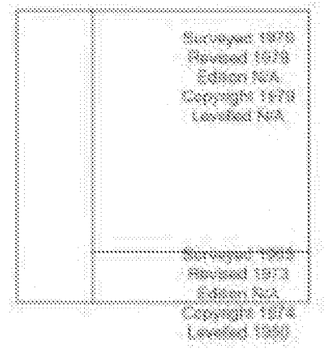
FIND
PROFESSIONAL MAPPING INTELLIGENCE

Site Details:

Client Ref: West Bersted
Report Ref: FIND-65962_1250scale_2_2
Grid Ref: 491620, 100663

Map Name: National Grid
Map date: **1974-1979**
Scale: 1:1,250
Printed at: 1:2,000

N
W E
S



Groundsure Insights

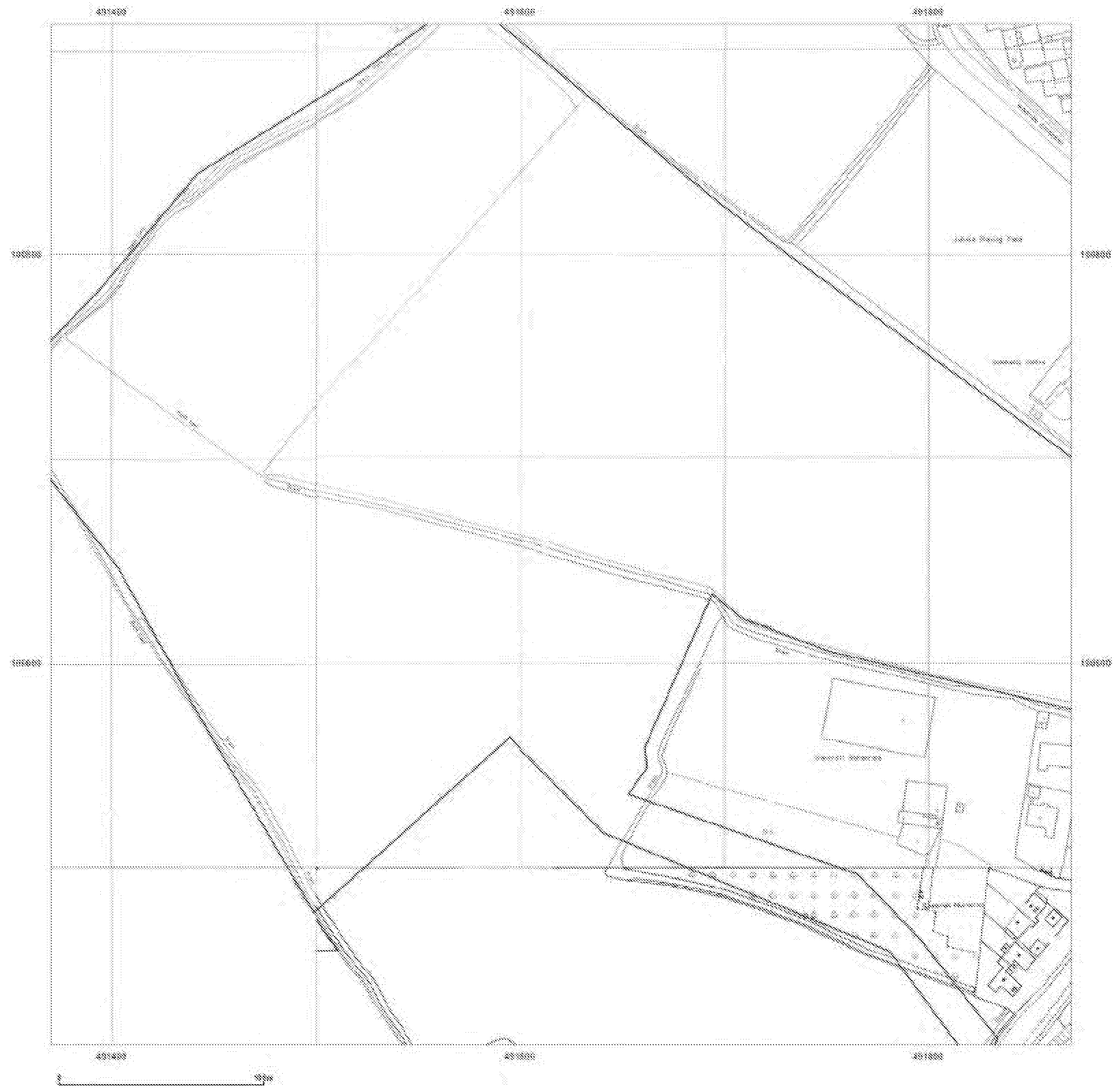
Produced by
Groundsure Insights
www.groundsure.com
Supplied by:
www.findmaps.co.uk
support@findmaps.co.uk
Tel: 0845 521 1410

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 September 2020

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

ARUN DISTRICT COUNCIL BE/87/21/OUT



F!ND
PROFESSIONAL MAPPING INTELLIGENCE

Site Details:

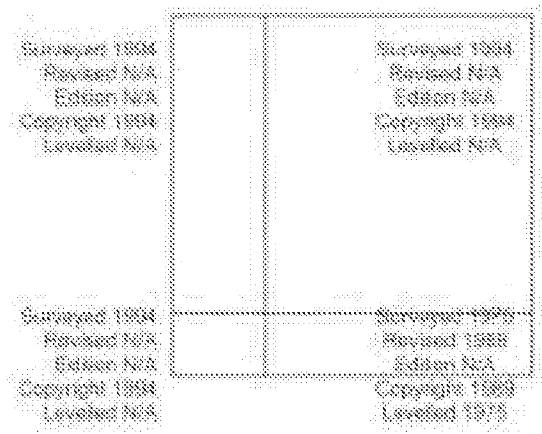
Client Ref: West Bersted
Report Ref: FIND-65962_1250scale_2_2
Grid Ref: 491620, 100663

Map Name: National Grid

Map date: **1989-1994**

Scale: 1:1,250

Printed at: 1:2,000



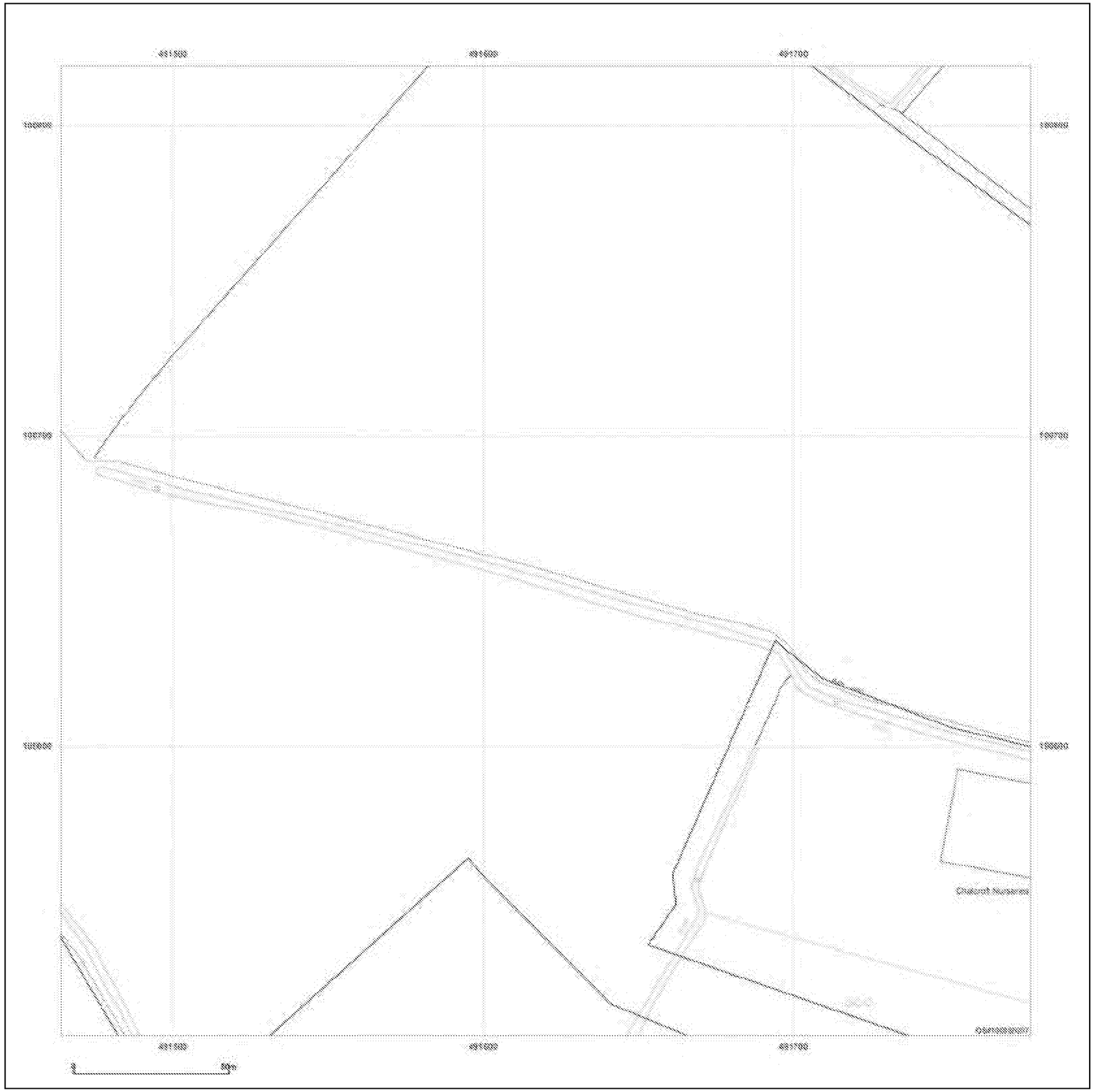
Produced by
Groundsure Insights
www.groundsure.com
Supplied by:
www.findmaps.co.uk
support@findmaps.co.uk
Tel: 0845 521 1410

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 September 2020

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

ARUN DISTRICT COUNCIL BE/87/21/OUT



FIND
PROFESSIONAL MAPPING INTELLIGENCE

Site Details:

Client Ref: West Bersted
Report Ref: FIND-65962_1250scale_2_2
Grid Ref: 491620, 100663

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

N
W E
S

Groundsure Insights

Produced by
Groundsure Insights
www.groundsure.com
Supplied by:
www.findmaps.co.uk
support@findmaps.co.uk
Tel: 0845 521 1410

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 September 2020

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

ARUN DISTRICT COUNCIL BE/87/21/OUT



FIND
PROFESSIONAL MAPPING INTELLIGENCE

Site Details:

Client Ref: West Bersted
Report Ref: FIND-65962_1250scale_2_3
Grid Ref: 491620, 101163

Map Name: National Grid
Map date: **1964**
Scale: 1:1,250
Printed at: 1:2,000

Produced by
Groundsure Insights
www.groundsure.com
Supplied by:
www.findmaps.co.uk
support@findmaps.co.uk
Tel: 0845 521 1410

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 September 2020

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

ARUN DISTRICT COUNCIL BE/87/21/OUT



FIND
PROFESSIONAL MAPPING INTELLIGENCE

Site Details:

Client Ref: West Bersted
Report Ref: FIND-65962_1250scale_2_3
Grid Ref: 491620, 101163

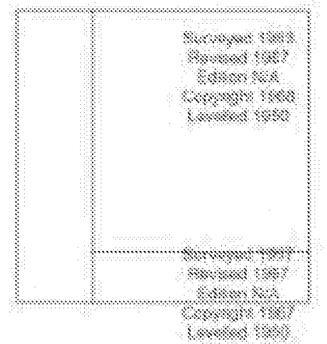
Map Name: National Grid

Map date: **1967-1968**

Scale: 1:1,250

Printed at: 1:2,000

N
W E
S



Groundsure Insights

Produced by
Groundsure Insights
www.groundsure.com
Supplied by:
www.findmaps.co.uk
support@findmaps.co.uk
Tel: 0845 521 1410

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 September 2020

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

ARUN DISTRICT COUNCIL BE/87/21/OUT



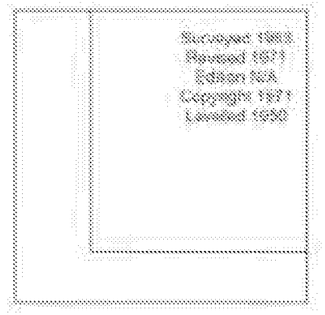
FIND
PROFESSIONAL MAPPING INTELLIGENCE

Site Details:

Client Ref: West Bersted
Report Ref: FIND-65962_1250scale_2_3
Grid Ref: 491620, 101163

Map Name: National Grid
Map date: **1971**
Scale: 1:1,250
Printed at: 1:2,000

N
W E
S



Groundsure

Produced by
Groundsure Insights
www.groundsure.com
Supplied by:
www.findmaps.co.uk
support@findmaps.co.uk
Tel: 0845 521 1410

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 September 2020

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

ARUN DISTRICT COUNCIL BE/87/21/OUT



F!ND

PROFESSIONAL MAPPING INTELLIGENCE

Site Details:

Client Ref: West Bersted
Report Ref: FIND-65962_1250scale_2_3
Grid Ref: 491620, 101163

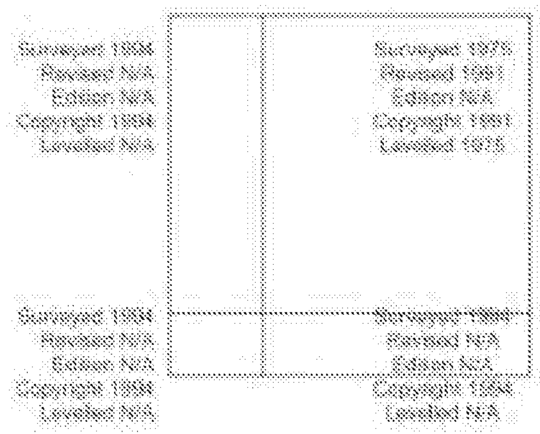
Map Name: National Grid

Map date: **1991-1994**

Scale: 1:1,250

Printed at: 1:2,000

N W E S



Produced by
Groundsure Insights
www.groundsure.com
Supplied by:
www.findmaps.co.uk
support@findmaps.co.uk
Tel: 0845 521 1410

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 September 2020

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

ARUN DISTRICT COUNCIL BE/87/21/OUT



PROFESSIONAL MAPPING INTELLIGENCE

Site Details:

Client Ref: West Bersted
Report Ref: FIND-65962_1250scale_2_3
Grid Ref: 491620, 101163

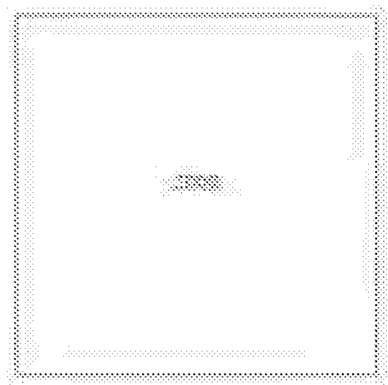
Map Name: LandLine

Map date: 2003

Scale: 1:1,250

Printed at: 1:1,250

N
W E
S



Produced by
Groundsure Insights
www.groundsure.com
Supplied by:
www.findmaps.co.uk
support@findmaps.co.uk
Tel: 0845 521 1410

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 September 2020

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

ARUN DISTRICT COUNCIL BE/87/21/OUT



FIND
PROFESSIONAL MAPPING INTELLIGENCE

Site Details:

Client Ref: West Bersted
Report Ref: FIND-65962_1250scale_3_1
Grid Ref: 492120, 100163

Map Name: National Grid
Map date: **1962-1964**
Scale: 1:1,250
Printed at: 1:2,000

N
W E
S

Surveyed 1963 Revised 1963 Edition N/A Copyright 1964 Levelled 1960	Surveyed 1961 Revised 1961 Edition N/A Copyright 1962 Levelled 1950
Surveyed N/A Revised N/A Edition N/A Copyright N/A Levelled N/A	Surveyed N/A Revised N/A Edition N/A Copyright N/A Levelled N/A

Groundsure Insights

Produced by
Groundsure Insights
www.groundsure.com
Supplied by:
www.findmaps.co.uk
support@findmaps.co.uk
Tel: 0845 521 1410

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 September 2020

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

ARUN DISTRICT COUNCIL BE/87/21/OUT



FIND
PROFESSIONAL MAPPING INTELLIGENCE

Site Details:

Client Ref: West Bersted
Report Ref: FIND-65962_1250scale_3_1
Grid Ref: 492120, 100163

Map Name: National Grid

Map date: **1967-1968**

Scale: 1:1,250

Printed at: 1:2,000

N
W E
S

Surveyed 1966 Revised 1966 Edition N/A Copyright 1968 Levelled 1970		Surveyed 1961 Revised 1967 Edition N/A Copyright 1968 Levelled 1970
Surveyed N/A Revised N/A Edition N/A Copyright N/A Levelled N/A		Surveyed N/A Revised N/A Edition N/A Copyright N/A Levelled N/A

Groundsure

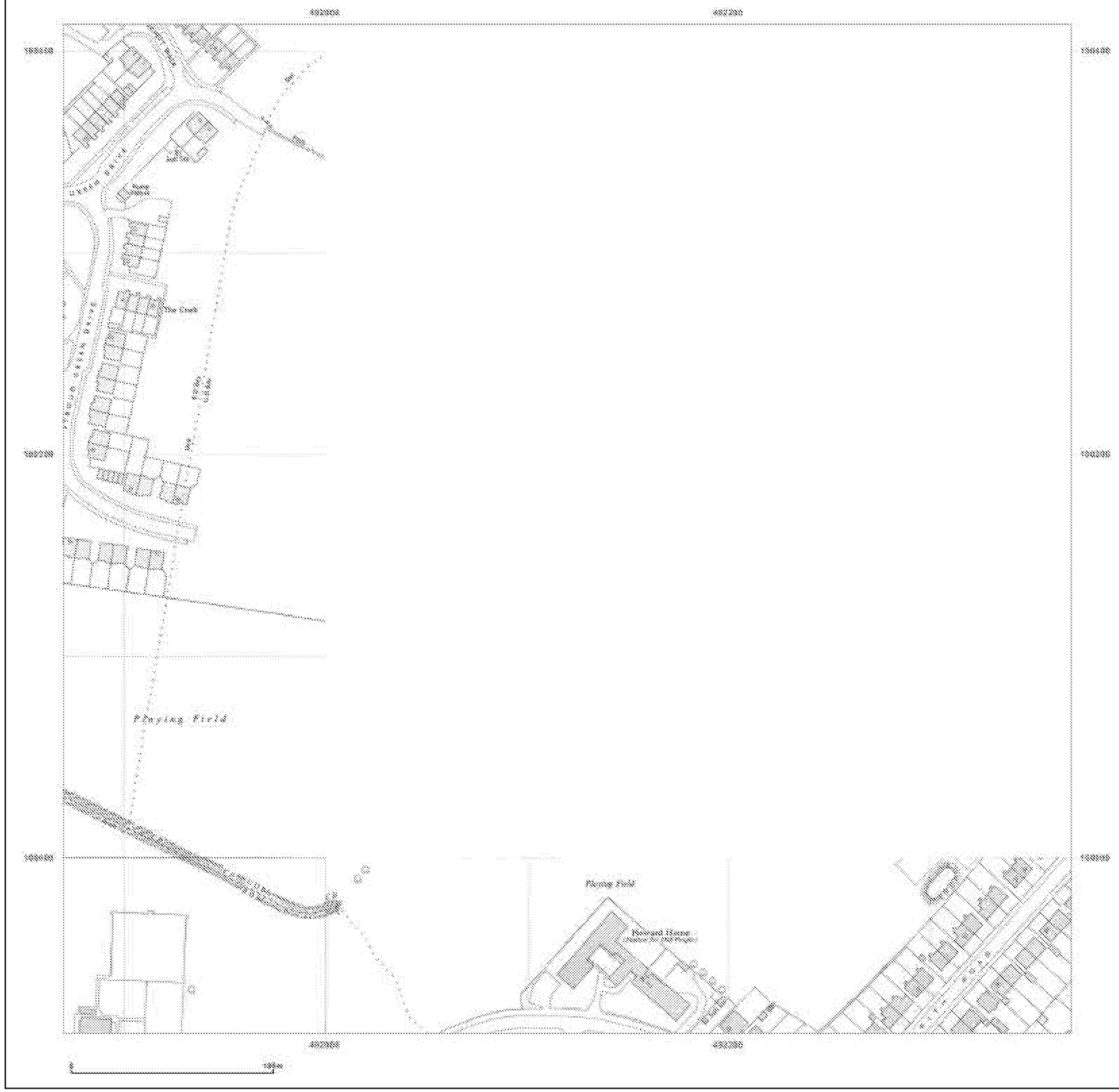
Produced by
Groundsure Insights
www.groundsure.com
Supplied by:
www.findmaps.co.uk
support@findmaps.co.uk
Tel: 0845 521 1410

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 September 2020

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

ARUN DISTRICT COUNCIL BE/87/21/OUT



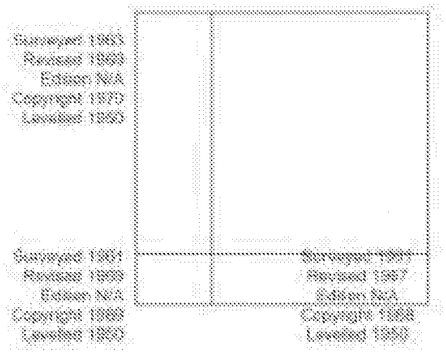
FIND
PROFESSIONAL MAPPING INTELLIGENCE

Site Details:

Client Ref: West Bersted
Report Ref: FIND-65962_1250scale_3_1
Grid Ref: 492120, 100163

Map Name: National Grid
Map date: **1968-1970**
Scale: 1:1,250
Printed at: 1:2,000

N
W E
S



Groundsure Insights

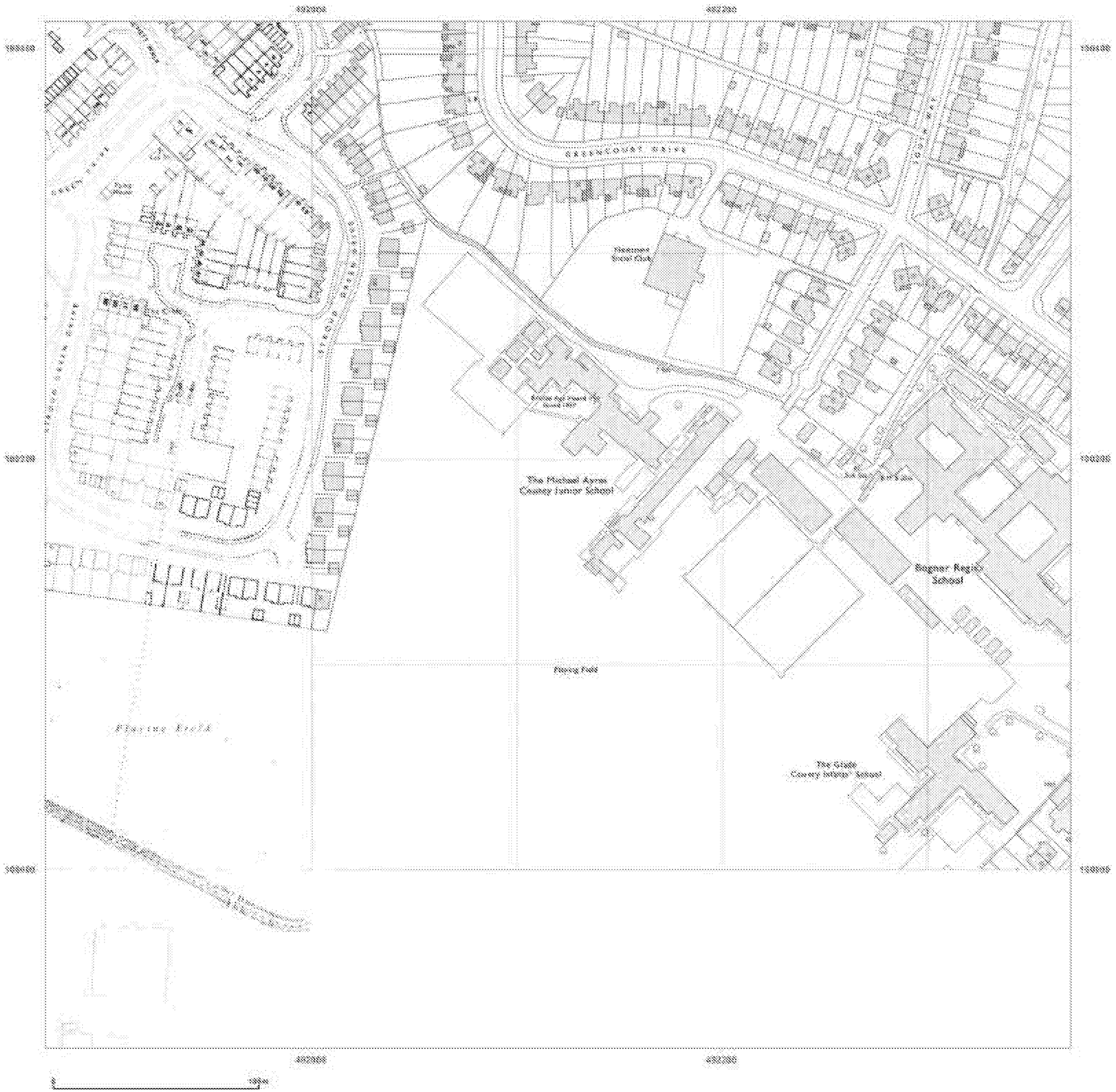
Produced by
Groundsure Insights
www.groundsure.com
Supplied by:
www.findmaps.co.uk
support@findmaps.co.uk
Tel: 0845 521 1410

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 September 2020

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

ARUN DISTRICT COUNCIL BE/87/21/OUT



FIND
PROFESSIONAL MAPPING INTELLIGENCE

Site Details:

Client Ref: West Bersted
Report Ref: FIND-65962_1250scale_3_1
Grid Ref: 492120, 100163

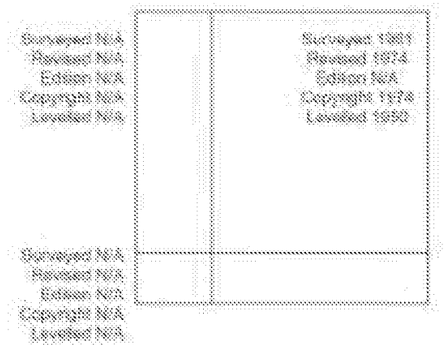
Map Name: National Grid

Map date: **1973-1974**

Scale: 1:1,250

Printed at: 1:2,000

N
W E
S



Groundsure Insights

Produced by
Groundsure Insights
www.groundsure.com
Supplied by:
www.findmaps.co.uk
support@findmaps.co.uk
Tel: 0845 521 1410

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 September 2020

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

ARUN DISTRICT COUNCIL BE/87/21/OUT



PROFESSIONAL MAPPING INTELLIGENCE

Site Details:

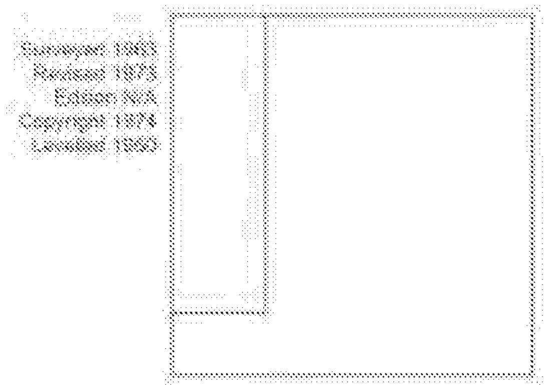
Client Ref: West Bersted
Report Ref: FIND-65962_1250scale_3_1
Grid Ref: 492120, 100163

Map Name: National Grid

Map date: **1974**

Scale: 1:1,250

Printed at: 1:2,000



Produced by
Groundsure Insights
www.groundsure.com
Supplied by:
www.findmaps.co.uk
support@findmaps.co.uk
Tel: 0845 521 1410

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 September 2020

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

ARUN DISTRICT COUNCIL BE/87/21/OUT



FIND
PROFESSIONAL MAPPING INTELLIGENCE

Site Details:

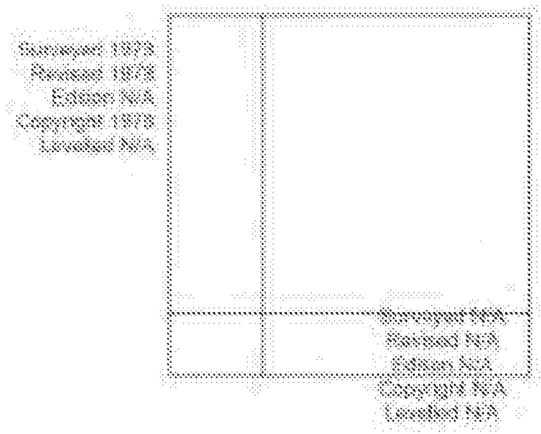
Client Ref: West Bersted
Report Ref: FIND-65962_1250scale_3_1
Grid Ref: 492120, 100163

Map Name: National Grid

Map date: **1978-1981**

Scale: 1:1,250

Printed at: 1:2,000



Produced by
Groundsure Insights
www.groundsure.com
Supplied by:
www.findmaps.co.uk
support@findmaps.co.uk
Tel: 0845 521 1410

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 September 2020

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

ARUN DISTRICT COUNCIL BE/87/21/OUT



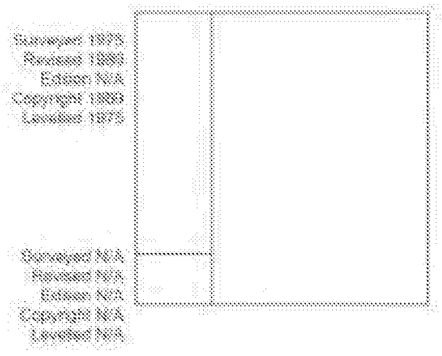
FIND
PROFESSIONAL MAPPING INTELLIGENCE

Site Details:

Client Ref: West Bersted
Report Ref: FIND-65962_1250scale_3_1
Grid Ref: 492120, 100163

Map Name: National Grid
Map date: **1984-1989**
Scale: 1:1,250
Printed at: 1:2,000

N
W E
S



Groundsure Insights

Produced by
Groundsure Insights
www.groundsure.com
Supplied by:
www.findmaps.co.uk
support@findmaps.co.uk
Tel: 0845 521 1410

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 September 2020

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

ARUN DISTRICT COUNCIL BE/87/21/OUT



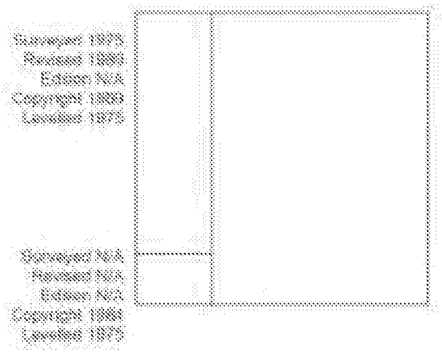
FIND
PROFESSIONAL MAPPING INTELLIGENCE

Site Details:

Client Ref: West Bersted
Report Ref: FIND-65962_1250scale_3_1
Grid Ref: 492120, 100163

Map Name: National Grid
Map date: **1984-1989**
Scale: 1:1,250
Printed at: 1:2,000

N
W E
S



Groundsure

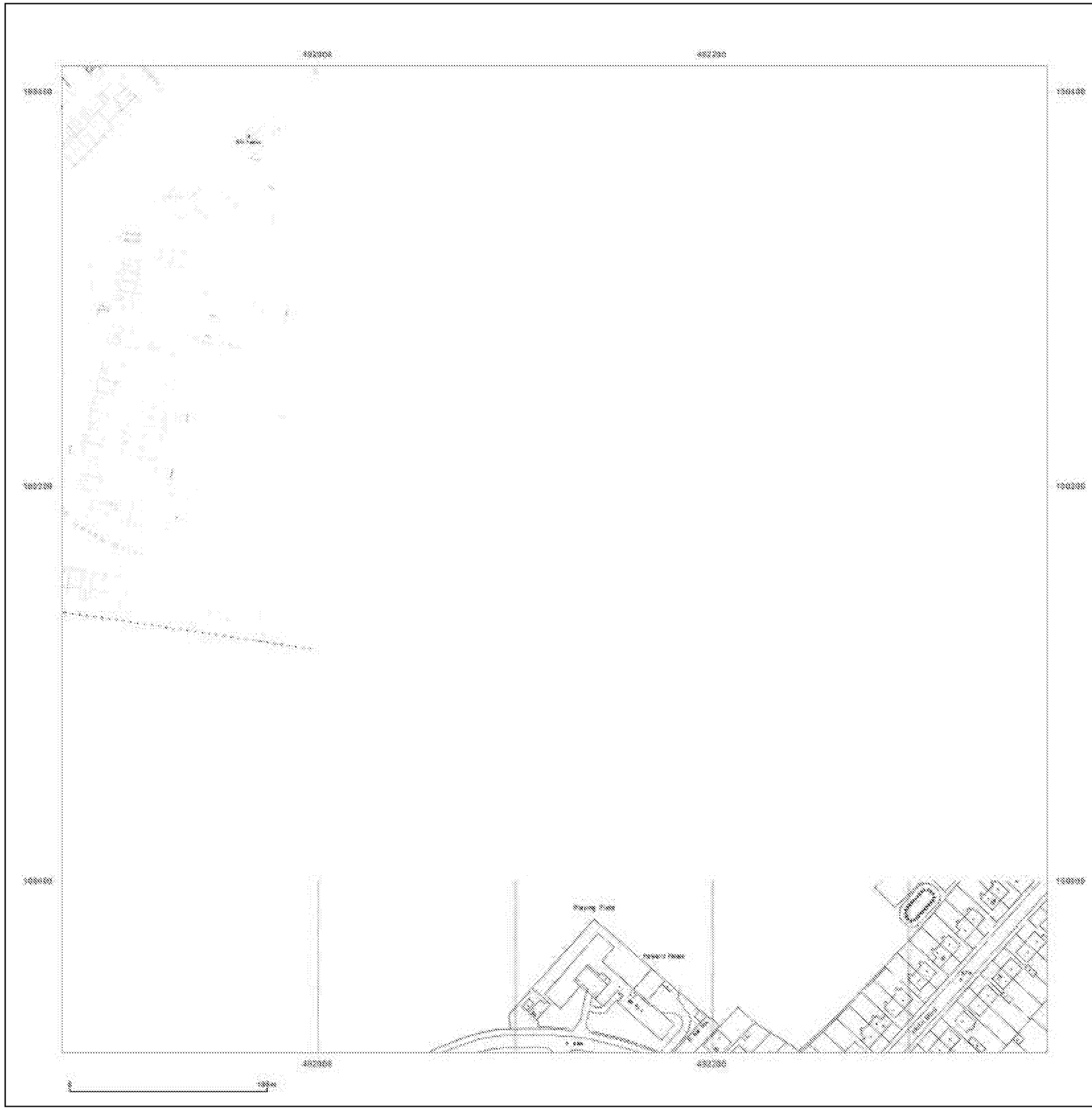
Produced by
Groundsure Insights
www.groundsure.com
Supplied by:
www.findmaps.co.uk
support@findmaps.co.uk
Tel: 0845 521 1410

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 September 2020

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

ARUN DISTRICT COUNCIL BE/87/21/OUT



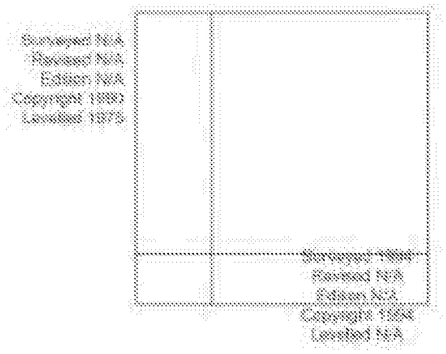
FIND
PROFESSIONAL MAPPING INTELLIGENCE

Site Details:

Client Ref: West Bersted
Report Ref: FIND-65962_1250scale_3_1
Grid Ref: 492120, 100163

Map Name: National Grid
Map date: **1990-1994**
Scale: 1:1,250
Printed at: 1:2,000

N
W E
S



Groundsure
Insights

Produced by
Groundsure Insights
www.groundsure.com
Supplied by:
www.findmaps.co.uk
support@findmaps.co.uk
Tel: 0845 521 1410

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 September 2020

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

ARUN DISTRICT COUNCIL BE/87/21/OUT



FIND
PROFESSIONAL MAPPING INTELLIGENCE

Site Details:

Client Ref: West Bersted
Report Ref: FIND-65962_1250scale_3_1
Grid Ref: 492120, 100163

Map Name: National Grid
Map date: **1990-1994**
Scale: 1:1,250
Printed at: 1:2,000

N
W E
S

Surveyed 1975 Revised 1980 Edition N/A Copyright 1980 Levelled 1975		Surveyed 1975 Revised 1991 Edition N/A Copyright 1991 Levelled 1975
Surveyed 1908 Revised N/A Edition N/A Copyright 1908 Levelled N/A		Surveyed 1908 Revised N/A Edition N/A Copyright 1908 Levelled N/A

Groundsure

Produced by
Groundsure Insights
www.groundsure.com
Supplied by:
www.findmaps.co.uk
support@findmaps.co.uk
Tel: 0845 521 1410

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 September 2020

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

ARUN DISTRICT COUNCIL BE/87/21/OUT



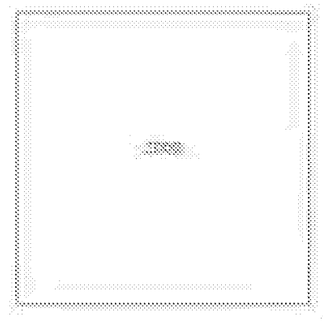
FIND
PROFESSIONAL MAPPING INTELLIGENCE

Site Details:

Client Ref: West Bersted
Report Ref: FIND-65962_1250scale_3_1
Grid Ref: 492120, 100163

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

N
W E
S



Groundsure Insights

Produced by
Groundsure Insights
www.groundsure.com
Supplied by:
www.findmaps.co.uk
support@findmaps.co.uk
Tel: 0845 521 1410

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 September 2020

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

ARUN DISTRICT COUNCIL BE/87/21/OUT



FIND
PROFESSIONAL MAPPING INTELLIGENCE

Site Details:

Client Ref: West Bersted
Report Ref: FIND-65962_1250scale_3_2
Grid Ref: 492120, 100663

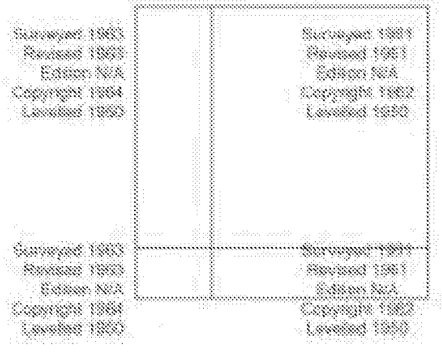
Map Name: National Grid

Map date: **1962-1964**

Scale: 1:1,250

Printed at: 1:2,000

N
W E
S



Groundsure Insights

Produced by
Groundsure Insights
www.groundsure.com
Supplied by:
www.findmaps.co.uk
support@findmaps.co.uk
Tel: 0845 521 1410

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 September 2020

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

ARUN DISTRICT COUNCIL BE/87/21/OUT



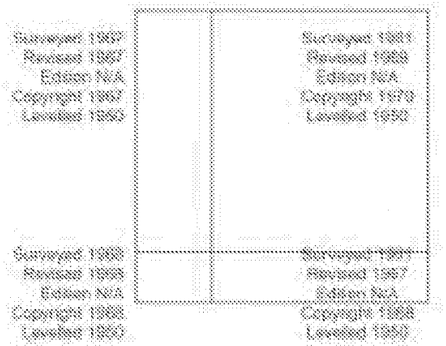
FIND
PROFESSIONAL MAPPING INTELLIGENCE

Site Details:

Client Ref: West Bersted
Report Ref: FIND-65962_1250scale_3_2
Grid Ref: 492120, 100663

Map Name: National Grid
Map date: **1967-1970**
Scale: 1:1,250
Printed at: 1:2,000

N
W E
S



Groundsure Insights

Produced by
Groundsure Insights
www.groundsure.com
Supplied by:
www.findmaps.co.uk
support@findmaps.co.uk
Tel: 0845 521 1410

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 September 2020

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

ARUN DISTRICT COUNCIL BE/87/21/OUT



FIND
PROFESSIONAL MAPPING INTELLIGENCE

Site Details:

Client Ref: West Bersted
Report Ref: FIND-65962_1250scale_3_2
Grid Ref: 492120, 100663

Map Name: National Grid
Map date: **1974-1979**
Scale: 1:1,250
Printed at: 1:2,000

N
W E
S

Surveyed 1975 Revised 1975 Edition N/A Copyright 1975 Levelled N/A		Surveyed 1978 Revised 1978 Edition N/A Copyright 1978 Levelled N/A
Surveyed 1963 Revised 1973 Edition N/A Copyright 1974 Levelled 1960		

Groundsure

Produced by
Groundsure Insights
www.groundsure.com
Supplied by:
www.findmaps.co.uk
support@findmaps.co.uk
Tel: 0845 521 1410

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 September 2020

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

ARUN DISTRICT COUNCIL BE/87/21/OUT



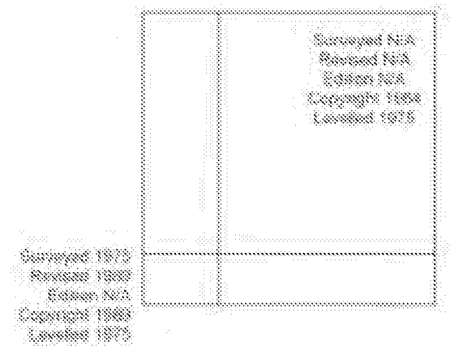
FIND
PROFESSIONAL MAPPING INTELLIGENCE

Site Details:

Client Ref: West Bersted
Report Ref: FIND-65962_1250scale_3_2
Grid Ref: 492120, 100663

Map Name: National Grid
Map date: **1984-1989**
Scale: 1:1,250
Printed at: 1:2,000

N
W E
S



Groundsure Insights

Produced by
Groundsure Insights
www.groundsure.com
Supplied by:
www.findmaps.co.uk
support@findmaps.co.uk
Tel: 0845 521 1410

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 September 2020

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

ARUN DISTRICT COUNCIL BE/87/21/OUT



FIND
PROFESSIONAL MAPPING INTELLIGENCE

Site Details:

Client Ref: West Bersted
Report Ref: FIND-65962_1250scale_3_2
Grid Ref: 492120, 100663

Map Name: National Grid
Map date: **1989-1994**
Scale: 1:1,250
Printed at: 1:2,000

N
W E
S

Surveyed 1908 Revised N/A Edition N/A Copyright 1908 Levelled N/A		Surveyed N/A Revised N/A Edition N/A Copyright 1991 Levelled 1975
Surveyed 1975 Revised 1989 Edition N/A Copyright 1989 Levelled 1975		Surveyed 1975 Revised 1991 Edition N/A Copyright 1991 Levelled 1975

Groundsure Insights

Produced by
Groundsure Insights
www.groundsure.com
Supplied by:
www.findmaps.co.uk
support@findmaps.co.uk
Tel: 0845 521 1410

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 September 2020

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

ARUN DISTRICT COUNCIL BE/87/21/OUT



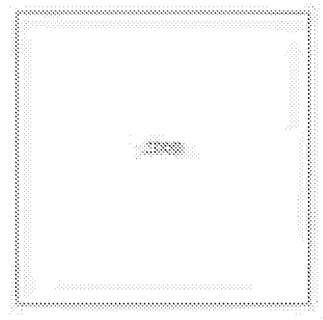
FIND
PROFESSIONAL MAPPING INTELLIGENCE

Site Details:

Client Ref: West Bersted
Report Ref: FIND-65962_1250scale_3_2
Grid Ref: 492120, 100663

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

N
W E
S



Groundsure Insights

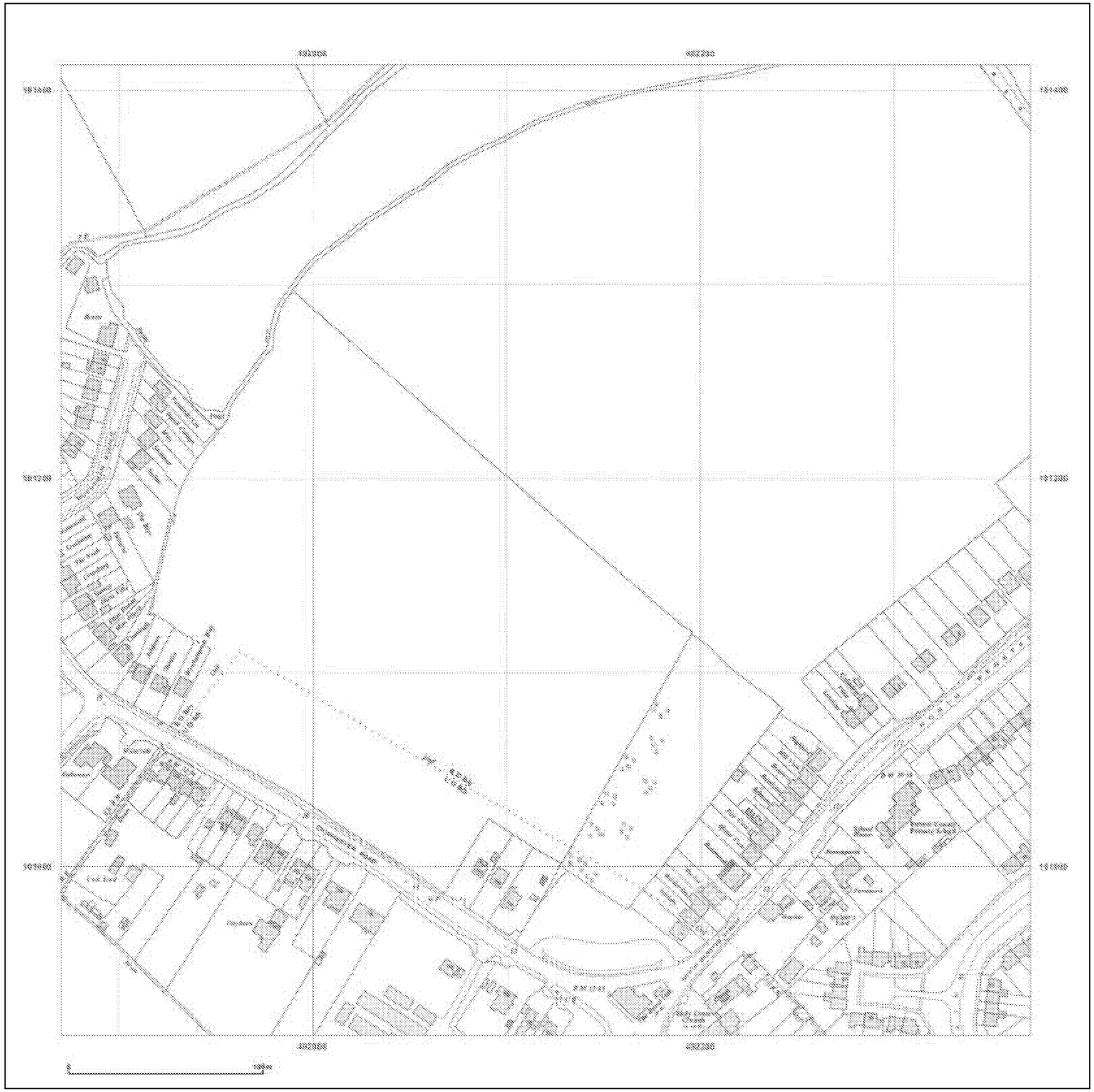
Produced by
Groundsure Insights
www.groundsure.com
Supplied by:
www.findmaps.co.uk
support@findmaps.co.uk
Tel: 0845 521 1410

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 September 2020

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

ARUN DISTRICT COUNCIL BE/87/21/OUT



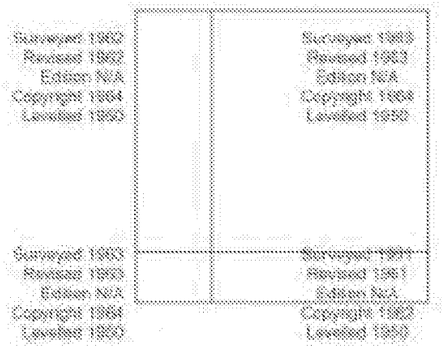
FIND
PROFESSIONAL MAPPING INTELLIGENCE

Site Details:

Client Ref: West Bersted
Report Ref: FIND-65962_1250scale_3_3
Grid Ref: 492120, 101163

Map Name: National Grid
Map date: **1962-1964**
Scale: 1:1,250
Printed at: 1:2,000

N
W E
S



Groundsure Insights

Produced by
Groundsure Insights
www.groundsure.com
Supplied by:
www.findmaps.co.uk
support@findmaps.co.uk
Tel: 0845 521 1410

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 September 2020

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

ARUN DISTRICT COUNCIL BE/87/21/OUT



FIND
PROFESSIONAL MAPPING INTELLIGENCE

Site Details:

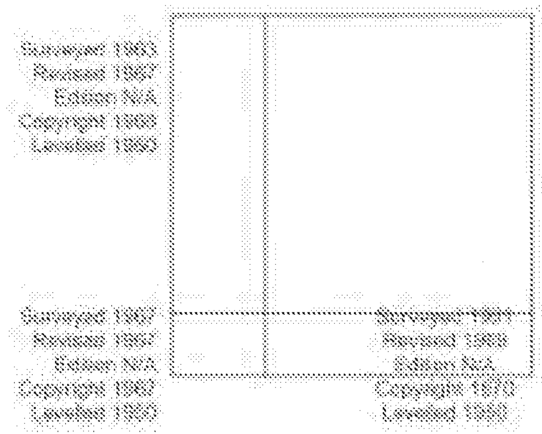
Client Ref: West Bersted
Report Ref: FIND-65962_1250scale_3_3
Grid Ref: 492120, 101163

Map Name: National Grid

Map date: **1967-1970**

Scale: 1:1,250

Printed at: 1:2,000



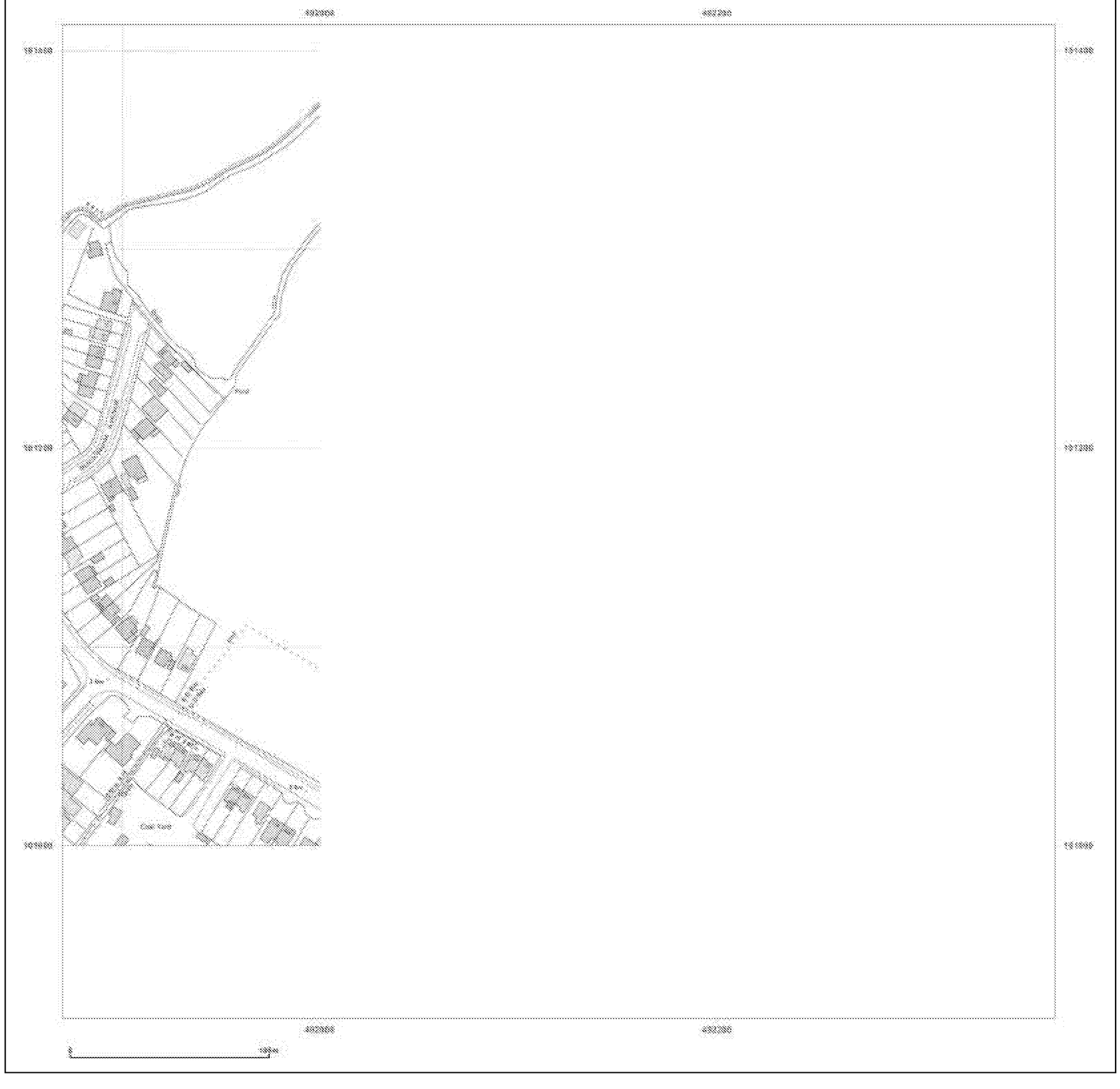
Produced by
Groundsure Insights
www.groundsure.com
Supplied by:
www.findmaps.co.uk
support@findmaps.co.uk
Tel: 0845 521 1410

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 September 2020

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

ARUN DISTRICT COUNCIL BE/87/21/OUT



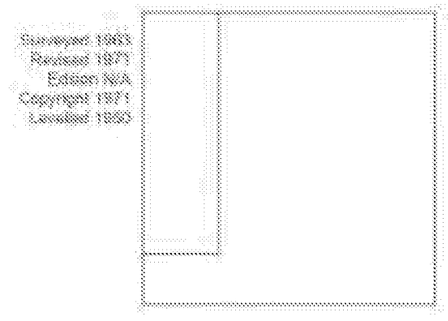
FIND
PROFESSIONAL MAPPING INTELLIGENCE

Site Details:

Client Ref: West Bersted
Report Ref: FIND-65962_1250scale_3_3
Grid Ref: 492120, 101163

Map Name: National Grid
Map date: **1971**
Scale: 1:1,250
Printed at: 1:2,000

N
W E
S



Groundsure

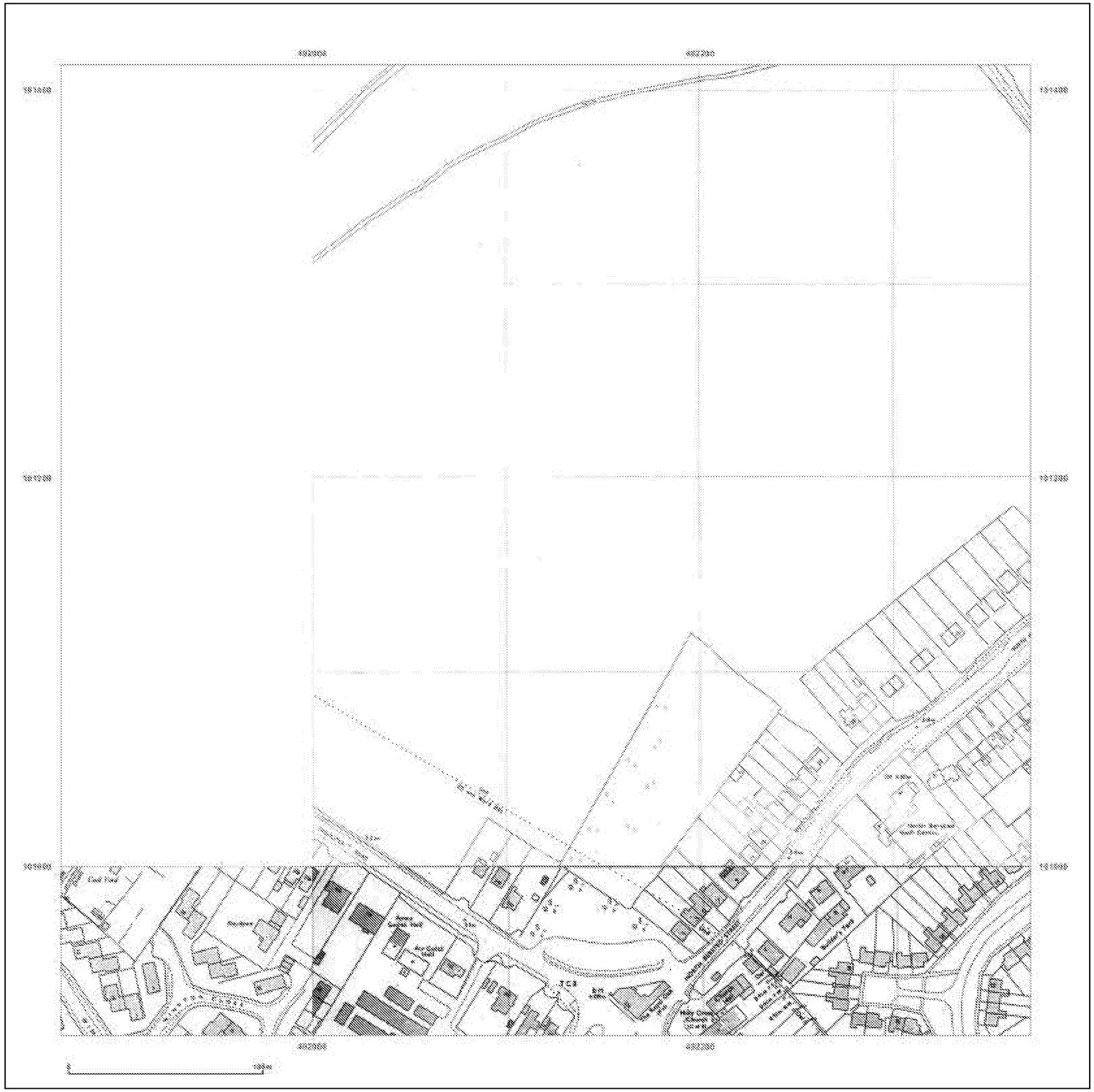
Produced by
Groundsure Insights
www.groundsure.com
Supplied by:
www.findmaps.co.uk
support@findmaps.co.uk
Tel: 0845 521 1410

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 September 2020

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

ARUN DISTRICT COUNCIL BE/87/21/OUT



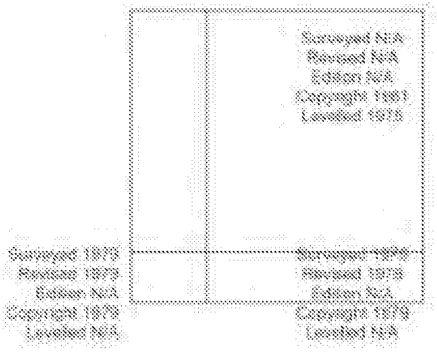
FIND
PROFESSIONAL MAPPING INTELLIGENCE

Site Details:

Client Ref: West Bersted
Report Ref: FIND-65962_1250scale_3_3
Grid Ref: 492120, 101163

Map Name: National Grid
Map date: **1979-1981**
Scale: 1:1,250
Printed at: 1:2,000

N
W E
S



Groundsure

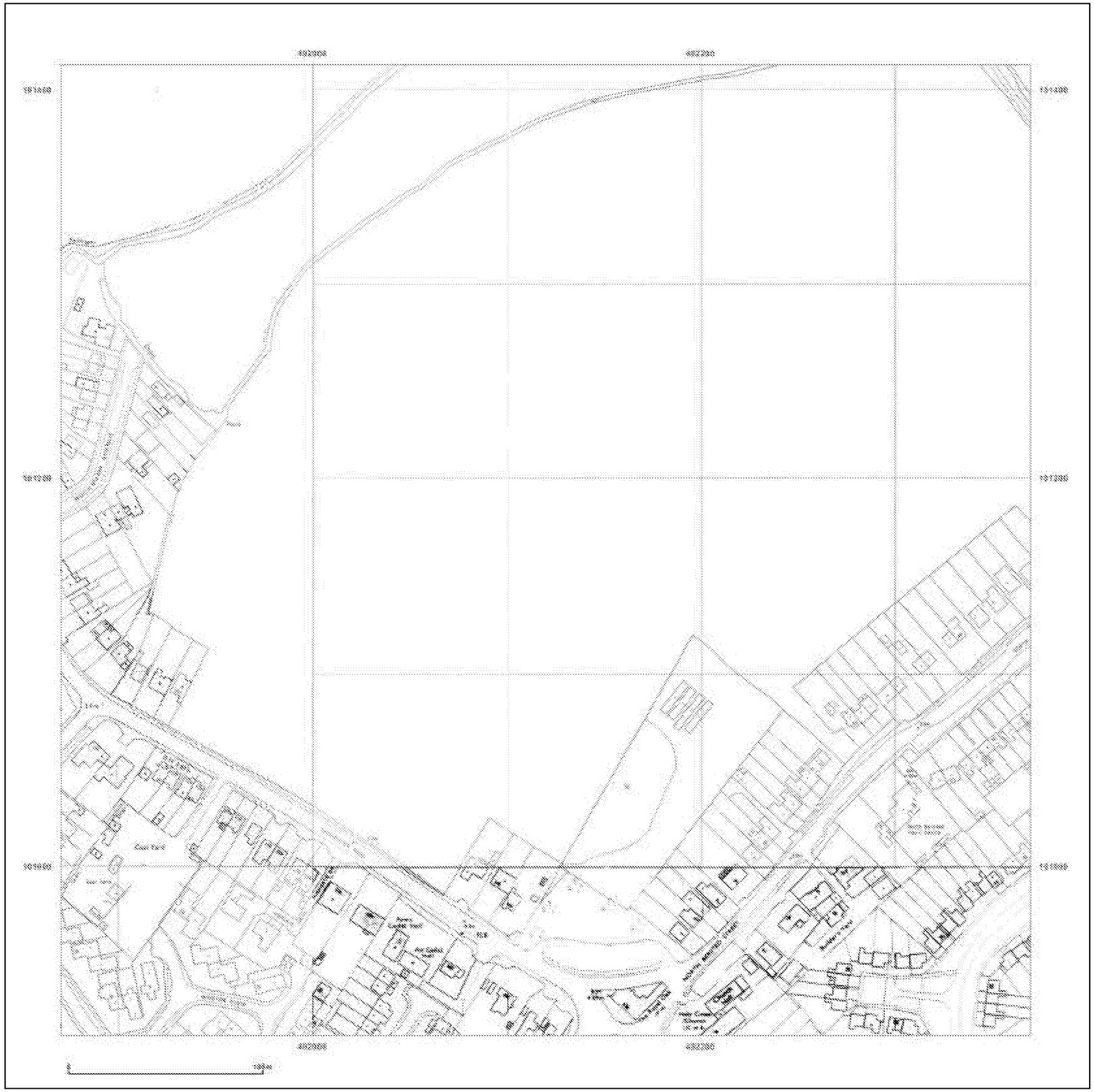
Produced by
Groundsure Insights
www.groundsure.com
Supplied by:
www.findmaps.co.uk
support@findmaps.co.uk
Tel: 0845 521 1410

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 September 2020

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

ARUN DISTRICT COUNCIL BE/87/21/OUT



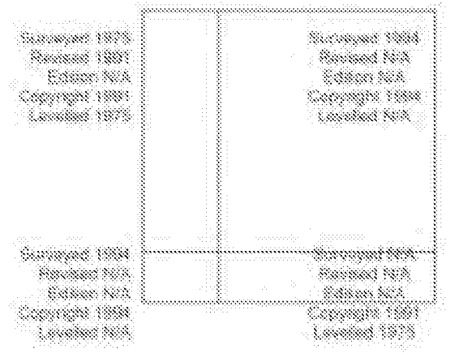
FIND
PROFESSIONAL MAPPING INTELLIGENCE

Site Details:

Client Ref: West Bersted
Report Ref: FIND-65962_1250scale_3_3
Grid Ref: 492120, 101163

Map Name: National Grid
Map date: **1991-1994**
Scale: 1:1,250
Printed at: 1:2,000

N
W E
S



Groundsure Insights

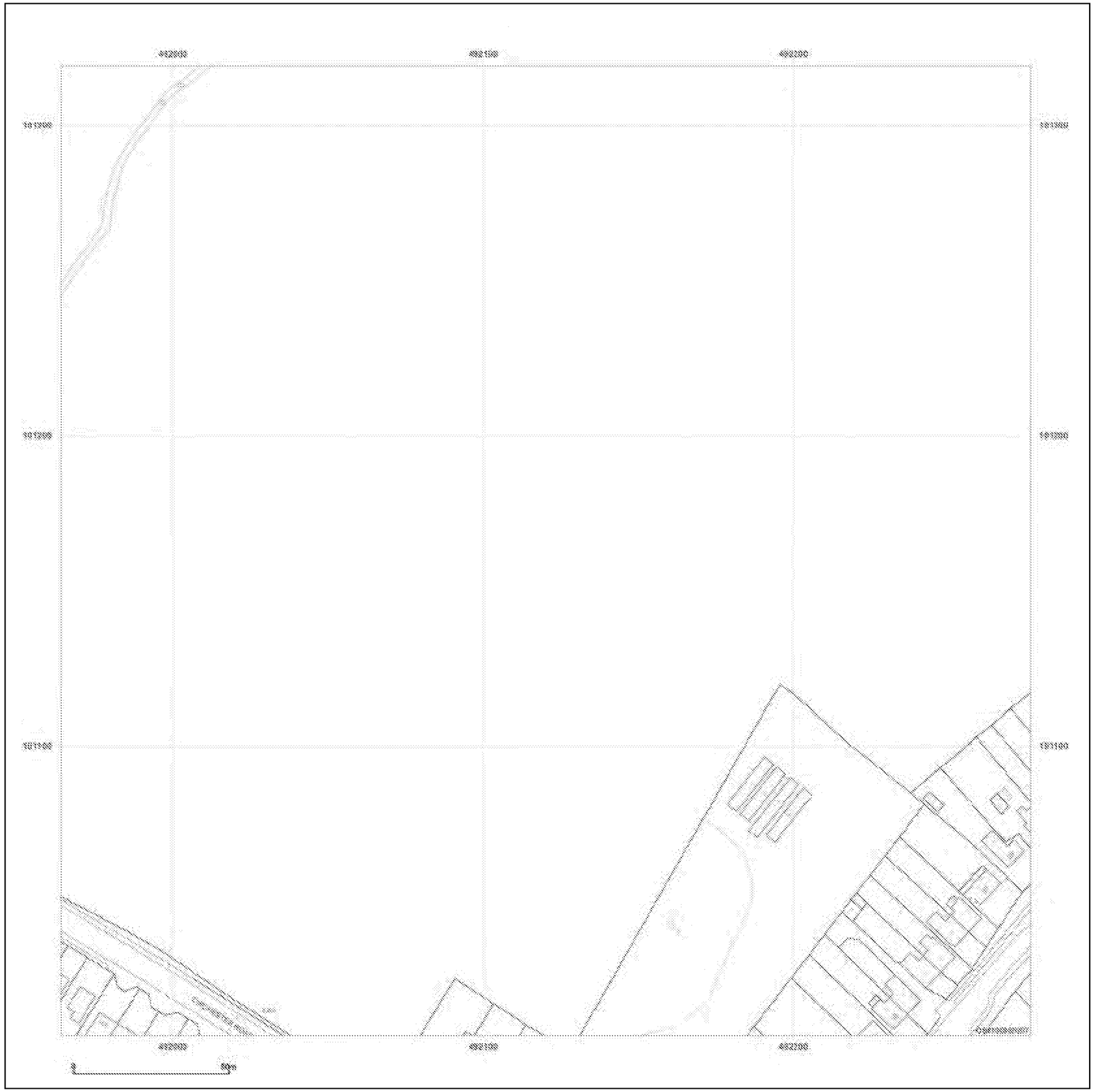
Produced by
Groundsure Insights
www.groundsure.com
Supplied by:
www.findmaps.co.uk
support@findmaps.co.uk
Tel: 0845 521 1410

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 September 2020

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

ARUN DISTRICT COUNCIL BE/87/21/OUT



FIND
PROFESSIONAL MAPPING INTELLIGENCE

Site Details:

Client Ref: West Bersted
Report Ref: FIND-65962_1250scale_3_3
Grid Ref: 492120, 101163

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





Groundsure

Produced by
Groundsure Insights
www.groundsure.com
Supplied by:
www.findmaps.co.uk
support@findmaps.co.uk
Tel: 0845 521 1410

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 01 September 2020

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

Appendix C Environmental Databases

Groundsure
LOCATION INTELLIGENCE

Geo
Insight

491655 100641

Order Details

Date: 31/08/2020

Your ref: West Bersted

Our Ref: FIND-65963

Client: FIND Mapping Ltd

Site Details

Location: 491655 100641

Area: 13.61 ha

Authority: Arun District Council



Summary of findings p. 2

OS MasterMap site plan N/A: >10ha

Aerial image p. 5

groundsure.com/insightuserguide

Contact us with any questions at:
info@groundsure.com
08444 159 000

ARUN DISTRICT COUNCIL BE/87/21/OUT

Summary of findings

Page	Section	Geology 1:10,000 scale	On site	0-50m	50-250m	250-500m	500-2000m
10	1.1	10k Availability	Identified (within 500m)				
11	1.2	Artificial and made ground (10k)	1	0	0	1	-
12	1.3	Superficial geology (10k)	2	0	0	3	-
13	1.4	Landslip (10k)	0	0	0	0	-
14	1.5	Bedrock geology (10k)	2	0	0	3	-
15	1.6	Bedrock faults and other linear features (10k)	0	0	0	0	-
Page	Section	Geology 1:50,000 scale	On site	0-50m	50-250m	250-500m	500-2000m
16	2.1	50k Availability	Identified (within 500m)				
17	2.2	Artificial and made ground (50k)	0	0	0	0	-
17	2.3	Artificial ground permeability (50k)	0	0	-	-	-
18	2.4	Superficial geology (50k)	1	0	0	1	-
19	2.5	Superficial permeability (50k)	Identified (within 50m)				
19	2.6	Landslip (50k)	0	0	0	0	-
19	2.7	Landslip permeability (50k)	None (within 50m)				
20	2.8	Bedrock geology (50k)	2	0	0	1	-
21	2.9	Bedrock permeability (50k)	Identified (within 50m)				
21	2.10	Bedrock faults and other linear features (50k)	0	0	0	0	-
Page	Section	Boreholes	On site	0-50m	50-250m	250-500m	500-2000m
22	3.1	BGS Boreholes	0	2	5	-	-
Page	Section	Natural ground subsidence					
24	4.1	Shrink swell clays	Moderate (within 50m)				
25	4.2	Running sands	Low (within 50m)				
26	4.3	Compressible deposits	Negligible (within 50m)				
27	4.4	Collapsible deposits	Low (within 50m)				
28	4.5	Landslides	Very low (within 50m)				
29	4.6	Ground dissolution of soluble rocks	Very low (within 50m)				

ARUN DISTRICT COUNCIL BE/87/21/OUT

Page	Section	Mining, ground workings and natural cavities	On site	0-50m	50-250m	250-500m	500-2000m
31	5.1	Natural cavities	0	0	0	0	-
32	5.2	BritPits	0	1	1	3	-
33	5.3	Surface ground workings	2	2	6	-	-
33	5.4	Underground workings	0	0	0	0	0
33	5.5	Historical Mineral Planning Areas	0	0	0	0	-
34	5.6	Non-coal mining	0	0	0	0	0
34	5.7	Mining cavities	0	0	0	0	0
34	5.8	JPB mining areas	None (within 0m)				
34	5.9	Coal mining	None (within 0m)				
34	5.10	Brine areas	None (within 0m)				
35	5.11	Gypsum areas	None (within 0m)				
35	5.12	Tin mining	None (within 0m)				
35	5.13	Clay mining	None (within 0m)				

Page	Section	Radon	
36	6.1	Radon	Less than 1% (within 0m)

Page	Section	Soil chemistry	On site	0-50m	50-250m	250-500m	500-2000m
37	7.1	BGS Estimated Background Soil Chemistry	6	0	-	-	-
37	7.2	BGS Estimated Urban Soil Chemistry	0	0	-	-	-
38	7.3	BGS Measured Urban Soil Chemistry	0	0	-	-	-

Page	Section	Railway infrastructure and projects	On site	0-50m	50-250m	250-500m	500-2000m
39	8.1	Underground railways (London)	0	0	0	-	-
39	8.2	Underground railways (Non-London)	0	0	0	-	-
39	8.3	Railway tunnels	0	0	0	-	-
39	8.4	Historical railway and tunnel features	0	0	0	-	-
39	8.5	Royal Mail tunnels	0	0	0	-	-
40	8.6	Historical railways	0	0	0	-	-
40	8.7	Railways	0	0	0	-	-
40	8.8	Crossrail 1	0	0	0	0	-

ARUN DISTRICT COUNCIL BE/87/21/OUT

40	8.9	Crossrail 2	0	0	0	0	-
40	8.10	HS2	0	0	0	0	-

ARUN DISTRICT COUNCIL BE/87/21/OUT

Recent aerial photograph



Capture Date: 28/06/2018

Site Area: 13.61ha

ARUN DISTRICT COUNCIL BE/87/21/OUT

Recent site history - 2015 aerial photograph



Aerial photography supplied by Getmapping PLC. © Copyright Getmapping PLC 2020. All Rights Reserved.

Capture Date: 20/05/2015

Site Area: 13.61ha

ARUN DISTRICT COUNCIL BE/87/21/OUT

Recent site history - 2013 aerial photograph



Aerial photography supplied by Getmapping PLC. © Copyright Getmapping PLC 2020. All Rights Reserved.

Capture Date: 03/05/2013

Site Area: 13.61ha

ARUN DISTRICT COUNCIL BE/87/21/OUT

Recent site history - 2012 aerial photograph



Capture Date: 13/09/2012

Site Area: 13.61ha

ARUN DISTRICT COUNCIL BE/87/21/OUT

Recent site history - 1999 aerial photograph



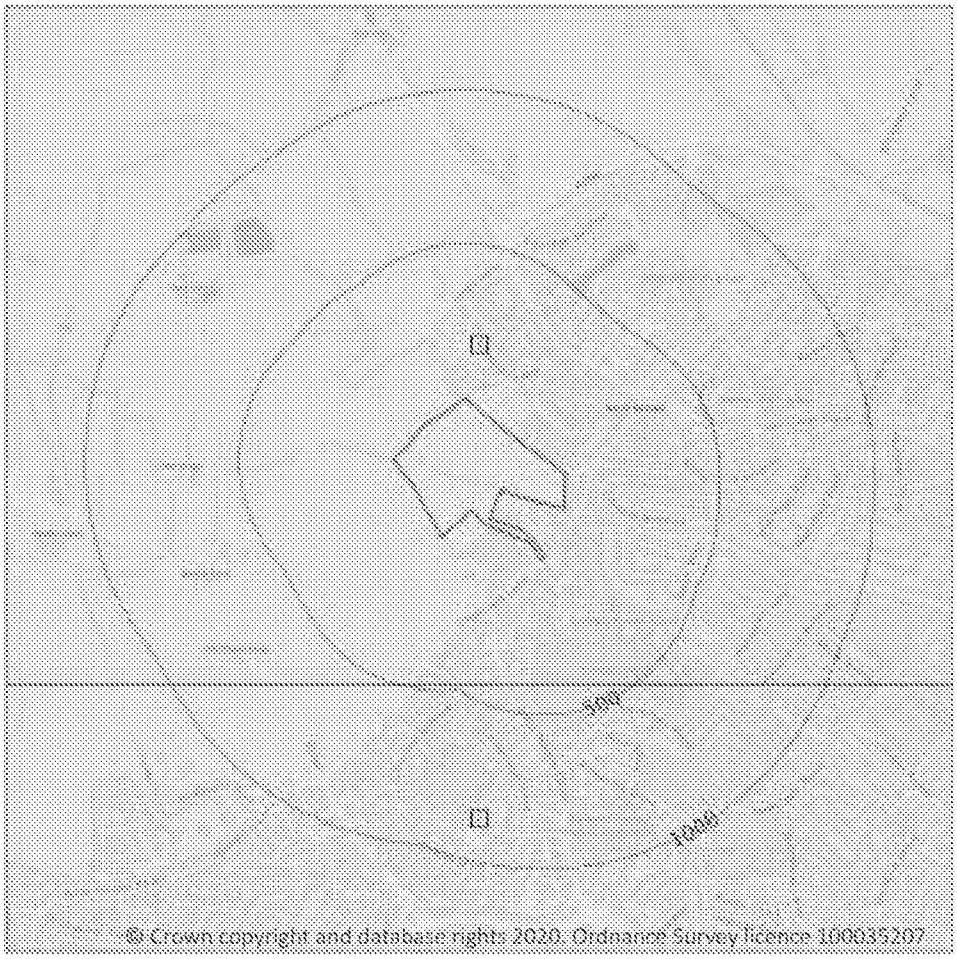
Aerial photography supplied by Getmapping PLC. © Copyright Getmapping PLC 2020. All rights Reserved.

Capture Date: 06/09/1999

Site Area: 13.61ha

ARUN DISTRICT COUNCIL BE/87/21/OUT

1 Geology 1:10,000 scale - Availability



Site Outline

Search buffers in metres (m)

- Full coverage
- Partial coverage
- No coverage

1.1 10k Availability

Records within 500m **2**

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

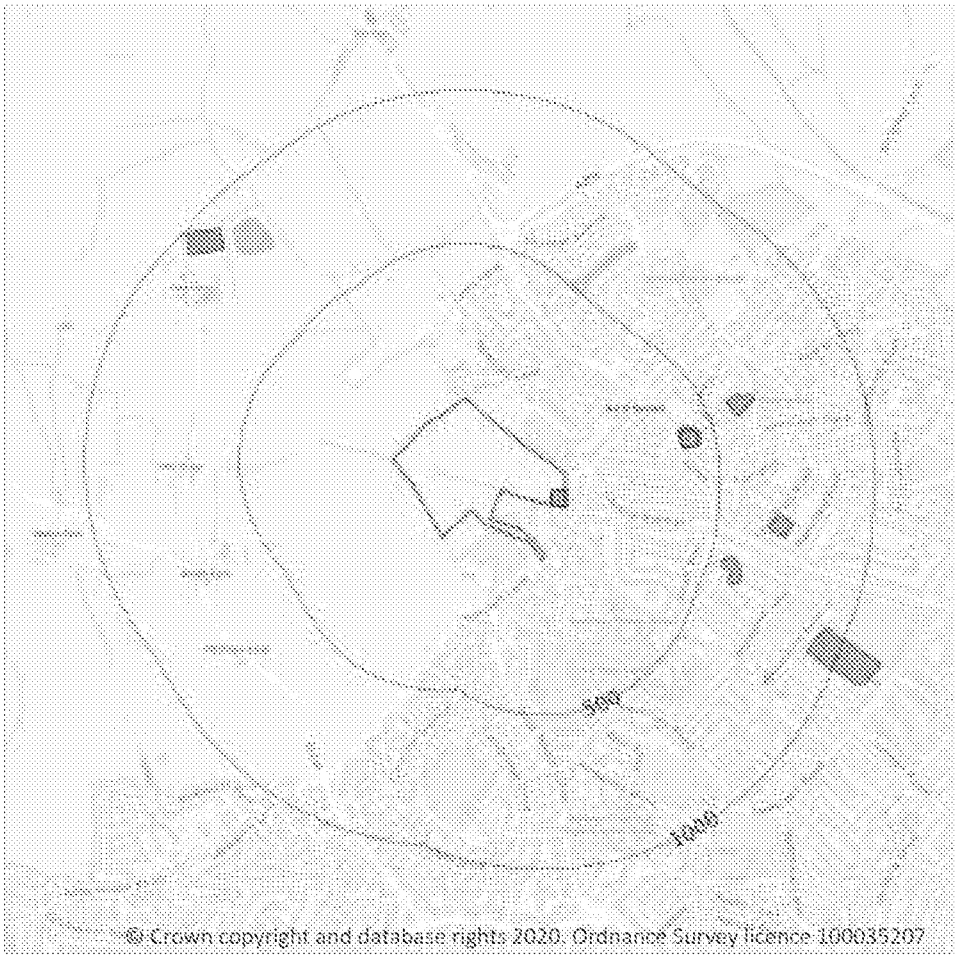
Features are displayed on the Geology 1:10,000 scale - Availability map on **page 10**

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	**On site**	**Full**	**Full**	**Full**	**No coverage**	**SU90SW**
2	400m S	No coverage	Full	Full	No coverage	SZ99NW

This data is sourced from the British Geological Survey.

ARUN DISTRICT COUNCIL BE/87/21/OUT

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



Site Outline

Search buffers in metres (m)

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

1.2 Artificial and made ground (10k)

Records within 500m	2

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

Features are displayed on the Geology 1:10,000 scale - Artificial and made ground map on **page 11**

ID	Location	LEX Code	Description	Rock description
1	**On site**	**WGR-VOID**	**Worked Ground (Undivided)**	**Void**
2	385m E	WGR-VOID	Worked Ground (Undivided)	Void

This data is sourced from the British Geological Survey.

Geology 1:10,000 scale - Superficial



Site Outline

Search buffers in metres (m)

Landslip (10k)

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

1.3 Superficial geology (10k)

Records within 500m 5

Superficial geological deposits at 1:10,000 scale. Also known as 'drift', these are the youngest geological deposits, formed during the Quaternary. They rest on older deposits or rocks referred to as bedrock.

Features are displayed on the Geology 1:10,000 scale - Superficial map on **page 12**

ID	Location	LEX Code	Description	Rock description
1	On site	RTDU-Z	River Terrace Deposits (undifferentiated) - Silt (unlithified Deposits Coding Scheme)	Silt
2	On site	RBD1-XSV	Raised Beach Deposits, 1 - Sand And Gravel	Sand And Gravel
3	367m NE	RMD-CZ	Raised Marine Deposits - Silty Clay	Clay, Silty

ARUN DISTRICT COUNCIL BE/87/21/OUT

ID	Location	LEX Code	Description	Rock description
4	385m E	RBD1-XSV	Raised Beach Deposits, 1 - Sand And Gravel	Sand And Gravel
5	400m S	RTDU-Z	River Terrace Deposits (undifferentiated) - Silt (unlithified Deposits Coding Scheme)	Silt

This data is sourced from the British Geological Survey.

1.4 Landslip (10k)

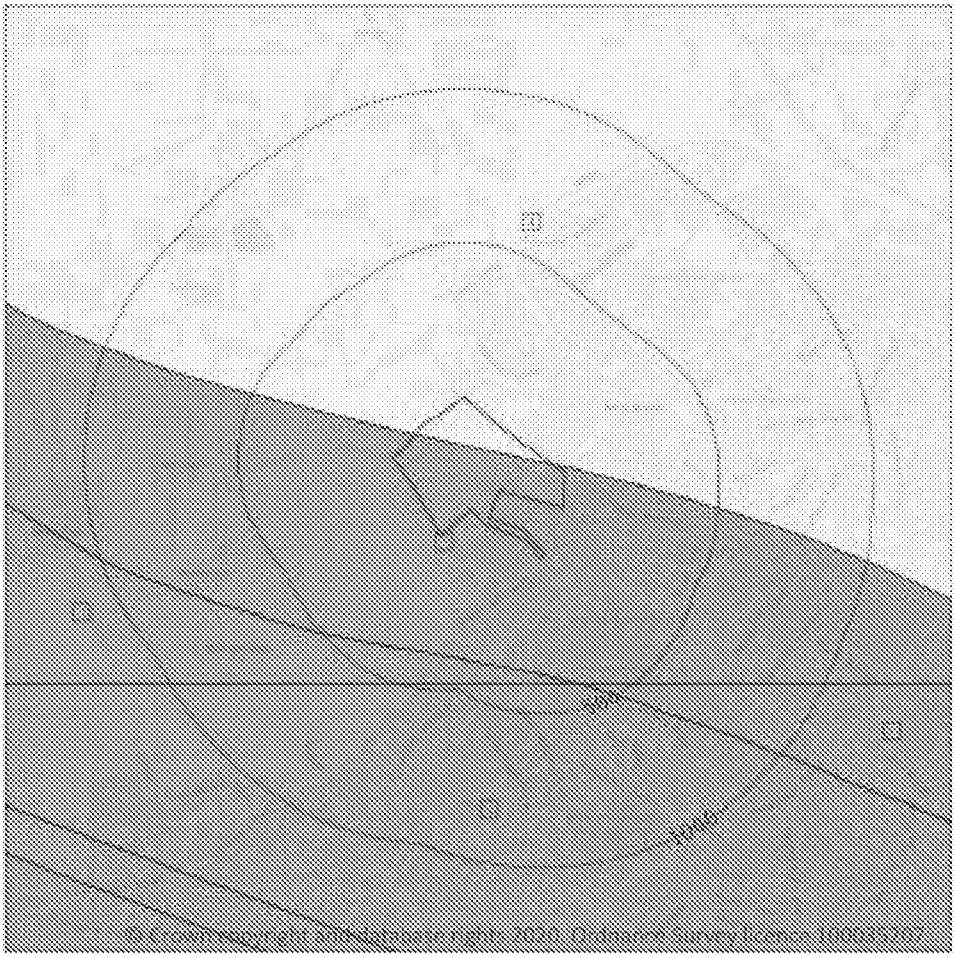
Records within 500m	0

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

This data is sourced from the British Geological Survey.

ARUN DISTRICT COUNCIL BE/87/21/OUT

Geology 1:10,000 scale - Bedrock



Site Outline

Search buffers in metres (m)

Bedrock faults and other linear features (10k)

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

1.5 Bedrock geology (10k)

Records within 500m	5

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

Features are displayed on the Geology 1:10,000 scale - Bedrock map on **page 14**

ID	Location	LEX Code	Description	Rock age
1	On site	LPCK-CHLK	Lewes Nodular Chalk Formation, Seaford Chalk Formation, Newhaven Chalk Formation, Culver Chalk Formation And Portsdown Chalk Formation (undifferentiated) - Chalk	Campanian Age - Turonian Age
2	On site	LMBE-CLAY	Lambeth Group - Clay	Paleocene Epoch

ARUN DISTRICT COUNCIL BE/87/21/OUT

ID	Location	LEX Code	Description	Rock age
3	367m S	LC-CLSISA	London Clay Formation - Clay, Silt And Sand	Eocene Epoch
4	400m S	LC-CLSISA	London Clay Formation - Clay, Silt And Sand	Eocene Epoch
5	418m S	LMBE-CLAY	Lambeth Group - Clay	Paleocene Epoch

This data is sourced from the British Geological Survey.

1.6 Bedrock faults and other linear features (10k)

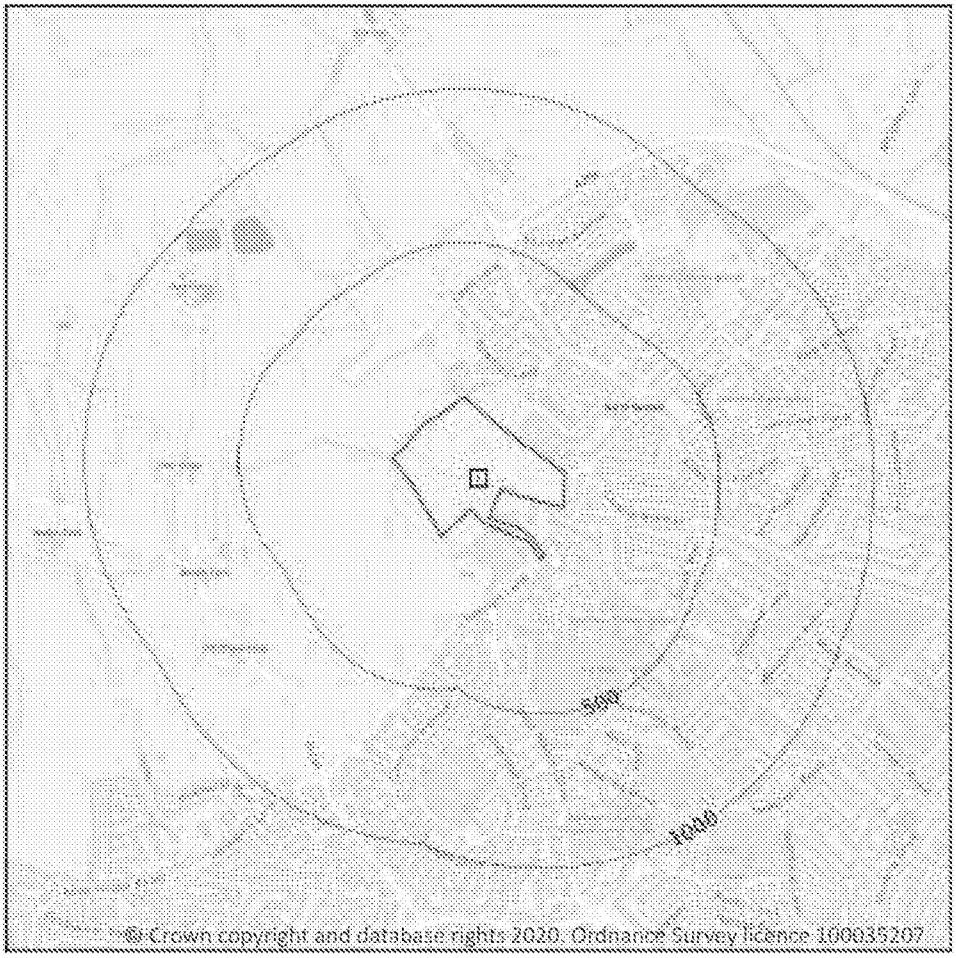
Records within 500m	0

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

This data is sourced from the British Geological Survey.

ARUN DISTRICT COUNCIL BE/87/21/OUT

2 Geology 1:50,000 scale - Availability



Site Outline

Search buffers in metres (m)

Geological map tile

2.1 50k Availability

Records within 500m	1

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

Features are displayed on the Geology 1:50,000 scale - Availability map on **page 16**

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	On site	Full	Full	Full	Full	EW317_332_chichester_and_

This data is sourced from the British Geological Survey.

ARUN DISTRICT COUNCIL BE/87/21/OUT

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

2.2 Artificial and made ground (50k)

Records within 500m	0

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

This data is sourced from the British Geological Survey.

2.3 Artificial ground permeability (50k)

Records within 50m	0

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

This data is sourced from the British Geological Survey.

ARUN DISTRICT COUNCIL BE/87/21/OUT

Geology 1:50,000 scale - Superficial



Site Outline

Search buffers in metres (m)

Landslip (50k)

Superficial geology (50k)
Please see table for more details.

2.4 Superficial geology (50k)

Records within 500m 2

Superficial geological deposits at 1:50,000 scale. Also known as 'drift', these are the youngest geological deposits, formed during the Quaternary. They rest on older deposits or rocks referred to as bedrock.

Features are displayed on the Geology 1:50,000 scale - Superficial map on **page 18**

ID	Location	LEX Code	Description	Rock description
1	On site	RTDU-XSZC	RIVER TERRACE DEPOSITS (UNDIFFERENTIATED)	SAND, SILT AND CLAY
2	382m NE	RMD-XCZSV	RAISED MARINE DEPOSITS	CLAY, SILT, SAND AND GRAVEL

This data is sourced from the British Geological Survey.

2.5 Superficial permeability (50k)

Records within 50m	1

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

Location	Flow type	Maximum permeability	Minimum permeability
On site	Intergranular	High	Low

This data is sourced from the British Geological Survey.

2.6 Landslip (50k)

Records within 500m	0

Mass movement deposits on BGS geological maps at 1:50,000 scale. Primarily superficial deposits that have moved down slope under gravity to form landslips. These affect bedrock, other superficial deposits and artificial ground.

This data is sourced from the British Geological Survey.

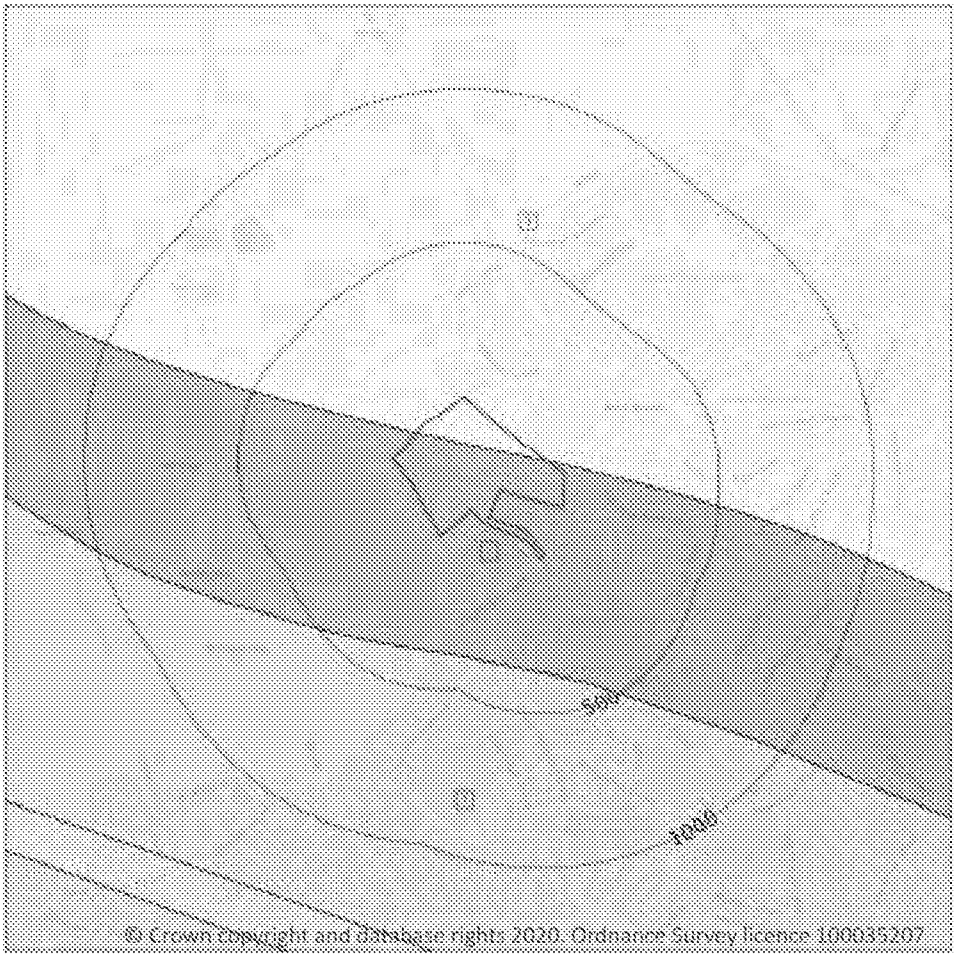
2.7 Landslip permeability (50k)

Records within 50m	0

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

This data is sourced from the British Geological Survey.

Geology 1:50,000 scale - Bedrock



Site Outline

Search buffers in metres (m)

Bedrock faults and other linear features (50k)

Bedrock geology (50k)
Please see table for more details.

2.8 Bedrock geology (50k)

Records within 500m	3

Bedrock geology at 1:50,000 scale. The main mass of rocks forming the Earth and present everywhere, whether exposed at the surface in outcrops or concealed beneath superficial deposits or water.

Features are displayed on the Geology 1:50,000 scale - Bedrock map on **page 20**

ID	Location	LEX Code	Description	Rock age
1	On site	LPCK-CHLK	LEWES NODULAR CHALK FORMATION, SEAFORD CHALK FORMATION, NEWHAVEN CHALK FORMATION, CULVER CHALK FORMATION AND PORTSDOWN CHALK FORMATION (UNDIFFERENTIATED) - CHALK	TURONIAN
2	On site	LMBE-XCZS	LAMBETH GROUP - CLAY, SILT AND SAND	THANETIAN

ARUN DISTRICT COUNCIL BE/87/21/OUT

ID	Location	LEX Code	Description	Rock age
3	360m S	LC-XCZS	LONDON CLAY FORMATION - CLAY, SILT AND SAND	YPRESIAN

This data is sourced from the British Geological Survey.

2.9 Bedrock permeability (50k)

Records within 50m	2

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

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

This data is sourced from the British Geological Survey.

2.10 Bedrock faults and other linear features (50k)

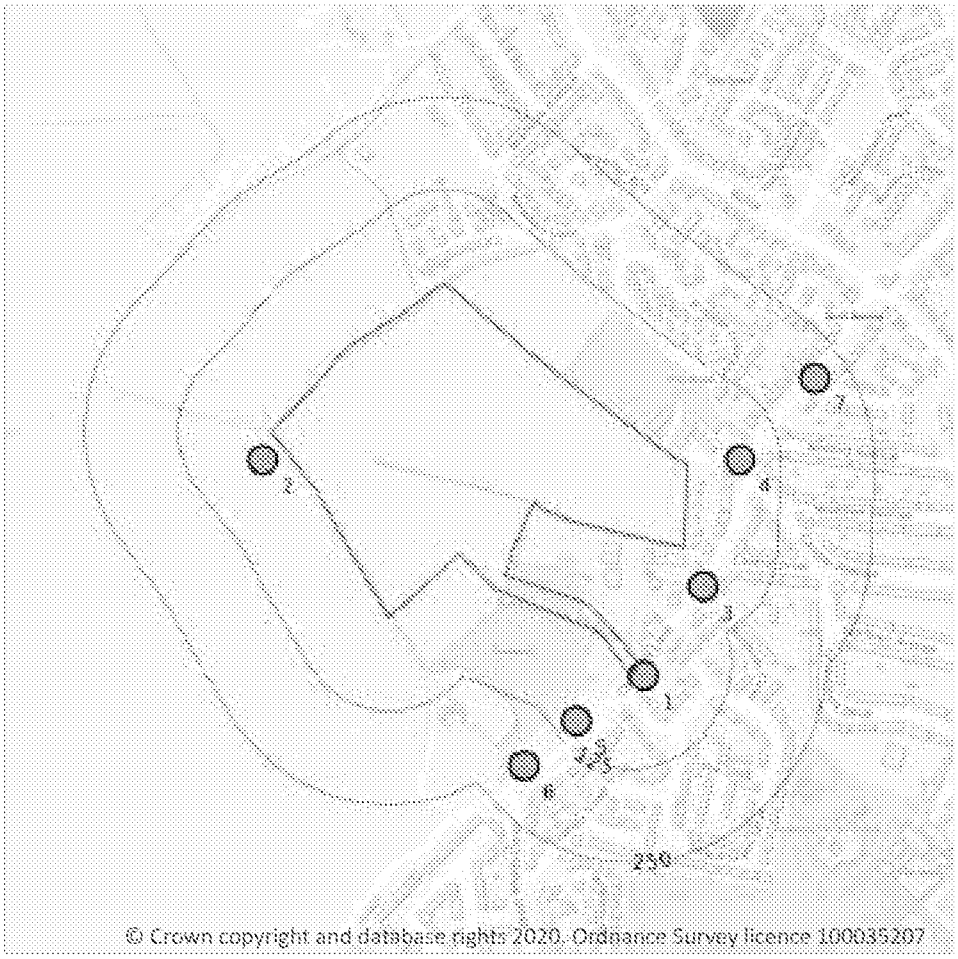
Records within 500m	0

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

This data is sourced from the British Geological Survey.

ARUN DISTRICT COUNCIL BE/87/21/OUT

3 Boreholes



3.1 BGS Boreholes

Records within 250m 7

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

Features are displayed on the Boreholes map on **page 22**

ID	Location	Grid reference	Name	Length	Confidential	Web link
1	14m SE	491840 100400	CHALCRAFT LANE BOGNOR BH5 SUSSEX	2.0	N	434432
2	32m SW	491330 100690	TINHALE BARN	4.3	N	434475
3	58m SE	491920 100520	CHALCRAFT LANE BOGNOR BH4 SUSSEX	3.0	N	434438

ARUN DISTRICT COUNCIL BE/87/21/OUT

ID	Location	Grid reference	Name	Length	Confidential	Web link
4	70m E	491970 100690	CHALCRAFT LANE BOGNOR BH3 SUSSEX	2.0	N	434432
5	95m SW	491750 100340	CHALCRAFT LANE BOGNOR BH6 SUSSEX	3.0	N	434440
6	187m SW	491680 100280	CHALCRAFT LANE BOGNOR BH7 SUSSEX	3.0	N	434441
7	206m NE	492070 100800	CHALCRAFT LANE BOGNOR BH2 SUSSEX	2.0	N	434436

This data is sourced from the British Geological Survey.

ARUN DISTRICT COUNCIL BE/87/21/OUT

4 Natural ground subsidence - Shrink swell clays



Site Outline

Search buffers in metres (m)

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

4.1 Shrink swell clays

Records within 50m **2**

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

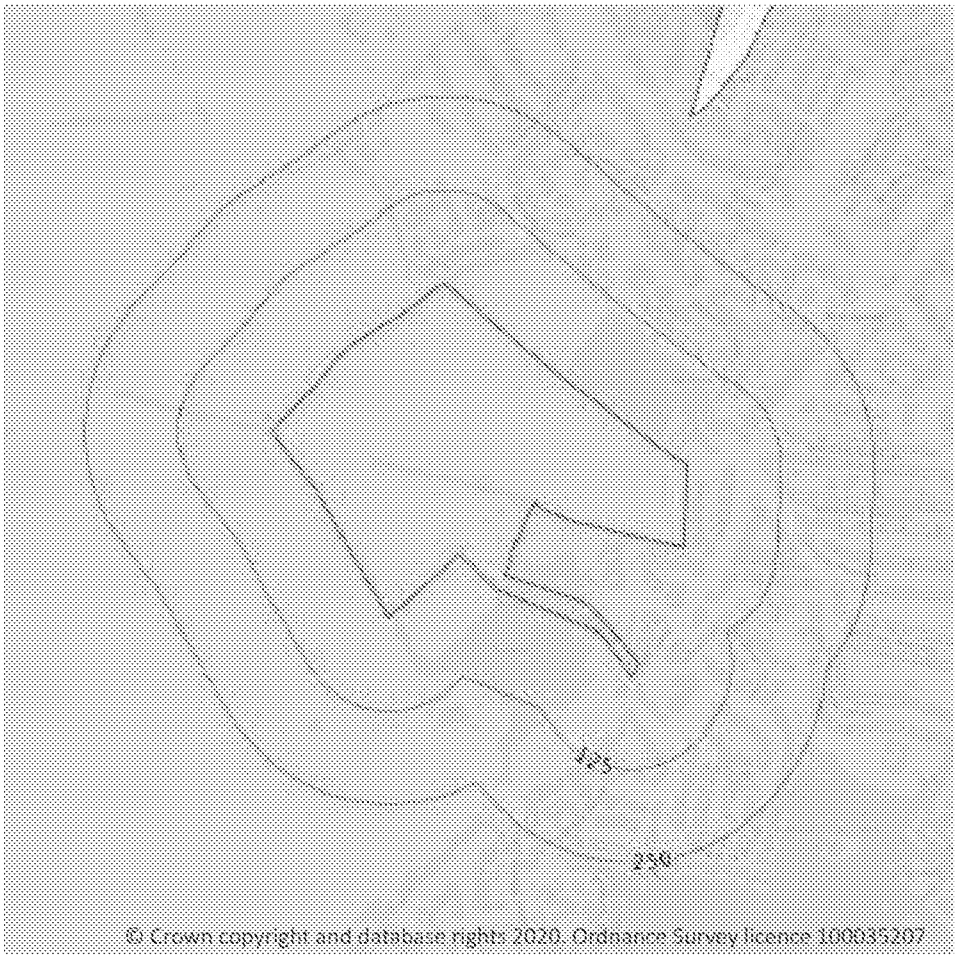
Features are displayed on the Natural ground subsidence - Shrink swell clays map on **page 24**

Location	Hazard rating	Details
On site	**Low**	**Ground conditions predominantly medium plasticity.**
On site	**Moderate**	**Ground conditions predominantly high plasticity.**

This data is sourced from the British Geological Survey.

ARUN DISTRICT COUNCIL BE/87/21/OUT

Natural ground subsidence - Running sands



© Crown copyright and database rights 2020. Ordnance Survey licence 100035207

Site Outline

Search buffers in metres (m)

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

4.2 Running sands

Records within 50m	1

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

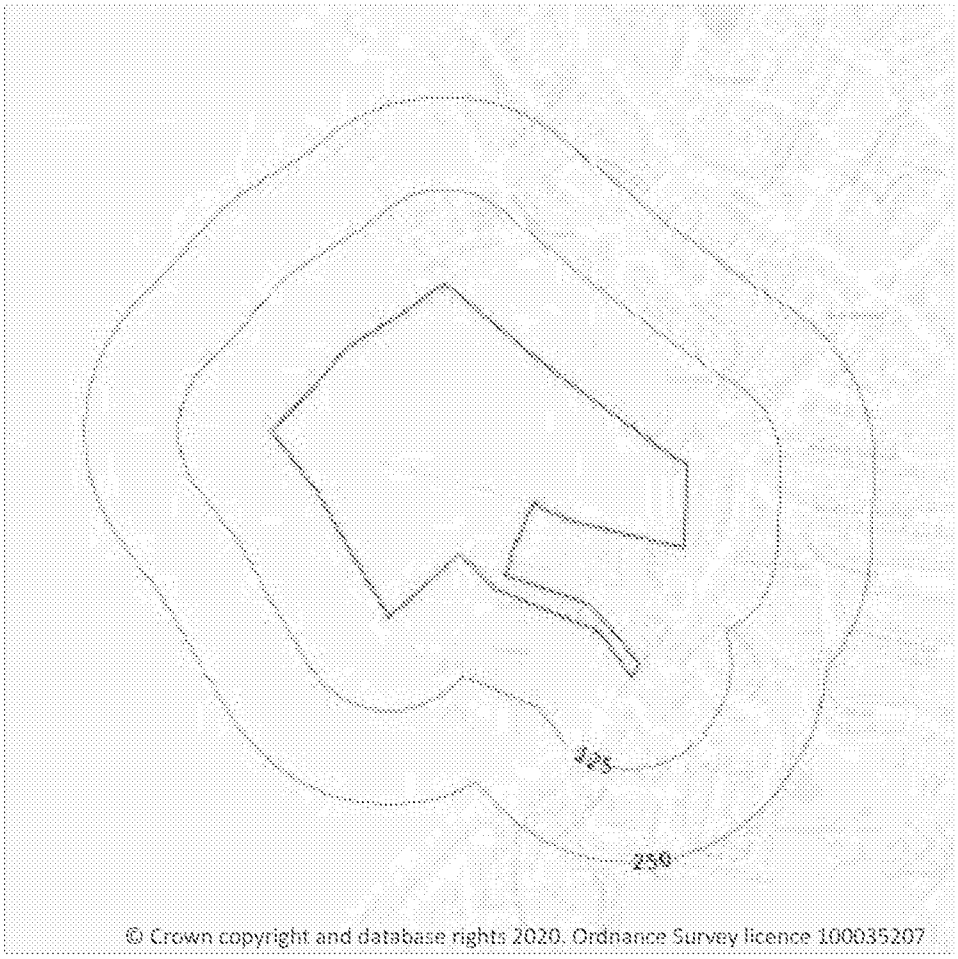
Features are displayed on the Natural ground subsidence - Running sands map on **page 25**

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

This data is sourced from the British Geological Survey.

ARUN DISTRICT COUNCIL BE/87/21/OUT

Natural ground subsidence - Compressible deposits



© Crown copyright and database rights 2020. Ordnance Survey licence 100035207

Site Outline

Search buffers in metres (m)

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

4.3 Compressible deposits

Records within 50m	1

The potential hazard presented by types of ground that may contain layers of very soft materials like clay or peat and may compress if loaded by overlying structures, or if the groundwater level changes, potentially resulting in depression of the ground and disturbance of foundations.

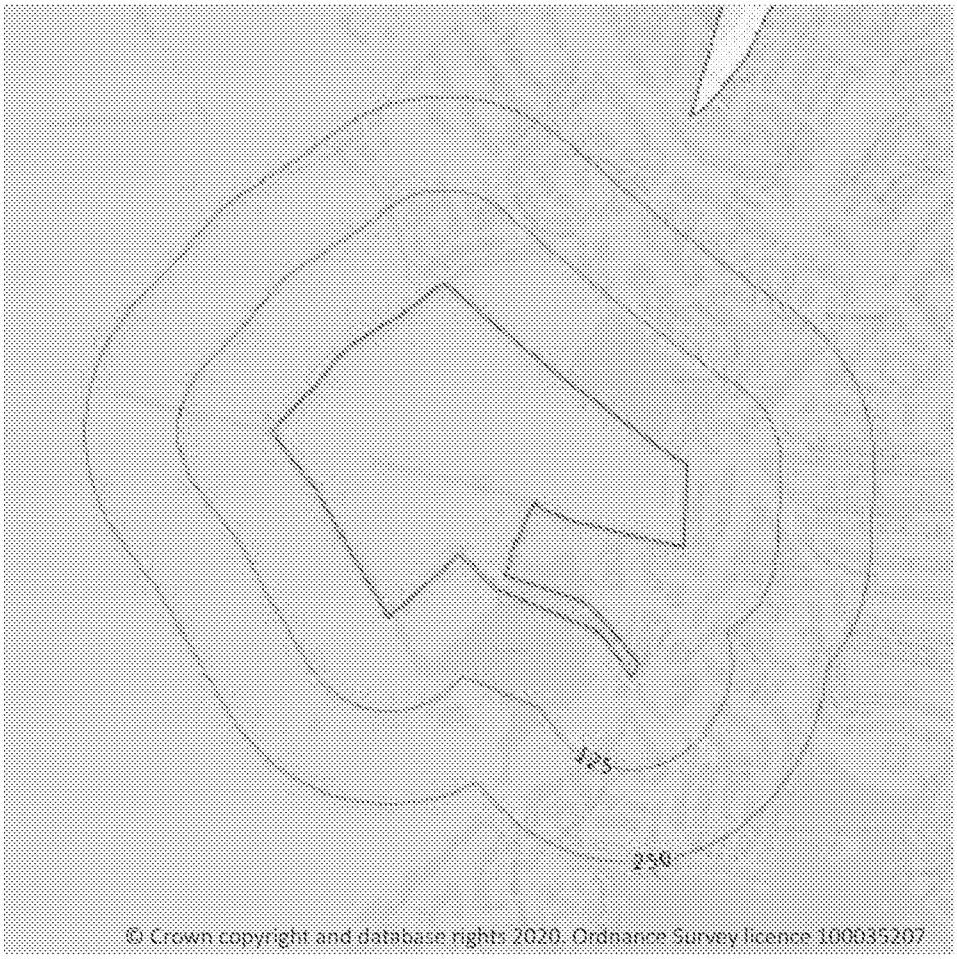
Features are displayed on the Natural ground subsidence - Compressible deposits map on **page 26**

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

This data is sourced from the British Geological Survey.

ARUN DISTRICT COUNCIL BE/87/21/OUT

Natural ground subsidence - Collapsible deposits



© Crown copyright and database rights 2020. Ordnance Survey licence 100035207

Site Outline

Search buffers in metres (m)

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

4.4 Collapsible deposits

Records within 50m	1

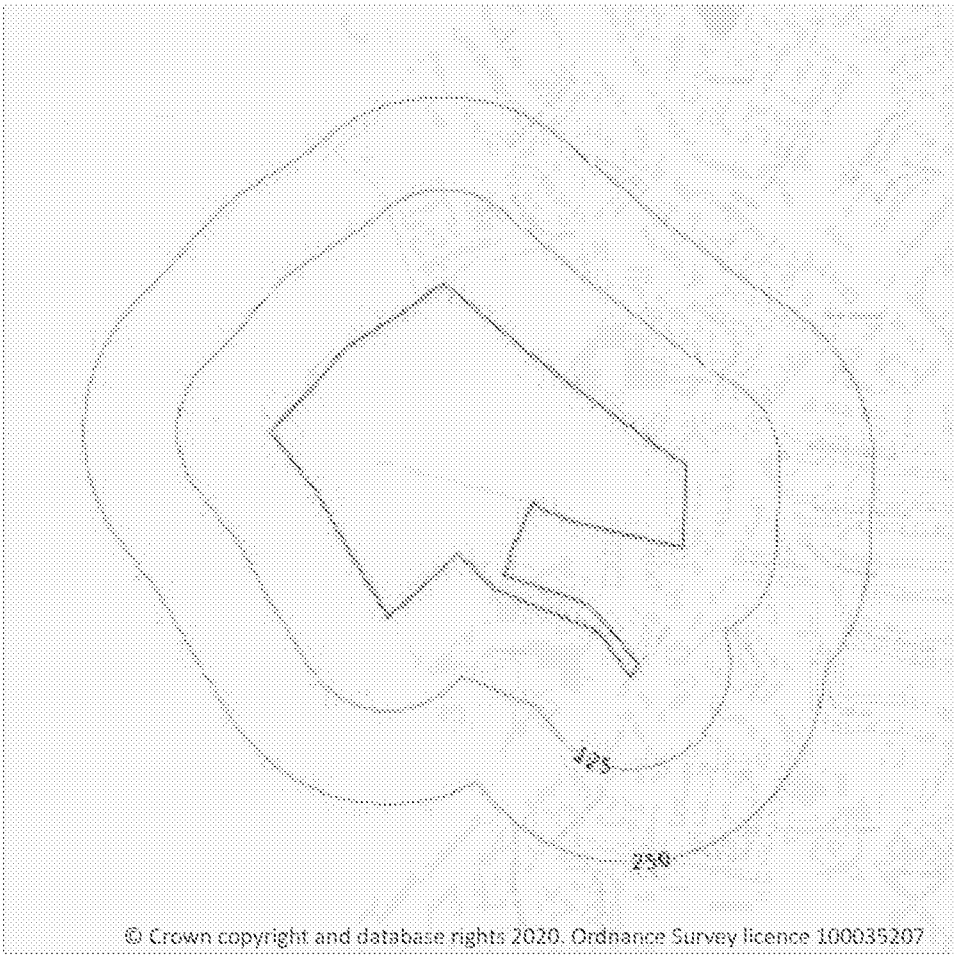
The potential hazard presented by natural deposits that could collapse when a load (such as a building) is placed on them or they become saturated with water.

Features are displayed on the Natural ground subsidence - Collapsible deposits map on **page 27**

Location	Hazard rating	Details
On site	**Low**	**Deposits with potential to collapse when loaded and saturated are possibly present in places.**

This data is sourced from the British Geological Survey.

Natural ground subsidence - Landslides



© Crown copyright and database rights 2020. Ordnance Survey licence 100035207

Site Outline

Search buffers in metres (m)

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

4.5 Landslides

Records within 50m	1

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

Features are displayed on the Natural ground subsidence - Landslides map on **page 28**

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

This data is sourced from the British Geological Survey.

Natural ground subsidence - Ground dissolution of soluble rocks



© Crown copyright and database rights 2020. Ordnance Survey licence 100035207

Site Outline

Search buffers in metres (m)

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

4.6 Ground dissolution of soluble rocks

Records within 50m	2

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

Features are displayed on the Natural ground subsidence - Ground dissolution of soluble rocks map on **page 29**

Location	Hazard rating	Details
On site	**Negligible**	**Soluble rocks are either not thought to be present within the ground, or not prone to dissolution. Dissolution features are unlikely to be present.**

ARUN DISTRICT COUNCIL BE/87/21/OUT

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

This data is sourced from the British Geological Survey.

5 Mining, ground workings and natural cavities



Site Outline

Search buffers in metres (m)

Natural cavities (Area)

Natural cavities (Point)

BritPits

Surface ground workings

Underground workings

Historical Mineral Planning Areas

Mining Cavities

Non Coal Mining

Sporadic underground mining of restricted extent possible

Localised small scale underground mining possible

Small scale mining possible

Underground mining known or likely within or in close proximity

Underground mining known within or in very close proximity

5.1 Natural cavities

Records within 500m	0

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

This data is sourced from Peter Brett Associates (PBA).

ARUN DISTRICT COUNCIL BE/87/21/OUT

5.2 BritPits

Records within 500m	5

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

Features are displayed on the Mining, ground workings and natural cavities map on **page 31**

ID	Location	Details	Description
5	45m NE	Name: North Bersted Brick Field Address: Bersted, BOGNOR REGIS, West Sussex Commodity: Clay & Shale Status: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site	Type: Ceased Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
A	191m NE	Name: North Bersted Brick Field Address: Bersted, BOGNOR REGIS, West Sussex Commodity: Clay & Shale Status: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site	Type: Ceased Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
B	280m NE	Name: North Bersted Brick Field Address: Bersted, BOGNOR REGIS, West Sussex Commodity: Clay & Shale Status: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site	Type: Ceased Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
9	408m S	Name: Chalcroft Lane Brick Works Address: Bersted, BOGNOR REGIS, West Sussex Commodity: Clay & Shale Status: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site	Type: Ceased Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
C	421m E	Name: North Bersted Brick Field Address: Bersted, BOGNOR REGIS, West Sussex Commodity: Clay & Shale Status: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site	Type: Ceased Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority

This data is sourced from the British Geological Survey.

ARUN DISTRICT COUNCIL BE/87/21/OUT

5.3 Surface ground workings

Records within 250m	10

Historical land uses identified from Ordnance Survey mapping that involved ground excavation at the surface. These features may or may not have been subsequently backfilled.

Features are displayed on the Mining, ground workings and natural cavities map on **page 31**

ID	Location	Land Use	Year of mapping	Mapping scale
1	**On site**	**Unspecified Pit**	**1940**	**1:10560**
2	**On site**	**Brick Field**	**1940**	**1:10560**
3	5m S	Cemetery	1993	1:10000
4	32m S	Ponds	1876	1:10560
6	50m NE	Pond	1876	1:10560
A	132m NE	Brick Field	1934	1:10560
A	132m NE	Unspecified Pit	1934	1:10560
7	142m E	Pond	1876	1:10560
B	219m NE	Brick Field	1934	1:10560
8	240m NW	Pond	1876	1:10560

This is data is sourced from Ordnance Survey/Groundsure.

5.4 Underground workings

Records within 1000m	0

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

This is data is sourced from Ordnance Survey/Groundsure.

5.5 Historical Mineral Planning Areas

Records within 500m	0

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

This data is sourced from the British Geological Survey.

ARUN DISTRICT COUNCIL BE/87/21/OUT

5.6 Non-coal mining

Records within 1000m	0

The potential for historical non-coal mining to have affected an area. The assessment is drawn from expert knowledge and literature in addition to the digital geological map of Britain. Mineral commodities may be divided into seven general categories - vein minerals, chalk, oil shale, building stone, bedded ores, evaporites and 'other' commodities (including ball clay, jet, black marble, graphite and chert).

This data is sourced from the British Geological Survey.

5.7 Mining cavities

Records within 1000m	0

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

This data is sourced from Peter Brett Associates (PBA).

5.8 JPB mining areas

Records on site	0

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

This data is sourced from Johnson Poole and Bloomer.

5.9 Coal mining

Records on site	0

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

This data is sourced from the Coal Authority.

5.10 Brine areas

Records on site	0

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

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

ARUN DISTRICT COUNCIL BE/87/21/OUT

5.11 Gypsum areas

Records on site	0

Generalised areas that may be affected by gypsum extraction.

This data is sourced from British Gypsum.

5.12 Tin mining

Records on site	0

Generalised areas that may be affected by historical tin mining.

This data is sourced from Mining Searches UK.

5.13 Clay mining

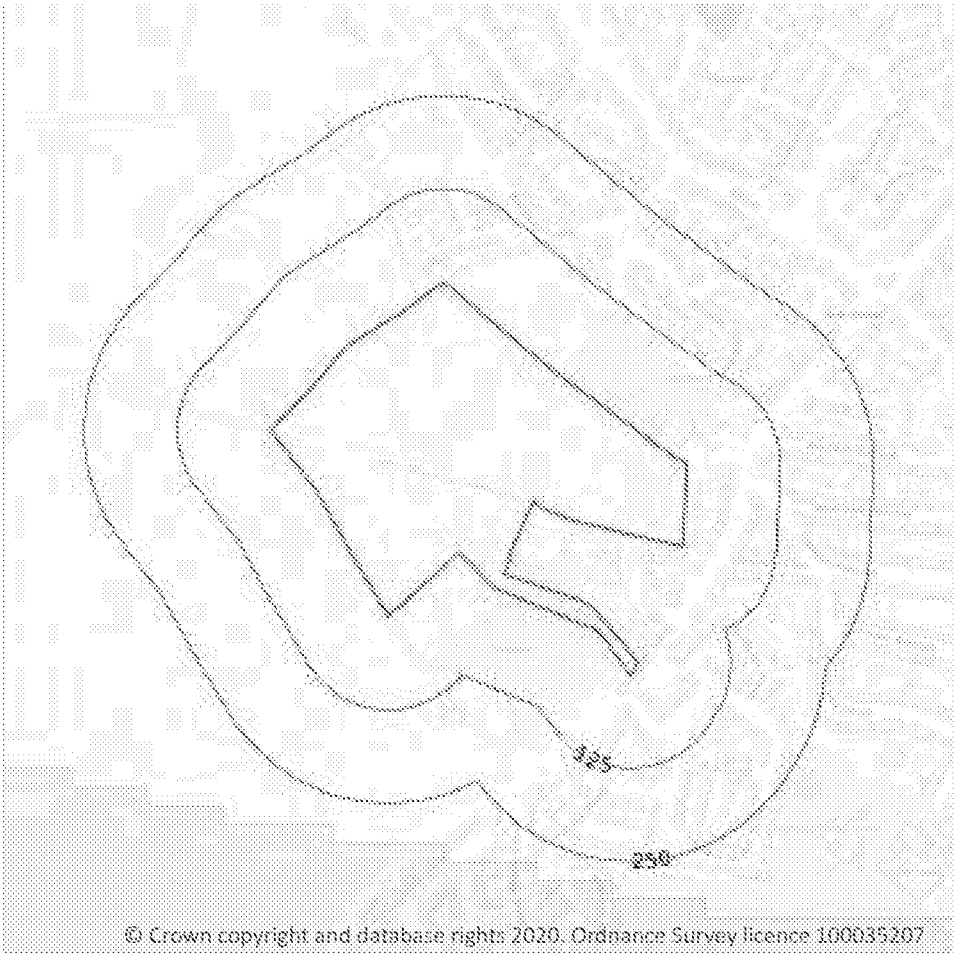
Records on site	0

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

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

ARUN DISTRICT COUNCIL BE/87/21/OUT

6 Radon



Site Outline

Search buffers in metres (m)

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

6.1 Radon

Records on site	1

Estimated percentage of dwellings exceeding the Radon Action Level. This data is the highest resolution radon dataset available for the UK and is produced to a 75m level of accuracy to allow for geological data accuracy and a 'residential property' buffer. The findings of this section should supersede any estimations derived from the Indicative Atlas of Radon in Great Britain. The data was derived from both geological assessments and long term measurements of radon in more than 479,000 households.

Features are displayed on the Radon map on **page 36**

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

This data is sourced from the British Geological Survey and Public Health England.

7 Soil chemistry

7.1 BGS Estimated Background Soil Chemistry

Records within 50m 6

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

Location	Arsenic	Bioaccessible Arsenic	Lead	Bioaccessible Lead	Cadmium	Chromium	Nickel
On site	**15 - 25 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 - 25 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 - 25 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 - 25 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**

This data is sourced from the British Geological Survey.

7.2 BGS Estimated Urban Soil Chemistry

Records within 50m 0

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

This data is sourced from the British Geological Survey.

7.3 BGS Measured Urban Soil Chemistry

Records within 50m	0

The locations and measured total concentrations (mg/kg) of Arsenic, Cadmium, Chromium, Copper, Nickel, Lead, Tin and Zinc in urban topsoil samples from 23 urban centres across Great Britain. These are collected at a sample density of 4 per km^2.

This data is sourced from the British Geological Survey.

8 Railway infrastructure and projects

8.1 Underground railways (London)

Records within 250m	0

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

This data is sourced from publicly available information by Groundsure.

8.2 Underground railways (Non-London)

Records within 250m	0

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

This data is sourced from publicly available information by Groundsure.

8.3 Railway tunnels

Records within 250m	0

Railway tunnels taken from contemporary Ordnance Survey mapping.

This data is sourced from the Ordnance Survey.

8.4 Historical railway and tunnel features

Records within 250m	0

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

This data is sourced from Ordnance Survey/Groundsure.

8.5 Royal Mail tunnels

Records within 250m	0

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

ARUN DISTRICT COUNCIL BE/87/21/OUT

This data is sourced from Groundsure/the Postal Museum.

8.6 Historical railways

Records within 250m	0

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

This data is sourced from OpenStreetMap.

8.7 Railways

Records within 250m	0

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

This data is sourced from Ordnance Survey and OpenStreetMap.

8.8 Crossrail 1

Records within 500m	0

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

This data is sourced from publicly available information by Groundsure.

8.9 Crossrail 2

Records within 500m	0

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

This data is sourced from publicly available information by Groundsure.

8.10 HS2

Records within 500m	0

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

This data is sourced from HS2 ltd.

ARUN DISTRICT COUNCIL BE/87/21/OUT

Data providers

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

Terms and conditions

Groundsure's Terms and Conditions can be accessed at this link: https://www.groundsure.com/terms-and-conditions-jan-2020/.

Groundsure
LOCATION INTELLIGENCE

Enviro
Insight

491655 100641

Order Details

Date: 31/08/2020

Your ref: West Bersted

Our Ref: FIND-65964

Client: FIND Mapping Ltd

Site Details

Location: 491655 100641

Area: 13.61 ha

Authority: Arun District Council



Summary of findings p. 2

OS MasterMap site plan N/A: >10ha

Aerial image p. 6

groundsure.com/insightuserguide

Contact us with any questions at:
info@groundsure.com
08444 159 000

ARUN DISTRICT COUNCIL BE/87/21/OUT

Summary of findings

Page	Section	Past land use	On site	0-50m	50-250m	250-500m	500-2000m
11	1.1	Historical industrial land uses	5	2	3	6	-
12	1.2	Historical tanks	0	0	0	0	-
13	1.3	Historical energy features	0	0	8	13	-
14	1.4	Historical petrol stations	0	0	0	2	-
14	1.5	Historical garages	0	0	0	1	-
14	1.6	Historical military land	0	0	0	0	-
Page	Section	Past land use - un-grouped	On site	0-50m	50-250m	250-500m	500-2000m
15	2.1	Historical industrial land uses	5	2	3	6	-
16	2.2	Historical tanks	0	0	0	0	-
16	2.3	Historical energy features	0	0	24	35	-
19	2.4	Historical petrol stations	0	0	0	2	-
19	2.5	Historical garages	0	0	0	3	-
Page	Section	Waste and landfill	On site	0-50m	50-250m	250-500m	500-2000m
20	3.1	Active or recent landfill	0	0	0	0	-
20	3.2	Historical landfill (BGS records)	0	0	0	0	-
20	3.3	Historical landfill (LA/mapping records)	0	0	0	0	-
20	3.4	Historical landfill (EA/NRW records)	0	0	0	0	-
20	3.5	Historical waste sites	0	0	0	0	-
21	3.6	Licensed waste sites	0	0	0	0	-
21	3.7	Waste exemptions	0	0	0	0	-
Page	Section	Current industrial land use	On site	0-50m	50-250m	250-500m	500-2000m
22	4.1	Recent industrial land uses	0	4	9	-	-
23	4.2	Current or recent petrol stations	0	0	0	1	-
24	4.3	Electricity cables	0	0	0	0	-
24	4.4	Gas pipelines	0	0	0	0	-
24	4.5	Sites determined as Contaminated Land	0	0	0	0	-

ARUN DISTRICT COUNCIL BE/87/21/OUT

24	4.6	Control of Major Accident Hazards (COMAH)	0	0	0	0	-
25	4.7	Regulated explosive sites	0	0	0	0	-
25	4.8	Hazardous substance storage/usage	0	0	0	0	-
25	4.9	Historical licensed industrial activities (IPC)	0	0	0	0	-
25	4.10	Licensed industrial activities (Part A(1))	0	0	0	0	-
25	**4.11**	**Licensed pollutant release (Part A(2)/B)**	0	0	0	1	-
26	4.12	Radioactive Substance Authorisations	0	0	0	0	-
26	**4.13**	**Licensed Discharges to controlled waters**	0	1	5	1	-
27	4.14	Pollutant release to surface waters (Red List)	0	0	0	0	-
27	4.15	Pollutant release to public sewer	0	0	0	0	-
28	4.16	List 1 Dangerous Substances	0	0	0	0	-
28	4.17	List 2 Dangerous Substances	0	0	0	0	-
28	**4.18**	**Pollution Incidents (EA/NRW)**	0	0	1	0	-
28	4.19	Pollution inventory substances	0	0	0	0	-
29	4.20	Pollution inventory waste transfers	0	0	0	0	-
29	4.21	Pollution inventory radioactive waste	0	0	0	0	-

Page	Section	Geology (basic)					
30	**5.1**	**Superficial geology (625k)**	Identified (within 500m)				
30	**5.2**	**Bedrock geology (625k)**	Identified (within 500m)				
Page	Section	Hydrogeology	On site	0-50m	50-250m	250-500m	500-2000m
31	**6.1**	**Superficial aquifer**	Identified (within 500m)				
33	**6.2**	**Bedrock aquifer**	Identified (within 500m)				
35	**6.3**	**Groundwater vulnerability**	Identified (within 50m)				
36	**6.4**	**Groundwater vulnerability- soluble rock risk**	Identified (within 0m)				
36	6.5	Groundwater vulnerability- local information	None (within 0m)				
37	**6.6**	**Groundwater abstractions**	0	0	0	1	9
40	**6.7**	**Surface water abstractions**	0	0	0	0	16
44	6.8	Potable abstractions	0	0	0	0	0
44	6.9	Source Protection Zones	0	0	0	0	-

ARUN DISTRICT COUNCIL BE/87/21/OUT

44	6.10	Source Protection Zones (confined aquifer)	0	0	0	0	-
Page	Section	Hydrology	On site	0-50m	50-250m	250-500m	500-2000m
45	7.1	Water Network (OS MasterMap)	13	5	13	-	-
48	7.2	Surface water features	1	4	5	-	-
48	7.3	WFD Surface water body catchments	1	-	-	-	-
49	7.4	WFD Surface water bodies	0	0	0	-	-
49	7.5	WFD Groundwater bodies	2	-	-	-	-
Page	Section	River and coastal flooding	On site	0-50m	50-250m	250-500m	500-2000m
50	8.1	Risk of Flooding from Rivers and Sea (RoFRaS)	None (within 50m)				
50	8.2	Historical Flood Events	0	0	0	-	-
50	8.3	Flood Defences	0	0	0	-	-
50	8.4	Areas Benefiting from Flood Defences	0	0	0	-	-
51	8.5	Flood Storage Areas	0	0	0	-	-
52	8.6	Flood Zone 2	None (within 50m)				
52	8.7	Flood Zone 3	None (within 50m)				
Page	Section	Surface water flooding					
53	9.1	Surface water flooding	1 in 30 year, 0.3m - 1.0m (within 50m)				
Page	Section	Groundwater flooding					
55	10.1	Groundwater flooding	High (within 50m)				
Page	Section	Environmental designations	On site	0-50m	50-250m	250-500m	500-2000m
56	11.1	Sites of Special Scientific Interest (SSSI)	0	0	0	0	1
57	11.2	Conserved wetland sites (Ramsar sites)	0	0	0	0	0
57	11.3	Special Areas of Conservation (SAC)	0	0	0	0	0
57	11.4	Special Protection Areas (SPA)	0	0	0	0	0
57	11.5	National Nature Reserves (NNR)	0	0	0	0	0
58	11.6	Local Nature Reserves (LNR)	0	0	0	0	1
58	11.7	Designated Ancient Woodland	0	0	0	0	0
58	11.8	Biosphere Reserves	0	0	0	0	0
58	11.9	Forest Parks	0	0	0	0	0

ARUN DISTRICT COUNCIL BE/87/21/OUT

59	11.10	Marine Conservation Zones	0	0	0	0	0
59	11.11	Green Belt	0	0	0	0	0
59	11.12	Proposed Ramsar sites	0	0	0	0	0
59	11.13	Possible Special Areas of Conservation (pSAC)	0	0	0	0	0
59	**11.14**	**Potential Special Protection Areas (pSPA)**	0	0	0	0	1
60	11.15	Nitrate Sensitive Areas	0	0	0	0	0
60	**11.16**	**Nitrate Vulnerable Zones**	1	0	0	0	1
61	**11.17**	**SSSI Impact Risk Zones**	2	-	-	-	-
62	**11.18**	**SSSI Units**	0	0	0	0	1

Page	Section	Visual and cultural designations	On site	0-50m	50-250m	250-500m	500-2000m
64	12.1	World Heritage Sites	0	0	0	-	-
64	12.2	Area of Outstanding Natural Beauty	0	0	0	-	-
64	12.3	National Parks	0	0	0	-	-
64	12.4	Listed Buildings	0	0	0	-	-
65	12.5	Conservation Areas	0	0	0	-	-
65	12.6	Scheduled Ancient Monuments	0	0	0	-	-
65	12.7	Registered Parks and Gardens	0	0	0	-	-

Page	Section	Agricultural designations	On site	0-50m	50-250m	250-500m	500-2000m
66	**13.1**	**Agricultural Land Classification**	Grade 3a (within 250m)				
67	13.2	Open Access Land	0	0	0	-	-
68	13.3	Tree Felling Licences	0	0	0	-	-
68	13.4	Environmental Stewardship Schemes	0	0	0	-	-
68	**13.5**	**Countryside Stewardship Schemes**	1	0	0	-	-

Page	Section	Habitat designations	On site	0-50m	50-250m	250-500m	500-2000m
69	14.1	Priority Habitat Inventory	0	0	0	-	-
69	14.2	Habitat Networks	0	0	0	-	-
69	14.3	Open Mosaic Habitat	0	0	0	-	-
69	14.4	Limestone Pavement Orders	0	0	0	-	-

ARUN DISTRICT COUNCIL BE/87/21/OUT

Recent aerial photograph



Capture Date: 28/06/2018

Site Area: 13.61ha

ARUN DISTRICT COUNCIL BE/87/21/OUT

Recent site history - 2015 aerial photograph



Aerial photography supplied by Getmapping PLC. © Copyright Getmapping PLC 2020. All Rights Reserved.

Capture Date: 19/04/2015

Site Area: 13.61ha

ARUN DISTRICT COUNCIL BE/87/21/OUT

Recent site history - 2013 aerial photograph



Capture Date: 03/05/2013

Site Area: 13.61ha

ARUN DISTRICT COUNCIL BE/87/21/OUT

Recent site history - 2012 aerial photograph



Aerial photography supplied by Getmapping PLC. © Copyright Getmapping PLC 2020. All Rights Reserved.

Capture Date: 13/09/2012

Site Area: 13.61ha

Recent site history - 1999 aerial photograph



Capture Date: 06/09/1999

Site Area: 13.61ha

ARUN DISTRICT COUNCIL BE/87/21/OUT

1 Past land use



Site Outline

Search buffers in metres (m)

Historical industrial land uses

Historical energy features

Historical petrol stations

Historical garages

1.1 Historical industrial land uses

Records within 500m	16

Potentially contaminative land use features digitised from historical Ordnance Survey mapping at 1:10,000 and 1:10,560 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use map on **page 11**

ID	Location	Land use	Dates present	Group ID
1	On site	Unspecified Pit	1940	1881715

ARUN DISTRICT COUNCIL BE/87/21/OUT

ID	Location	Land use	Dates present	Group ID
2	**On site**	**Brick Field**	**1940**	**1889610**
A	**On site**	**Nursery**	**1977**	**1895555**
A	**On site**	**Nursery**	**1940**	**1927494**
A	**On site**	**Nursery**	**1993**	**1951261**
A	2m E	Nursery	1961	1887965
3	5m S	Cemetery	1993	1861569
B	132m NE	Unspecified Pit	1934	1881716
B	132m NE	Brick Field	1934	1964512
B	219m NE	Brick Field	1934	1929340
F	250m S	Fire Station	1993	1894193
F	250m S	Fire Station	1977	1961467
B	332m E	Smithy	1896	1876121
K	377m E	Brick Field	1910	1884751
K	281m E	Unspecified Pit	1910	1881719
13	490m E	Brick Field	1934	1905327

This data is sourced from Ordnance Survey / Groundsure.

1.2 Historical tanks

Records within 500m	0

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

This data is sourced from Ordnance Survey / Groundsure.

ARUN DISTRICT COUNCIL BE/87/21/OUT

1.3 Historical energy features

Records within 500m	21

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

Features are displayed on the Past land use map on **page 11**

ID	Location	Land use	Dates present	Group ID
4	107m SE	Electricity Substation	1970 - 1990	212226
5	172m E	Electricity Substation	1970 - 1991	209799
C	176m S	Electricity Substation	1970 - 1974	206067
C	178m S	Electricity Substation	1974 - 1990	202002
D	184m NE	Electricity Substation	1979	201740
D	184m NE	Electricity Substation	1967 - 1974	204771
E	212m NE	Electricity Substation	1971 - 1991	210170
E	212m NE	Electricity Substation	-	187474
G	203m NE	Electricity Substation	1991	208775
G	304m NE	Electricity Substation	-	187767
G	304m NE	Electricity Substation	1968 - 1971	208640
7	328m NE	Electricity Substation	1970 - 1991	200442
I	352m E	Electricity Substation	1979 - 1991	199121
9	361m SW	Electricity Substation	1968 - 1990	195155
J	366m N	Electricity Substation	1968 - 1971	209992
I	367m E	Electricity Substation	1970	191389
J	379m N	Electricity Substation	1991	199584
J	379m N	Electricity Substation	-	187570
10	381m S	Electricity Substation	1989 - 1990	201676
11	468m E	Electricity Substation	1968 - 1991	200349
12	480m SE	Electricity Substation	1968 - 1991	198339

ARUN DISTRICT COUNCIL BE/87/21/OUT

This data is sourced from Ordnance Survey / Groundsure.

1.4 Historical petrol stations

Records within 500m	2

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

Features are displayed on the Past land use map on **page 11**

ID	Location	Land use	Dates present	Group ID
H	304m NE	Filling Station	1991	3374
H	305m NE	Filling Station		3284

This data is sourced from Ordnance Survey / Groundsure.

1.5 Historical garages

Records within 500m	1

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

Features are displayed on the Past land use map on **page 11**

ID	Location	Land use	Dates present	Group ID
H	313m NE	Garage	1964 - 1971	63803

This data is sourced from Ordnance Survey / Groundsure.

1.6 Historical military land

Records within 500m	0

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

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

ARUN DISTRICT COUNCIL BE/87/21/OUT

2 Past land use - un-grouped



Site Outline

Search buffers in metres (m)

Historical industrial land uses

Historical energy features

Historical petrol stations

Historical garages

2.1 Historical industrial land uses

Records within 500m	16

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

Features are displayed on the Past land use - un-grouped map on **page 15**

ID	Location	Land Use	Date	Group ID
1	On site	Brick Field	1940	1889610
2	On site	Unspecified Pit	1940	1881715
A	On site	Nursery	1993	1951261

ARUN DISTRICT COUNCIL BE/87/21/OUT

ID	Location	Land Use	Date	Group ID
A	**On site**	**Nursery**	**1940**	**1927494**
A	**On site**	**Nursery**	**1977**	**1895555**
A	2m E	Nursery	1961	1887965
B	5m S	Cemetery	1993	1861569
C	132m NE	Brick Field	1934	1964512
C	132m NE	Unspecified Pit	1934	1901716
4	219m NE	Brick Field	1934	1929340
H	250m S	Fire Station	1993	1894193
H	250m S	Fire Station	1977	1961467
5	332m E	Smithy	1896	1876121
O	377m E	Brick Field	1910	1884751
O	381m E	Unspecified Pit	1910	1881719
6	490m E	Brick Field	1934	1905327

This data is sourced from Ordnance Survey / Groundsure.

2.2 Historical tanks

Records within 500m	0

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

This data is sourced from Ordnance Survey / Groundsure.

2.3 Historical energy features

Records within 500m	59

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

Features are displayed on the Past land use - un-grouped map on **page 15**

ARUN DISTRICT COUNCIL BE/87/21/OUT

ID	Location	Land Use	Date	Group ID
B	107m SE	Electricity Substation	1970	212226
B	107m SE	Electricity Substation	1974	212226
B	107m SE	Electricity Substation	1974	212226
B	107m SE	Electricity Substation	1978	212226
B	107m SE	Electricity Substation	1989	212226
B	107m SE	Electricity Substation	1989	212226
B	107m SE	Electricity Substation	1990	212226
B	107m SE	Electricity Substation	1990	212226
D	172m E	Electricity Substation	1970	209799
D	173m E	Electricity Substation	1979	209799
D	173m E	Electricity Substation	1984	209799
D	173m E	Electricity Substation	1991	209799
E	176m S	Electricity Substation	1970	206067
E	176m S	Electricity Substation	1974	206067
E	178m S	Electricity Substation	1978	202002
E	178m S	Electricity Substation	1989	202002
E	178m S	Electricity Substation	1974	202002
E	179m S	Electricity Substation	1990	202002
F	184m NE	Electricity Substation	1967	204771
F	184m NE	Electricity Substation	1979	201740
F	184m NE	Electricity Substation	1974	204771
G	212m NE	Electricity Substation	1991	210170
G	212m NE	Electricity Substation	-	187474
G	212m NE	Electricity Substation	1971	210170
I	303m NE	Electricity Substation	1991	208775
I	304m NE	Electricity Substation	-	187767
I	304m NE	Electricity Substation	1968	208640
I	304m NE	Electricity Substation	1971	208640

ID	Location	Land Use	Date	Group ID
K	328m NE	Electricity Substation	1970	200442
K	329m NE	Electricity Substation	1979	200442
K	329m NE	Electricity Substation	1984	200442
K	329m NE	Electricity Substation	1991	200442
L	352m E	Electricity Substation	1979	199121
L	352m E	Electricity Substation	1984	199121
L	352m E	Electricity Substation	1991	199121
M	361m SW	Electricity Substation	1974	195155
M	361m SW	Electricity Substation	1978	195155
M	361m SW	Electricity Substation	1989	195155
M	361m SW	Electricity Substation	1989	195155
M	361m SW	Electricity Substation	1990	195155
M	361m SW	Electricity Substation	1990	195155
M	362m SW	Electricity Substation	1968	195155
M	362m SW	Electricity Substation	1970	195155
M	362m SW	Electricity Substation	1974	195155
N	366m N	Electricity Substation	1968	209992
N	366m N	Electricity Substation	1971	209992
L	367m E	Electricity Substation	1970	191389
N	379m N	Electricity Substation	1991	199584
N	379m N	Electricity Substation	-	187570
P	381m S	Electricity Substation	1989	201676
P	381m S	Electricity Substation	1989	201676
P	381m S	Electricity Substation	1990	201676
P	381m S	Electricity Substation	1990	201676
Q	468m E	Electricity Substation	1991	200349
Q	469m E	Electricity Substation	1974	200349
O	469m E	Electricity Substation	1968	200349

ARUN DISTRICT COUNCIL BE/87/21/OUT

ID	Location	Land Use	Date	Group ID
R	480m SE	Electricity Substation	1991	198339
R	481m SE	Electricity Substation	1974	198339
R	481m SE	Electricity Substation	1968	198339

This data is sourced from Ordnance Survey / Groundsure.

2.4 Historical petrol stations

Records within 500m	2

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

Features are displayed on the Past land use - un-grouped map on **page 15**

ID	Location	Land Use	Date	Group ID
J	304m NE	Filling Station	1991	3374
J	305m NE	Filling Station		3284

This data is sourced from Ordnance Survey / Groundsure.

2.5 Historical garages

Records within 500m	3

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

Features are displayed on the Past land use - un-grouped map on **page 15**

ID	Location	Land Use	Date	Group ID
J	313m NE	Garage	1968	63803
J	313m NE	Garage	1964	63803
J	313m NE	Garage	1971	63803

This data is sourced from Ordnance Survey / Groundsure.

ARUN DISTRICT COUNCIL BE/87/21/OUT

3 Waste and landfill

3.1 Active or recent landfill

Records within 500m	0

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

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

3.2 Historical landfill (BGS records)

Records within 500m	0

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

This data is sourced from the British Geological Survey.

3.3 Historical landfill (LA/mapping records)

Records within 500m	0

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

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

3.4 Historical landfill (EA/NRW records)

Records within 500m	0

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

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

3.5 Historical waste sites

Records within 500m	0

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

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

ARUN DISTRICT COUNCIL BE/87/21/OUT

3.6 Licensed waste sites

Records within 500m	0

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

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

3.7 Waste exemptions

Records within 500m	0

Activities involving the storage, treatment, use or disposal of waste that are exempt from needing a permit. Exemptions have specific limits and conditions that must be adhered to.

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

ARUN DISTRICT COUNCIL BE/87/21/OUT

4 Current industrial land use



Site Outline

Search buffers in metres (m)

Recent industrial land uses

Current or recent petrol stations

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

Licensed Discharges to controlled waters

Pollution Incidents (EA/NRW)

4.1 Recent industrial land uses

Records within 250m 13

Current potentially contaminative industrial sites.

Features are displayed on the Current industrial land use map on **page 22**

ID	Location	Company	Address	Activity	Category
1	3m NE	Mast (Telecommunication)	West Sussex, PO21	Telecommunications Features	Infrastructure and Facilities
2	19m E	D T Autos	72, Chalcraft Lane, Bognor Regis, West Sussex, PO21 5TU	Vehicle Repair, Testing and Servicing	Repair and Servicing

ARUN DISTRICT COUNCIL BE/87/21/OUT

ID	Location	Company	Address	Activity	Category
3	23m E	Gas Governor Station	West Sussex, PO21	Gas Features	Infrastructure and Facilities
A	40m NE	Motorhome & Caravan Services Within Chalcroft Nurseries	Chalcraft Lane, Bognor Regis, West Sussex, PO21 5TS	New Vehicles	Motoring
4	59m S	Grant Transport & Logistics	2, Stroud Green Drive, Bognor Regis, West Sussex, PO21 5SY	Distribution and Haulage	Transport, Storage and Delivery
C	74m E	Bejewelled by Becky	7, Burchett Walk, Bognor Regis, West Sussex, PO21 5TA	Jewellery, Gems, Clocks and Watches	Consumer Products
D	114m SE	Electricity Sub Station	West Sussex, PO21	Electrical Features	Infrastructure and Facilities
D	115m SE	Pump House	West Sussex, PO21	Water Pumping Stations	Industrial Features
7	176m E	Electricity Sub Station	West Sussex, PO21	Electrical Features	Infrastructure and Facilities
8	181m S	Electricity Sub Station	West Sussex, PO21	Electrical Features	Infrastructure and Facilities
9	187m NE	Electricity Sub Station	West Sussex, PO21	Electrical Features	Infrastructure and Facilities
10	206m SE	A J M Contractors	66, Greencourt Drive, Bognor Regis, West Sussex, PO21 5EX	Building and Component Suppliers	Construction Services
E	218m NE	Electricity Sub Station	West Sussex, PO21	Electrical Features	Infrastructure and Facilities

This data is sourced from Ordnance Survey.

4.2 Current or recent petrol stations

Records within 500m	1

Open, closed, under development and obsolete petrol stations.

Features are displayed on the Current industrial land use map on **page 22**

ARUN DISTRICT COUNCIL BE/87/21/OUT

ID	Location	Company	Address	LPG	Status
F	350m NE	ESSO	449, Chichester Road, Brazwick Avenue, North Bersted, Bognor Regis, West Sussex, PO21 5DS	No	Open

This data is sourced from Experian.

4.3 Electricity cables

Records within 500m	0

High voltage underground electricity transmission cables.

This data is sourced from National Grid.

4.4 Gas pipelines

Records within 500m	0

High pressure underground gas transmission pipelines.

This data is sourced from National Grid.

4.5 Sites determined as Contaminated Land

Records within 500m	0

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

This data is sourced from Local Authority records.

4.6 Control of Major Accident Hazards (COMAH)

Records within 500m	0

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

This data is sourced from the Health and Safety Executive.

ARUN DISTRICT COUNCIL BE/87/21/OUT

4.7 Regulated explosive sites

Records within 500m	0

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

This data is sourced from the Health and Safety Executive.

4.8 Hazardous substance storage/usage

Records within 500m	0

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

This data is sourced from Local Authority records.

4.9 Historical licensed industrial activities (IPC)

Records within 500m	0

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

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

4.10 Licensed industrial activities (Part A(1))

Records within 500m	0

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

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

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

Records within 500m	1

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

Features are displayed on the Current industrial land use map on **page 22**

ARUN DISTRICT COUNCIL BE/87/21/OUT

ID	Location	Address	Details	
F	339m NE	Regis Service Station, 449 Chichester Road, Bognor Regis, West Sussex, PO21 5DS	Process: Unloading of Petrol into Storage at Service Stations Status: Current Permit Permit Type: Part B	Enforcement: No Enforcements Notified Date of enforcement: No Enforcements Notified Comment: No Enforcements Notified

This data is sourced from Local Authority records.

4.12 Radioactive Substance Authorisations

Records within 500m	0

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

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

4.13 Licensed Discharges to controlled waters

Records within 500m	7

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

Features are displayed on the Current industrial land use map on **page 22**

ID	Location	Address	Details	
A	23m N	CHALCROFT NURSERIES, CHALCROFT LANE, BOGNOR REGIS, WEST SUSSEX, PO21 5TS	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: NPSWQD0061.14 Permit Version: 1 Receiving Water: TRIBUTARY OF ALDINGBOURNE RIFE	Status: NEW CONSENT (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV ACT 1995) Issue date: 23/01/2009 Effective Date: 23/01/2009 Revocation Date: -
B	57m SE	LAND ADJ CHALCRAFT LANE CEMETERY, CHALCRAFT LANE, BERSTED, BOGNOR REGIS, WEST SUSSEX, PO21 5XX	Effluent Type: MISCELLANEOUS DISCHARGES - MINE/GROUNDWATER AS RAISED Permit Number: P13108 Permit Version: 1 Receiving Water: TRIB TO ALDINGBOURNE RIFE	Status: NEW CONSENT (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV ACT 1995) Issue date: 17/09/2007 Effective Date: 17/09/2007 Revocation Date: -
B	77m SE	CHALCRAFT CEMETARY, CHALCRAFT LANE, BOGNOR REGIS, WEST SUSSEX	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: P03403 Permit Version: 1 Receiving Water: INTO LAND	Status: LAPSED UNDER SCHEDULE 23 ENVIRONMENT ACT 1995 Issue date: 18/01/1991 Effective Date: 18/01/1991 Revocation Date: 31/03/1997

ARUN DISTRICT COUNCIL BE/87/21/OUT

ID	Location	Address	Details	
5	104m SE	STROUD FARM, CHALCROFT LANE	Effluent Type: MISCELLANEOUS DISCHARGES - SURFACE WATER Permit Number: SO1611 Permit Version: 1 Receiving Water: FRESHWATER RIVER	Status: LAPSED UNDER SCHEDULE 23 ENVIRONMENT ACT 1995 Issue date: 04/08/1967 Effective Date: 04/08/1967 Revocation Date: 31/03/1997
6	133m NE	NEW-BARN FARM ESTATE, NORTH BERSTED	Effluent Type: MISCELLANEOUS DISCHARGES - SURFACE WATER Permit Number: SO1647 Permit Version: 1 Receiving Water: FRESHWATER RIVER	Status: LAPSED UNDER SCHEDULE 23 ENVIRONMENT ACT 1995 Issue date: 09/10/1967 Effective Date: 09/10/1967 Revocation Date: 31/03/1997
E	205m NE	NEW-BARN FARM ESTATE, NORTH BERSTED	Effluent Type: MISCELLANEOUS DISCHARGES - SURFACE WATER Permit Number: SO1647 Permit Version: 1 Receiving Water: FRESHWATER RIVER	Status: LAPSED UNDER SCHEDULE 23 ENVIRONMENT ACT 1995 Issue date: 09/10/1967 Effective Date: 09/10/1967 Revocation Date: 31/03/1997
11	311m NE	NEWBARN ESTATE, NORTH BERSTED	Effluent Type: MISCELLANEOUS DISCHARGES - SURFACE WATER Permit Number: SO1165 Permit Version: 1 Receiving Water: FRESHWATER RIVER	Status: LAPSED UNDER SCHEDULE 23 ENVIRONMENT ACT 1995 Issue date: 04/10/1961 Effective Date: 04/10/1961 Revocation Date: 31/03/1997

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

4.14 Pollutant release to surface waters (Red List)

Records within 500m	0

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

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

4.15 Pollutant release to public sewer

Records within 500m	0

Discharges of Special Category Effluents to the public sewer.

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

ARUN DISTRICT COUNCIL BE/87/21/OUT

4.16 List 1 Dangerous Substances

Records within 500m	0

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

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

4.17 List 2 Dangerous Substances

Records within 500m	0

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

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

4.18 Pollution Incidents (EA/NRW)

Records within 500m	1

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

Features are displayed on the Current industrial land use map on **page 22**

ID	Location	Details	
C	59m NE	Incident Date: 19/09/2002 Incident Identification: 109150 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Other Atmospheric Pollutant or Effect	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)

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

4.19 Pollution Inventory substances

Records within 500m	0

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

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

ARUN DISTRICT COUNCIL BE/87/21/OUT

4.20 Pollution inventory waste transfers

Records within 500m	0

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

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

4.21 Pollution inventory radioactive waste

Records within 500m	0

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

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

ARUN DISTRICT COUNCIL BE/87/21/OUT

5 Geology (basic)

5.1 Superficial geology (625k)

Records within 500m	2

Generalised geology data based on BGS's published poster maps of the UK (North and South). Superficial related themes digitised from 1977 first edition Quaternary map (North and South).

Location	Lex code	Description	Rock type
On site	**BRK-SILT**	**BRICKEARTH**	**SILT**
365m E	ALV-CLSS	ALLUVIUM	CLAY, SILT AND SAND

This data is sourced from the British Geological Survey.

5.2 Bedrock geology (625k)

Records within 500m	3

Generalised geology data based on BGS's published poster maps of the UK (North and South). Bedrock related themes created through generalisation of 1:50,000 data.

Location	Lex code	Description	Rock type
On site	**WHCK-CHLK**	**WHITE CHALK SUBGROUP**	**CHALK**
On site	**LMBE-CLSSG**	**LAMBETH GROUP**	**CLAY, SILT, SAND AND GRAVEL**
348m W	THAM-CLSSG	THAMES GROUP	CLAY, SILT, SAND AND GRAVEL

This data is sourced from the British Geological Survey.

ARUN DISTRICT COUNCIL BE/87/21/OUT

6 Hydrogeology - Superficial aquifer



Site Outline

Search buffers in metres (m)

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

6.1 Superficial aquifer

Records within 500m **2**

Aquifer status of groundwater held within superficial geology.

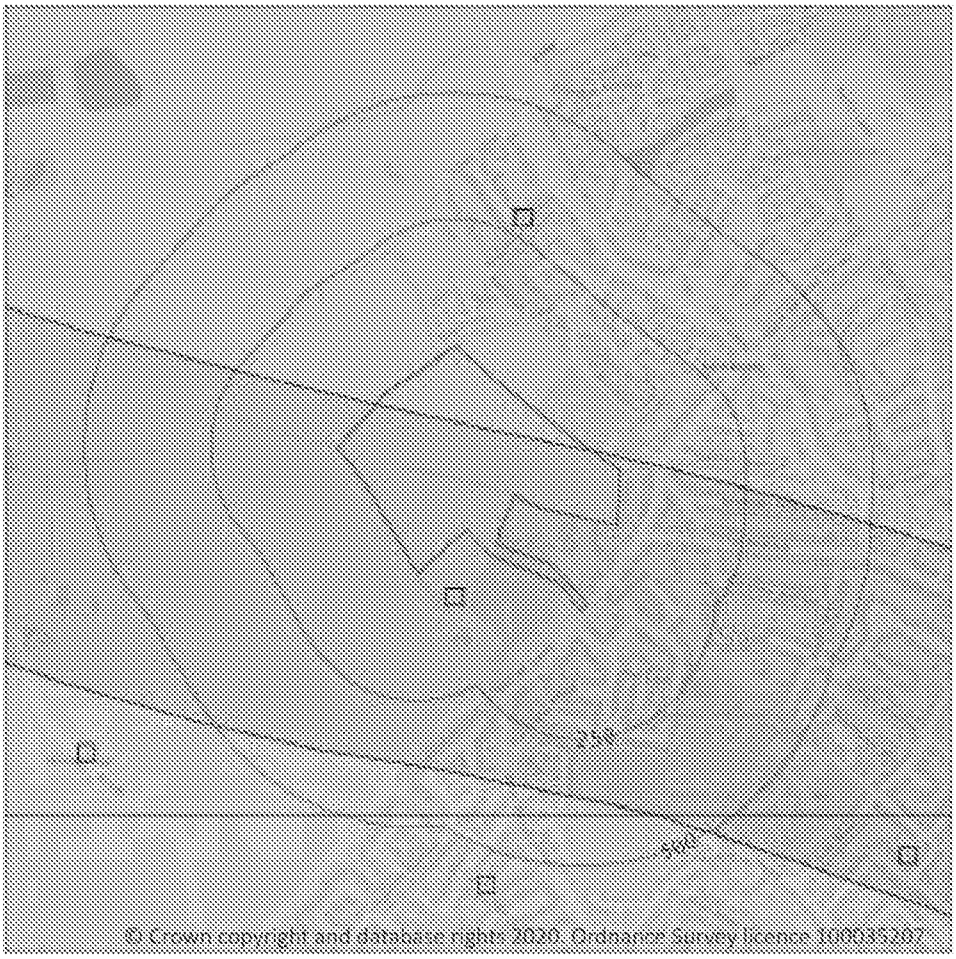
Features are displayed on the Hydrogeology map on **page 31**

ID	Location	Designation	Description
1	**On site**	**Secondary A**	**Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers**
2	400m S	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers

ARUN DISTRICT COUNCIL BE/87/21/OUT

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

Bedrock aquifer



6.2 Bedrock aquifer

Records within 500m	5

Aquifer status of groundwater held within bedrock geology.

Features are displayed on the Bedrock aquifer map on **page 33**

ID	Location	Designation	Description
1	On site	Principal	Geology of high intergranular and/or fracture permeability, usually providing a high level of water storage and may support water supply/river base flow on a strategic scale. Generally principal aquifers were previously major aquifers
2	On site	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers

ARUN DISTRICT COUNCIL BE/87/21/OUT

ID	Location	Designation	Description
3	360m S	Unproductive	These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow
4	400m S	Unproductive	These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow
5	428m S	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers

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

Groundwater vulnerability



Site Outline

Search buffers in metres (m)

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

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

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

6.3 Groundwater vulnerability

Records within 50m	2

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

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

Features are displayed on the Groundwater vulnerability map on **page 35**

ARUN DISTRICT COUNCIL BE/87/21/OUT

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

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

6.4 Groundwater vulnerability- soluble rock risk

Records on site	1

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

ID	Maximum soluble risk category	Percentage of grid square covered by maximum risk
2	Significant soluble rocks are likely to be present. Problems unlikely except with considerable surface or subsurface water flow.	20.0%

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

6.5 Groundwater vulnerability- local information

Records on site	0

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

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

ARUN DISTRICT COUNCIL BE/87/21/OUT

Abstractions and Source Protection Zones



Site Outline

Search buffers in metres (m)

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

6.6 Groundwater abstractions

Records within 2000m	10

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

Features are displayed on the Abstractions and Source Protection Zones map on **page 37**

ARUN DISTRICT COUNCIL BE/87/21/OUT

ID	Location	Details	
1	331m NW	Status: Active Licence No: 10/41/541005 Details: General Use Relating To Secondary Category (Medium Loss) Direct Source: Southern Region Groundwater Point: POINT A AT ORCHARD CARAVAN PARK,NORTH BERSTED Data Type: Point Name: Rickard Easting: 491400 Northing: 101210	Annual Volume (m^3): 11,365 Max Daily Volume (m^3): 68.10 Original Application No: - Original Start Date: 17/08/1977 Expiry Date: - Issue No: 101 Version Start Date: 01/04/2008 Version End Date: -
2	796m NW	Status: Historical Licence No: 27/166 Details: Spray Irrigation - Direct Direct Source: Southern Region Groundwater Point: POINT A AT PARK FARM, LAGNESS Data Type: Point Name: Langmead Farms Ltd Easting: 490700 Northing: 101200	Annual Volume (m^3): 59527 Max Daily Volume (m^3): 589 Original Application No: - Original Start Date: - Expiry Date: - Issue No: 102 Version Start Date: 16/06/2009 Version End Date: -
-	846m NW	Status: Historical Licence No: 27/192 Details: Spray Irrigation - Storage Direct Source: Southern Region Groundwater Point: WINTER STORAGE AT PARK FARM, LAGNESS Data Type: Point Name: Langmead Farms Ltd Easting: 490660 Northing: 101230	Annual Volume (m^3): 22727 Max Daily Volume (m^3): 444 Original Application No: - Original Start Date: - Expiry Date: 18/07/2007 Issue No: 102 Version Start Date: 01/11/2003 Version End Date: -
-	846m NW	Status: Historical Licence No: 27/192A Details: Spray Irrigation - Storage Direct Source: Southern Region Groundwater Point: WINTER STORAGE AT PARK FARM, LAGNESS Data Type: Point Name: Langmead Farms Ltd Easting: 490660 Northing: 101230	Annual Volume (m^3): 22727 Max Daily Volume (m^3): 444 Original Application No: - Original Start Date: 09/11/2005 Expiry Date: 31/03/2016 Issue No: 1 Version Start Date: 16/06/2009 Version End Date: -
-	846m NW	Status: Active Licence No: 27/166 Details: Spray Irrigation - Direct Direct Source: Southern Region Groundwater Point: BOREHOLE A AT PARK FARM, LAGNESS Data Type: Point Name: Langmead Farms Ltd Easting: 490660 Northing: 101230	Annual Volume (m^3): 82,254 Max Daily Volume (m^3): 1,033 Original Application No: - Original Start Date: 10/09/1991 Expiry Date: - Issue No: 103 Version Start Date: 16/04/2019 Version End Date: -

ID	Location	Details	
-	846m NW	Status: Active Licence No: 27/166 Details: Spray Irrigation - Storage Direct Source: Southern Region Groundwater Point: BOREHOLE A AT PARK FARM, LAGNESS Data Type: Point Name: Langmead Farms Ltd Easting: 490660 Northing: 101230	Annual Volume (m^3): 82,254 Max Daily Volume (m^3): 1,033 Original Application No: - Original Start Date: 10/09/1991 Expiry Date: - Issue No: 103 Version Start Date: 16/04/2019 Version End Date: -
-	1893m N	Status: Active Licence No: 10/41/541104 Details: General Farming & Domestic Direct Source: Southern Region Groundwater Point: A WELL AT COLWORTH MANOR, CHICHESTER Data Type: Point Name: The Summer Berry Company UK Easting: 491580 Northing: 102820	Annual Volume (m^3): 22,730 Max Daily Volume (m^3): 91.20 Original Application No: - Original Start Date: 21/03/1966 Expiry Date: - Issue No: 103 Version Start Date: 23/10/2019 Version End Date: -
-	1974m NW	Status: Active Licence No: 10/41/531301 Details: General Use Relating To Secondary Category (Medium Loss) Direct Source: Southern Region Groundwater Point: NEWLANDS NURSERY, LAGNESS, CHICHESTER Data Type: Point Name: Roundstone Nurseries Easting: 489580 Northing: 101620	Annual Volume (m^3): 11,228 Max Daily Volume (m^3): 109.10 Original Application No: - Original Start Date: 07/02/1966 Expiry Date: - Issue No: 101 Version Start Date: 31/03/2016 Version End Date: -
-	1974m NW	Status: Active Licence No: 10/41/531201 Details: Spray Irrigation - Direct Direct Source: Southern Region Groundwater Point: NEWLANDS NURSERY, LAGNESS, CHICHESTER Data Type: Point Name: Roundstone Nurseries Easting: 489580 Northing: 101620	Annual Volume (m^3): 11,228 Max Daily Volume (m^3): 109.10 Original Application No: - Original Start Date: 07/02/1966 Expiry Date: - Issue No: 101 Version Start Date: 31/03/2016 Version End Date: -
-	1992m NE	Status: Active Licence No: 10/41/541004 Details: Spray Irrigation - Direct Direct Source: Southern Region Groundwater Point: AT SHRIPNEY FARM, BOGNOR REGIS Data Type: Point Name: Langmead Farms Ltd Easting: 492870 Northing: 102440	Annual Volume (m^3): 45,460 Max Daily Volume (m^3): 547.20 Original Application No: - Original Start Date: 18/03/1966 Expiry Date: - Issue No: 102 Version Start Date: 16/04/2019 Version End Date: -

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

6.7 Surface water abstractions

Records within 2000m	16

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

Features are displayed on the Abstractions and Source Protection Zones map on **page 37**

ID	Location	Details	
-	1377m NE	Status: Historical Licence No: 10/41/541001 Details: Spray Irrigation - Direct Direct Source: Southern Region Surface Waters Point: ALDINGBOURNE RIFE AT WHITEHOUSE FARM. Data Type: Line Name: The Donald Langmead Partnership Easting: 492920 Northing: 101610	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: - Expiry Date: - Issue No: 100 Version Start Date: 07/12/1996 Version End Date: -
-	1825m NE	Status: Historical Licence No: 10/41/541001 Details: Spray Irrigation - Direct Direct Source: Southern Region Surface Waters Point: LEFT BANK OF THE ALDINGBOURNE RIFE LOOKING DOWNSTREAM Data Type: Point Name: Langmead Easting: 492430 Northing: 102539	Annual Volume (m^3): 9092 Max Daily Volume (m^3): 545.5 Original Application No: - Original Start Date: - Expiry Date: - Issue No: 101 Version Start Date: 01/04/2016 Version End Date: 29/06/2016
-	1825m NE	Status: Active Licence No: 10/41/541001/R01 Details: Spray Irrigation - Direct Direct Source: Southern Region Surface Waters Point: LEFT BANK OF THE ALDINGBOURNE RIFE LOOKING DOWNSTREAM Data Type: Point Name: Langmead Easting: 492430 Northing: 102539	Annual Volume (m^3): 9,092 Max Daily Volume (m^3): 545.50 Original Application No: - Original Start Date: 30/06/2016 Expiry Date: 31/03/2028 Issue No: 1 Version Start Date: 16/04/2019 Version End Date: -

ARUN DISTRICT COUNCIL BE/87/21/OUT

ID	Location	Details	
-	1825m NE	Status: Active Licence No: 10/41/541309/R01 Details: Spray Irrigation - Direct Direct Source: Southern Region Surface Waters Point: LEFT BANK OF THE ALDINGBOURNE RIFE LOOKING DOWNSTREAM Data Type: Point Name: Ashmarden Limited Easting: 492430 Northing: 102539	Annual Volume (m^3): 12,274 Max Daily Volume (m^3): 909 Original Application No: - Original Start Date: 01/04/2016 Expiry Date: 31/03/2028 Issue No: 3 Version Start Date: 04/02/2020 Version End Date: -
-	1825m NE	Status: Active Licence No: 27/186 Details: Spray Irrigation - Storage Direct Source: Southern Region Surface Waters Point: LEFT BANK OF THE ALDINGBOURNE RIFE LOOKING DOWNSTREAM Data Type: Point Name: Langmead Farms Ltd Easting: 492430 Northing: 102539	Annual Volume (m^3): 90,920 Max Daily Volume (m^3): 1,440 Original Application No: - Original Start Date: 20/02/1996 Expiry Date: - Issue No: 104 Version Start Date: 16/04/2019 Version End Date: -
-	1826m NE	Status: Historical Licence No: 10/41/541001 Details: Spray Irrigation - Direct Direct Source: Southern Region Surface Waters Point: LEFT BANK OF THE ALDINGBOURNE RIFE LOOKING DOWNSTREAM Data Type: Point Name: Langmead Easting: 492430 Northing: 102540	Annual Volume (m^3): 9092 Max Daily Volume (m^3): 545.5 Original Application No: - Original Start Date: - Expiry Date: - Issue No: 101 Version Start Date: 10/06/2009 Version End Date: -
-	1826m NE	Status: Historical Licence No: 10/41/541309 Details: Spray Irrigation - Direct Direct Source: Southern Region Surface Waters Point: LEFT BANK OF THE ALDINGBOURNE RIFE LOOKING DOWNSTREAM Data Type: Point Name: Ashmarden Ltd Easting: 492430 Northing: 102540	Annual Volume (m^3): 12274 Max Daily Volume (m^3): 909.2 Original Application No: - Original Start Date: - Expiry Date: 31/03/2016 Issue No: 101 Version Start Date: 10/06/2009 Version End Date: -

ARUN DISTRICT COUNCIL BE/87/21/OUT

ID	Location	Details	
-	1826m NE	Status: Historical Licence No: 10/41/542102 Details: Spray Irrigation - Direct Direct Source: Southern Region Surface Waters Point: LEFT BANK OF THE ALDINGBOURNE RIFE LOOKING DOWNSTREAM Data Type: Point Name: Ashmarden Ltd Easting: 492430 Northing: 102540	Annual Volume (m^3): 19639 Max Daily Volume (m^3): 909.2 Original Application No: - Original Start Date: 20/05/1966 Expiry Date: 31/03/2016 Issue No: 101 Version Start Date: 10/06/2009 Version End Date: -
-	1826m NE	Status: Historical Licence No: 27/186 Details: Spray Irrigation - Storage Direct Source: Southern Region Surface Waters Point: LEFT BANK OF THE ALDINGBOURNE RIFE LOOKING DOWNSTREAM Data Type: Point Name: Langmead Farms Ltd Easting: 492430 Northing: 102540	Annual Volume (m^3): 90920 Max Daily Volume (m^3): 1440 Original Application No: - Original Start Date: - Expiry Date: - Issue No: 103 Version Start Date: 16/06/2009 Version End Date: -
-	1832m NE	Status: Historical Licence No: 10/41/541309/R01 Details: Spray Irrigation - Direct Direct Source: Southern Region Surface Waters Point: LEFT BANK OF THE ALDINGBOURNE RIFE LOOKING DOWNSTREAM Data Type: Point Name: Ashmarden Ltd Easting: 492420 Northing: 102552	Annual Volume (m^3): 12274 Max Daily Volume (m^3): 909.2 Original Application No: - Original Start Date: 01/04/2016 Expiry Date: 31/03/2028 Issue No: 1 Version Start Date: 01/04/2016 Version End Date: -
-	1832m NE	Status: Historical Licence No: 27/186 Details: Spray Irrigation - Storage Direct Source: Southern Region Surface Waters Point: LEFT BANK OF THE ALDINGBOURNE RIFE LOOKING DOWNSTREAM Data Type: Point Name: Langmead Farms Ltd Easting: 492420 Northing: 102552	Annual Volume (m^3): 90920 Max Daily Volume (m^3): 1440 Original Application No: - Original Start Date: - Expiry Date: - Issue No: 103 Version Start Date: 16/06/2009 Version End Date: -

ARUN DISTRICT COUNCIL BE/87/21/OUT

ID	Location	Details	
-	1832m NE	Status: Historical Licence No: 10/41/541001 Details: Spray Irrigation - Direct Direct Source: Southern Region Surface Waters Point: LEFT BANK OF THE ALDINGBOURNE RIFE LOOKING DOWNSTREAM Data Type: Point Name: Langmead Easting: 492420 Northing: 102552	Annual Volume (m^3): 9092 Max Daily Volume (m^3): 545.5 Original Application No: - Original Start Date: - Expiry Date: - Issue No: 101 Version Start Date: 10/06/2009 Version End Date: -
-	1835m NE	Status: Historical Licence No: 10/41/541001 Details: Spray Irrigation - Direct Direct Source: Southern Region Surface Waters Point: LEFT BANK OF THE ALDINGBOURNE RIFE LOOKING DOWNSTREAM Data Type: Point Name: Langmead Easting: 492428 Northing: 102551	Annual Volume (m^3): 9092 Max Daily Volume (m^3): 545.5 Original Application No: - Original Start Date: - Expiry Date: - Issue No: 101 Version Start Date: 10/06/2009 Version End Date: -
-	1835m NE	Status: Historical Licence No: 10/41/541309/R01 Details: Spray Irrigation - Direct Direct Source: Southern Region Surface Waters Point: LEFT BANK OF THE ALDINGBOURNE RIFE LOOKING DOWNSTREAM Data Type: Point Name: Ashmarden Ltd Easting: 492428 Northing: 102551	Annual Volume (m^3): 12274 Max Daily Volume (m^3): 909.2 Original Application No: - Original Start Date: 01/04/2016 Expiry Date: 31/03/2028 Issue No: 1 Version Start Date: 01/04/2016 Version End Date: -
-	1835m NE	Status: Historical Licence No: 27/186 Details: Spray Irrigation - Storage Direct Source: Southern Region Surface Waters Point: LEFT BANK OF THE ALDINGBOURNE RIFE LOOKING DOWNSTREAM Data Type: Point Name: Langmead Farms Ltd Easting: 492428 Northing: 102551	Annual Volume (m^3): 90920 Max Daily Volume (m^3): 1440 Original Application No: - Original Start Date: - Expiry Date: - Issue No: 103 Version Start Date: 16/06/2009 Version End Date: -

ARUN DISTRICT COUNCIL BE/87/21/OUT

ID	Location	Details	
-	1835m NE	Status: Historical Licence No: 10/41/541001/R01 Details: Spray Irrigation - Direct Direct Source: Southern Region Surface Waters Point: LEFT BANK OF THE ALDINGBOURNE RIFE LOOKING DOWNSTREAM Data Type: Point Name: Langmead Easting: 492428 Northing: 102551	Annual Volume (m^3): 9092 Max Daily Volume (m^3): 545.5 Original Application No: - Original Start Date: 30/06/2016 Expiry Date: 31/03/2028 Issue No: 1 Version Start Date: 30/06/2016 Version End Date: -

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

6.8 Potable abstractions

Records within 2000m	0

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

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

6.9 Source Protection Zones

Records within 500m	0

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

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

6.10 Source Protection Zones (confined aquifer)

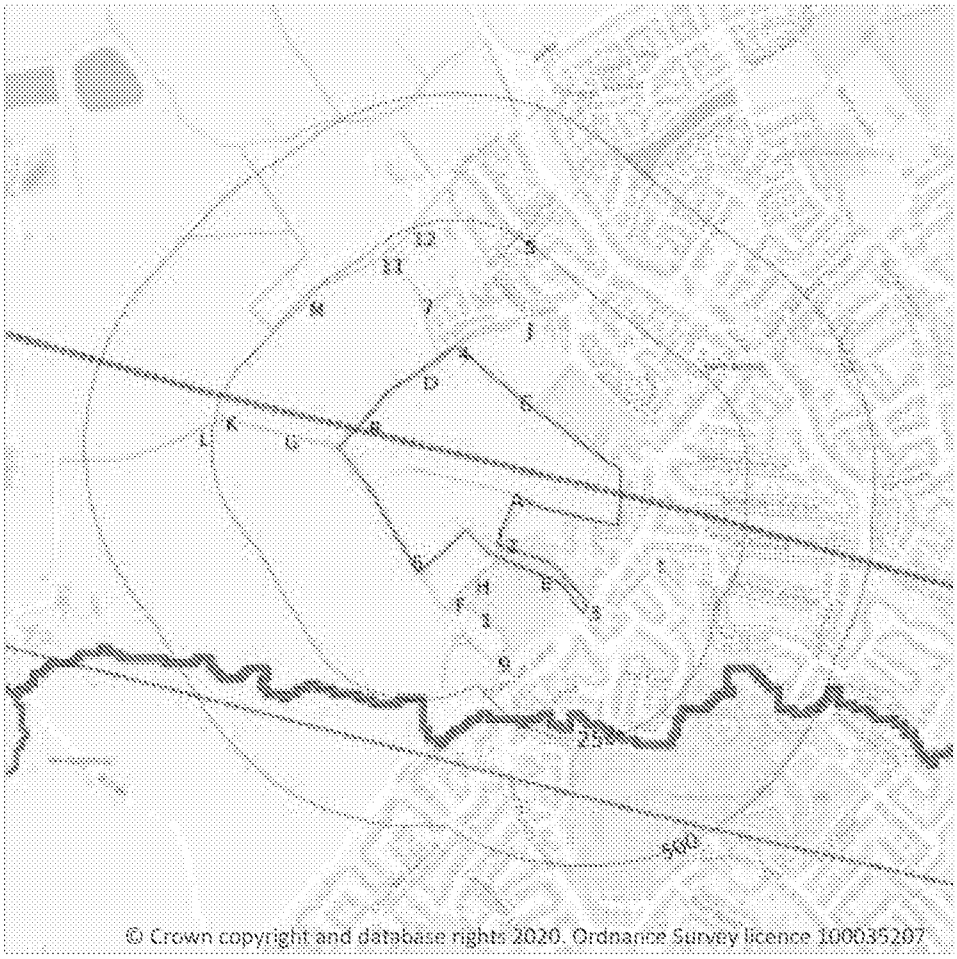
Records within 500m	0

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

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

ARUN DISTRICT COUNCIL BE/87/21/OUT

7 Hydrology



Site Outline

Search buffers in metres (m)

Water Network (OS MasterMap)

Surface water features (wider than 5m)

Surface water features (narrower than 5m)

WFD River, canal and surface water transfer water bodies

WFD Lake water bodies

WFD Transitional and coastal water bodies

WFD Surface water body catchments boundaries

WFD Groundwater body boundaries

7.1 Water Network (OS MasterMap)

Records within 250m **31**

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

Features are displayed on the Hydrology map on **page 45**

ID	Location	Type of water feature	Ground level	Permanence	Name
2	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-

ARUN DISTRICT COUNCIL BE/87/21/OUT

ID	Location	Type of water feature	Ground level	Permanence	Name
3	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
4	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
6	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
A	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
B	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
B	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
B	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
B	On site	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
B	On site	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
C	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
D	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
E	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
G	2m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-

ARUN DISTRICT COUNCIL BE/87/21/OUT

ID	Location	Type of water feature	Ground level	Permanence	Name
C	3m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
7	5m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
C	7m NE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
H	15m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
F	83m SE	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
F	83m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
9	85m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
I	97m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
I	103m SE	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
I	105m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
J	126m NE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
I	169m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
K	224m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-

ARUN DISTRICT COUNCIL BE/87/21/OUT

ID	Location	Type of water feature	Ground level	Permanence	Name
L	224m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
11	228m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
12	228m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
M	229m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-

This data is sourced from the Ordnance Survey.

7.2 Surface water features

Records within 250m	10

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

Features are displayed on the Hydrology map on **page 45**

This data is sourced from the Ordnance Survey.

7.3 WFD Surface water body catchments

Records on site	1

The Water Framework Directive is an EU-led framework for the protection of inland surface waters, estuaries, coastal waters and groundwater through river basin-level management planning. In terms of surface water, these basins are broken down into smaller units known as management, operational and water body catchments.

Features are displayed on the Hydrology map on **page 45**

ID	Location	Type	Water body catchment	Water body ID	Operational catchment	Management catchment
C	**On site**	**River WB catchment**	**Aldingbourne Rife**	**GB107041011980**	**Western Streams**	**Arun and Western Streams**

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

ARUN DISTRICT COUNCIL BE/87/21/OUT

7.4 WFD Surface water bodies

Records identified	1

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

Features are displayed on the Hydrology map on **page 45**

ID	Location	Type	Name	Water body ID	Overall rating	Chemical rating	Ecological rating	Year
-	1206m N	River	Aldingbourne Rife	GB107041011980	Moderate	Good	Moderate	2016

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

7.5 WFD Groundwater bodies

Records on site	2

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

Features are displayed on the Hydrology map on **page 45**

ID	Location	Name	Water body ID	Overall rating	Chemical rating	Quantitative	Year
1	**On site**	**Sussex Lambeth Group**	**GB40701G505100**	**Poor**	**Good**	**Poor**	**2015**
5	**On site**	**Littlehampton Anticline West**	**GB40701G504900**	**Poor**	**Good**	**Poor**	**2015**

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

ARUN DISTRICT COUNCIL BE/87/21/OUT

8 River and coastal flooding

8.1 Risk of Flooding from Rivers and Sea (RoFRaS)

Records within 50m	0

The chance of flooding from rivers and/or the sea in any given year, based on cells of 50m. Each cell is allocated one of four flood risk categories, taking into account flood defences and their condition; Very low (less than 1 in 1000 chance in any given year), Low (less than 1 in 100 but greater than or equal to 1 in 1000 chance), Medium (less than 1 in 30 but greater than or equal to 1 in 100 chance) or High (greater than or equal to 1 in 30 chance).

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

8.2 Historical Flood Events

Records within 250m	0

Records of historic flooding from rivers, the sea, groundwater and surface water. Records began in 1946 when predecessor bodies started collecting detailed information about flooding incidents, although limited details may be included on flooding incidents prior to this date. Takes into account the presence of defences, structures, and other infrastructure where they existed at the time of flooding, and includes flood extents that may have been affected by overtopping, breaches or blockages.

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

8.3 Flood Defences

Records within 250m	0

Records of flood defences owned, managed or inspected by the Environment Agency and Natural Resources Wales. Flood defences can be structures, buildings or parts of buildings. Typically these are earth banks, stone and concrete walls, or sheet-piling that is used to prevent or control the extent of flooding.

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

8.4 Areas Benefiting from Flood Defences

Records within 250m	0

Areas that would benefit from the presence of flood defences in a 1 in 100 (1%) chance of flooding each year from rivers or 1 in 200 (0.5%) chance of flooding each year from the sea.

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

ARUN DISTRICT COUNCIL BE/87/21/OUT

8.5 Flood Storage Areas

Records within 250m	0

Areas that act as a balancing reservoir, storage basin or balancing pond to attenuate an incoming flood peak to a flow level that can be accepted by the downstream channel or to delay the timing of a flood peak so that its volume is discharged over a longer period.

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

River and coastal flooding - Flood Zones

8.6 Flood Zone 2

Records within 50m	0

Areas of land at risk of flooding, when the presence of flood defences are ignored. Covering land between Flood Zone 3 (see next section) and the extent of the flooding from rivers or the sea with a 1 in 1000 (0.1%) chance of flooding each year.

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

8.7 Flood Zone 3

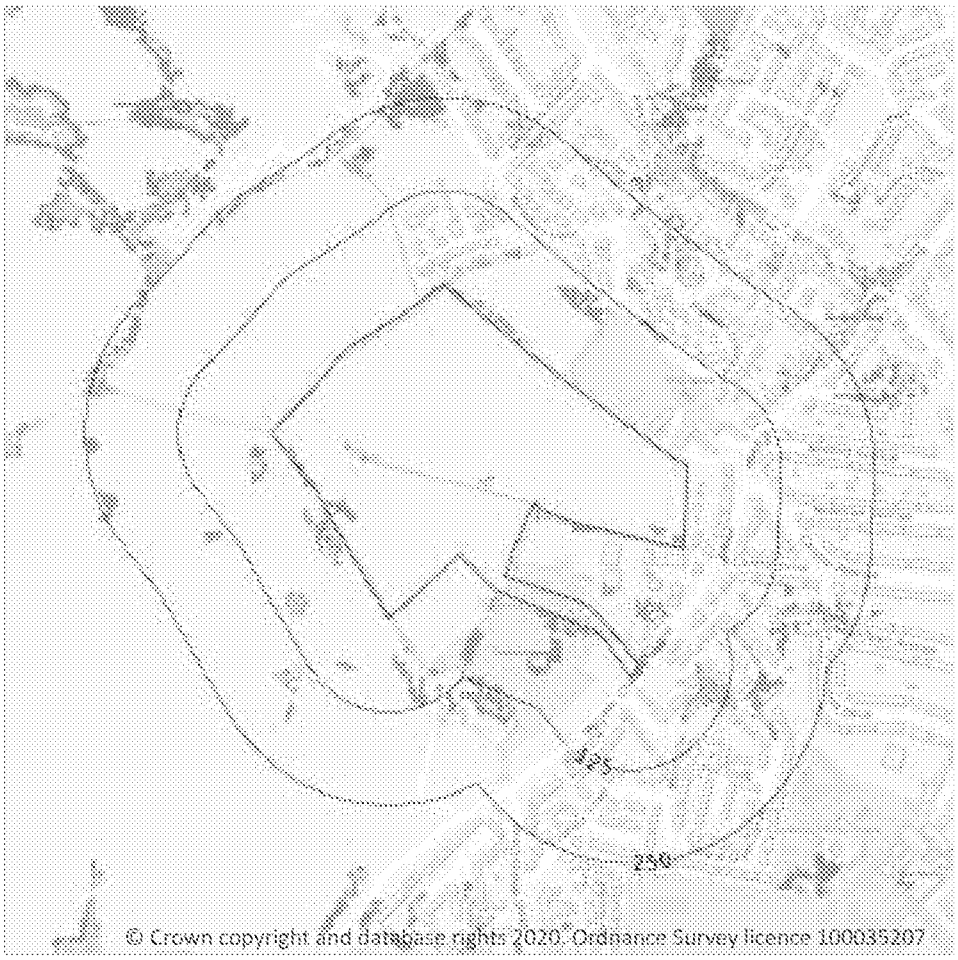
Records within 50m	0

Areas of land at risk of flooding, when the presence of flood defences are ignored. Covering land with a 1 in 100 (1%) or greater chance of flooding each year from rivers or a 1 in 200 (0.5%) or greater chance of flooding each year from the sea.

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

ARUN DISTRICT COUNCIL BE/87/21/OUT

9 Surface water flooding



Site Outline
Search buffers in metres (m)

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

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

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

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

9.1 Surface water flooding

Highest risk on site	**1 in 30 year, 0.3m - 1.0m**
Highest risk within 50m	**1 in 30 year, 0.3m - 1.0m**

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

Features are displayed on the Surface water flooding map on **page 53**

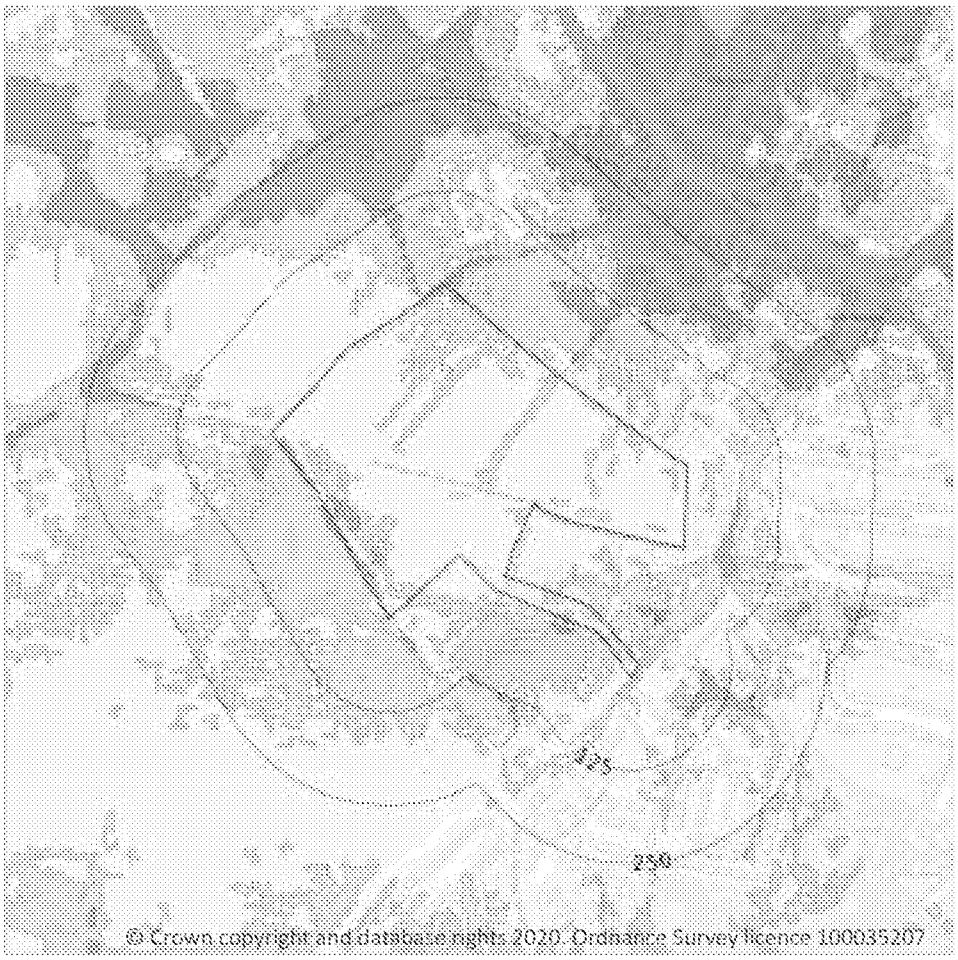
The data shown on the map and in the table above shows the highest likelihood of flood events happening at the site. Lower likelihood events may have greater flood depths and hence a greater potential impact on a site.

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

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

This data is sourced from Ambiental Risk Analytics.

10 Groundwater flooding



Site Outline

Search buffers in metres (m)

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

10.1 Groundwater flooding

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

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

Features are displayed on the Groundwater flooding map on **page 55**

This data is sourced from Ambiental Risk Analytics.

11 Environmental designations



Site Outline

Search buffers in metres (m)

Sites of Special Scientific Interest (SSSI)

Local Nature Reserves (LNR)

Potential Special Protection Areas (pSPA)

11.1 Sites of Special Scientific Interest (SSSI)

Records within 2000m	1

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

Features are displayed on the Environmental designations map on **page 56**

ID	Location	Name	Data source
-	1877m S	Bognor Reef	Natural England

ARUN DISTRICT COUNCIL BE/87/21/OUT

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

11.2 Conserved wetland sites (Ramsar sites)

Records within 2000m	0

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

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

11.3 Special Areas of Conservation (SAC)

Records within 2000m	0

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

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

11.4 Special Protection Areas (SPA)

Records within 2000m	0

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

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

11.5 National Nature Reserves (NNR)

Records within 2000m	0

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

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

ARUN DISTRICT COUNCIL BE/87/21/OUT

11.6 Local Nature Reserves (LNR)

Records within 2000m	1

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

Features are displayed on the Environmental designations map on **page 56**

ID	Location	Name	Data source
1	1380m NE	The Brooks	Natural England

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

11.7 Designated Ancient Woodland

Records within 2000m	0

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

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

11.8 Biosphere Reserves

Records within 2000m	0

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

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

11.9 Forest Parks

Records within 2000m	0

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

This data is sourced from the Forestry Commission.

ARUN DISTRICT COUNCIL BE/87/21/OUT

11.10 Marine Conservation Zones

Records within 2000m	0

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

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

11.11 Green Belt

Records within 2000m	0

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

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

11.12 Proposed Ramsar sites

Records within 2000m	0

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

This data is sourced from Natural England.

11.13 Possible Special Areas of Conservation (pSAC)

Records within 2000m	0

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

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

11.14 Potential Special Protection Areas (pSPA)

Records within 2000m	1

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

Features are displayed on the Environmental designations map on **page 56**

ARUN DISTRICT COUNCIL BE/87/21/OUT

ID	Location	Name	Status
-	1895m S	Solent and Dorset Coast	Potential

This data is sourced from Natural England.

11.15 Nitrate Sensitive Areas

Records within 2000m	0

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

This data is sourced from Natural England.

11.16 Nitrate Vulnerable Zones

Records within 2000m	2

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

Location	Name	Type	NVZ ID	Status
On site	**Aldingbourne Rife NVZ**	**Surface Water**	**S517**	**Existing**
1081m NW	Pagham Rife NVZ	Surface Water	S685	Changed

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

ARUN DISTRICT COUNCIL BE/87/21/OUT

SSSI Impact Zones and Units



Site Outline

Search buffers in metres (m)

SSSI Impact Risk Zones

SSSI Units

Not recorded

Favourable

Unfavourable - Recovering

Unfavourable - No change

Unfavourable - Declining

Partially destroyed

Destroyed

11.17 SSSI Impact Risk Zones

Records on site	2

Developed to allow rapid initial assessment of the potential risks to SSSIs posed by development proposals. They define zones around each SSSI which reflect the particular sensitivities of the features for which it is notified and indicate the types of development proposal which could potentially have adverse impacts.

Features are displayed on the SSSI Impact Zones and Units map on **page 61**

ID	Location	Type of developments requiring consultation
1	On site	Infrastructure - Airports, helipads and other aviation proposals. Residential - Any residential developments with a total net gain in residential units. Rural residential - Any residential developments outside of existing settlements/urban areas with a total net gain in residential units. Air pollution - Any industrial/agricultural development that could cause AIR POLLUTION (incl: industrial processes, livestock & poultry units with floorspace > 500m², slurry lagoons > 750m² & manure stores > 3500t). Combustion - General combustion processes >50MW energy input. Incl: energy from waste incineration, other incineration, landfill gas generation plant, pyrolysis/gasification, anaerobic digestion, sewage treatment works, other incineration/ combustion.
2	On site	Infrastructure - Airports, helipads and other aviation proposals. Residential - Any residential developments with a total net gain in residential units. Rural residential - Any residential developments outside of existing settlements/urban areas with a total net gain in residential units. Air pollution - Any industrial/agricultural development that could cause AIR POLLUTION (incl: industrial processes, livestock & poultry units with floorspace > 500m², slurry lagoons > 200m² & manure stores > 250t). Combustion - General combustion processes >20MW energy input. Incl: energy from waste incineration, other incineration, landfill gas generation plant, pyrolysis/gasification, anaerobic digestion, sewage treatment works, other incineration/ combustion. Waste - Landfill. Incl: inert landfill, non-hazardous landfill, hazardous landfill. Composting - Any composting proposal with more than 75000 tonnes maximum annual operational throughput. Incl: open windrow composting, in-vessel composting, anaerobic digestion, other waste management.

This data is sourced from Natural England.

11.18 SSSI Units

Records within 2000m	1

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

Features are displayed on the SSSI Impact Zones and Units map on page 61

ID:	-
Location:	1877m S
SSSI name:	Bognor Reef
Unit name:	3 Foreshore
Broad habitat:	Earth Heritage
Condition:	Favourable
Reportable features:	

ARUN DISTRICT COUNCIL BE/87/21/OUT

Feature name	Feature condition	Date of assessment
EC - Aves	Favourable	20/07/2012
EC - Palaeoentomology	Favourable	20/07/2012
EC - Tertiary Palaeobotany	Favourable	20/07/2012

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

12 Visual and cultural designations

12.1 World Heritage Sites

Records within 250m	0

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

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

12.2 Area of Outstanding Natural Beauty

Records within 250m	0

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

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

12.3 National Parks

Records within 250m	0

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

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

12.4 Listed Buildings

Records within 250m	0

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

ARUN DISTRICT COUNCIL BE/87/21/OUT

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

12.5 Conservation Areas

Records within 250m	0

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

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

12.6 Scheduled Ancient Monuments

Records within 250m	0

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

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

12.7 Registered Parks and Gardens

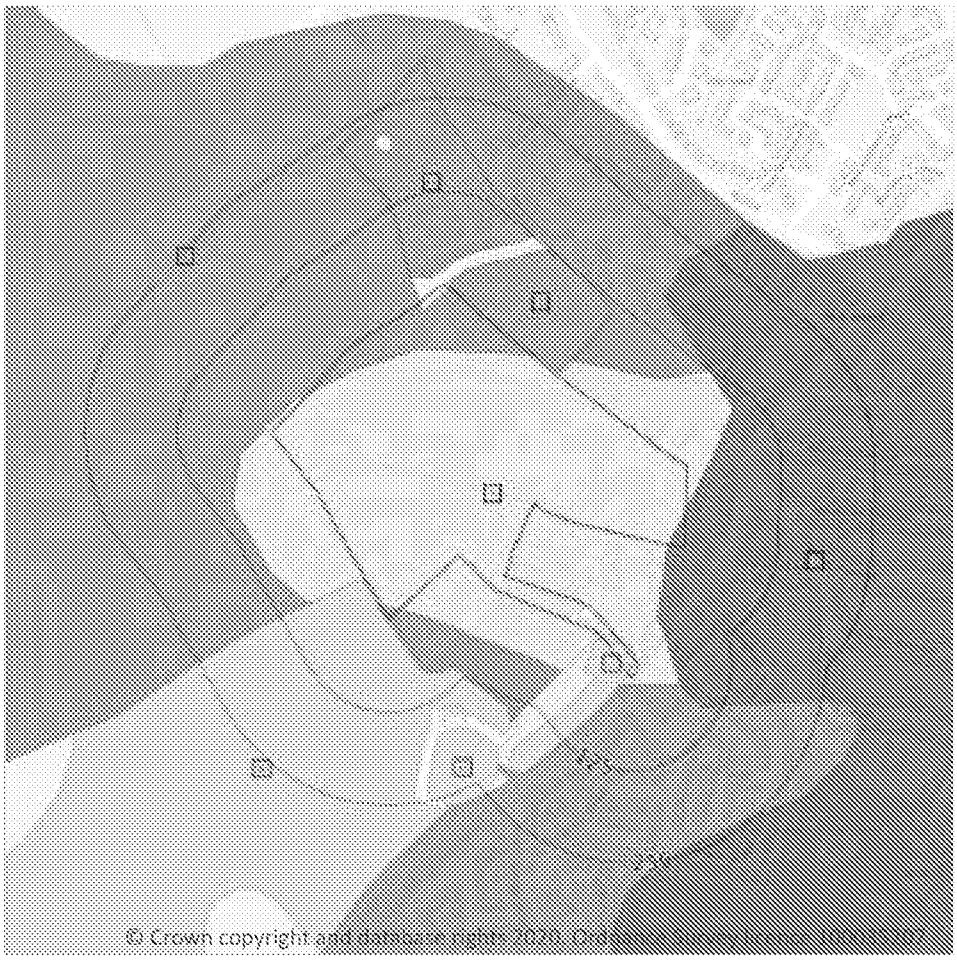
Records within 250m	0

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

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

ARUN DISTRICT COUNCIL BE/87/21/OUT

13 Agricultural designations



Site Outline

Search buffers in metres (m)

- Grade 1 - excellent quality
- Grade 2 - very good quality
- Grade 3 - good to moderate quality
- Grade 3a - good quality
- Grade 3b - moderate quality
- Grade 4 - poor quality
- Grade 5 - very poor quality
- Non-agricultural land
- Urban land
- Exclusion land
- Tree felling licences
- Open Access land

13.1 Agricultural Land Classification

Records within 250m	8

Classification of the quality of agricultural land taking into consideration multiple factors including climate, physical geography and soil properties. It should be noted that the categories for the grading of agricultural land are not consistent across England, Wales and Scotland.

Features are displayed on the Agricultural designations map on **page 66**

ID	Location	Classification	Description
2	On site	Grade 3a	**Good quality agricultural land. Land capable of consistently producing moderate to high yields of a narrow range of arable crops, especially cereals, or moderate yields of a wide range of crops including cereals, grass, oilseed rape, potatoes, sugar beet and the less demanding horticultural crops.**
3	On site	Urban	-

ID	Location	Classification	Description
4	**On site**	**Grade 2**	**Very good quality agricultural land. Land with minor limitations which affect crop yield, cultivations or harvesting. A wide range of agricultural and horticultural crops can usually be grown but on some land in the grade there may be reduced flexibility due to difficulties with the production of the more demanding crops such as winter harvested vegetables and arable root crops. The level of yield is generally high but may be lower or more variable than Grade 1.**
5	**On site**	**Grade 4**	**Poor quality agricultural land. Land with severe limitations which significantly restrict the range of crops and/or level of yields. It is mainly suited to grass with occasional arable crops (e.g. cereals and forage crops) the yields of which are variable. In moist climates, yields of grass may be moderate to high but there may be difficulties in utilisation. The grade also includes very droughty arable land.**
7	0m NE	Grade 2	Very good quality agricultural land. Land with minor limitations which affect crop yield, cultivations or harvesting. A wide range of agricultural and horticultural crops can usually be grown but on some land in the grade there may be reduced flexibility due to difficulties with the production of the more demanding crops such as winter harvested vegetables and arable root crops. The level of yield is generally high but may be lower or more variable than Grade 1.
8	2m SW	Grade 3a	Good quality agricultural land. Land capable of consistently producing moderate to high yields of a narrow range of arable crops, especially cereals, or moderate yields of a wide range of crops including cereals, grass, oilseed rape, potatoes, sugar beet and the less demanding horticultural crops.
10	16m NW	Grade 2	Very good quality agricultural land. Land with minor limitations which affect crop yield, cultivations or harvesting. A wide range of agricultural and horticultural crops can usually be grown but on some land in the grade there may be reduced flexibility due to difficulties with the production of the more demanding crops such as winter harvested vegetables and arable root crops. The level of yield is generally high but may be lower or more variable than Grade 1.
12	168m SE	Grade 3a	Good quality agricultural land. Land capable of consistently producing moderate to high yields of a narrow range of arable crops, especially cereals, or moderate yields of a wide range of crops including cereals, grass, oilseed rape, potatoes, sugar beet and the less demanding horticultural crops.

This data is sourced from Natural England.

13.2 Open Access Land

Records within 250m	0

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

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

ARUN DISTRICT COUNCIL BE/87/21/OUT

13.3 Tree Felling Licences

Records within 250m	0

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

This data is sourced from the Forestry Commission.

13.4 Environmental Stewardship Schemes

Records within 250m	0

Environmental Stewardship covers a range of schemes that provide financial incentives to farmers, foresters and land managers to look after and improve the environment.

This data is sourced from Natural England.

13.5 Countryside Stewardship Schemes

Records within 250m	1

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

Location	Reference	Scheme	Start Date	End Date
On site	105714	Countryside Stewardship (Middle Tier)	01/01/2016	31/12/2020

This data is sourced from Natural England.

ARUN DISTRICT COUNCIL BE/87/21/OUT

14 Habitat designations

14.1 Priority Habitat Inventory

Records within 250m	0

Habitats of principal importance as named under Natural Environment and Rural Communities Act (2006) Section 41.

This data is sourced from Natural England.

14.2 Habitat Networks

Records within 250m	0

Habitat networks for 18 priority habitat networks (based primarily, but not exclusively, on the priority habitat inventory) and areas suitable for the expansion of networks through restoration and habitat creation.

This data is sourced from Natural England.

14.3 Open Mosaic Habitat

Records within 250m	0

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

This data is sourced from Natural England.

14.4 Limestone Pavement Orders

Records within 250m	0

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

This data is sourced from Natural England.

ARUN DISTRICT COUNCIL BE/87/21/OUT

Data providers

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

Terms and conditions

Groundsure's Terms and Conditions can be accessed at this link: https://www.groundsure.com/terms-and-conditions-jan-2020/.

Appendix D Risk Rating Matrix

Risk rating for contaminated land qualitative risk assessment.

Risk is this context is a combination of the pollution probability, or frequency and the magnitude of the pollution.

Level of Scale and Seriousness (severity or magnitude)	Probability/Frequency		
	Most Likely	**Reasonably Foreseeable**	**Unlikely**
Severed pollution and high magnitude	High	High	Low
Moderately severe pollution and moderate magnitude	Medium	Medium	Low
Low severity of pollution and low magnitude	Low	Low	Low

Part IIA Amended Regulations 2012 Guidance
High Risk = Category 1
Medium Risk = Category 2-3
Low Risk = Category 4

Appendix F Environmental Receptors

Pollution to controlled waters.

'Section 78A(9) of the EPA 1990 defines the pollution of controlled waters as: "the entry into controlled waters of any poisonous, noxious or polluting matter or any solid waste matter".' (A35)

'Before determining that pollution of controlled water is being, or is likely to be, caused, the local authority should be satisfied that a substance is continuing to enter controlled waters or is likely to enter controlled waters. The local authority should regard something as being "likely" to be caused when the local authority judge it more likely than not to occur.' (A36)

'Land should **not** be designated as contaminated land where:

(a) a substance is already present in controlled waters;

(b) entry into controlled waters of that substance from land has ceased; and

(c) it is not likely that further entry will take place.' (A37)

'Substances should be regarded as having entered controlled waters where:

(a) they are dissolved or suspended in those waters; or

if they are immiscible with water, they have direct contact with those waters on or beneath the surface of the water.' (A38)

The term 'continuing to enter' should be taken to mean any entry additional to any which has already occurred. (A39)

Reproduced from DETR (2000) Contaminated Land: Implementation of Part IIA of the Environmental Protection Act 1990 Circular 2/2000 and Scottish Executive Rural Affairs Department (2000) Circular 1/2000. Environmental Protection Act 1990: Part IIA – Contaminated Land.

Significant harm to various receptors.

Type of receptor	**Description of harm to that type of receptor that is to be regarded as significant harm**
Human beings	Death, disease, serious injury, genetic mutation, birth defects or the impairment of reproductive functions. For these purposes, disease is to be taken to mean an unhealthy condition of the body or a part of it and can include, for example, cancer, liver dysfunction or extensive skin ailments. Mental dysfunction is included only insofar as it is attributable to the effects of a pollutant on the body of the person concerned. In the Guidance, this description of significant harm is referred to as a 'human health effect'.
Any ecological system, or living organism forming part of such a system, within a location which is: • an area notified as an area of Special Scientific Interest under Section 28 of the Wildlife and Countryside Act 1981. • any land declared a National Nature Reserve under Section 35 of that Act • any area designated as a Marine Nature Reserve under Section 36 of that Act • an area of Special Protection of Birds, established under Section 3 of that Act • any European Site within the meaning of regulation 10 of the Conservation (Natural Habitats etc.) Regulations 1994 (i.e. Special Areas of Conservation and Special protection Areas) • any candidate Special Areas of Conservation or potential Special Protection Areas given equivalent protection • any habitat or site afforded policy protection under paragraph 13 of Planning Policy Guidance	For any protected location: Harm which results in an irreversible adverse change, or in some other substantial adverse change, in the functioning of the ecological system within any substantial part of that location; or Harm which affects any species of special interest within that location and which endangers the long-term maintenance of the population of that species at that location. In addition, in the case of a protected location, which is a European Site (or a candidate Special Area of Conservation or a potential Special Protection Ares), harm which is incompatible with the favourable conservation status of natural habitats at that location or species typically found there. In determining what constitutes such harm, the local authority should have regard to the advice of English nature and to the requirements of the Conservation (Natural Habitats etc Regulations 1994.

Type of receptor	Description of harm to that type of receptor that is to be regarded as significant harm
Note 9 (PPG9) on nature conservation (i.e. candidate Special Areas of Conservation, potential Special protection Areas and listed Ramsar sites); or • any nature reserve established under Section 21 of the National Parks and Access to the Countryside Act 1949.	In the Guidance this description of significant harm is referred to as an 'ecological system effect'.
Property in the form of: • crops, including timber • produce grown domestically, or on allotments, for consumption • livestock • other owned or domesticated animals; wild animals which are the subject of shooting or fishing rights.	For crops, a substantial diminution in yield or other substantial loss in their value, resulting from death, disease or other physical damage. For domestic pets, death, serious disease or serious physical damage. For other property in this category, a substantial loss in its value resulting from death, disease or other serious physical damage. The local authority should regard a substantial loss in value as occurring only when a substantial proportion of the animals or crops are dead or otherwise no longer fit for their intended purpose. Food should be regarded as being no longer fit for purpose when it fails to comply with the provisions of the Food Safety Act 1990. Where a diminution in yield or loss in value is caused by a pollutant linkage, a 20% diminution or loss should be regarded as a benchmark for what constitutes a substantial diminution or loss. In the Guidance this description of significant harm is referred to as an 'animal or crop effect'.
Property in the form of buildings. For this purpose 'building' means any structure or erection and any part of a building, including any part below ground level, but does not include plant or machinery comprised in a building.	Structural failure, substantial damage or substantial interference with any right of occupation. For this purpose, the local authority should regard substantial damage or substantial interference as occurring when any part of the building ceases to be capable of being used for the purpose for which it is or was intended. Additionally, in the case of a scheduled Ancient Monument, substantial damage should be regarded as occurring when the damage significantly impairs the historic, architectural, traditional, artistic or archaeological interest by reason of which the monument was scheduled in the Guidance this description of significant harm is referred to as a 'building effect'.

Reproduced from DETR (2000) Contaminated Land: Implementation of Part IIA of the Environmental Protection Act 1990. Circular 2/2000 and Scottish Executive Rural Affairs Department (2000) Circular 1/2000. Environmental Protection Act 1990: Part IIA – Contaminated Land.