

APPENDIX A: Existing Site Layout Plan



brl	brick wall	rrc	rodding eye
bol	bolard	rrs	road name plate
bs	bus stop	rwp	rainwater pipe
bx	box inspection chamber	rwp	road sign
cbv	cover at drainage channel	▲ Sln	survey station
ck	dropped kerb	sc	stop stock
cl	diameter	sl	stop
ec	electricity pole	sv	stop valve
ear	earth road	tr	traffic light
fb	flower bed	tl	telegraphic pole
fb	footpath	wn	water pipe
g	gully	wc	water meter
gpc	gas stop cock	wcv	water stop valve
gv	gas stop valve	Fence details	
gvh	hydrant	bwl	barbed wire
ic	inspection chamber	cb	crash barrier
jbx	junction box	cl	conspired iron
kb	kerb	cl	chain link
kb	letter box	cnp	conspired palling
lp	lamp post	ir	iron railing
lp	lamp post	pmw	post and wire
mrk	marker	psw	post and wire mesh
h	height	psw	post and rail
p	post	clz	close board fence
pb	post box		
lp	lamp post		

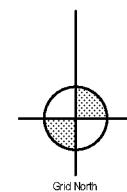
Line types

Figure 1: Diagram illustrating the symbols used to represent various features in a landscape plan. The symbols include:

- Fences
- Kerb
- Walls
- Stairs
- Change of Surface
- Footpath
- Bank Top
- Bank Bottom
- Building
- Building Overhead
- Roof heights
- Flower Bed
- Overhead Cable
- Road Edge
- Hedge Row
- Canopy
- Edge of vegetation
- Multi directional tree canopy

Notes

Tree species should be confirmed by a arboricultural consultant if critical
Trunk sizes are measured at 1.5m above ground level
Eaves heights (where shown) are taken at the end of the tile / top of guttering.
Ridge heights are taken at the top of the ridge tile.
Service covers indicated where visible at time of survey



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Client	Ed Rees
Drawing Title	Topographic Land Survey
Location	Walberton Garage

LEVELS BASED ON		Surveyor:- SB	Assistant:- RKL
Local Grid		Drawn By:- SB	Checked by:- JB
GRID BASED ON		REVISIONS	
Drawing & CAD Ref.			
16219			
SCALE (when printed)		Date	
1:200 @ A1		31st October 2016	
Removal of this book also removes all warranties This drawing has been created for use at a scale of 1:200 All critical dimensions, positions and levels to be checked on site			

APPENDIX B: Groundsure EnviroInsight & GeoInsight Reports



Your Environment

Chilgrove Park Road, Chilgrove,
Chichester, PO18 9HU

Groundsure
Reference:

GS-3427021

Your Reference: YE2690

Report Date 7 Nov 2016

Report Delivery Method: Email - pdf

Groundsure Enviro Insight

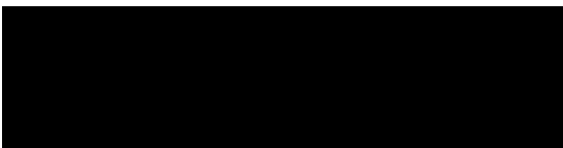
Address: PROGRESS GARAGE, YAPTON LANE, ARUNDEL, BN18 0AS

Dear Sir/ Madam,

Thank you for placing your order with Groundsure. Please find enclosed the **Groundsure Enviro Insight** as requested.

If you need any further assistance, please do not hesitate to contact our helpline on 08444 159000 quoting the above Groundsure reference number.

Yours faithfully,



Managing Director
Groundsure Limited

Enc.
Groundsure Enviroinsight

Groundsure Enviro Insight

Address: PROGRESS GARAGE, YAPTON LANE, ARUNDEL, BN18 0AS
Date: 7 Nov 2016
Reference: GS-3427021
Client: YourEnvironment

NW

N

NE

W

E



SW

S

SE

Aerial Photograph Capture date: 13-Sep-2012
Grid Reference: 497693,105228
Site Size: 0.19ha

Report Reference: GS-3427021
Client Reference: YE2690

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Overview of Findings

For further details on each dataset, please refer to each individual section in the main report as listed. Where the database has been searched a numerical result will be recorded. Where the database has not been searched '-' will be recorded.

Section 1: Historical Industrial Sites	On-site	0-50	51-250	251-500
1.1 Potentially Contaminative Uses identified from 1:10,000 scale mapping	2	2	6	5
1.2 Additional Information – Historical Tank Database	0	0	16	14
1.3 Additional Information – Historical Energy Features Database	0	0	0	0
1.4 Additional Information – Historical Petrol and Fuel Site Database	0	0	0	0
1.5 Additional Information – Historical Garage and Motor Vehicle Repair Database	3	0	0	0
1.6 Potentially Infilled Land	0	0	0	21

Section 2: Environmental Permits, Incidents and Registers	On-site	0-50m	51-250	251-500
2.1 Industrial Sites Holding Environmental Permits and/or Authorisations				
2.1.1 Records of historic IPC Authorisations	0	0	0	0
2.1.2 Records of Part A(1) and IPPC Authorised Activities	0	0	0	0
2.1.3 Records of Red List Discharge Consents	0	0	0	0
2.1.4 Records of List 1 Dangerous Substances Inventory sites	0	0	0	0
2.1.5 Records of List 2 Dangerous Substances Inventory sites	0	0	0	0
2.1.6 Records of Part A(2) and Part B Activities and Enforcements	0	0	0	0
2.1.7 Records of Category 3 or 4 Radioactive Substances Authorisations	0	0	0	0
2.1.8 Records of Licensed Discharge Consents	0	1	0	1
2.1.9 Records of Water Industry Referrals	0	0	0	0
2.1.10 Records of Planning Hazardous Substance Consents and Enforcements within 500m of the study site	0	0	0	0
2.2 Records of COMAH and NIHHS sites	0	0	0	0
2.3 Environment Agency Recorded Pollution Incidents				
2.3.1 National Incidents Recording System, List 2	0	0	0	0
2.3.2 National Incidents Recording System, List 1	0	0	0	0
2.4 Sites Determined as Contaminated Land under Part 2A EPA 1990	0	0	0	0

Section 3: Landfill and Other Waste Sites	On-site	0-50m	51-250	251-500	501-1000	1000-1500
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3.1 Landfill Sites						
3.1.1 Environment Agency Registered Landfill Sites	0	0	0	0	0	Not searched
3.1.2 Environment Agency Historic Landfill Sites	0	0	0	0	0	0
3.1.3 BGS/DoE Landfill Site Survey	0	0	0	0	0	0
3.1.4 Records of Landfills in Local Authority and Historical Mapping Records	0	0	0	0	0	0
3.2 Landfill and Other Waste Sites Findings						
3.2.1 Operational and Non-Operational Waste Treatment, Transfer and Disposal Sites	0	0	0	0	Not searched	Not searched
3.2.2 Environment Agency Licensed Waste Sites	0	0	0	0	0	0

Section 4: Current Land Use	On-site	0-50m	51-250	251-500
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4.1 Current Industrial Sites Data	1	0	4	Not searched
4.2 Records of Petrol and Fuel Sites	0	0	0	0
4.3 National Grid Underground Electricity Cables	0	0	0	0
4.4 National Grid Gas Transmission Pipelines	0	0	0	0

Section 5: Geology

5.1 Are there any records of Artificial Ground and Made Ground present beneath the study site?	No
5.2 Are there any records of Superficial Ground and Drift Geology present beneath the study site?	Yes
5.3 For records of Bedrock and Solid Geology beneath the study site see the detailed findings section.	

Section 6: Hydrogeology and Hydrology	0-500m
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6.1 Are there any records of Strata Classification in the Superficial Geology within 500m of the study site?	Yes
6.2 Are there any records of Strata Classification in the Bedrock Geology within 500m of the study site?	Yes

	On-site	0-50m	51-250	251-500	501-1000	1000-2000
6.3 Groundwater Abstraction Licences (within 2000m of the study site)	0	0	3	1	2	4
6.4 Surface Water Abstraction Licences (within 2000m of the study site)	0	0	0	0	2	2
6.5 Potable Water Abstraction Licences (within 2000m of the study site)	0	0	0	0	0	0
6.6 Source Protection Zones (within 500m of the study site)	0	0	0	0	Not searched	Not searched
6.7 Source Protection Zones within Confined Aquifer	0	0	0	0	Not searched	Not searched
6.8 Groundwater Vulnerability and Soil Leaching Potential (within 500m of the study site)	1	0	1	1	Not searched	Not searched
	On-site	0-50m	51-250	251-500	501-1000	1000-1500

Section 6: Hydrogeology and Hydrology

0-500m

6.9 Is there any Environment Agency information on river quality within 1500m of the study site?	No	No	No	No	No	No
6.10 Detailed River Network entries within 500m of the site	0	0	0	5	Not searched	Not searched
6.11 Surface water features within 250m of the study site	No	No	No	Not searched	Not searched	Not searched

Section 7: Flooding

7.1 Are there any Environment Agency Zone 2 floodplains within 250m of the study site?	No
7.2 Are there any Environment Agency Zone 3 floodplains within 250m of the study site?	No
7.3 What is the Risk of flooding from Rivers and the Sea (RoFRaS) rating for the study site?	Very Low
7.4 Are there any Flood Defences within 250m of the study site?	No
7.5 Are there any areas benefiting from Flood Defences within 250m of the study site?	No
7.6 Are there any areas used for Flood Storage within 250m of the study site?	No
7.7 What is the maximum BGS Groundwater Flooding susceptibility within 50m of the study site?	Potential below Surface
7.8 What is the BGS confidence rating for the Groundwater Flooding susceptibility areas?	High

Section 8: Designated Environmentally Sensitive Sites

On-site 0-50m 51-250 251-500 501-1000 1000-2000

8.1 Records of Sites of Special Scientific Interest (SSSI)	0	0	0	0	0	0
8.2 Records of National Nature Reserves (NNR)	0	0	0	0	0	0
8.3 Records of Special Areas of Conservation (SAC)	0	0	0	0	0	0
8.4 Records of Special Protection Areas (SPA)	0	0	0	0	0	0
8.5 Records of Ramsar sites	0	0	0	0	0	0
8.6 Records of Ancient Woodlands	0	0	0	0	0	33
8.7 Records of Local Nature Reserves (LNR)	0	0	0	0	0	0
8.8 Records of World Heritage Sites	0	0	0	0	0	0
8.9 Records of Environmentally Sensitive Areas	0	0	0	0	0	1
8.10 Records of Areas of Outstanding Natural Beauty (AONB)	0	0	0	0	0	0

Section 8: Designated Environmentally Sensitive Sites	On-site	0-50m	51-250	251-500	501-1000	1000-2000
8.11 Records of National Parks	0	0	0	0	0	1
8.12 Records of Nitrate Sensitive Areas	0	0	0	0	0	0
8.13 Records of Nitrate Vulnerable Zones	0	0	1	0	0	1
8.14 Records of Green Belt land	0	0	0	0	0	0

Section 9: Natural Hazards	
9.1 What is the maximum risk of natural ground subsidence?	Low
9.1.1 What is the maximum Shrink-Swell hazard rating identified on the study site?	Low
9.1.2 What is the maximum Landslides hazard rating identified on the study site?	Very Low
9.1.3 What is the maximum Soluble Rocks hazard rating identified on the study site?	Negligible
9.1.4 What is the maximum Compressible Ground hazard rating identified on the study site?	Negligible
9.1.5 What is the maximum Collapsible Rocks hazard rating identified on the study site?	Low
9.1.6 What is the maximum Running Sand hazard rating identified on the study site?	Low
9.2 Radon	
9.2.1 Is the property in a Radon Affected Area as defined by the Health Protection Agency (HPA) and if so what percentage of homes are above the Action Level?	The property is in a Radon Affected Area, as between 1 and 3% of properties are above the Action Level.
9.2.2 Is the property in an area where Radon Protection are required for new properties or extensions to existing ones as described in publication BR211 by the Building Research Establishment?	No radon protective measures are necessary.

Section 10: Mining	
10.1 Are there any coal mining areas within 75m of the study site?	No
10.2 Are there any Non-Coal Mining areas within 50m of the study site boundary?	No
10.3 Are there any brine affected areas within 75m of the study site?	No

Using this report

The following report is designed by Environmental Consultants for Environmental Professionals bringing together the most up-to-date market leading environmental data. This report is provided under and subject to the Terms & Conditions agreed between Groundsure and the Client. The document contains the following sections:

1. Historical Industrial Sites

Provides information on past land uses that may pose a risk to the study site in terms of potential contamination from activities or processes. Potentially Infilled Land features are also included. This search is conducted using radii of up to 500m.

2. Environmental Permits, Incidents and Registers

Provides information on Regulated Industrial Activities and Pollution Incidents as recorded by Regulatory Authorities, and sites determined as Contaminated Land. This search is conducted using radii up to 500m.

3. Landfills and Other Waste Sites

Provides information on landfills and other waste sites that may pose a risk to the study site. This search is conducted using radii up to 1500m.

4. Current Land Uses

Provides information on current land uses that may pose a risk to the study site in terms of potential contamination from activities or processes. These searches are conducted using radii of up to 500m. This includes information on potentially contaminative industrial sites, petrol stations and fuel sites as well as high pressure gas pipelines and underground electricity transmission lines.

5. Geology

Provides information on artificial and superficial deposits and bedrock beneath the study site.

6. Hydrogeology and Hydrology

Provides information on productive strata within the bedrock and superficial geological layers, abstraction licenses, Source Protection Zones (SPZs) and river quality. These searches are conducted using radii of up to 2000m.

7. Flooding

Provides information on river and coastal flooding, flood defences, flood storage areas and groundwater flood areas. This search is conducted using radii of up to 250m.

8. Designated Environmentally Sensitive Sites

Provides information on the Sites of Special Scientific Interest (SSSI), National Nature Reserves (NNR), Special Areas of Conservation (SAC), Special Protection Areas (SPA), Ramsar sites, Local Nature Reserves (LNR), Areas of Outstanding Natural Beauty (AONB), National Parks (NP), Environmentally Sensitive Areas, Nitrate Sensitive Areas, Nitrate Vulnerable Zones and World Heritage Sites and Scheduled Ancient Woodland. These searches are conducted using radii of up to 2000m.

9. Natural Hazards

Provides information on a range of natural hazards that may pose a risk to the study site. These factors include natural ground subsidence and radon.

10. Mining

Provides information on areas of coal and non-coal mining and brine affected areas.

11. Contacts

This section of the report provides contact points for statutory bodies and data providers that may be able to provide further information on issues raised within this report. Alternatively, Groundsure provide a free Technical Helpline (08444 159000) for further information and guidance.

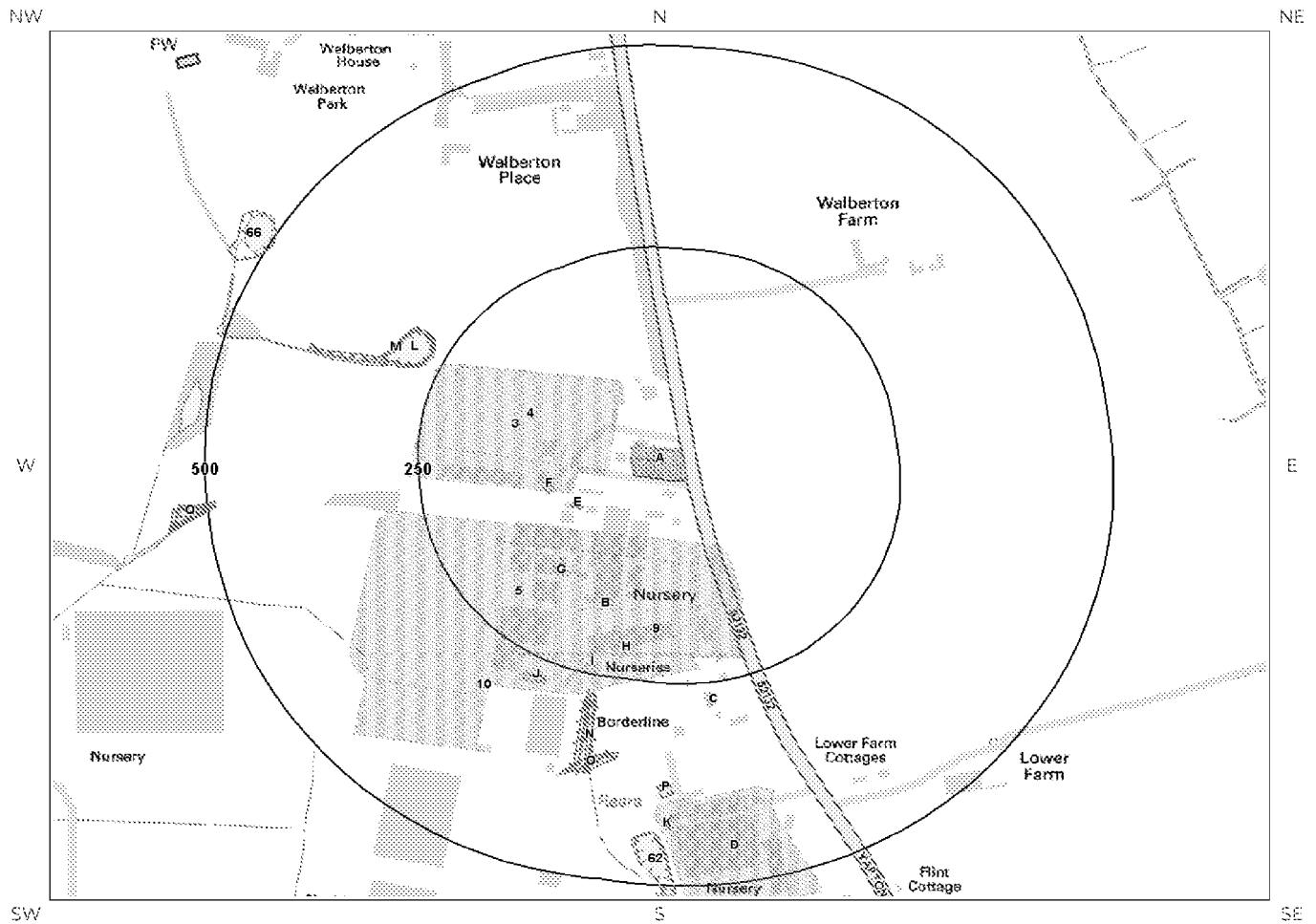
Note: Maps

Only certain features are placed on the maps within the report. All features represented on maps found within this search are given an identification number. This number identifies the feature on the mapping and correlates it to the additional information provided below. This identification number precedes all other information and takes the following format -Id: 1, Id: 2, etc. Where numerous features on the same map are in such close proximity that the numbers would obscure each other a letter identifier is used instead to represent the features. (e.g. Three features which overlap may be given the identifier "A" on the map and would be identified separately as features 1A, 3A, 10A on the data tables provided).

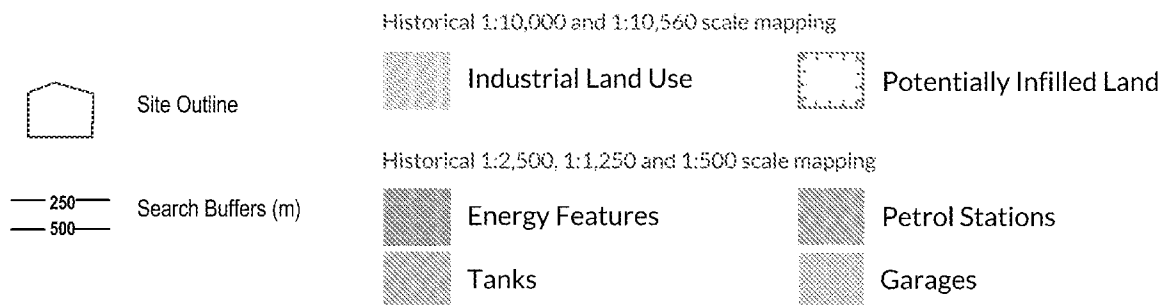
Where a feature is reported in the data tables to a distance greater than the map area, it is noted in the data table as "Not Shown".

All distances given in this report are in Metres (m). Directions are given as compass headings such as N: North, E: East, NE: North East from the nearest point of the study site boundary.

1. Historical Land Use



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1. Historical Industrial Sites

1.1 Potentially Contaminative Uses identified from 1:10,000 scale Mapping

The systematic analysis of data extracted from standard 1:10,560 and 1:10,000 scale historical maps provides the following information:

Records of sites with a potentially contaminative past land use within 500m of the search boundary: 15

ID	Distance [m]	Direction	Use	Date
1A	0	On Site	Garage	1990
2A	0	On Site	Garage	1977
3	25	W	Nursery	1950
4	29	W	Nursery	1961
5	72	S	Nursery	1950
6F	95	W	Unspecified Tank	1977
7B	99	S	Nursery	1977
8B	100	S	Nursery	1990
9	155	S	Nursery	1961
10	212	S	Nursery	1991
11J	268	S	Unspecified Tanks	1991
12C	271	S	Unspecified Tank	1991
13C	271	S	Unspecified Tank	1978
14D	385	S	Nursery	1978
15D	385	S	Nursery	1991

1.2 Additional Information – Historical Tank Database

The systematic analysis of data extracted from High Detailed 1:1,250 and 1:2,500 scale historical maps provides the following information.

Records of historical tanks within 500m of the search boundary: 30

ID	Distance (m)	Direction	Use	Date
16E	70	SW	Tanks	1984
17E	72	SW	Tanks	1994
18E	72	SW	Unspecified Tank	1974
19F	95	W	Unspecified Tank	1984
20F	97	W	Unspecified Tank	1974
21G	145	SW	Unspecified Tank	1984
22G	146	SW	Unspecified Tank	1994
23G	146	SW	Unspecified Tank	1974

24H	213	S	Unspecified Tank	1984
25H	214	S	Unspecified Tank	1994
26I	238	S	Unspecified Tank	1992
27I	238	S	Unspecified Tank	1984
28I	238	S	Unspecified Tank	1987
29I	238	S	Unspecified Tank	1988
30I	238	S	Unspecified Tank	1974
31I	238	S	Unspecified Tank	1999
32J	269	SW	Unspecified Tank	1999
33J	270	SW	Unspecified Tank	1992
34J	270	SW	Unspecified Tank	1988
35C	271	S	Unspecified Tank	1999
36C	272	S	Unspecified Tank	1984
37C	272	S	Unspecified Tank	1992
38C	272	S	Unspecified Tank	1987
39C	272	S	Unspecified Tank	1988
40J	273	SW	Unspecified Tank	1999
41J	273	SW	Unspecified Tank	1992
42J	274	SW	Unspecified Tank	1988
43K	423	S	Unspecified Tank	1999
44K	424	S	Unspecified Tank	1988
45K	424	S	Unspecified Tank	1992

1.3 Additional Information – Historical Energy Features Database

The systematic analysis of data extracted from High Detailed 1:1,250 and 1:2,500 scale historical maps provides the following information.

Records of historical energy features within 500m of the search boundary: 0

Database searched and no data found.

1.4 Additional Information – Historical Petrol and Fuel Site Database

The systematic analysis of data extracted from High Detailed 1:1,250 and 1:2,500 scale historical maps provides the following information.

Records of historical petrol stations and fuel sites within 500m of the search boundary: 0

Database searched and no data found.

1.5 Additional Information – Historical Garage and Motor Vehicle Repair Database

The systematic analysis of data extracted from High Detailed 1:1,250 and 1:2,500 scale historical maps

provides the following information.

Records of historical garage and motor vehicle repair sites within 500m of the search boundary: 3

ID	Distance (m)	Direction	Use	Date
46A	0	On Site	Garage	1974
47A	0	On Site	Garage	1994
48A	0	On Site	Garage	1984

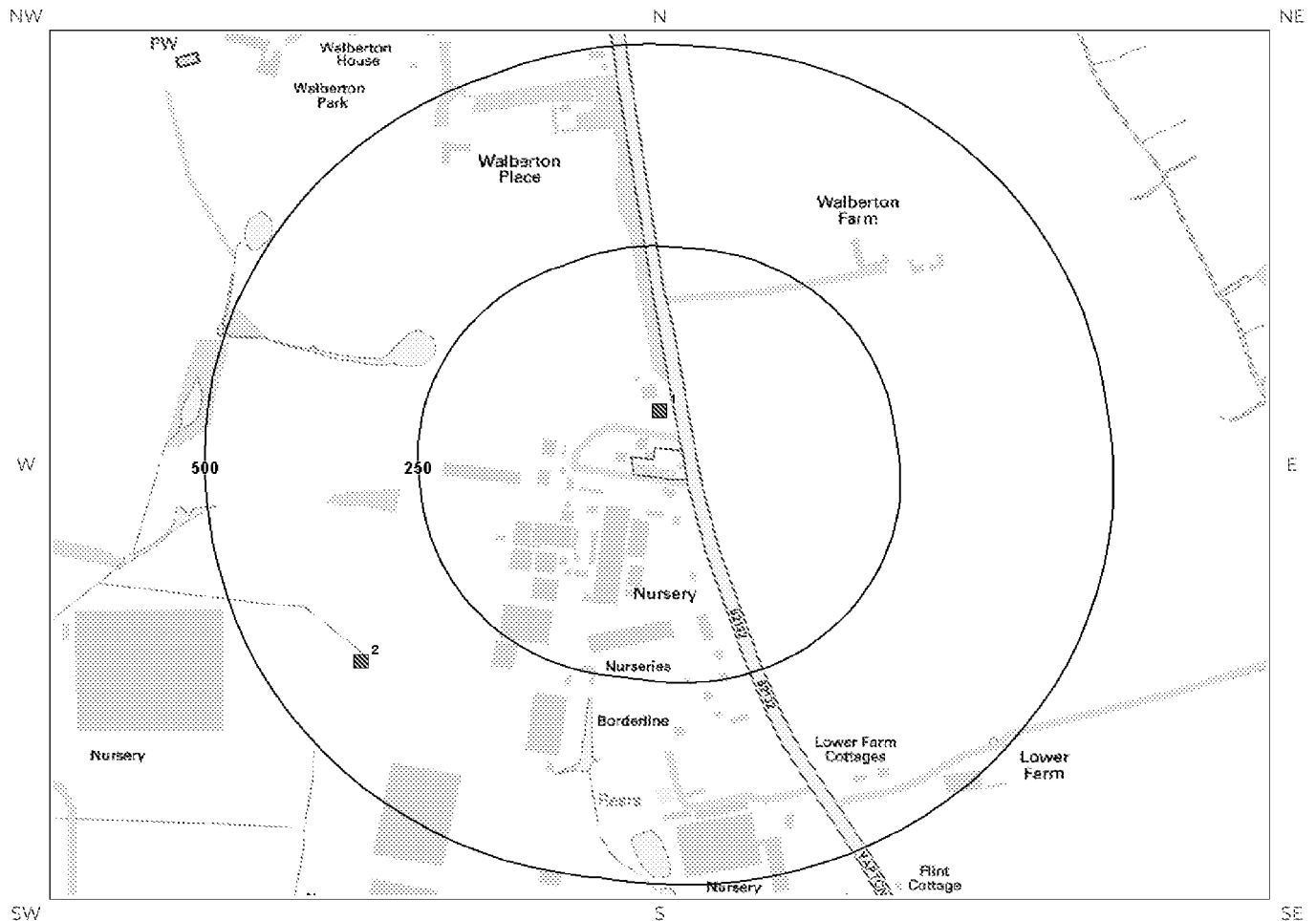
1.6 Potentially Infilled Land

Records of Potentially Infilled Features from 1:10,000 scale mapping within 500m of the study site: 21

The following Historical Potentially Infilled Features derived from the Historical Mapping information is provided by Groundsure:

ID	Distance(m)	Direction	Use	Date
49L	266	NW	Pond	1990
50L	266	NW	Pond	1977
51L	266	NW	Pond	1961
52M	268	NW	Pond	1910
53M	268	NW	Pond	1950
54N	274	S	Pond	1950
55N	274	S	Pond	1910
56N	275	S	Pond	1876
57N	278	S	Pond	1896
58O	346	S	Pond	1991
59O	346	S	Pond	1978
60P	374	S	Reservoir	1991
61P	374	S	Reservoir	1978
62	436	S	Ponds	1991
63Q	490	W	Pond	1977
64Q	490	W	Pond	1876
65Q	493	W	Pond	1990
66	496	NW	Pond	1961
67Q	499	W	Pond	1896
68Q	499	W	Pond	1910
69Q	499	W	Pond	1950

2. Environmental Permits, Incidents and Registers Map



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- | | | |
|--------------------|-------------------------------|--|
| Site Outline | Recorded Pollution Incident | RAS 3 & 4 Authorisations |
| Search Buffers (m) | Dangerous Substances (List 1) | Part A(1) Authorised Processes and Historic IPC Authorisations |
| | Dangerous Substances (List 2) | Part A(2) and Part B Authorised Processes |
| | Water Industry Referrals | COMAH / NIHHS Sites |
| | Licenced Discharge Consents | Sites Determined as Contaminated Land |
| | Red List Discharge Consents | Hazardous Substance Consents and Enforcements |

2. Environmental Permits, Incidents and Registers

2.1 Industrial Sites Holding Licences and/or Authorisations

Searches of information provided by the Environment Agency and Local Authorities reveal the following information:

2.1.1 Records of historic IPC Authorisations within 500m of the study site:

0

Database searched and no data found.

2.1.2 Records of Part A(1) and IPPC Authorised Activities within 500m of the study site:

0

Database searched and no data found.

2.1.3 Records of Red List Discharge Consents (potentially harmful discharges to controlled waters) within 500m of the study site:

0

Database searched and no data found.

2.1.4 Records of List 1 Dangerous Substances Inventory Sites within 500m of the study site:

0

Database searched and no data found.

2.1.5 Records of List 2 Dangerous Substance Inventory Sites within 500m of the study site:

0

Database searched and no data found.

2.1.6 Records of Part A(2) and Part B Activities and Enforcements within 500m of the study site:

0

Database searched and no data found.

2.1.7 Records of Category 3 or 4 Radioactive Substances Authorisations:

0

Database searched and no data found.

2.1.8 Records of Licensed Discharge Consents within 500m of the study site:

2

The following Licensed Discharge Consents records are represented as points on the Environmental Permits, Incidents and Registers Map:

ID	Distance (m)	Direction	NGR	Details
1	46	N	497700 105300	Address: SPINDLEWOOD, SPINDLEWOOD, YAPTON LANE, WALBERTON, WEST SUSSEX Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: N02731 Permit Version: 1 Receiving Water: FRESHWATER RIVER Status: Lapsed Under Schedule 23 Environment Act 1995 Issue date: 25/06/1979 Effective Date: 25-Jun-1979 Revocation Date: 31/03/1997
2	395	SW	497350 104990	Address: WALBERTON NURSERY YAPTON LANE, WALBERTON NURSERY, YAPTON LANE, WALBERTON, ARUNDEL, WEST SUSSEX, BN18 0AS Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: P13193 Permit Version: 1 Receiving Water: DITCH TO BARNHAM RIFE Status: NEW CONSENT (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV ACT 1995) Issue date: 07/09/2007 Effective Date: 07-Sep-2007 Revocation Date: -

2.1.9 Records of Water Industry Referrals (potentially harmful discharges to the public sewer) within 500m of the study site:

0

Database searched and no data found.

2.1.10 Records of Planning Hazardous Substance Consents and Enforcements within 500m of the study site:

0

Database searched and no data found.

2.2 Dangerous or Hazardous Sites

Records of COMAH & NIHHS sites within 500m of the study site:

0

Database searched and no data found.

2.3 Environment Agency Recorded Pollution Incidents

2.3.1 Records of National Incidents Recording System, List 2 within 500m of the study site:

0

Database searched and no data found.

2.3.2 Records of National Incidents Recording System, List 1 within 500m of the study site:

0

Database searched and no data found.

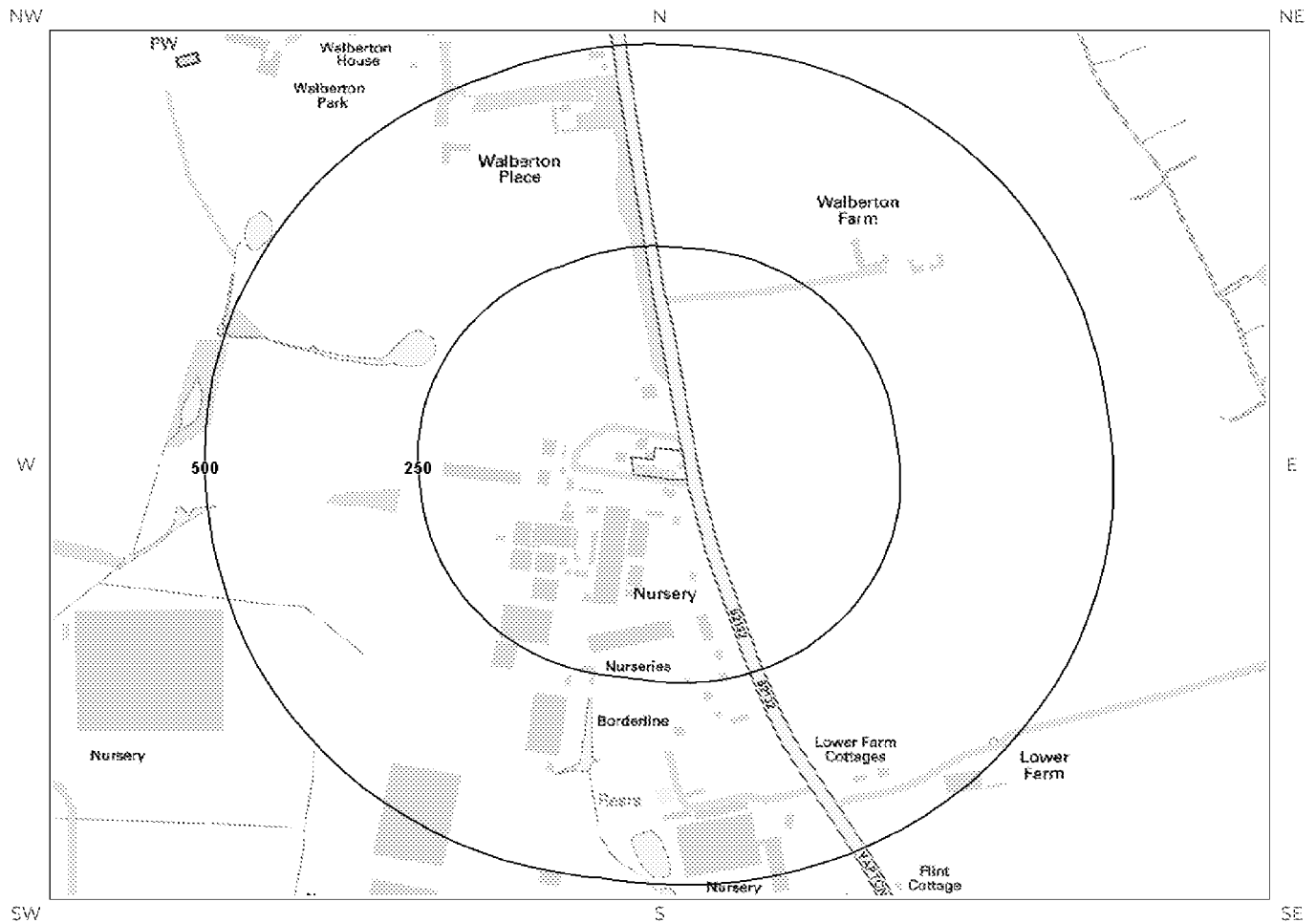
2.4 Sites Determined as Contaminated Land under Part 2A EPA 1990

How many records of sites determined as contaminated land under Section 78R of the Environmental Protection Act 1990 are there within 500m of the study site?

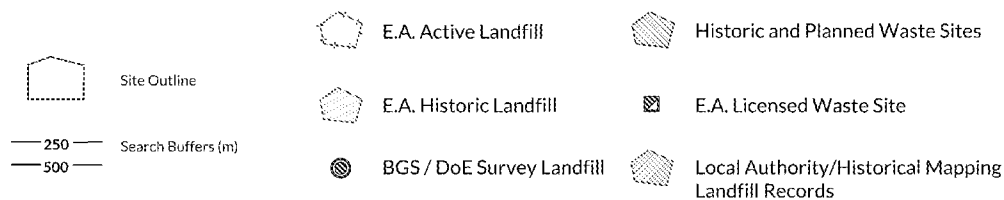
0

Database searched and no data found.

3. Landfill and Other Waste Sites Map



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3. Landfill and Other Waste Sites

3.1 Landfill Sites

3.1.1 Records from Environment Agency landfill data within 1000m of the study site:

0

Database searched and no data found.

3.1.2 Records of Environment Agency historic landfill sites within 1500m of the study site:

0

Database searched and no data found.

3.1.3 Records of BGS/DoE non-operational landfill sites within 1500m of the study site:

0

Database searched and no data found.

3.1.4 Records of Landfills from Local Authority and Historical Mapping Records within 1500m of the study site:

0

Database searched and no data found.

3.2 Other Waste Sites

3.2.1 Records of waste treatment, transfer or disposal sites within 500m of the study site:

0

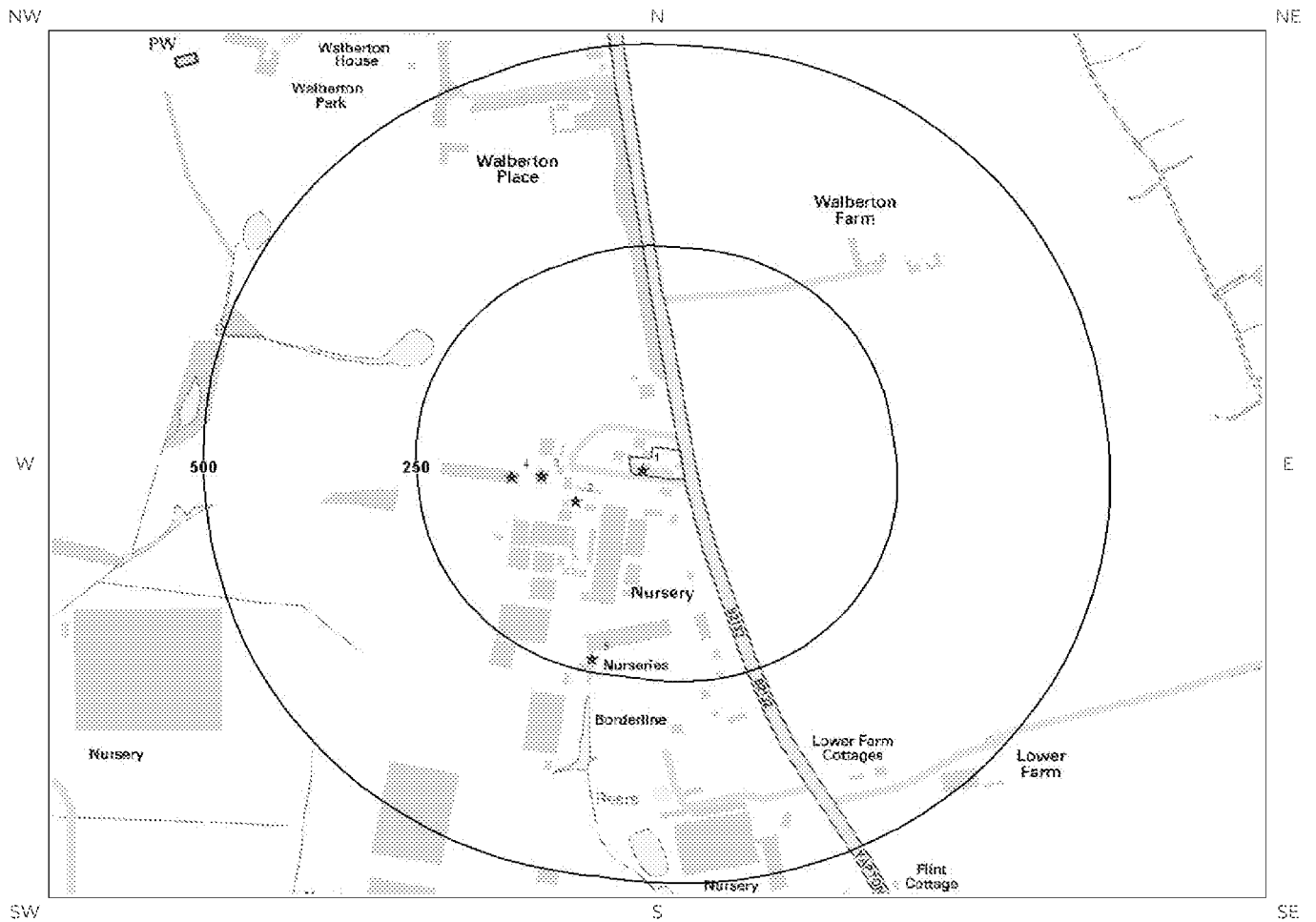
Database searched and no data found.

3.2.2 Records of Environment Agency licensed waste sites within 1500m of the study site:

0

Database searched and no data found.

4. Current Land Use Map



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4. Current Land Uses

4.1 Current Industrial Data

Records of potentially contaminative industrial sites within 250m of the study site: 5

The following records are represented as points on the Current Land Uses map.

ID	Distance (m)	Direction	Company	NGR	Address	Activity	Category
1	0	On Site	Fibreglass Services	497683 105226	Yapton Lane, Walberton, Arundel, BN18 0AS	Vehicle Repair, Testing and Servicing	Repair and Servicing
2	73	SW	Tanks	497605 105188	BN18	Tanks (Generic)	Industrial Features
3	105	W	Geoff Burse Trailers	497564 105219	Yapton Lane, Walberton, Arundel, BN18 0AS	Lifting and Handling Equipment	Industrial Products
4	140	W	Chartwell Wooden Windows Ltd	497529 105218	Yapton Lane, Walberton, Arundel, BN18 0AS	General Construction Supplies	Industrial Products
5	234	S	Tank	497623 104992	BN18	Tanks (Generic)	Industrial Features

4.2 Petrol and Fuel Sites

Records of petrol or fuel sites within 500m of the study site: 0

Database searched and no data found.

4.3 National Grid High Voltage Underground Electricity Transmission Cables

This dataset identifies the high voltage electricity transmission lines running between generating power plants and electricity substations. The dataset does not include the electricity distribution network (smaller, lower voltage cables distributing power from substations to the local user network). This information has been extracted from databases held by National Grid and is provided for information only with no guarantee as to its completeness or accuracy. National Grid do not offer any warranty as to the accuracy of the available data and are excluded from any liability for any such inaccuracies or errors.

Records of National Grid high voltage underground electricity transmission cables within 500m of the study site: 0

Database searched and no data found.

4.4 National Grid High Pressure Gas Transmission Pipelines

This dataset identifies high-pressure, large diameter pipelines which carry gas between gas terminals, power stations, compressors and storage facilities. The dataset does not include the Local Transmission System (LTS) which supplies gas directly into homes and businesses. This information has been extracted from databases held by National Grid and is provided for information only with no guarantee as to its completeness or accuracy. National Grid do not offer any warranty as to the accuracy of the available data and are excluded from any liability for any such inaccuracies or errors.

Records of National Grid high pressure gas transmission pipelines within 500m of the study site: 0

Database searched and no data found.

5. Geology

5.1 Artificial Ground and Made Ground

Database searched and no data found.

The database has been searched on site, including a 50m buffer.

5.2 Superficial Ground and Drift Geology

The database has been searched on site, including a 50m buffer.

Lex Code	Description	Rock Type
RTDU	RIVER TERRACE DEPOSITS (UNDIFFERENTIATED)	SAND, SILT AND CLAY [UNLITHIFIED DEPOSITS CODING SCHEME]

5.3 Bedrock and Solid Geology

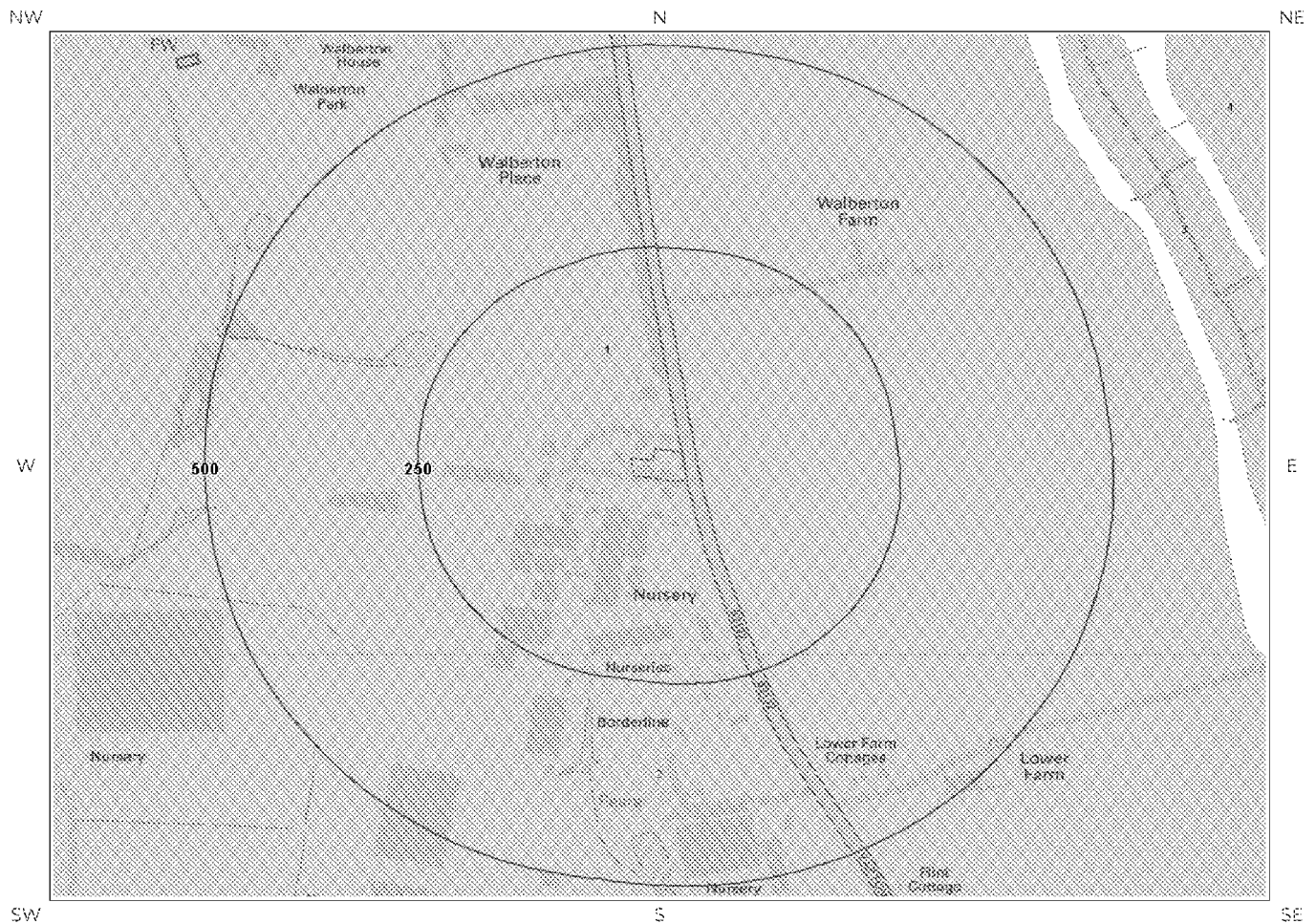
The database has been searched on site, including a 50m buffer.

Lex Code	Description	Rock Type
LC-CLSISA	LONDON CLAY FORMATION	CLAY, SILT AND SAND

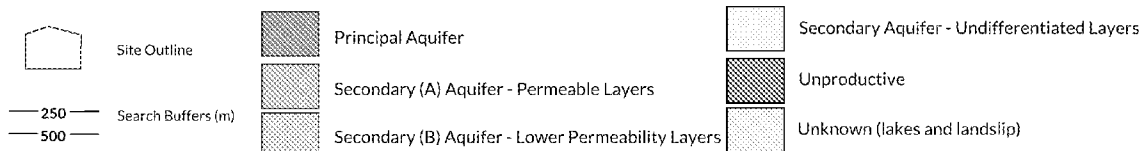
(Derived from the BGS 1:50,000 Digital Geological Map of Great Britain)

6 Hydrogeology and Hydrology

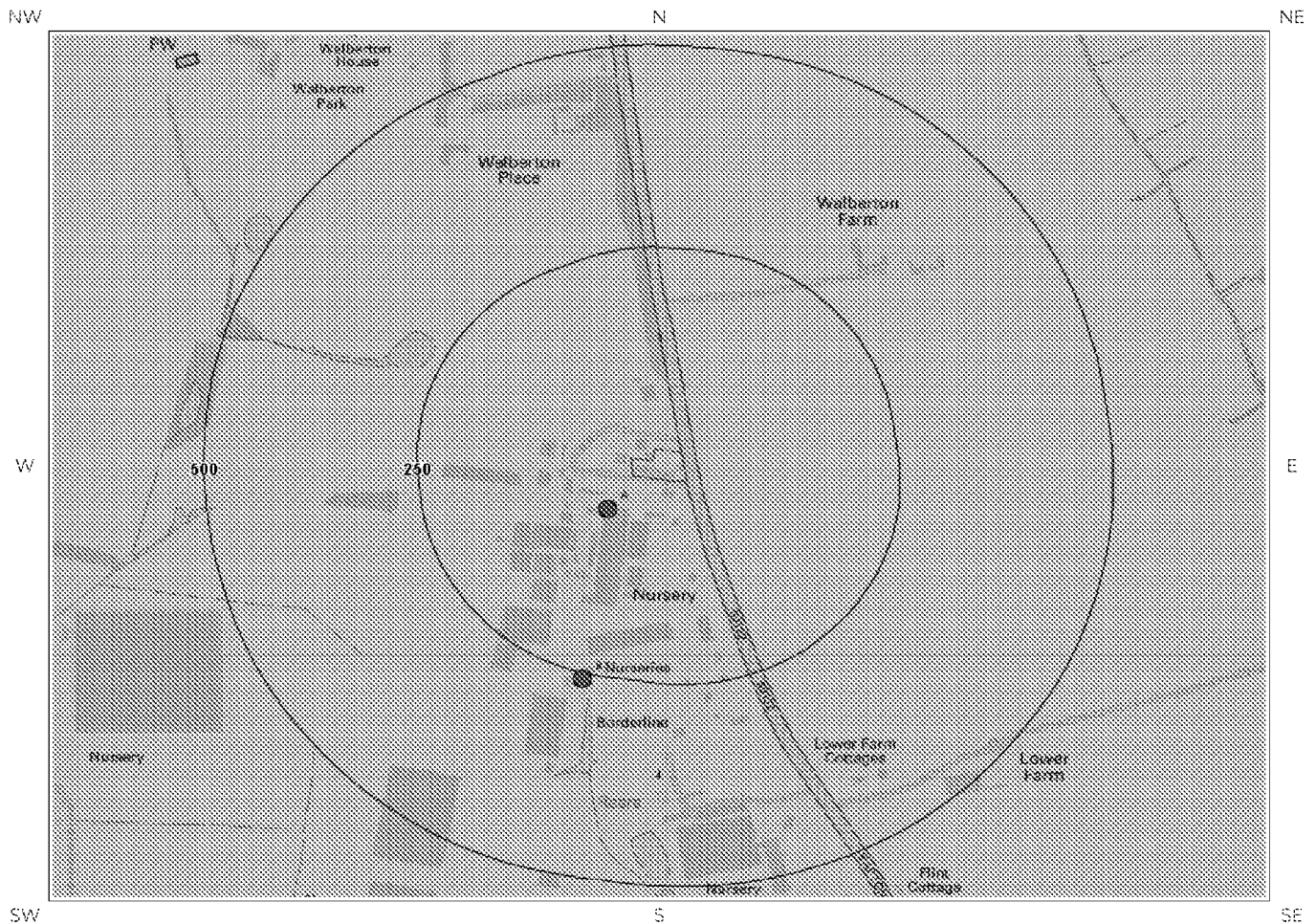
6a. Aquifer Within Superficial Geology



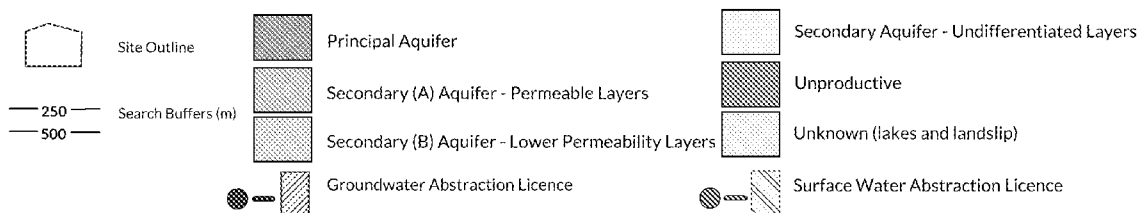
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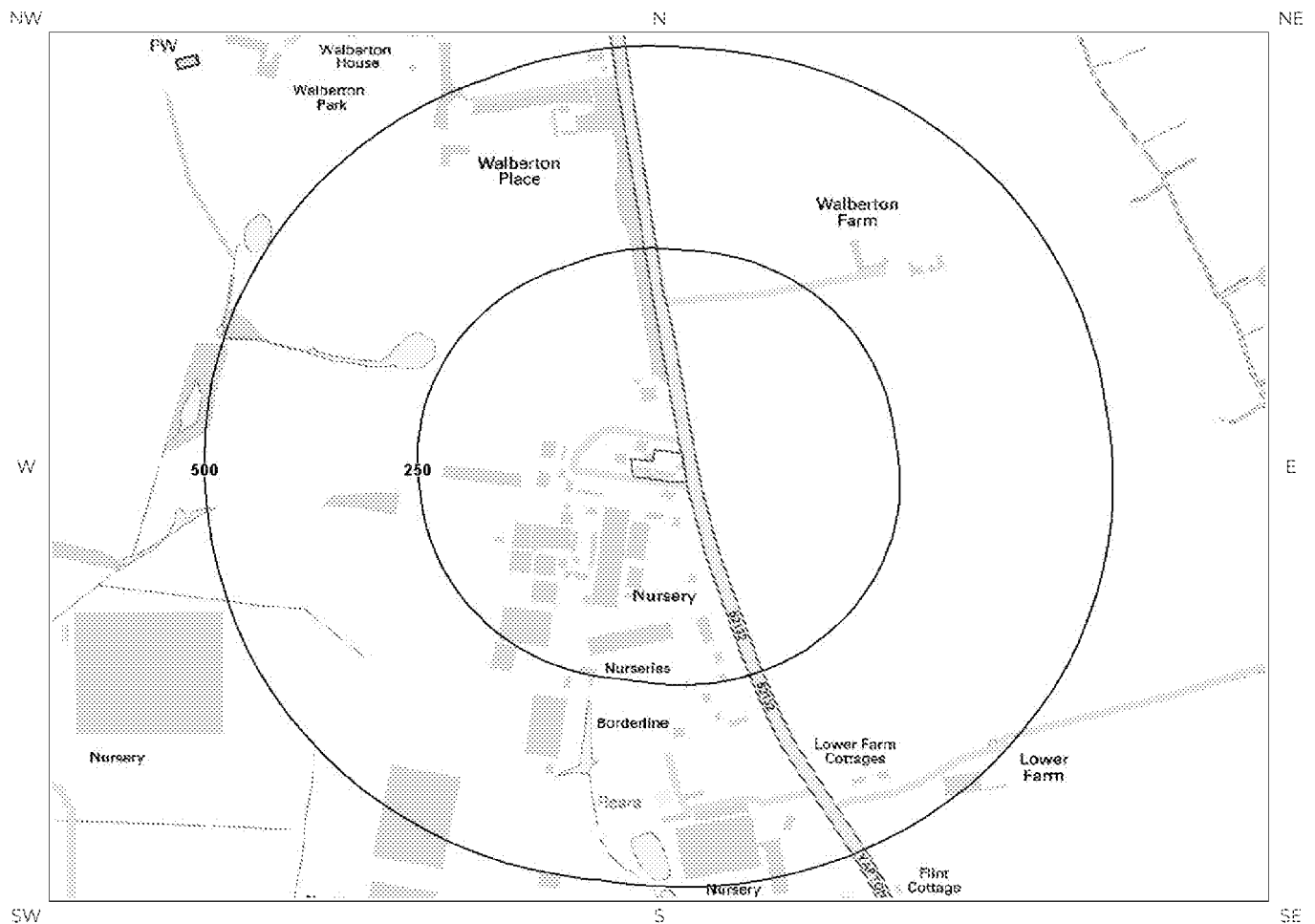
6b. Aquifer Within Bedrock Geology and Abstraction Licenses



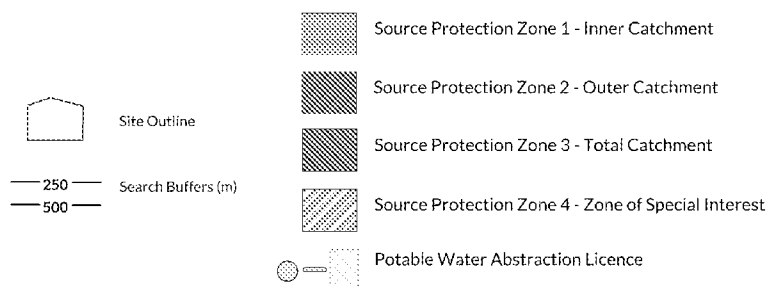
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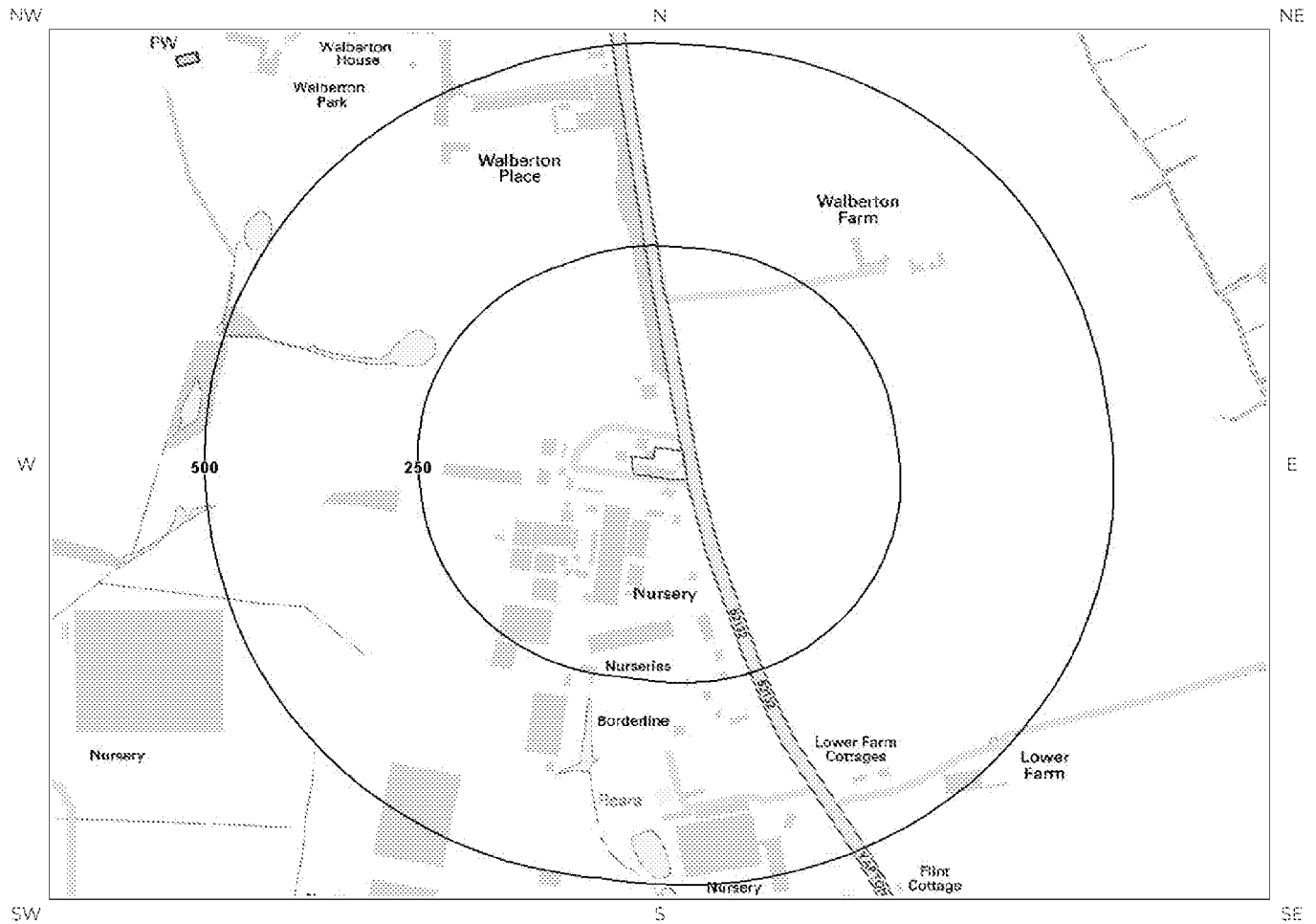
6c. Hydrogeology – Source Protection Zones and Potable Water Abstraction Licenses



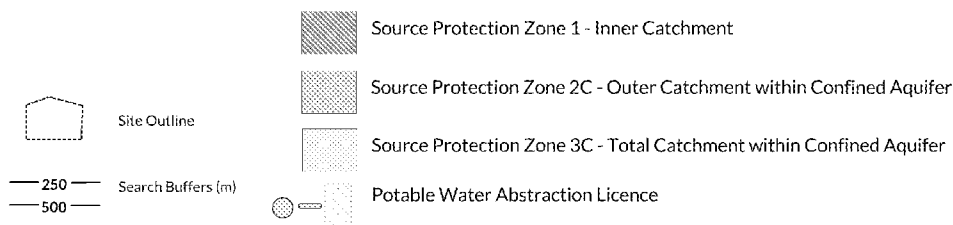
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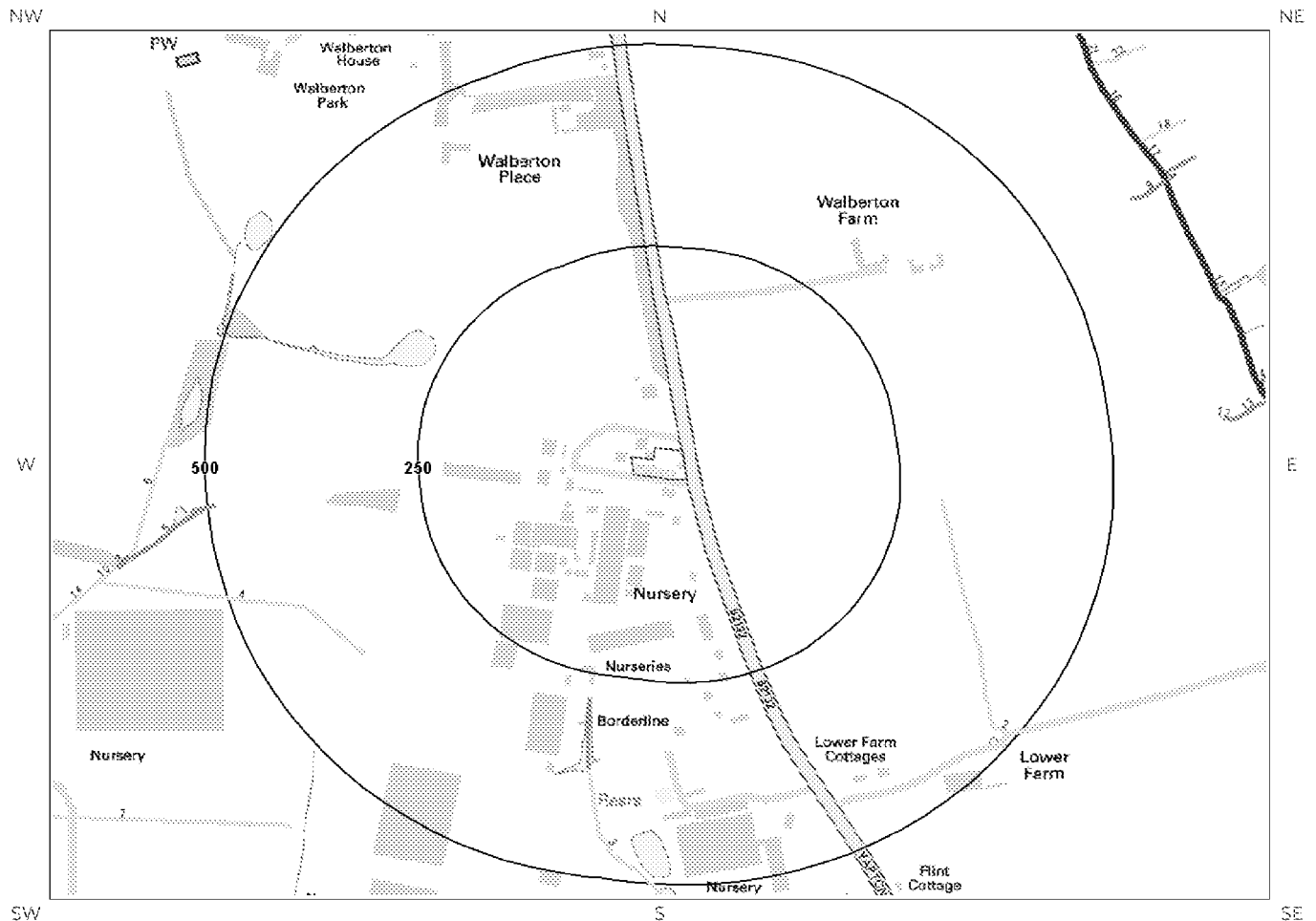
6d. Hydrogeology – Source Protection Zones within confined aquifer



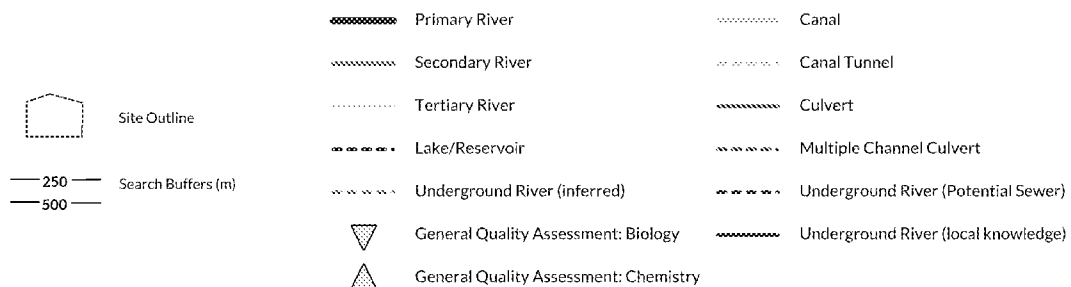
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6e. Hydrology – Detailed River Network and River Quality



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6. Hydrogeology and Hydrology

6.1 Aquifer within Superficial Deposits

Are there records of strata classification within the superficial geology at or in proximity to the property? **Yes**

From 1 April 2010, the Environment Agency's Groundwater Protection Policy has been using aquifer designations consistent with the Water Framework Directive. For further details on the designation and interpretation of this information, please refer to the Groundsure Enviro Insight User Guide.

The following aquifer records are shown on the Aquifer within Superficial Geology Map (6a):

ID	Distance (m)	Direction	Designation	Description
1	0	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	214	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

6.2 Aquifer within Bedrock Deposits

Are there records of strata classification within the bedrock geology at or in proximity to the property? **Yes**

From 1 April 2010, the Environment Agency's Groundwater Protection Policy has been using aquifer designations consistent with the Water Framework Directive. For further details on the designation and interpretation of this information, please refer to the Groundsure Enviro Insight User Guide.

The following aquifer records are shown on the Aquifer within Bedrock Geology Map (6b):

ID	Distance (m)	Direction	Designation	Description
3	0	On Site	Unproductive	These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow
4	214	S	Unproductive	These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow

6.3 Groundwater Abstraction Licences

Are there any Groundwater Abstraction Licences within 2000m of the study site?

Yes

The following Abstraction Licences records are represented as points, lines and regions on the Aquifer within Bedrock Geology Map (6b):

ID	Distance (m)	Direction	NGR	Details
5A	51	SW	497640 105180	Status: Historical Licence No: 27/194 Details: Spray Irrigation - Direct Direct Source: Southern Region Groundwater Point: Point A At Walberton Nurseries, Walberton Data Type: Point Name: D Tristram T/A Walberton Nurseries Annual Volume (m³): 42000 Max Daily Volume (m³): 288 Original Application No: 169/1629 Original Start Date: - Expiry Date: 1/4/2008 00 Issue No: 100 Version Start Date: 2/4/1998 Version End Date:
6A	51	SW	497640 105180	Status: Historical Licence No: 27/194A Details: Spray Irrigation - Direct Direct Source: Southern Region Groundwater Point: Point A At Walberton Nurseries, Walberton Data Type: Point Name: Walberton Nursery LLP Annual Volume (m³): 42000 Max Daily Volume (m³): 288 Original Application No: NPS/WR/015686 Original Start Date: 10/10/2005 Expiry Date: 31/3/2016 Issue No: 2 Version Start Date: 17/4/2014 Version End Date:
7A	51	SW	497640 105180	Status: Historical Licence No: 27/194A/R01 Details: Spray Irrigation - Direct Direct Source: Southern Region Groundwater Point: Point A At Walberton Nurseries, Walberton Data Type: Point Name: Walberton Nursery LLP Annual Volume (m³): 42000 Max Daily Volume (m³): 288 Original Application No: NPS/WR/019253 Original Start Date: 1/4/2016 Expiry Date: 31/3/2028 Issue No: 1 Version Start Date: 1/4/2016 Version End Date:
8	258	S	497610 104970	Status: Historical Licence No: 10/41/412006 Details: Horticultural Watering Direct Source: Southern Region Groundwater Point: Todhurst Barn, Yapton Lane, Walberton Data Type: Point Name: Walberton Nursery LLP Annual Volume (m³): 4546 Max Daily Volume (m³): 90.9 Original Application No: NPS/WR/015212 Original Start Date: - Expiry Date: - Issue No: 101 Version Start Date: 24/1/2014 Version End Date:
Not shown	851	SW	497110 104580	Status: Historical Licence No: 10/41/542208 Details: Spray Irrigation - Direct Direct Source: Southern Region Groundwater Point: Point B, Lake Lane, barnham Data Type: Point Name: Eric Wall Holdings Ltd Annual Volume (m³): 100000 Max Daily Volume (m³): 545 Original Application No: WR.0442 Original Start Date: - Expiry Date: - Issue No: 100 Version Start Date: 10/6/2009 Version End Date:
Not shown	931	W	496740 105160	Status: Historical Licence No: 10/41/542209 Details: Spray Irrigation - Direct Direct Source: Southern Region Groundwater Point: At Lake Lane, barnham Data Type: Point Name: Toddington Nurseries Limited Annual Volume (m³): 36368 Max Daily Volume (m³): 681.9 Original Application No: NPS/WR/013602 Original Start Date: - Expiry Date: - Issue No: 102 Version Start Date: 9/8/2013 Version End Date:

ID	Distance (m)	Direction	NGR	Details
Not shown	1135	SW	496740 104570	Status: Historical Licence No: 10/41/542208 Details: Spray Irrigation - Direct Direct Source: Southern Region Groundwater Point: Point A, Lake Lane, barnham Data Type: Point Name: Eric Wall Holdings Ltd Annual Volume (m³): 100000 Max Daily Volume (m³): 545 Original Application No: WR.0442 Original Start Date: - Expiry Date: - Issue No: 100 Version Start Date: 10/6/2009 Version End Date:
Not shown	1388	S	497840 103830	Status: Historical Licence No: 10/41/411007 Details: Horticultural Watering Direct Source: Southern Region Groundwater Point: The Streddles, North End Road, Yapton Data Type: Point Name: Clay Esq Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: WR.0612 Original Start Date: - Expiry Date: - Issue No: 100 Version Start Date: 18/7/1979 Version End Date:
Not shown	1664	SE	498790 103930	Status: Historical Licence No: 10/41/412007 Details: Spray Irrigation - Direct Direct Source: Southern Region Groundwater Point: Wicks Farm, Ford Data Type: Point Name: Keith Langmead Ltd Annual Volume (m³): 15000 Max Daily Volume (m³): 120 Original Application No: - Original Start Date: - Expiry Date: - Issue No: 101 Version Start Date: 8/6/2009 Version End Date:
Not shown	1951	SW	496460 103690	Status: Historical Licence No: 10/41/542008 Details: Spray Irrigation - Direct Direct Source: Southern Region Groundwater Point: Point A At Tile Barn Farm, barnham Data Type: Point Name: Lonsdale Annual Volume (m³): 25003 Max Daily Volume (m³): 204.5 Original Application No: - Original Start Date: - Expiry Date: - Issue No: 101 Version Start Date: 17/1/2008 Version End Date:

6.4 Surface Water Abstraction Licences

Are there any Surface Water Abstraction Licences within 2000m of the study site? Yes

The following Surface Water Abstraction Licences records are represented as points, lines and regions on the Aquifer within Bedrock Geology Map (6b):

ID	Distance (m)	Direction	NGR	Details
Not shown	515	S	497700 104700	Status: Active Licence No: 27/176 Details: Spray Irrigation - Spray Irrigation Definition Order Direct Source: Southern Region Surface Waters Point: Todhurst Rife At Star Nurseries, Barnham Data Type: Point Name: Star Nurseries Ltd Annual Volume (m³): 20000 Max Daily Volume (m³): 214 Application No: 169/1113 Original Start Date: - Expiry Date: - Issue No: 100 Version Start Date: 16/6/2009 Version End Date:
Not shown	634	S	497730 104580	Status: Historical Licence No: 10/41/412002 Details: Spray Irrigation - Direct Direct Source: Southern Region Surface Waters Point: Todhurst Rife At Yapton Lane, Walberton Data Type: Line Name: Fresh Acres Nurseries Ltd Annual Volume (m³): - Max Daily Volume (m³): - Application No: WR.0755 Original Start Date: - Expiry Date: - Issue No: 100 Version Start Date: 29/6/1998 Version End Date:

ID	Distance (m)	Direction	NGR	Details
Not shown	1287	SE	498810 104510	Status: Active Licence No: 27/190 Details: Spray Irrigation - Storage Direct Source: Southern Region Surface Waters Point: Point A On Binstead Rife, Wicks Farm, Yapton Data Type: Point Name: Keith Langmead Ltd Annual Volume (m³): 100000 Max Daily Volume (m³): 1200 Application No: - Original Start Date: - Expiry Date: - Issue No: 102 Version Start Date: 16/6/2009 Version End Date:
Not shown	1774	E	499460 105630	Status: Active Licence No: 10/41/411020 Details: Spray Irrigation - Direct Direct Source: Southern Region Surface Waters Point: Binsted Rife Nr Priory Farm Data Type: Line Name: Luckin & Son Annual Volume (m³): 2500 Max Daily Volume (m³): 181.8 Application No: 169/0513 Original Start Date: - Expiry Date: - Issue No: 100 Version Start Date: 8/6/2009 Version End Date:

6.5 Potable Water Abstraction Licences

Are there any Potable Water Abstraction Licences within 2000m of the study site?

No

Database searched and no data found.

6.6 Source Protection Zones

Are there any Source Protection Zones within 500m of the study site?

No

Database searched and no data found.

6.7 Source Protection Zones within Confined Aquifer

Are there any Source Protection Zones within the Confined Aquifer within 500m of the study site?

No

Historically, Source Protection Zone maps have been focused on regulation of activities which occur at or near the ground surface, such as prevention of point source pollution and bacterial contamination of water supplies. Sources in confined aquifers were often considered to be protected from these surface pressures due to the presence of a low permeability confining layer (e.g. glacial till, clay). The increased interest in subsurface activities such as onshore oil and gas exploration, ground source heating and cooling requires protection zones for confined sources to be marked on SPZ maps where this has not already been done.

Database searched and no data found.

6.8 Groundwater Vulnerability and Soil Leaching Potential

Is there any Environment Agency information on groundwater vulnerability and soil leaching potential within 500m of the study site? Yes

Distance (m)	Direction	Classification	Soil Vulnerability Category	Description
0	On Site	Minor Aquifer/Intermediate Leaching Potential	I1	Soils which can possibly transmit a wide range of pollutants.
128	SW	Minor Aquifer/High Leaching Potential	H1	Soils which readily transmit liquid discharges because they are shallow or susceptible to rapid flow directly to rock, gravel or groundwater.
416	SE	Minor Aquifer/High Leaching Potential	H1	Soils which readily transmit liquid discharges because they are shallow or susceptible to rapid flow directly to rock, gravel or groundwater.

6.9 River Quality

Is there any Environment Agency information on river quality within 1500m of the study site? No

6.9.1 Biological Quality:

Database searched and no data found.

6.9.2 Chemical Quality:

Database searched and no data found.

6.10 Detailed River Network

Are there any Detailed River Network entries within 500m of the study site? Yes

The following Detailed River Network records are represented on the Hydrology Map (6e):

ID	Distance (m)	Direction	Details
1	279	S	River Name: - Welsh River Name: - Alternative Name: - River Type: Secondary River Main River Status: Currently Undefined
2	298	E	River Name: Drain Welsh River Name: - Alternative Name: - River Type: Tertiary River Main River Status: Currently Undefined
3	368	S	River Name: - Welsh River Name: - Alternative Name: - River Type: Tertiary River Main River Status: Currently Undefined

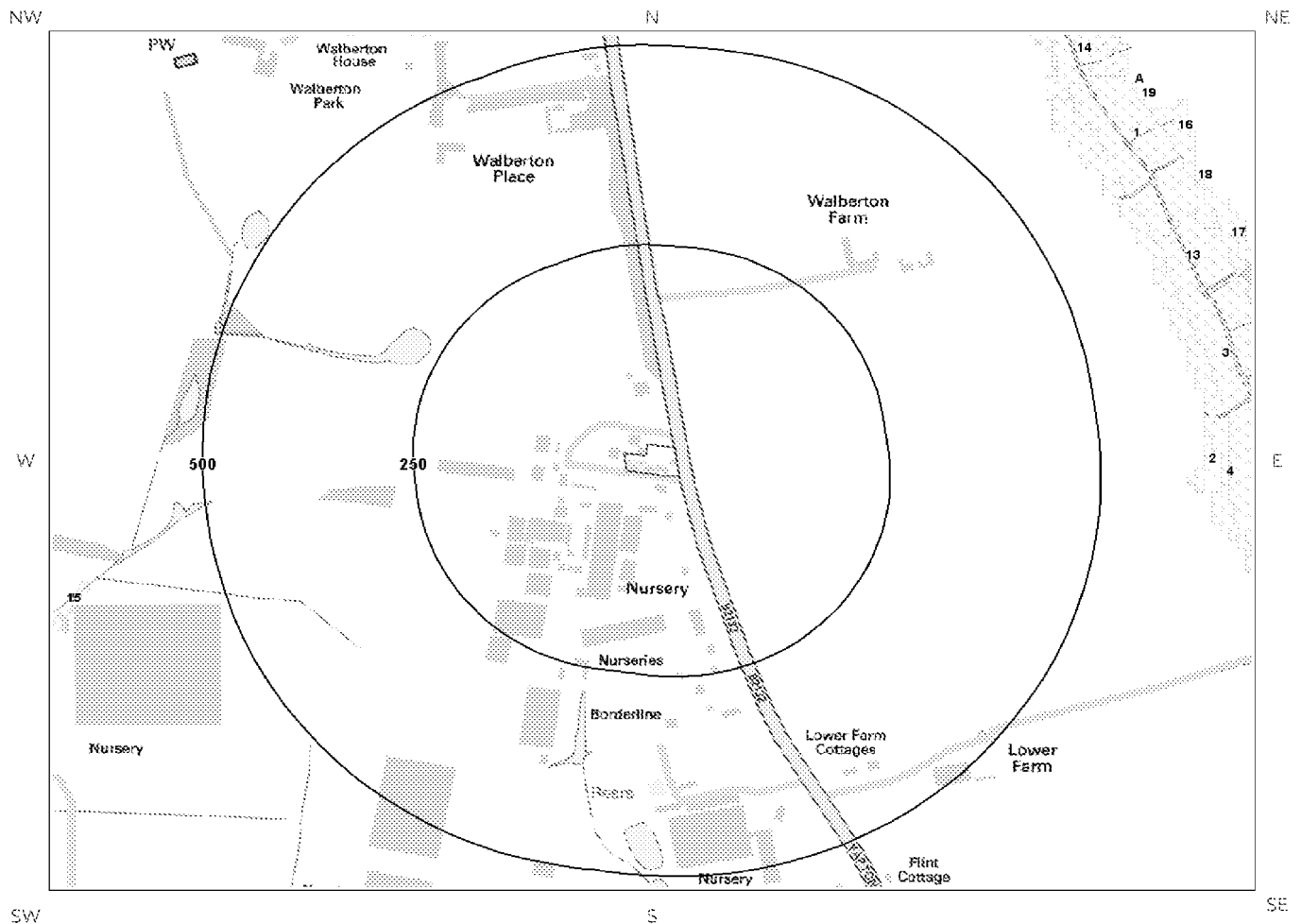
ID	Distance (m)	Direction	Details	
4	386	SW	River Name: Drain Weish River Name: - Alternative Name: -	River Type: Tertiary River Main River Status: Currently Undefined
5	491	W	River Name: - Weish River Name: - Alternative Name: -	River Type: Secondary River Main River Status: Currently Undefined

6.11 Surface Water Features

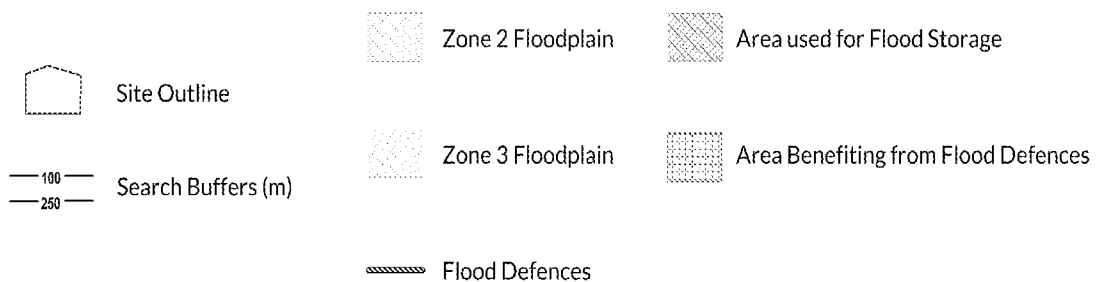
Are there any surface water features within 250m of the study site? No

Database searched and no data found.

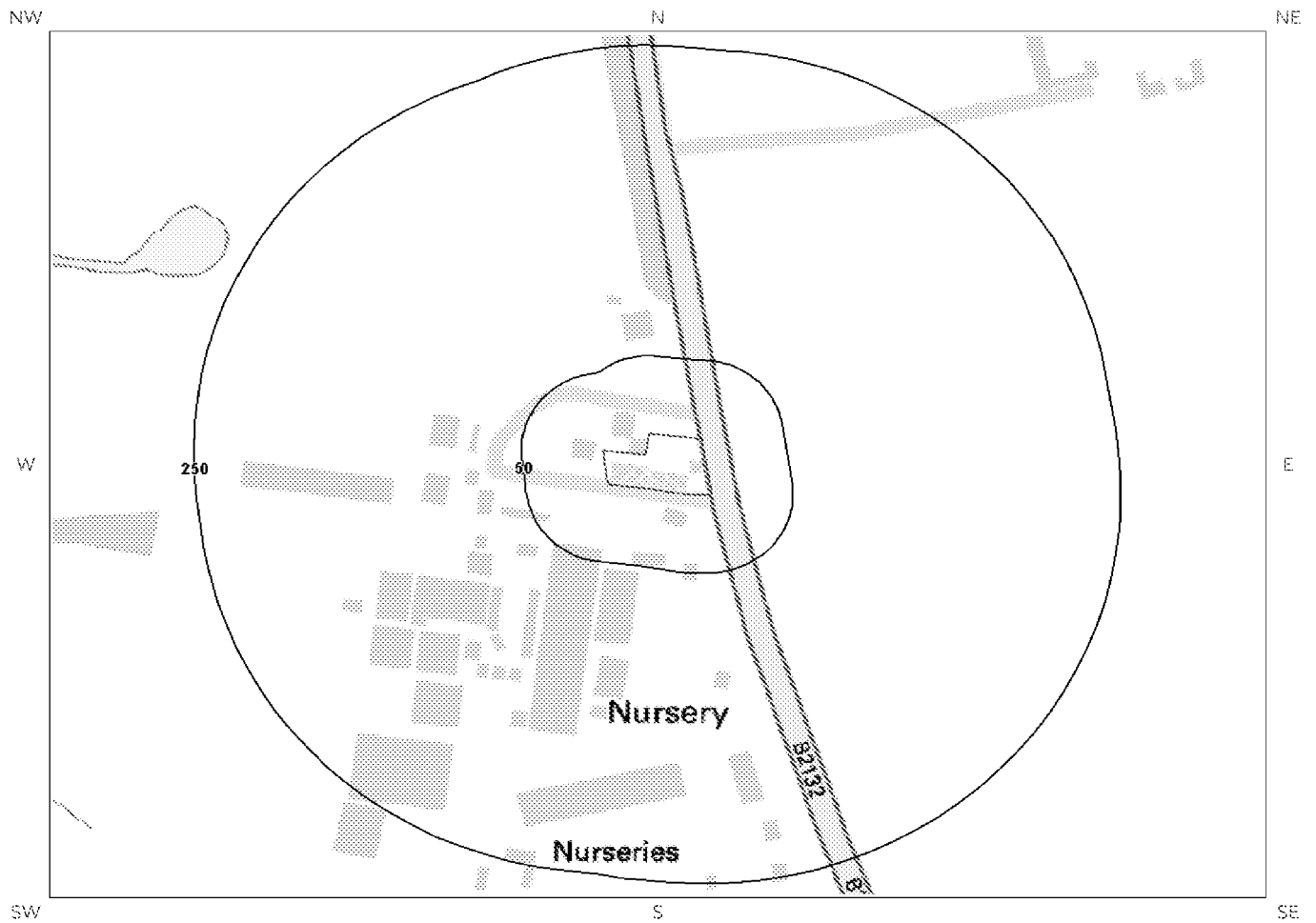
7a. Environment Agency Flood Map for Planning (from rivers and the sea)



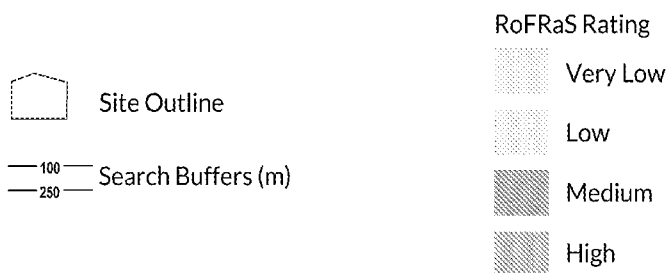
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7b. Environment Agency Risk of Flooding from Rivers and the Sea (RoFRaS) Map



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7 Flooding

7.1 River and Coastal Zone 2 Flooding

Is the site within 250m of an Environment Agency Zone 2 floodplain? No

Environment Agency Zone 2 floodplains estimate the annual probability of flooding as between 1 in 1000 (0.1%) and 1 in 100 (1%) from rivers and between 1 in 1000 (0.1%) and 1 in 200 (0.5%) from the sea. Any relevant data is represented on Map 7a – Flood Map for Planning:

Database searched and no data found.

7.2 River and Coastal Zone 3 Flooding

Is the site within 250m of an Environment Agency Zone 3 floodplain? No

Zone 3 shows the extent of a river flood with a 1 in 100 (1%) or greater chance of occurring in any year or a sea flood with a 1 in 200 (0.5%) or greater chance of occurring in any year. Any relevant data is represented on Map 7a – Flood Map for Planning.

Database searched and no data found.

7.3 Risk of Flooding from Rivers and the Sea (RoFRaS) Flood Rating

What is the highest risk of flooding onsite? Very Low

The Environment Agency RoFRaS database provides an indication of river and coastal flood risk at a national level on a 50m grid with the flood rating at the centre of the grid calculated and given above. The data considers the probability that the flood defences will overtop or breach by considering their location, type, condition and standard of protection.

RoFRaS data for the study site indicates the property is in an area with a Very Low (less than 1 in 1000) chance of flooding in any given year.

7.4 Flood Defences

Are there any Flood Defences within 250m of the study site? No
Database searched and no data found.

7.5 Areas benefiting from Flood Defences

Are there any areas benefiting from Flood Defences within 250m of the study site? No

7.6 Areas benefiting from Flood Storage

Are there any areas used for Flood Storage within 250m of the study site?

No

7.7 Groundwater Flooding Susceptibility Areas

7.7.1 Are there any British Geological Survey groundwater flooding susceptibility areas within 50m of the boundary of the study site? Yes

Does this relate to Clearwater Flooding or Superficial Deposits Flooding? Superficial Deposits Flooding

Notes: Groundwater flooding may either be associated with shallow unconsolidated sedimentary aquifers which overlie unproductive aquifers (Superficial Deposits Flooding), or with unconfined aquifers (Clearwater Flooding).

7.7.2 What is the highest susceptibility to groundwater flooding in the search area based on the underlying geological conditions?

Potential below Surface

Where potential for groundwater flooding of property situated below ground level is indicated, this means that given the geological conditions there may be a groundwater flooding hazard to basements and other below surface infrastructure. Unless other relevant information, e.g. records of previous flooding, suggests groundwater flooding has occurred before in this area you need take no further action in relation to groundwater flooding hazard. If there are records of previous incidences of groundwater flooding, then is recommended that other information e.g. rainfall history, property type, and land drainage information in addition to previous records of flooding be investigated in order to establish relative, but not absolute, risk of groundwater flooding.

7.8 Groundwater Flooding Confidence Areas

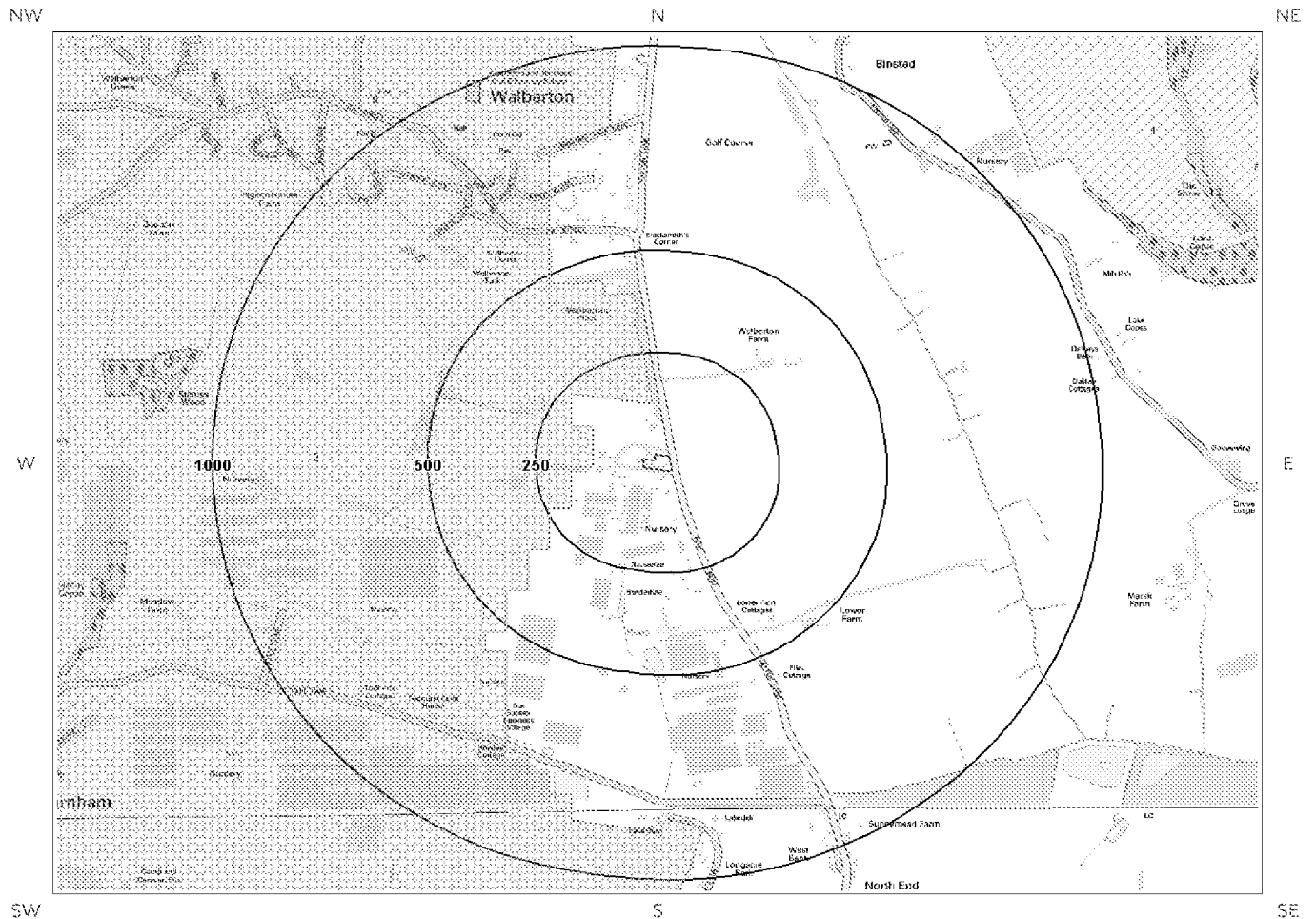
What is the British Geological Survey confidence rating in this result?

High

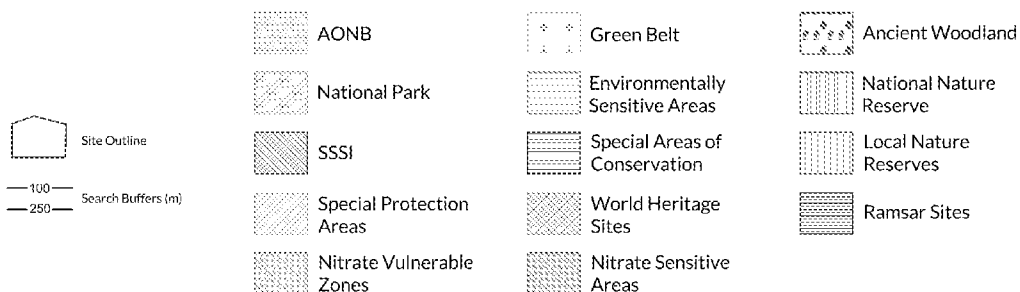
Notes: Groundwater flooding is defined as the emergence of groundwater at the ground surface or the rising of groundwater into man-made ground under conditions where the normal range of groundwater levels is exceeded.

The confidence rating is on a threefold scale - Low, Moderate and High. This provides a relative indication of the BGS confidence in the accuracy of the susceptibility result for groundwater flooding. This is based on the amount and precision of the information used in the assessment. In areas with a relatively lower level of confidence the susceptibility result should be treated with more caution. In other areas with higher levels of confidence the susceptibility result can be used with more confidence.

8. Designated Environmentally Sensitive Sites Map



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8. Designated Environmentally Sensitive Sites

Presence of Designated Environmentally Sensitive Sites within 2000m of the study site? Yes

8.1 Records of Sites of Special Scientific Interest (SSSI) within 2000m of the study site:

0

Database searched and no data found.

8.2 Records of National Nature Reserves (NNR) within 2000m of the study site:

0

Database searched and no data found.

8.3 Records of Special Areas of Conservation (SAC) within 2000m of the study site:

0

Database searched and no data found.

8.4 Records of Special Protection Areas (SPA) within 2000m of the study site:

0

Database searched and no data found.

8.5 Records of Ramsar sites within 2000m of the study site:

0

Database searched and no data found.

8.6 Records of Ancient Woodland within 2000m of the study site:

33

The following records of Designated Ancient Woodland provided by Natural England/Natural Resources Wales are represented as polygons on the Designated Environmentally Sensitive Sites Map:

ID	Distance (m)	Direction	Ancient Woodland Name	Data Source
5	1057	W	UNKNOWN	Ancient and Semi-Natural Woodland
6	1104	W	UNKNOWN	Ancient and Semi-Natural Woodland
7	1162	NE	UNKNOWN	Ancient and Semi-Natural Woodland
8	1217	W	UNKNOWN	Ancient and Semi-Natural Woodland
Not shown	1287	N	UNKNOWN	Ancient and Semi-Natural Woodland
Not shown	1295	N	UNKNOWN	Ancient and Semi-Natural Woodland
Not shown	1388	N	UNKNOWN	Ancient and Semi-Natural Woodland
12	1398	NE	UNKNOWN	Ancient and Semi-Natural Woodland
13	1473	NE	UNKNOWN	Ancient and Semi-Natural Woodland
Not shown	1489	NE	UNKNOWN	Ancient and Semi-Natural Woodland
Not shown	1546	NE	UNKNOWN	Ancient and Semi-Natural Woodland
Not shown	1546	NE	UNKNOWN	Ancient and Semi-Natural Woodland
Not shown	1564	W	UNKNOWN	Ancient and Semi-Natural Woodland
Not shown	1572	N	UNKNOWN	Ancient and Semi-Natural Woodland
Not shown	1576	N	UNKNOWN	Ancient and Semi-Natural Woodland
Not shown	1600	NE	UNKNOWN	Ancient and Semi-Natural Woodland
21	1605	NE	UNKNOWN	Ancient and Semi-Natural Woodland
Not shown	1622	NE	UNKNOWN	Ancient and Semi-Natural Woodland
Not shown	1639	NE	UNKNOWN	Ancient and Semi-Natural Woodland
Not shown	1644	N	UNKNOWN	Ancient and Semi-Natural Woodland
Not shown	1686	NW	UNKNOWN	Ancient and Semi-Natural Woodland
Not shown	1799	NE	UNKNOWN	Ancient and Semi-Natural Woodland
Not shown	1805	NW	UNKNOWN	Ancient and Semi-Natural Woodland
Not shown	1812	N	UNKNOWN	Ancient Replanted Woodland
Not shown	1840	NE	UNKNOWN	Ancient and Semi-Natural Woodland
Not shown	1885	N	UNKNOWN	Ancient and Semi-Natural Woodland
Not shown	1891	NE	UNKNOWN	Ancient and Semi-Natural Woodland

ID	Distance (m)	Direction	Ancient Woodland Name	Data Source
Not shown	1891	NE	UNKNOWN	Ancient and Semi-Natural Woodland
Not shown	1897	NE	UNKNOWN	Ancient Replanted Woodland
Not shown	1922	NE	UNKNOWN	Ancient and Semi-Natural Woodland
Not shown	1950	N	UNKNOWN	Ancient Replanted Woodland
Not shown	1968	NE	UNKNOWN	Ancient and Semi-Natural Woodland
Not shown	1994	NE	UNKNOWN	Ancient and Semi-Natural Woodland

8.7 Records of Local Nature Reserves (LNR) within 2000m of the study site:

0

Database searched and no data found.

8.8 Records of World Heritage Sites within 2000m of the study site:

0

Database searched and no data found.

8.9 Records of Environmentally Sensitive Areas within 2000m of the study site:

1

The following Environmentally Sensitive Area records produced by DEFRA are represented as polygons on the Designated Environmentally Sensitive Sites Map:

ID	Distance (m)	Direction	ESA Name	Data Source
Not shown	1644	N	South Downs	Natural England

8.10 Records of Areas of Outstanding Natural Beauty (AONB) within 2000m of the study site:

0

Database searched and no data found.

8.11 Records of National Parks (NP) within 2000m of the study site:

1

The following National Park records provided by Natural England/Natural Resources Wales are represented as polygons on the Designated Environmentally Sensitive Sites Map:

ID	Distance (m)	Direction	NP Name	Data Source
1	1106	NE	South Downs	Natural England

8.12 Records of Nitrate Sensitive Areas within 2000m of the study site:

0

Database searched and no data found.

8.13 Records of Nitrate Vulnerable Zones within 2000m of the study site:

2

The following Nitrate Vulnerable Zone records produced by DEFRA are represented as polygons on the Designated Environmentally Sensitive Sites Map:

ID	Distance (m)	Direction	NVZ Name	Data Source
2	117	W	Existing	DEFRA
3	1124	N	Existing	DEFRA

8.14 Records of Green Belt land within 2000m of the study site:

0

Database searched and no data found.

9. Natural Hazards Findings

9.1 Detailed BGS GeoSure Data

BGS GeoSure Data has been searched to 50m. The data is included in tabular format. If you require further information on geology and ground stability, please obtain a Groundsure Geo Insight, available from our [website](#). The following information has been found:

9.1.1 Shrink Swell

What is the maximum Shrink-Swell* hazard rating identified on the study site? Low

The following natural subsidence information provided by the British Geological Survey is not represented on mapping:

Hazard
Ground conditions predominantly medium plasticity. Do not plant trees with high soil moisture demands near to buildings. For new build, consideration should be given to advice published by the National House Building Council (NHBC) and the Building Research Establishment (BRE). There is a possible increase in construction cost to reduce potential shrink-swell problems. For existing property, there is a possible increase in insurance risk, especially during droughts or where vegetation with high moisture demands is present.

9.1.2 Landslides

What is the maximum Landslide* hazard rating identified on the study site? Very Low

The following natural subsidence information provided by the British Geological Survey is not represented on mapping:

Hazard
Slope instability problems are unlikely to be present. No special actions required to avoid problems due to landslides. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with landslides.

9.1.3 Soluble Rocks

What is the maximum Soluble Rocks* hazard rating identified on the study site? Negligible

The following natural subsidence information provided by the British Geological Survey is not represented on mapping:

Hazard
Soluble rocks are present, but unlikely to cause problems except under exceptional conditions. No special actions required to avoid problems due to soluble rocks. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with soluble rocks.

* This indicates an automatically generated 50m buffer and site.

9.1.4 Compressible Ground

What is the maximum Compressible Ground* hazard rating identified on the study site? Negligible

The following natural subsidence information provided by the British Geological Survey is not represented on mapping:

Hazard
No indicators for compressible deposits identified. No special actions required to avoid problems due to compressible deposits. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with compressible deposits.

9.1.5 Collapsible Rocks

What is the maximum Collapsible Rocks* hazard rating identified on the study site? Low

The following natural subsidence information provided by the British Geological Survey is not represented on mapping:

Hazard
Slight possibility for collapsible deposit problems after major changes in loading or groundwater conditions. Normal maintenance to avoid large amounts of water entering the ground through pipe leakage or soak-aways should reduce the likelihood of problems due to collapsible deposits. For new build, assess the possibility of collapsible (loessic) deposits in ground investigation. For existing property, no significant increase in insurance risk from collapsible deposits is likely.

9.1.6 Running Sand

What is the maximum Running Sand* hazard rating identified on the study site? Low

The following natural subsidence information provided by the British Geological Survey is not represented on mapping:

Hazard
Possibility of running sand problems after major changes in ground conditions. Normal maintenance to avoid leakage of water-bearing services or water bodies (ponds, swimming pools) should reduce likelihood of problems due to running sand. For new build consider possibility of running sand into trenches or excavations if water table is high or sandy strata are exposed to water. Avoid concentrated water inputs to site. Unlikely to be an increase in construction costs due to potential for running sand. For existing property no significant increase in insurance risk due to running sand problems is likely.

9.2 Radon

9.2.1 Radon Affected Areas

Is the property in a Radon Affected Area as defined by the Health Protection Agency (HPA) and if so what percentage of homes are above the Action Level? The property is in a Radon Affected Area, as between 1 and 3% of properties are above the Action Level.

* This indicates an automatically generated 50m buffer and site.

9.2.2 Radon Protection

Is the property in an area where Radon Protection are required for new properties or extensions to existing

ones as described in publication BR211 by the Building Research Establishment?

No radon protective measures are necessary.

10. Mining

10.1 Coal Mining

Are there any coal mining areas within 75m of the study site? No

Database searched and no data found.

10.2 Non-Coal Mining

Are there any Non-Coal Mining areas within 50m of the study site boundary? No

Database searched and no data found.

10.3 Brine Affected Areas

Are there any brine affected areas within 75m of the study site? No

Guidance: No Guidance Required.

Contact Details

Groundsure Helpline
Telephone: 08444 159 000
info@groundsure.com

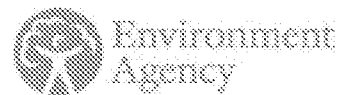


British Geological Survey Enquiries
Kingsley Dunham Centre
Keyworth, Nottingham NG12 5GG



BGS Geological Hazards Reports and general geological enquiries:

Environment Agency
National Customer Contact Centre, PO Box 544
Leamington Spa CV36 3HF



Public Health England
Public information access office
Public Health England, Wellington House
133-155 Waterloo Road, London, SE1 8UG



The Coal Authority
200 Lichfield Lane
Mansfield
Notts NG18 4RG



Ordnance Survey
Adanac Drive, Southampton
SO16 0AS



Local Authority
Authority: Arun District Council

Address: Maltavers Road, Littlehampton, West Sussex, BN17 5LF

Gemapping PLC
Virginia Villas, High Street, Hartley Witney,
Hampshire RG27 8NW



Acknowledgements: Site of Special Scientific Interest, National Nature Reserve, Ramsar Site, Special Protection Area, Special Area of Conservation data is provided by, and used with the permission of, Natural England who retain the Copyright and Intellectual Property Rights for the data.

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<https://www.groundsure.com/terms-and-conditions-sept-2016>



Groundsure

LOCATION INTELLIGENCE

Your Environment

Chilgrove Park Road, Chilgrove,
Chichester, PO18 9HU

Groundsure Reference: GS-3427022

Your Reference: YE2690

Report Date 7 Nov 2016

Report Delivery Method: Email - pdf

Groundsure Geo Insight

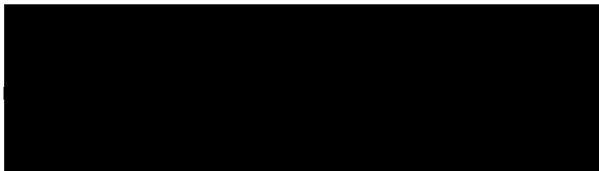
Address: PROGRESS GARAGE, YAPTON LANE, ARUNDEL, BN18 0AS

Dear Sir/ Madam,

Thank you for placing your order with Groundsure. Please find enclosed the **Groundsure Geo Insight** as requested.

If you need any further assistance, please do not hesitate to contact our helpline on 08444 159000 quoting the above Groundsure reference number.

Yours faithfully,



Managing Director
Groundsure Limited

Enc.
Groundsure Geoinsight

Groundsure Geo Insight

Address: PROGRESS GARAGE, YAPTON LANE, ARUNDEL, BN18 0AS
Date: 7 Nov 2016
Reference: GS-3427022
Client: YourEnvironment



Aerial Photograph Capture date: 13-Sep-2012
Grid Reference: 497693,105228
Site Size: 0.19ha

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Overview of Findings

The Groundsure Geo Insight provides high quality geo-environmental information that allows geo-environmental professionals and their clients to make informed decisions and be forewarned of potential ground instability problems that may affect the ground investigation, foundation design and possibly remediation options that could lead to possible additional costs.

The report is based on the BGS 1:50,000 Digital Geological Map of Great Britain, BGS Geosure data; BRITPITS database; Shallow Mining data and Borehole Records, Coal Authority data including brine extraction areas, PBA non-coal mining and natural cavities database, Johnson Poole and Bloomer mining data and Groundsure's unique database including historical surface ground and underground workings.

For further details on each dataset, please refer to each individual section in the report as listed. Where the database has been searched a numerical result will be recorded. Where the database has not been searched '-' will be recorded.

Section 1:Geology

1.1 Artificial Ground	1.1.1 Is there any Artificial Ground/ Made Ground present beneath the study site?	No
	1.1.2 Are there any records relating to permeability of artificial ground within the study site* boundary?	No
1.2 Superficial Geology and Landslips	1.2.1 Is there any Superficial Ground/Drift Geology present beneath the study site?	Yes
	1.2.2 Are there any records relating to permeability of superficial geology within the study site boundary?	Yes
	1.2.3 Are there any records of landslip within 500m of the study site boundary?	No
	1.2.4 Are there any records relating to permeability of landslips within the study site boundary?	No
1.3 Bedrock, Solid Geology & Faults	1.3.1 For records of Bedrock and Solid Geology beneath the study site* see the detailed findings section.	
	1.3.2 Are there any records relating to permeability of bedrock within the study site boundary?	Yes
	1.3.3 Are there any records of faults within 500m of the study site boundary?	Yes
1.4 Radon data	1.4.1 Is the property in a Radon Affected Area as defined by the Health Protection Agency (HPA) and if so what percentage of homes are above the Action Level?	The property is in a Radon Affected Area, as between 1 and 3% of properties are above the Action Level
	1.4.2 Is the property in an area where Radon Protection Measures are required for new properties or extensions to existing ones as described in publication BR211 by the Building Research Establishment?	No radon protective measures are necessary

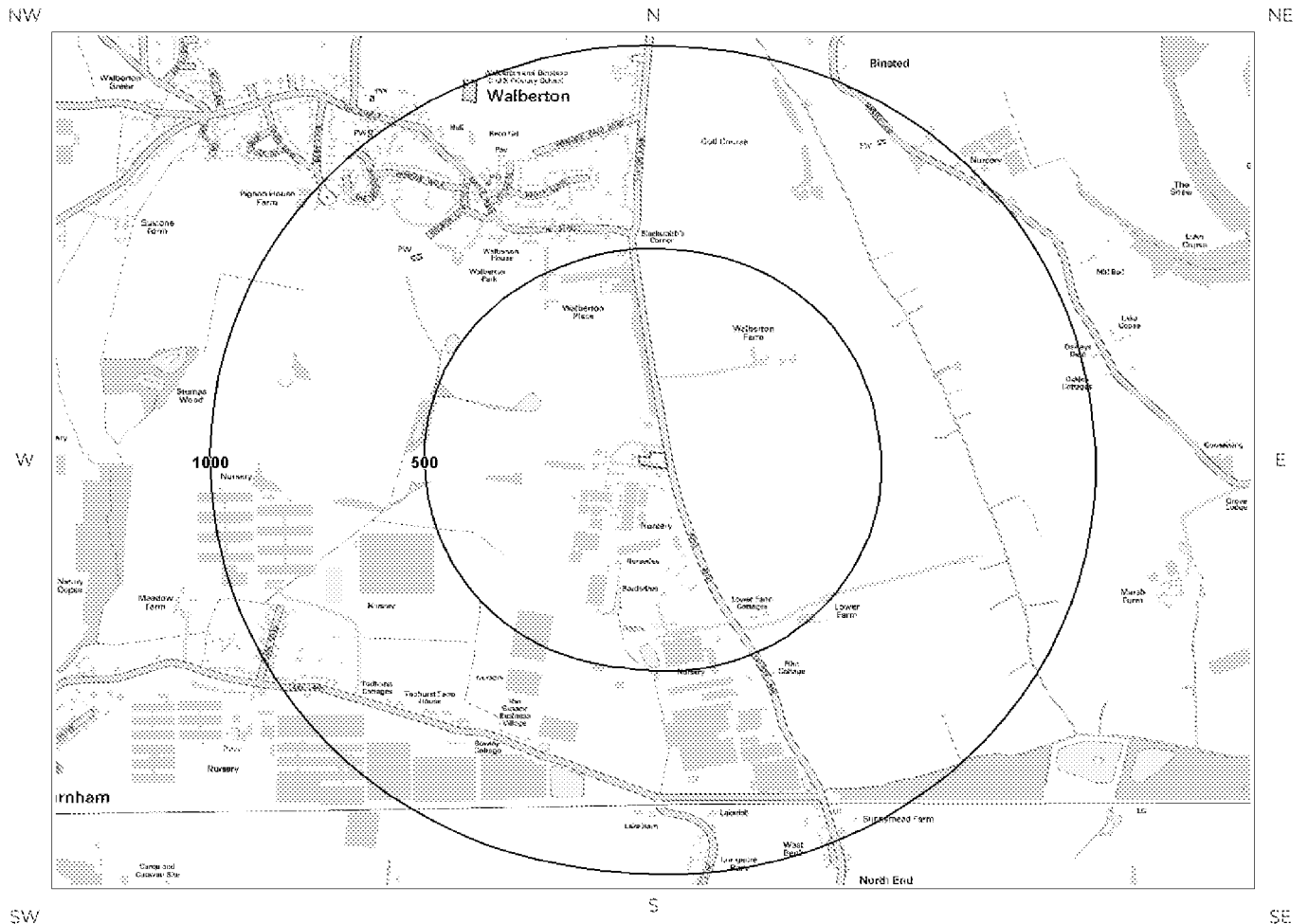
Section 2:Ground Workings	On-site	0-50m	51-250	251-500	501-1000
2.1 Historical Surface Ground Working Features from Small Scale Mapping	0	0	0	Not Searched	Not Searched
2.2 Historical Underground Workings from Small Scale Mapping	0	0	0	0	0
2.3 Current Ground Workings	0	0	0	0	0

Section 3: Mining, Extraction & Natural Cavities	On-site	0-50m	51-250	251-500	501-1000
3.1 Historical Mining	0	0	0	0	0
3.2 Coal Mining	0	0	0	0	0
3.3 Johnson Poole and Bloomer Mining Area	0	0	0	0	0
3.4 Non-Coal Mining	0	0	0	0	0
3.5 Non-Coal Mining Cavities	0	0	0	0	0
3.6 Natural Cavities	0	0	0	0	0
3.7 Brine Extraction	0	0	0	0	0
3.8 Gypsum Extraction	0	0	0	0	0
3.9 Tin Mining	0	0	0	0	0
3.10 Clay Mining	0	0	0	0	0
Section 4: Natural Ground Subsidence	On-site				
4.1 Shrink Swell Clay	Low				
4.2 Landslides	Very Low				
4.3 Ground Dissolution of Soluble Rocks	Negligible				
4.4 Compressible Deposits	Negligible				
4.5 Collapsible Deposits	Low				
4.6 Running Sand	Low				
Section 5: Borehole Records	On-site	0-50m	51-250		
5 BGS Recorded Boreholes	0	0	2		
Section 6: Estimated Background Soil Chemistry	On-site	0-50m	51-250		
6 Records of Background Soil Chemistry	1	0	5		
Section 7: Railways and Tunnels	On-site	0-50m	51-250	251-500	
7.1 Tunnels	0	0	0	Not Searched	
7.2 Historical Railway and Tunnel Features	0	0	0	Not Searched	
7.3 Historical Railways	0	0	0	Not Searched	
7.4 Active Railways	0	0	0	Not Searched	

Section 7: Railways and Tunnels	On-site	0-50m	51-250	251-500
7.5 Railway Projects	0	0	0	0

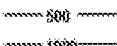
1 Geology

1.1 Artificial Ground Map



Artificial Ground Legend

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	Site Outline		Made Ground (undivided)		Disturbed Ground (undivided)
	Search Buffers (m)		Worked Ground (undivided)		Landscaped Ground (undivided)
			Infilled Ground		Reclaimed Ground

1 Geology

1.1 Artificial Ground

1.1.1 Artificial/ Made Ground

The following geological information represented on the mapping is derived from 1:50,000 scale BG5 Geological mapping, Sheet No:317

Are there any records of Artificial/Made Ground within 500m of the study site boundary? No

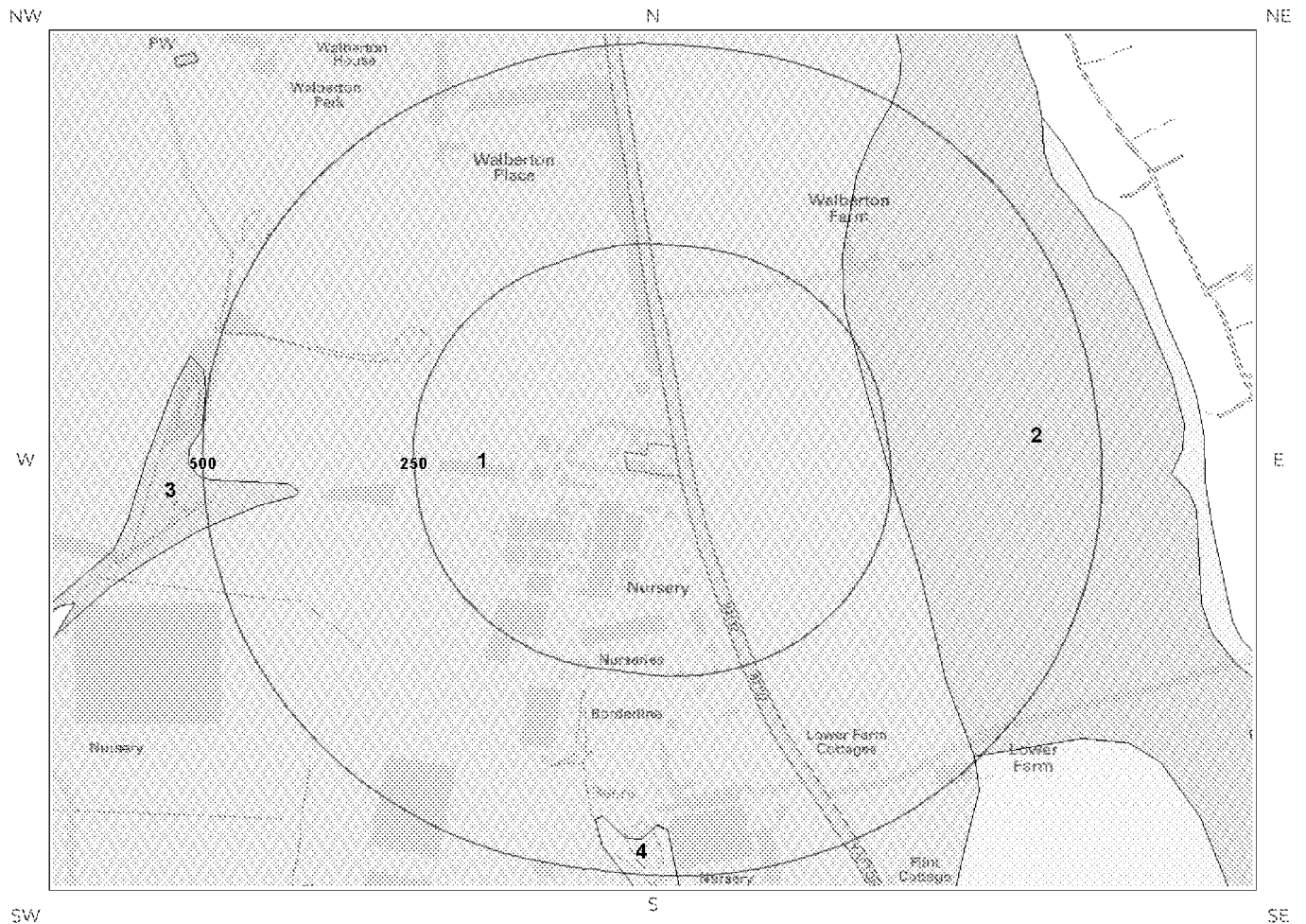
Database searched and no data found.

1.1.2 Permeability of Artificial Ground

Are there any records relating to permeability of artificial ground within the study site boundary? No

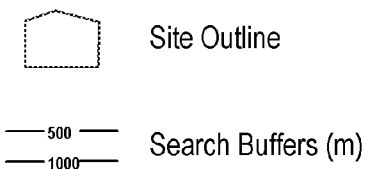
Database searched and no data found.

1.2 Superficial Deposits and Landslips Map



Superficial Deposits and Landslips
Legend

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1.2 Superficial Deposits and Landslips

1.2.1 Superficial Deposits/ Drift Geology

Are there any records of Superficial Deposits/ Drift Geology within 500m of the study site boundary? Yes

ID	Distance (m)	Direction	LEX Code	Description	Rock Description
1	0.0	On Site	RTDU	RIVER TERRACE DEPOSITS (UNDIFFERENTIATED)	SAND, SILT AND CLAY [UNLITHIFIED DEPOSITS CODING SCHEME]
2	236.0	E	HEAD	HEAD	GRAVEL, SAND, SILT AND CLAY [UNLITHIFIED DEPOSITS CODING SCHEME]
3	389.0	W	HEAD	HEAD	GRAVEL, SAND, SILT AND CLAY [UNLITHIFIED DEPOSITS CODING SCHEME]
4	432.0	S	RMD	RAISED MARINE DEPOSITS	CLAY, SILT, SAND AND GRAVEL [UNLITHIFIED DEPOSITS CODING SCHEME]
5	494.0	SE	RBD1	RAISED BEACH DEPOSITS, 1	SAND AND GRAVEL [UNLITHIFIED DEPOSITS CODING SCHEME]

1.2.2 Permeability of Superficial Ground

Are there any records relating to permeability of superficial ground within the study site boundary? Yes

Distance (m)	Direction	Flow Type	Maximum Permeability	Minimum Permeability
0.0	On Site	Intergranular	High	Low

1.2.3 Landslip

Are there any records of Landslip within 500m of the study site boundary? No

Database searched and no data found.

This Geology shows the main components as discrete layers, these are: Artificial / Made Ground, Superficial / Drift Geology and Landslips. These are all displayed with the BGS Lexicon code for the rock unit and BGS sheet number. Not all of the main geological components have nationwide coverage.

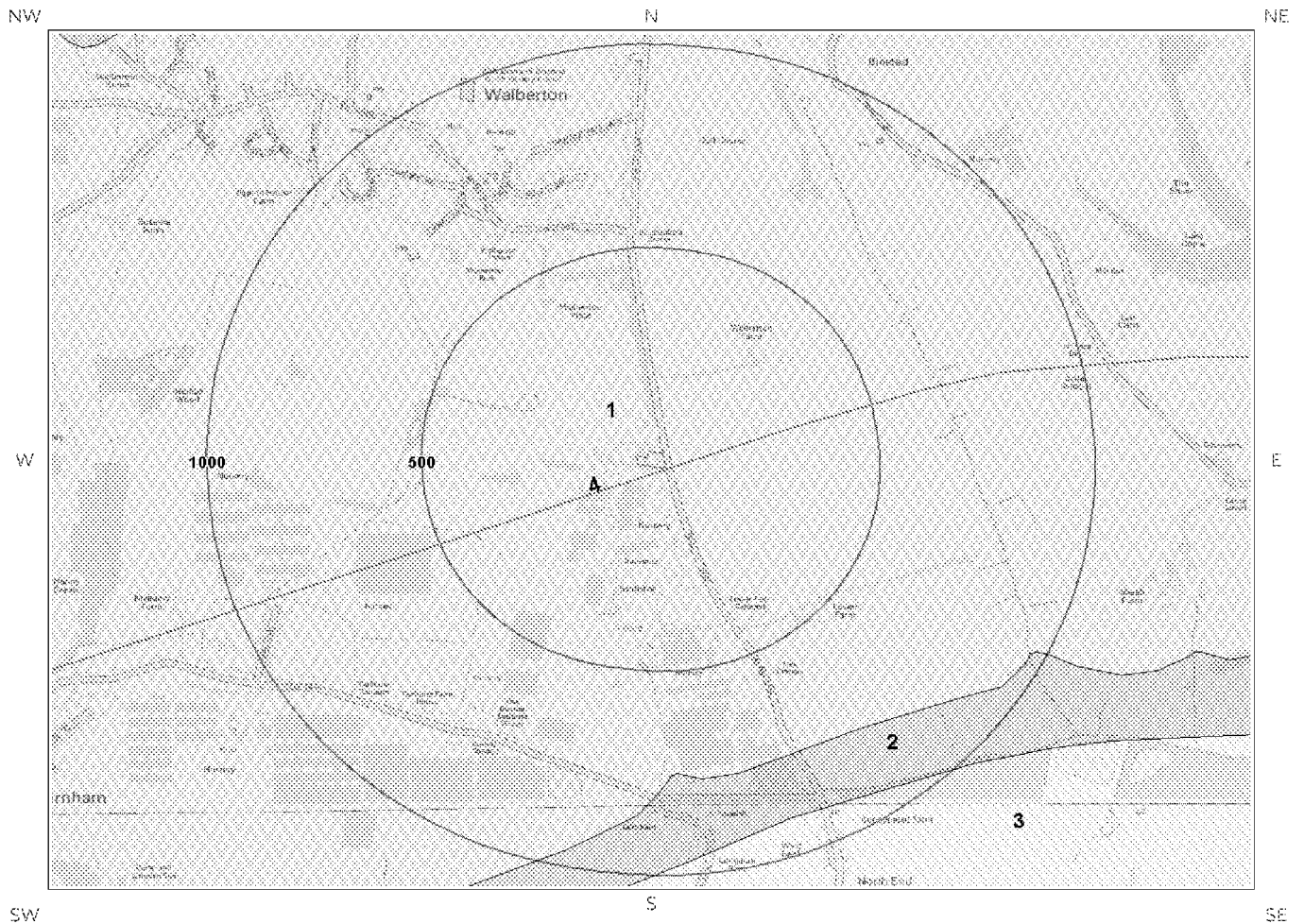
1.2.4 Landslip Permeability

Are there any records relating to permeability of landslips within the study site** boundary? No

Database searched and no data found.

* This includes an automatically generated 50m buffer zone around the site

1.3 Bedrock and Faults Map

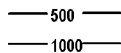


Bedrock and Faults Legend

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Site Outline



Search Buffers (m)

1.3 Bedrock, Solid Geology & Faults

The following geological information represented on the mapping is derived from 1:50,000 scale BGS Geological mapping, Sheet No:317

1.3.1 Bedrock/ Solid Geology

Records of Bedrock/ Solid Geology within 500m of the study site boundary:

ID	Distance (m)	Direction	LEX Code	Description	Rock Age
1	0.0	On Site	LC-CLSISA	London Clay Formation - Clay, Silt And Sand	No Details

1.3.2 Permeability of Bedrock Ground

Are there any records relating to permeability of bedrock ground within the study site* boundary? Yes

Distance (m)	Direction	Flow Type	Maximum Permeability	Minimum Permeability
0.0	On Site	Mixed	Moderate	Very Low

1.3.3 Faults

Are there any records of Faults within 500m of the study site boundary? Yes

ID	Distance (m)	Direction	Category Description	Feature Description
4	5.0	S	FOLD_AXIS	Axial plane trace of major syncline

The geology map for the site and surrounding area are extracted from the BGS Digital Geological Map of Great Britain at 1:50,000 scale.

This Geology shows the main components as discrete layers, these are: Bedrock/ Solid Geology and linear features such as Faults. These are all displayed with the BGS Lexicon code for the rock unit and BGS sheet number. Not all of the main geological components have nationwide coverage.

* This includes an automatically generated 50m buffer zone around the site

1.4 Radon Data

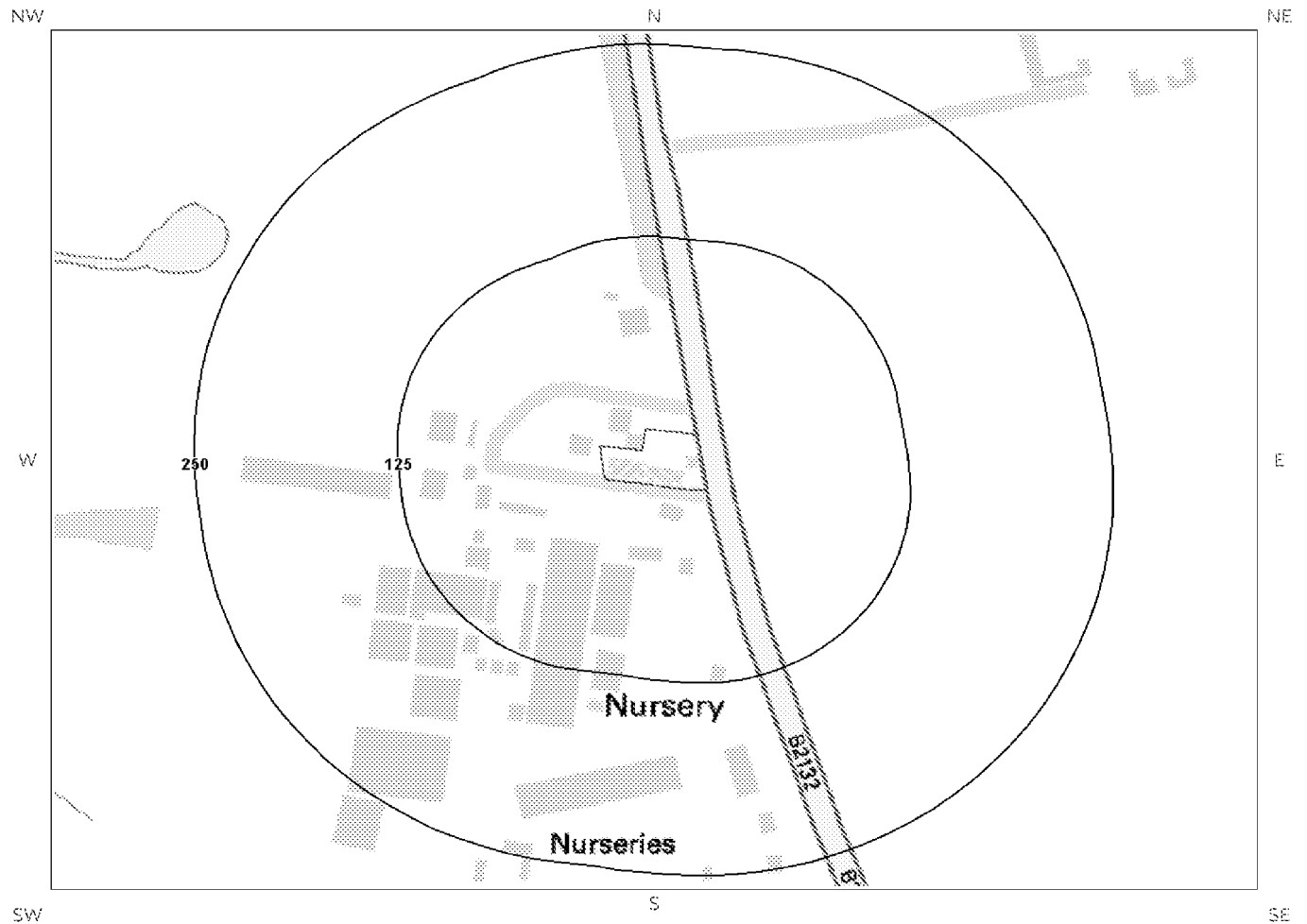
1.4.1 Radon Affected Areas

Is the property in a Radon Affected Area as defined by the Health Protection Agency (HPA) and if so what percentage of homes are above the Action Level? The property is in a Radon Affected Area, as between 1 and 3% of properties are above the Action Level

1.4.2 Radon Protection

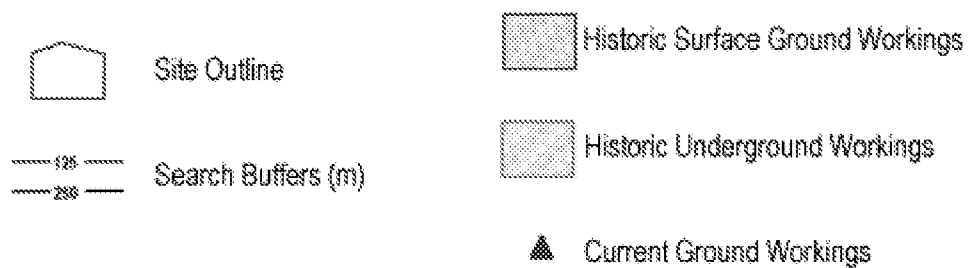
Is the property in an area where Radon Protection are required for new properties or extensions to existing ones as described in publication BR211 by the Building Research Establishment? No radon protective measures are necessary

2 Ground Workings Map



Ground Workings Legend

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2 Ground Workings

2.1 Historical Surface Ground Working Features derived from Historical Mapping

This dataset is based on Groundsure's unique Historical Land Use Database derived from 1:10,560 and 1:10,000 scale historical mapping.

Are there any Historical Surface Ground Working Features within 250m of the study site boundary? No

Database searched and no data found.

2.2 Historical Underground Working Features derived from Historical Mapping

This data is derived from the Groundsure unique Historical Land Use Database. It contains data derived from 1:10,000 and 1:10,560 historical Ordnance Survey Mapping and includes some natural topographical features (Shake Holes for example) as well as manmade features that may have implications for ground stability. Underground and mining features have been identified from surface features such as shafts. The distance that these extend underground is not shown.

Are there any Historical Underground Working Features within 1000m of the study site boundary? No

Database searched and no data found.

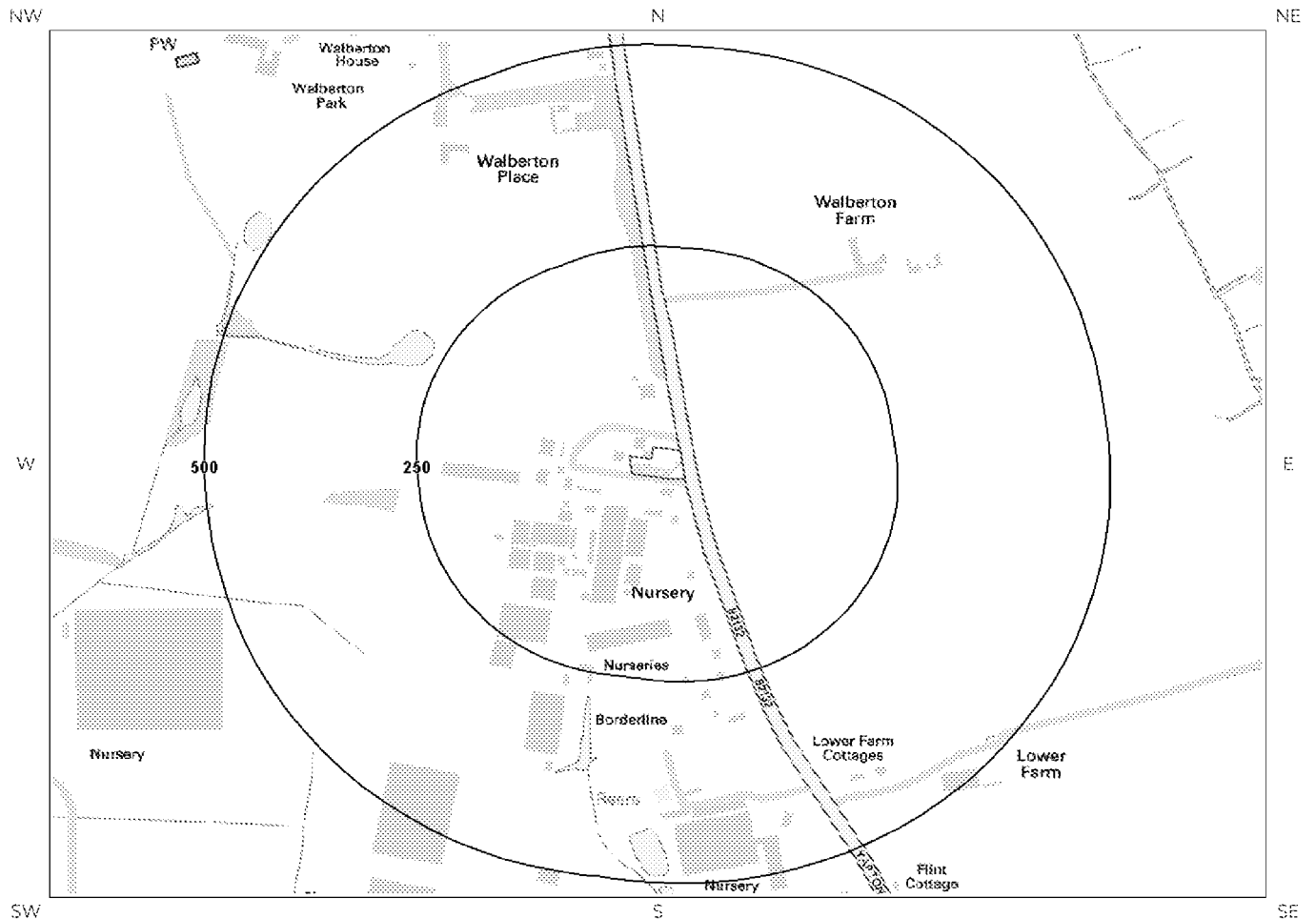
2.3 Current Ground Workings

This dataset is derived from the BGS BRITPITS database covering active; inactive mines; quarries; oil wells; gas wells and mineral wharves; and rail deposits throughout the British Isles.

Are there any BGS Current Ground Workings within 1000m of the study site boundary? No

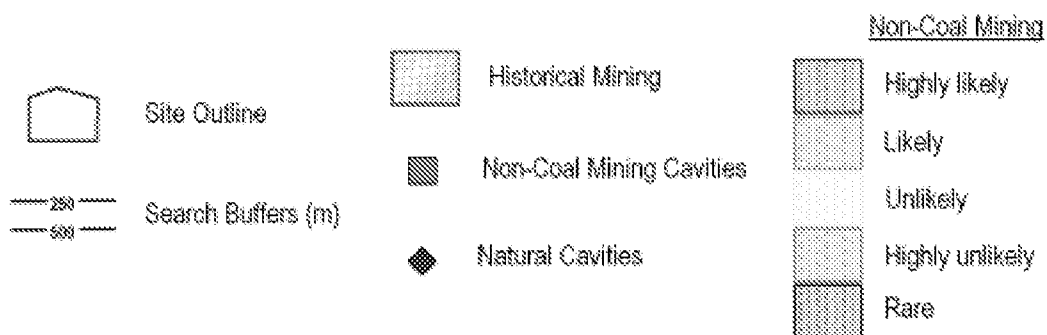
Database searched and no data found.

3 Mining, Extraction & Natural Cavities Map



Mining, Extraction and
Natural Cavities Legend

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3 Mining, Extraction & Natural Cavities

3.1 Historical Mining

This dataset is derived from Groundsure unique Historical Land-use Database that are indicative of mining or extraction activities.

Are there any Historical Mining areas within 1000m of the study site boundary? No

Database searched and no data found.

3.2 Coal Mining

This dataset provides information as to whether the study site lies within a known coal mining affected area as defined by the coal authority.

Are there any Coal Mining areas within 1000m of the study site boundary? No

Database searched and no data found.

3.3 Johnson Poole and Bloomer

This dataset provides information as to whether the study site lies within an area where JPB hold information relating to mining.

Are there any JPB Mining areas within 1000m of the study site boundary? No

The following information provided by JPB is not represented on mapping: Database searched and no data found.

3.4 Non-Coal Mining

This dataset provides information as to whether the study site lies within an area which may have been subject to non-coal historic mining.

Are there any Non-Coal Mining areas within 1000m of the study site boundary? No

Database searched and no data found.

3.5 Non-Coal Mining Cavities

This dataset provides information from the Peter Brett Associates (PBA) mining cavities database (compiled for the national study entitled "Review of mining instability in Great Britain, 1990" PBA has also continued adding to this database) on mineral extraction by mining.

Are there any Non-Coal Mining cavities within 1000m of the study site boundary? No

Database searched and no data found.

3.6 Natural Cavities

This dataset provides information based on Peter Brett Associates natural cavities database.

Are there any Natural Cavities within 1000m of the study site boundary? No

Database searched and no data found.

3.7 Brine Extraction

This data provides information from the Coal Authority issued on behalf of the Cheshire Brine Subsidence Compensation Board.

Are there any Brine Extraction areas within 1000m of the study site boundary? No

Database searched and no data found.

3.8 Gypsum Extraction

This dataset provides information on Gypsum extraction from British Gypsum records.

Are there any Gypsum Extraction areas within 1000m of the study site boundary? No

Database searched and no data found.

3.9 Tin Mining

This dataset provides information on tin mining areas and is derived from tin mining records. This search is based upon postcode information to a sector level.

Are there any Tin Mining areas within 1000m of the study site boundary? No

Database searched and no data found.

3.10 Clay Mining

This dataset provides information on Kaolin and Ball Clay mining from relevant mining records.

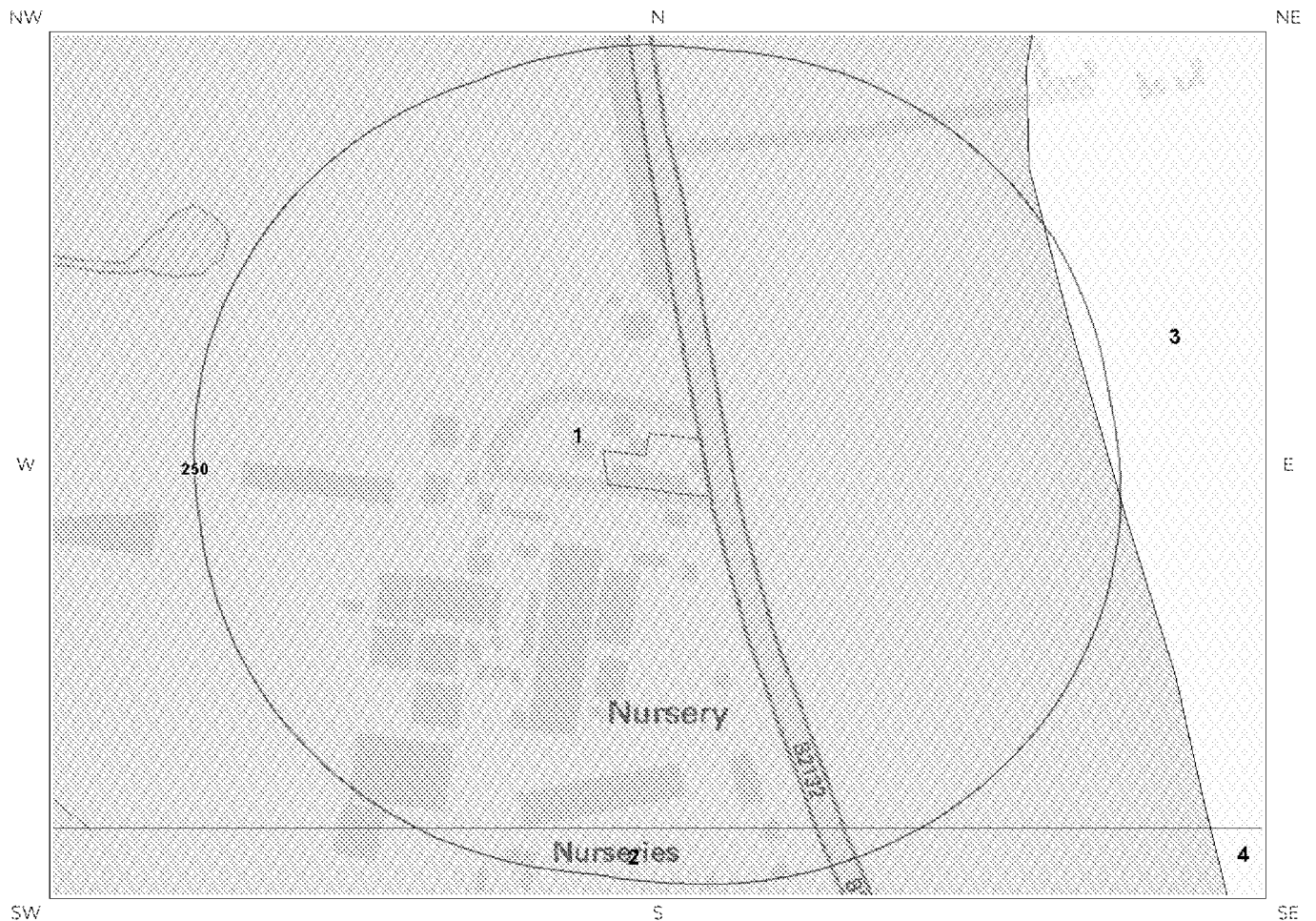
Are there any Clay Mining areas within 1000m of the study site boundary?

No

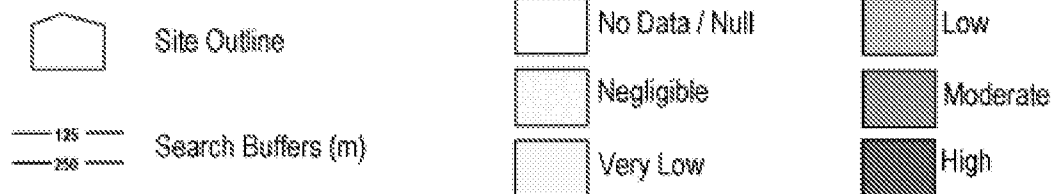
Database searched and no data found.

4 Natural Ground Subsidence

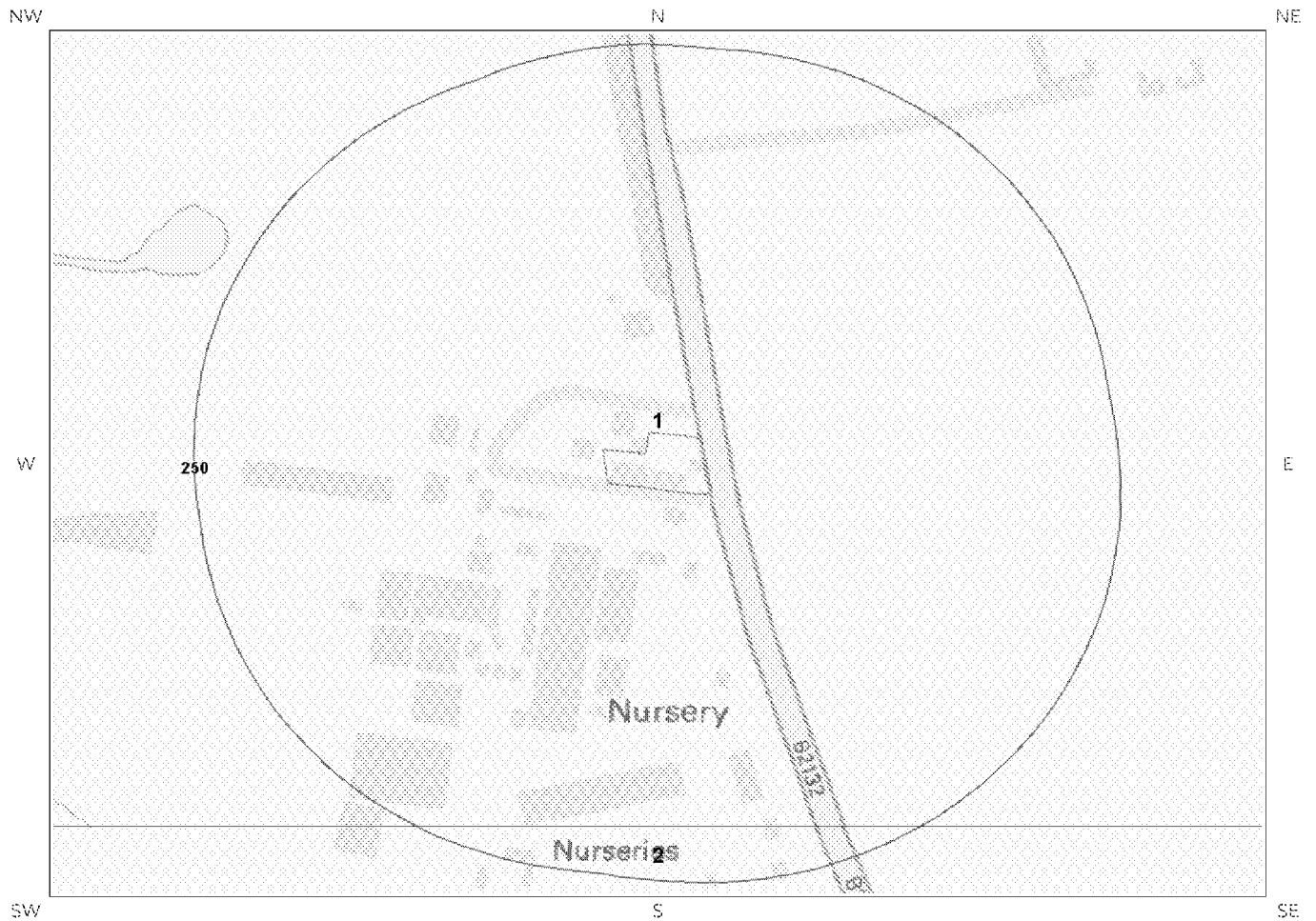
4.1 Shrink-Swell Clay Map



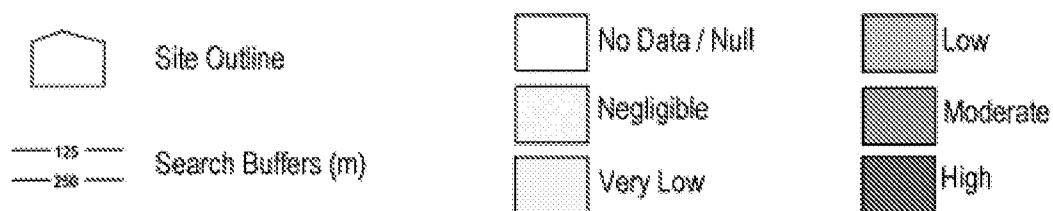
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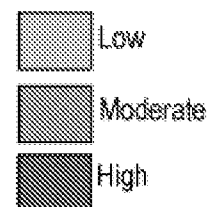
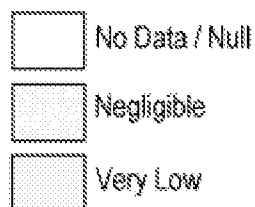
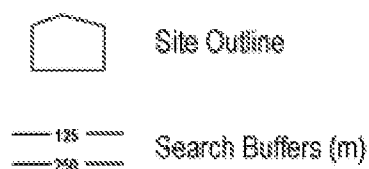
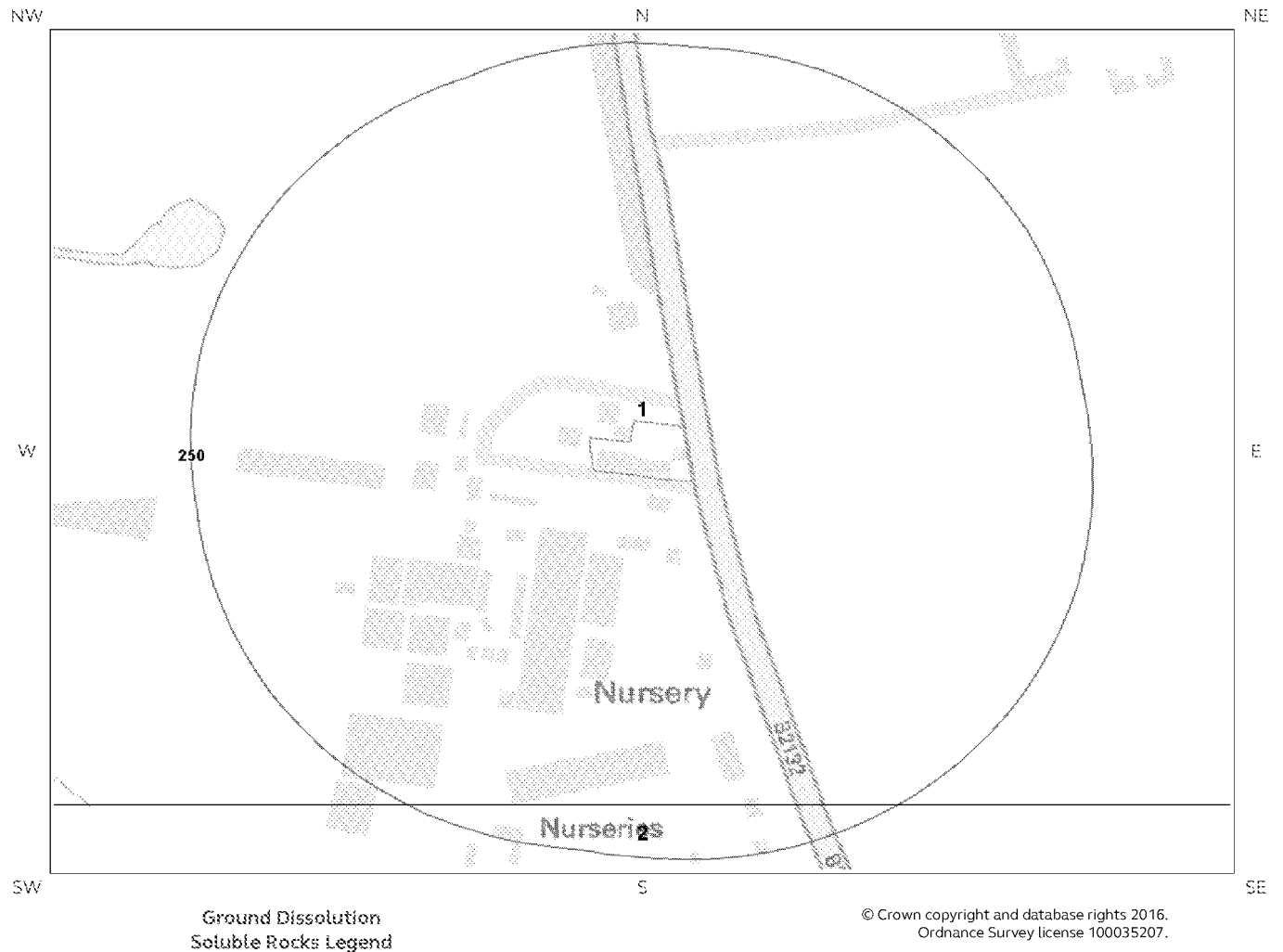
4.2 Landslides Map



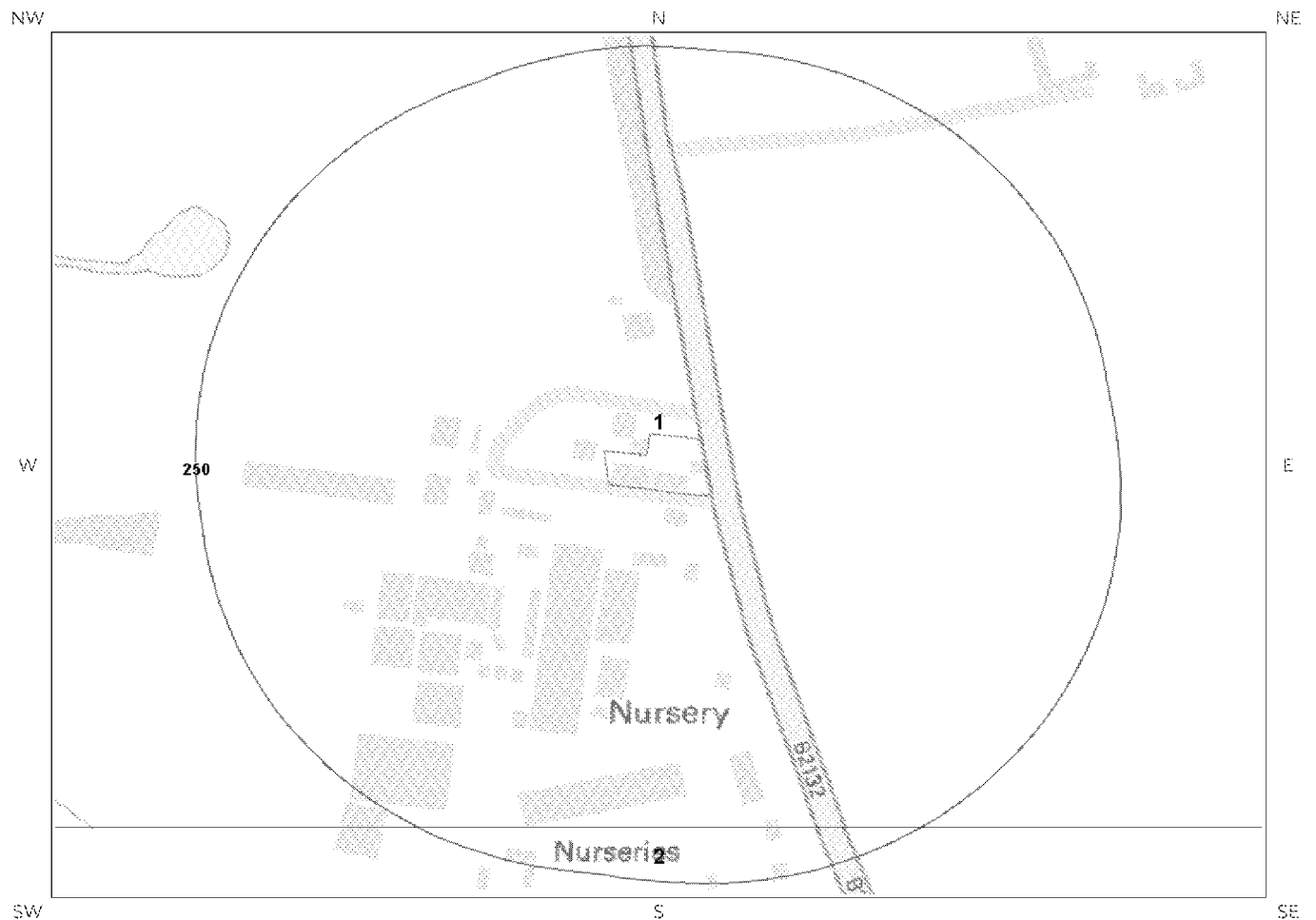
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4.3 Ground Dissolution Soluble Rocks Map

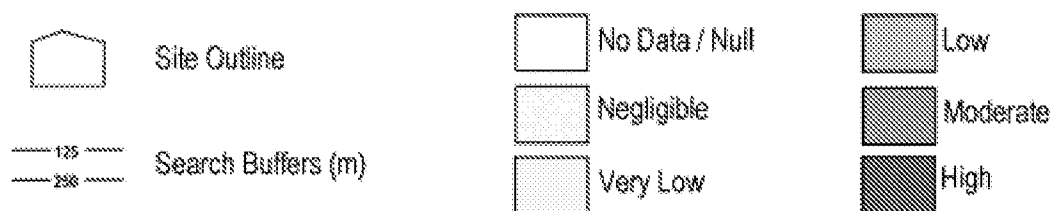


4.4 Compressible Deposits Map

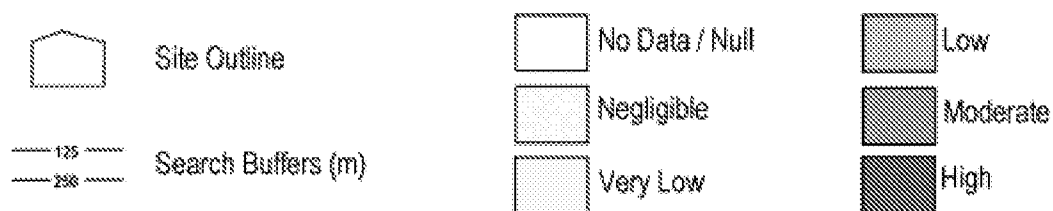
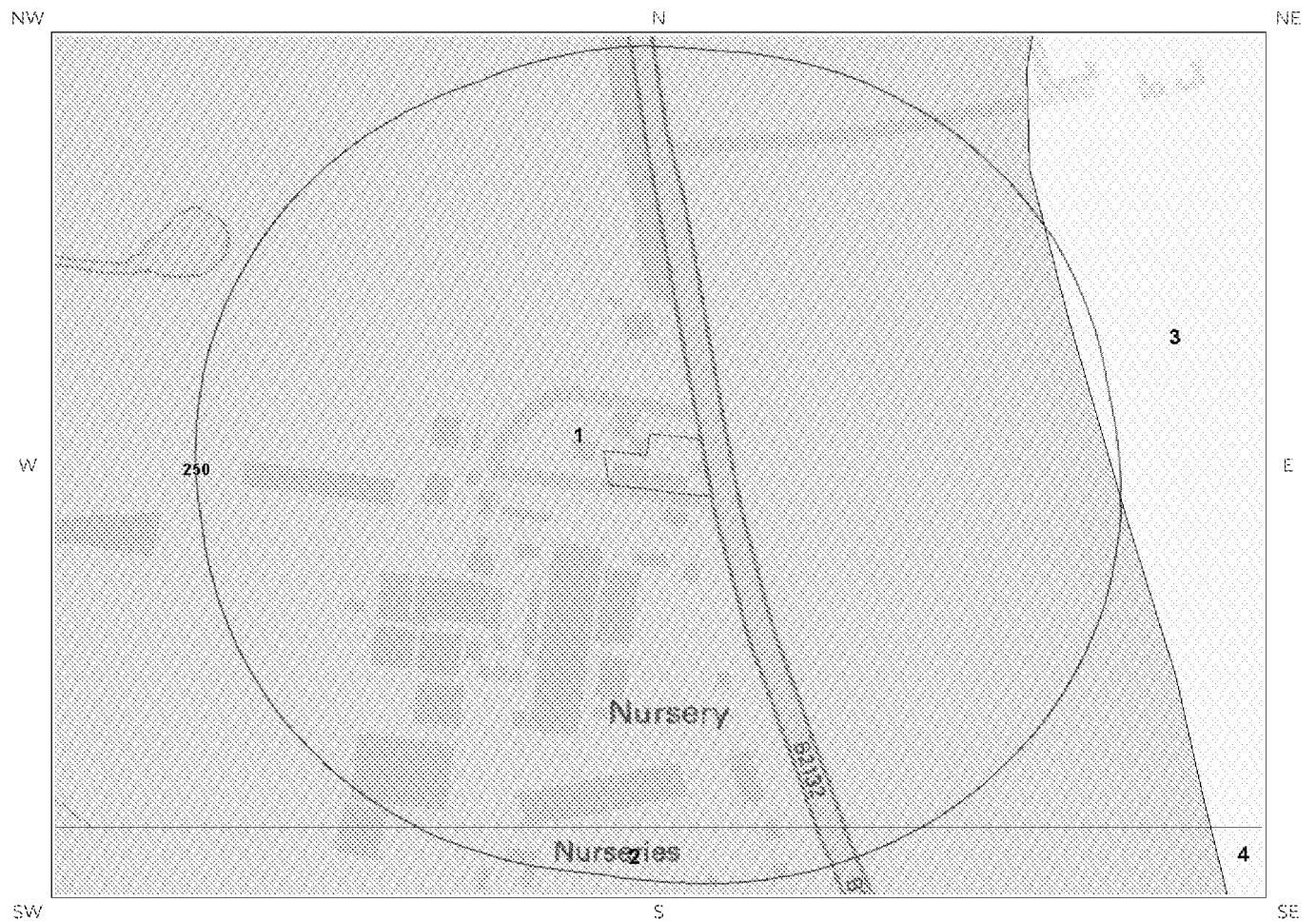


Compressible Deposits Legend

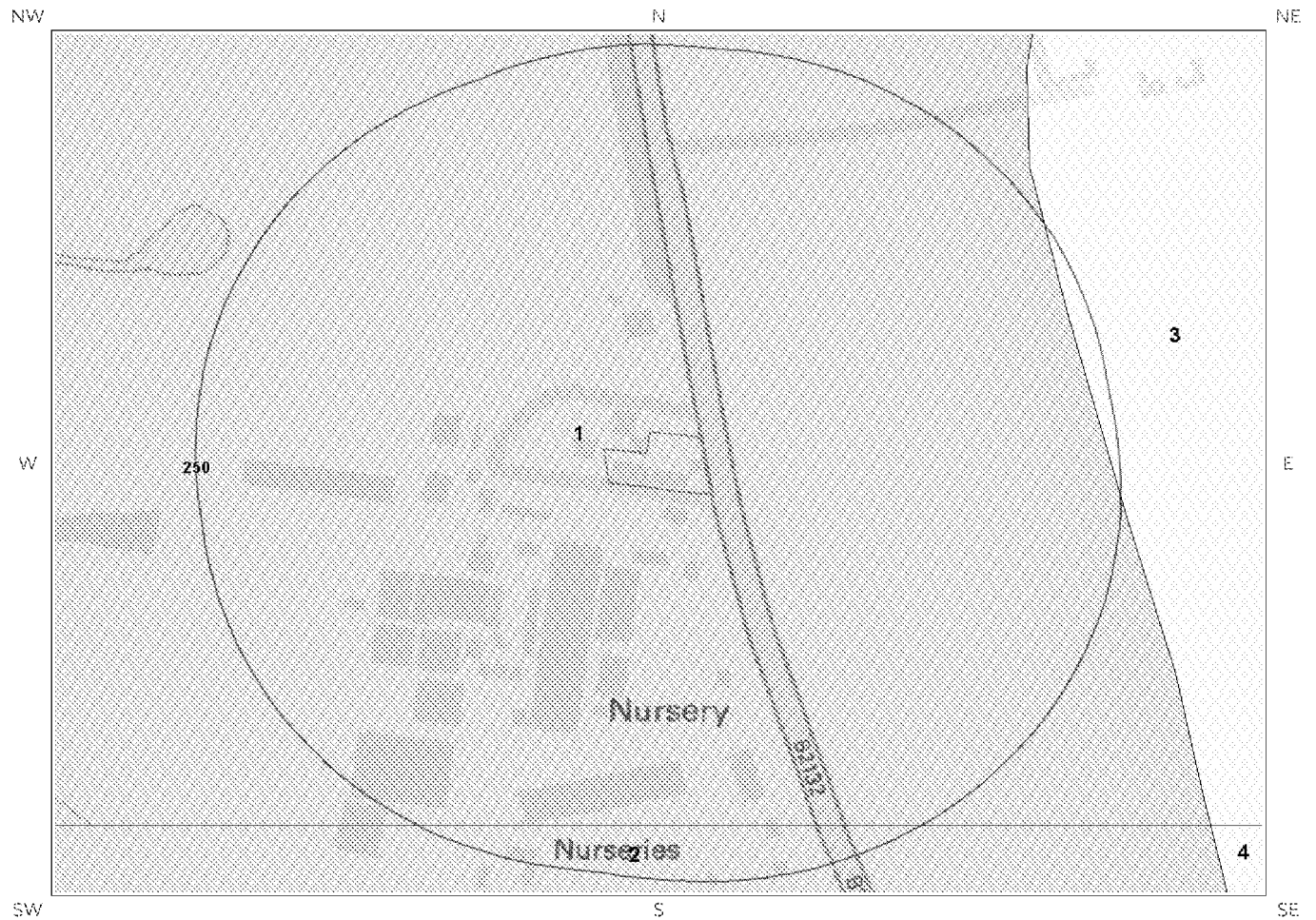
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4.5 Collapsible Deposits Map

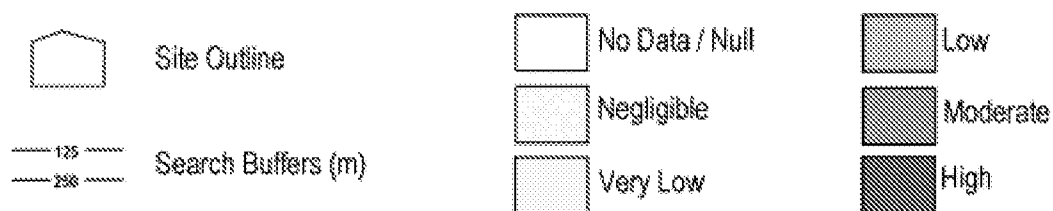


4.6 Running Sand Map



Running Sand Legend

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4 Natural Ground Subsidence

The National Ground Subsidence rating is obtained through the 6 natural ground stability hazard datasets, which are supplied by the British Geological Survey (BGS).

The following GeoSure data represented on the mapping is derived from the BGS Digital Geological map of Great Britain at 1:50,000 scale.

What is the maximum hazard rating of natural subsidence within the study site* boundary? Low

4.1 Shrink-Swell Clays

The following Shrink Swell information provided by the British Geological Survey:

ID	Distance (m)	Direction	Hazard Rating	Details
1	0.0	On Site	Low	Ground conditions predominantly medium plasticity. Do not plant trees with high soil moisture demands near to buildings. For new build, consideration should be given to advice published by the National House Building Council (NHBC) and the Building Research Establishment (BRE). There is a possible increase in construction cost to reduce potential shrink swell problems. For existing property, there is a possible increase in insurance risk, especially during droughts or where vegetation with high moisture demands is present.

4.2 Landslides

The following Landslides information provided by the British Geological Survey:

ID	Distance (m)	Direction	Hazard Rating	Details
1	0.0	On Site	Very Low	Slope instability problems are unlikely to be present. No special actions required to avoid problems due to landslides. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with landslides.

4.3 Ground Dissolution of Soluble Rocks

The following Ground Dissolution information provided by the British Geological Survey:

ID	Distance (m)	Direction	Hazard Rating	Details
1	0.0	On Site	Negligible	Soluble rocks are present, but unlikely to cause problems except under exceptional conditions. No special actions required to avoid problems due to soluble rocks. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with soluble rocks.

* This includes an automatically generated 50m buffer zone around the site

4.4 Compressible Deposits

The following Compressible Deposits information provided by the British Geological Survey:

ID	Distance (m)	Direction	Hazard Rating	Details
1	0.0	On Site	Negligible	No indicators for compressible ground identified. No special actions required to avoid problems due to compressible ground. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with compressible ground.

4.5 Collapsible Deposits

The following Collapsible Rocks information provided by the British Geological Survey:

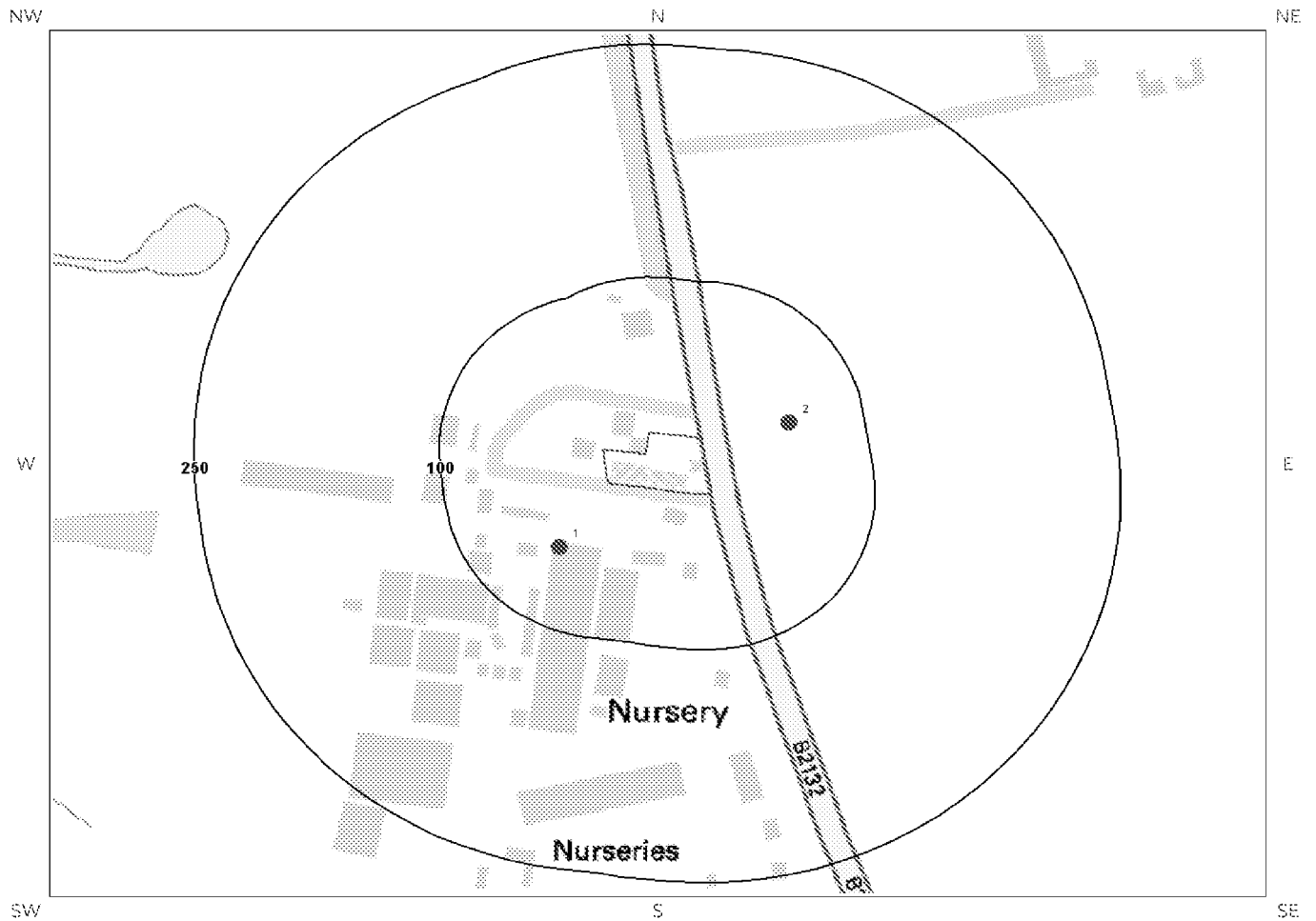
ID	Distance (m)	Direction	Hazard Rating	Details
1	0.0	On Site	Low	Slight possibility for collapsible deposit problems after major changes in loading or groundwater conditions. Normal maintenance to avoid large amounts of water entering the ground through pipe leakage or soak-aways should reduce the likelihood of problems due to collapsible deposits. For new build, assess the possibility of collapsible (loessic) deposits in ground investigation. For existing property, no significant increase in insurance risk from collapsible deposits is likely.

4.6 Running Sands

The following Running Sands information provided by the British Geological Survey:

ID	Distance (m)	Direction	Hazard Rating	Details
1	0.0	On Site	Low	Possibility of running sand problems after major changes in ground conditions. Normal maintenance to avoid leakage of water-bearing services or water bodies (ponds, swimming pools) should reduce likelihood of problems due to running sand. For new build, consider possibility of running sand into trenches or excavations if water table is high or sandy strata are exposed to water. Avoid concentrated water inputs to site. Unlikely to be an increase in construction costs due to potential for running sand. For existing property, no significant increase in insurance risk due to running sand problems is likely.

5 Borehole Records Map



Borehole Records Legend

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5 Borehole Records

The systematic analysis of data extracted from the BGS Borehole Records database provides the following information.

Records of boreholes within 250m of the study site boundary:

2

ID	Distance (m)	Direction	NGR	BGS Reference	Drilled Length	Borehole Name
1	51.0	SW	497640 105180	SU90NE155	130.0	WALBERTON NURSERIES YAPTON LANE WALBERTON
2	54.0	E	497780 105260	SU90NE73	4.87	WALBERTON ARUNDEL SUSSEX

The borehole records are available using the hyperlinks below: Please note that if the donor of the borehole record has requested the information be held as commercial-in-confidence, the additional data will be held separately by the BGS and a formal request must be made for its release.

#1: scans.bgs.ac.uk/sobi_scans/boreholes/18723639

#2: scans.bgs.ac.uk/sobi_scans/boreholes/434143

6 Estimated Background Soil Chemistry

Records of background estimated soil chemistry within 250m of the study site boundary:

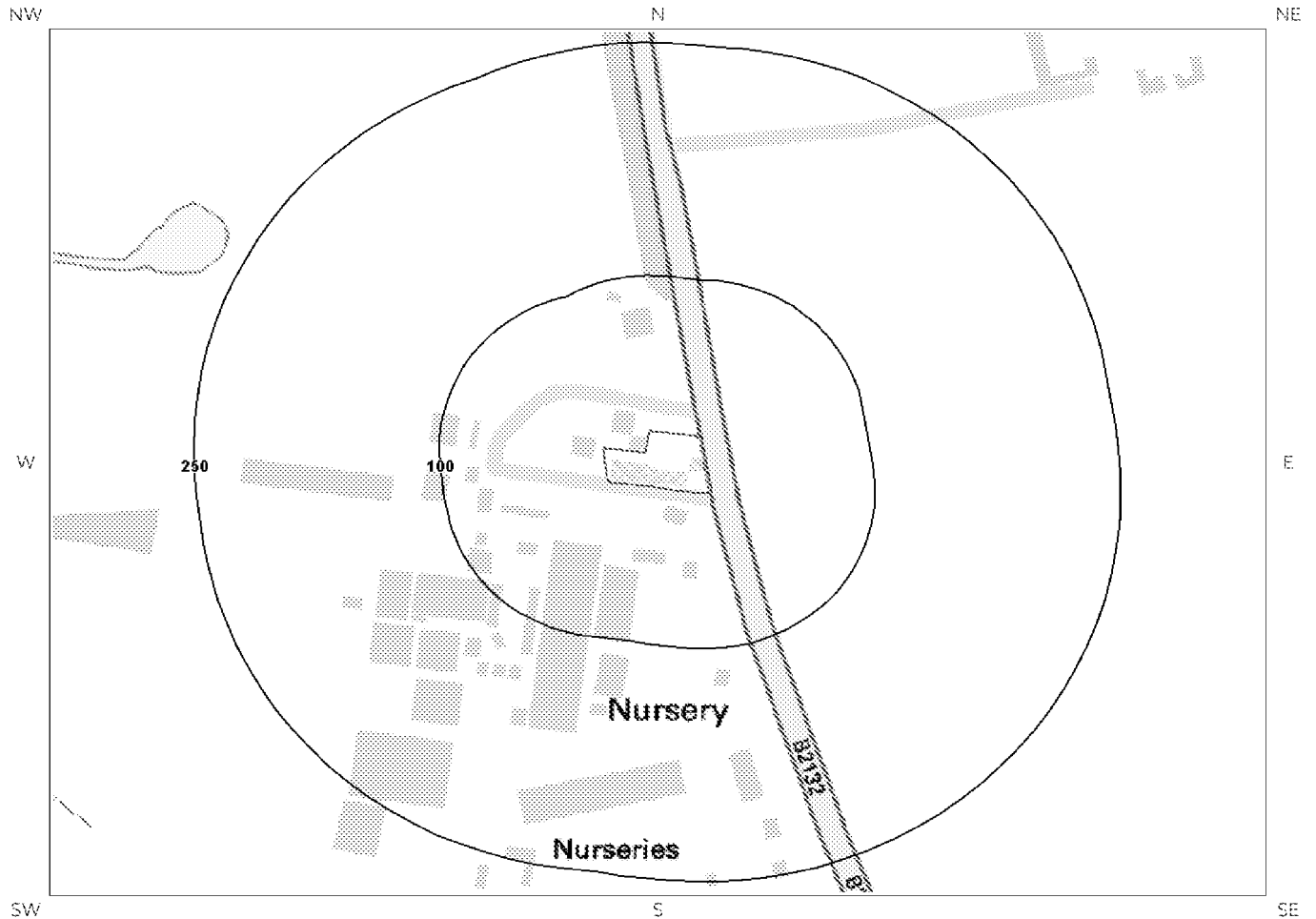
6

For further information on how this data is calculated and limitations upon its use, please see the Groundsure Geo Insight User Guide, available on request.

Distance (m)	Direction	Sample Type	Arsenic (As)	Cadmium (Cd)	Chromium (Cr)	Nickel (Ni)	Lead (Pb)
0.0	On Site	Sediment	<15 mg/kg	<1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg	<100 mg/kg
167.0	W	Sediment	<15 mg/kg	<1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg	<100 mg/kg
214.0	S	Sediment	<15 mg/kg	<1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg	<100 mg/kg
214.0	S	Sediment	<15 mg/kg	<1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg	<100 mg/kg
236.0	E	Sediment	<15 mg/kg	<1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg	<100 mg/kg
246.0	N	Sediment	<15 mg/kg	<1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg	<100 mg/kg

*As this data is based upon underlying 1:50,000 scale geological information, a 50m buffer has been added to the search radius.

7 Railways and Tunnels Map



Railways and Tunnels Legend

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	Site Outline		Underground or Partially Underground Railway / Subway System		Railway Track (OpenStreetMap)
	Search Buffers (m)		Railway Tunnel (OS Mapping)		High Speed 2
	250		Abandoned or Dismantled Railway (OpenStreetMap)		High Speed 2 Revised Proposed Route
	500		Railway Track (OS Mapping)		Crossrail 1
					Railway and/or Tunnel Feature from Historical Mapping

7 Railways and Tunnels

7.1 Tunnels

This data is derived from OpenStreetMap and provides information on the possible locations of underground railway systems in the UK - the London Underground, the Tyne & Wear Metro and the Glasgow Subway.

Have any underground railway lines been identified within the study site boundary? No

Have any underground railway lines been identified within 250m of the study site boundary? No

Database searched and no data found.

Any records that have been identified are represented on the Railways and Tunnels Map.

This data is derived from Ordnance Survey mapping and provides information on the possible locations of railway tunnels forming part of the UK overground railway network.

Have any other railway tunnels been identified within the site boundary? No

Have any other railway tunnels been identified within 250m of the site boundary? No

Database searched and no data found.

Any records that have been identified are represented on the Railways and Tunnels Map.

7.2 Historical Railway and Tunnel Features

This data is derived from Groundsure's unique Historical Land-use Database and contains features relating to tunnels, railway tracks or associated works that have been identified from historical Ordnance Survey mapping.

Have any historical railway or tunnel features been identified within the study site boundary? No

Have any historical railway or tunnel features been identified within 250m of the study site boundary? No

Database searched and no data found.

Any records that have been identified are represented on the Railways and Tunnels Map.

7.3 Historical Railways

This data is derived from OpenStreetMap and provides information on the possible alignments of abandoned or dismantled railway lines in proximity to the study site.

Have any historical railway lines been identified within the study site boundary? No

Have any historical railway lines been identified within 250m of the study site boundary? No

Database searched and no data found.

Note: multiple sections of the same track may be listed in the detail above

Any records that have been identified are represented on the Railways and Tunnels Map.

7.4 Active Railways

These datasets are derived from Ordnance Survey mapping and OpenStreetMap and provide information on the possible locations of active railway lines in proximity to the study site.

Have any active railway lines been identified within the study site boundary? No

Have any active railway lines been identified within 250m of the study site boundary? No

Database searched and no data found.

Note: multiple sections of the same track may be listed in the detail above

Any records that have been identified are represented on the Railways and Tunnels Map.

7.5 Railway Projects

These datasets provide information on the location of large scale railway projects High Speed 2 and Crossrail 1 .

Is the study site within 5km of the route of the High Speed 2 rail project? No

Is the study site within 5km of the proposed alternative route of the High Speed 2 rail project? No

Is the study site within 500m of the route of the Crossrail 1 rail project? No

Further information on proximity to these routes, the project construction status and associated works can be obtained through the purchase of a Groundsure HS2 and Crossrail 1 Report.

The route data has been digitised from publicly available maps by Groundsure. The route as provided relates to the Crossrail 1 project only, and does not include any details of the Crossrail 2 project, as final details of the route for Crossrail 2 are still under consultation.

Contact Details

Groundsure Helpline
Telephone: 08444 159 000
info@groundsure.com

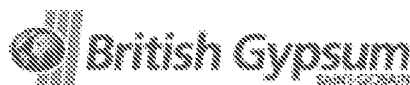


British Geological Survey Enquiries
Kingsley Dunham Centre
Keyworth, Nottingham NG12 5GG



BGS Geological Hazards Reports and general geological enquiries

British Gypsum
British Gypsum Ltd
East Leake
Loughborough
Leicestershire
LE12 6HX



The Coal Authority
200 Lichfield Lane
Mansfield
Notts NG18 4RG



Public Health England
Public information access office
Public Health England, Wellington House
133-155 Waterloo Road, London, SE1 8UG



Johnson Poole & Bloomer Limited
Harris and Pearson Building, Brettel Lane
Brierley Hill, West Midlands
DY5 3LH



Ordnance Survey
Adanac Drive, Southampton
SO16 0AS



Getmapping PLC
Virginia Villas, High Street, Hartley Witney,
Hampshire RG27 8NW



Contact Details

Peter Brett Associates
Caversham Bridge House
Waterman Place
Reading
Berkshire RG1 8DN



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APPENDIX C: Groundsure Historical Maps

Site Details:

PROGRESS GARAGE, YAPTON
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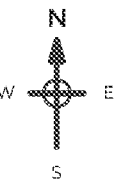
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Grid Ref: 497700, 105234

Map Name: County Series

Map date: 1876

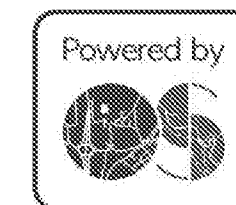
Scale: 1:2,500

Printed at: 1:2,500



Surveyed 1876
Revised 1876
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1876
Revised 1876
Edition N/A
Copyright N/A
Levelled N/A

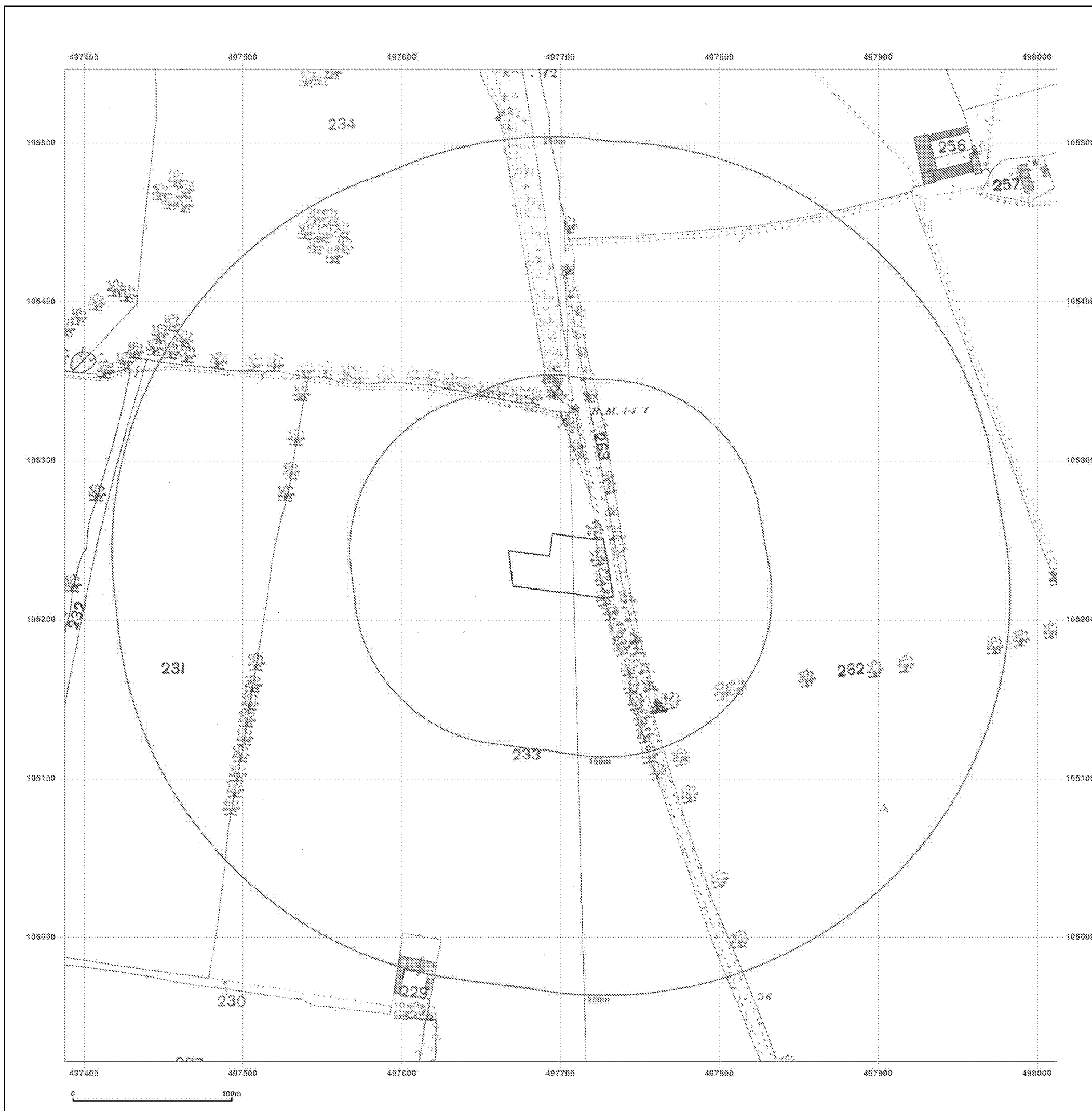


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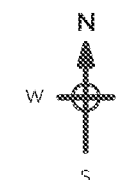
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Report Ref: GS-3427023
Grid Ref: 497700, 105234

Map Name: County Series

Map date: 1897

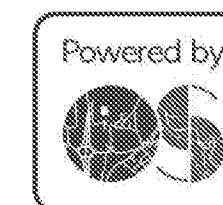
Scale: 1:2,500

Printed at: 1:2,500



Surveyed 1897
Revised 1897
Edition N/A
Copyright N/A
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Surveyed 1897
Revised 1897
Edition N/A
Copyright N/A
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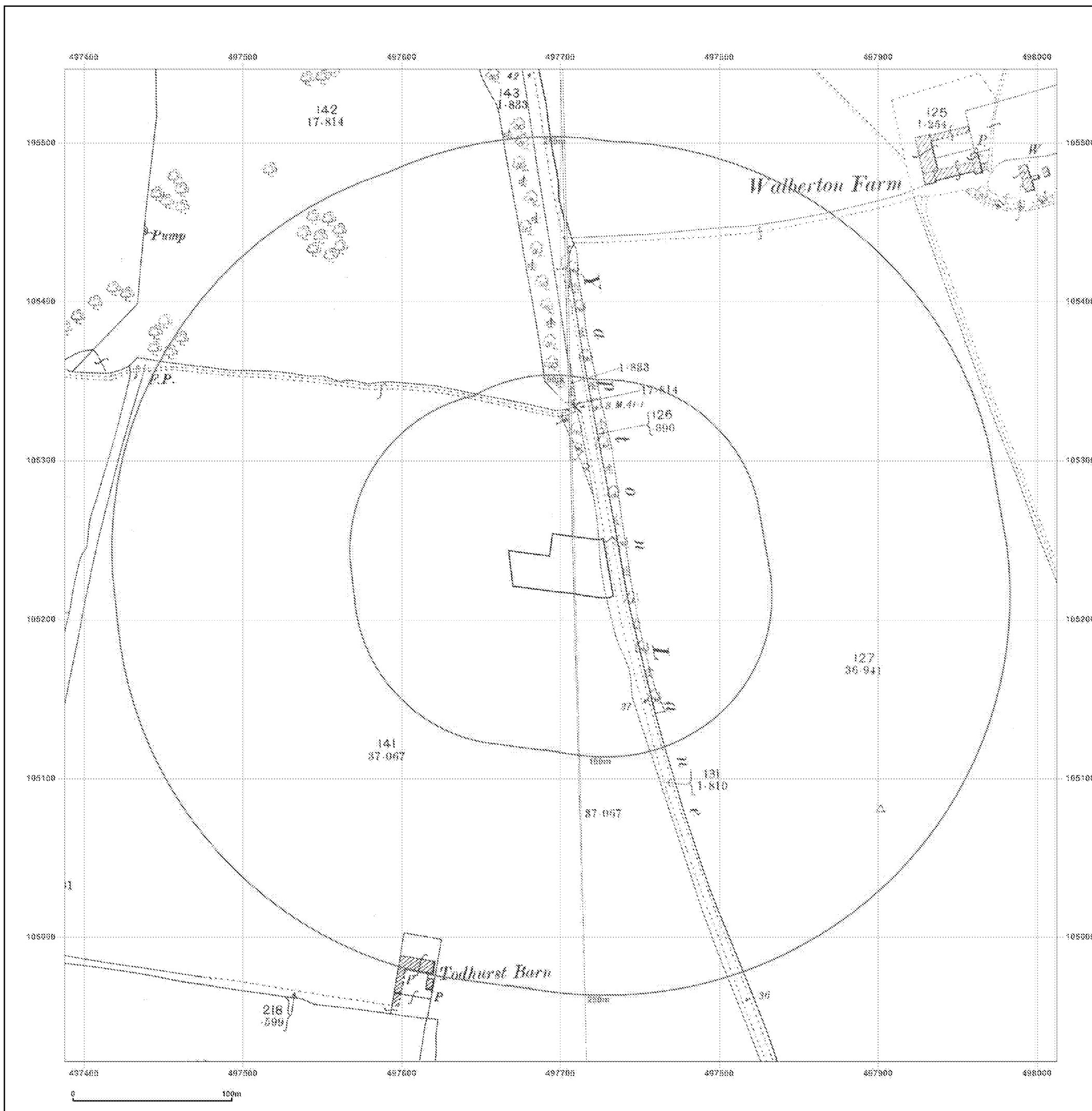


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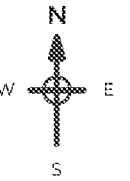
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Grid Ref: 497700, 105234

Map Name: County Series

Map date: 1912

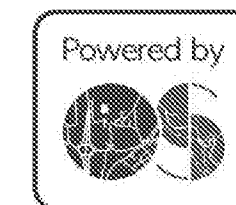
Scale: 1:2,500

Printed at: 1:2,500



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Edition N/A
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Edition N/A
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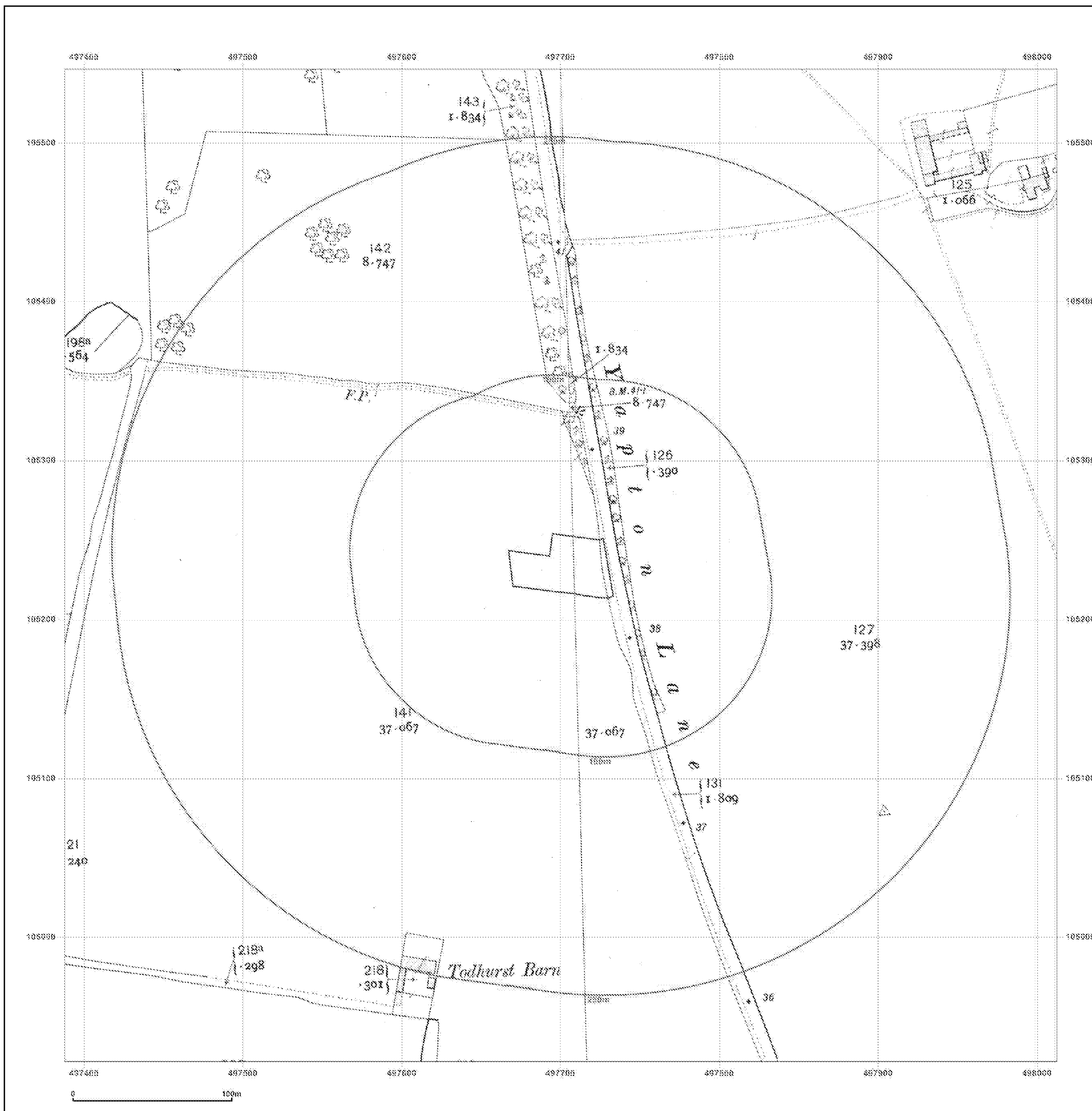


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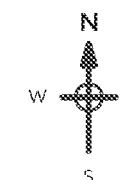
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Map Name: County Series

Map date: 1938-1939

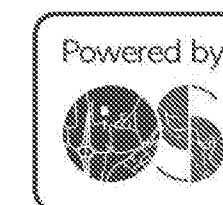
Scale: 1:2,500

Printed at: 1:2,500



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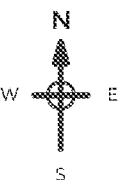
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Map Name: National Grid

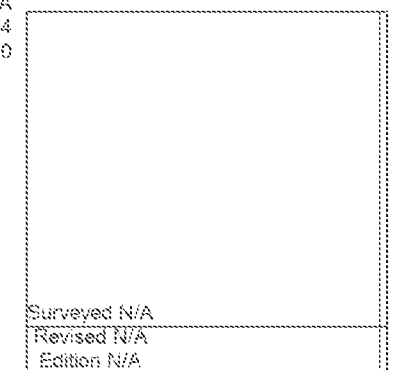
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Scale: 1:2,500

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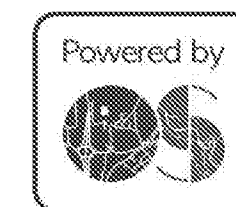


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Revised N/A
Edition N/A
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Surveyed 1974
Revised 1974
Edition N/A
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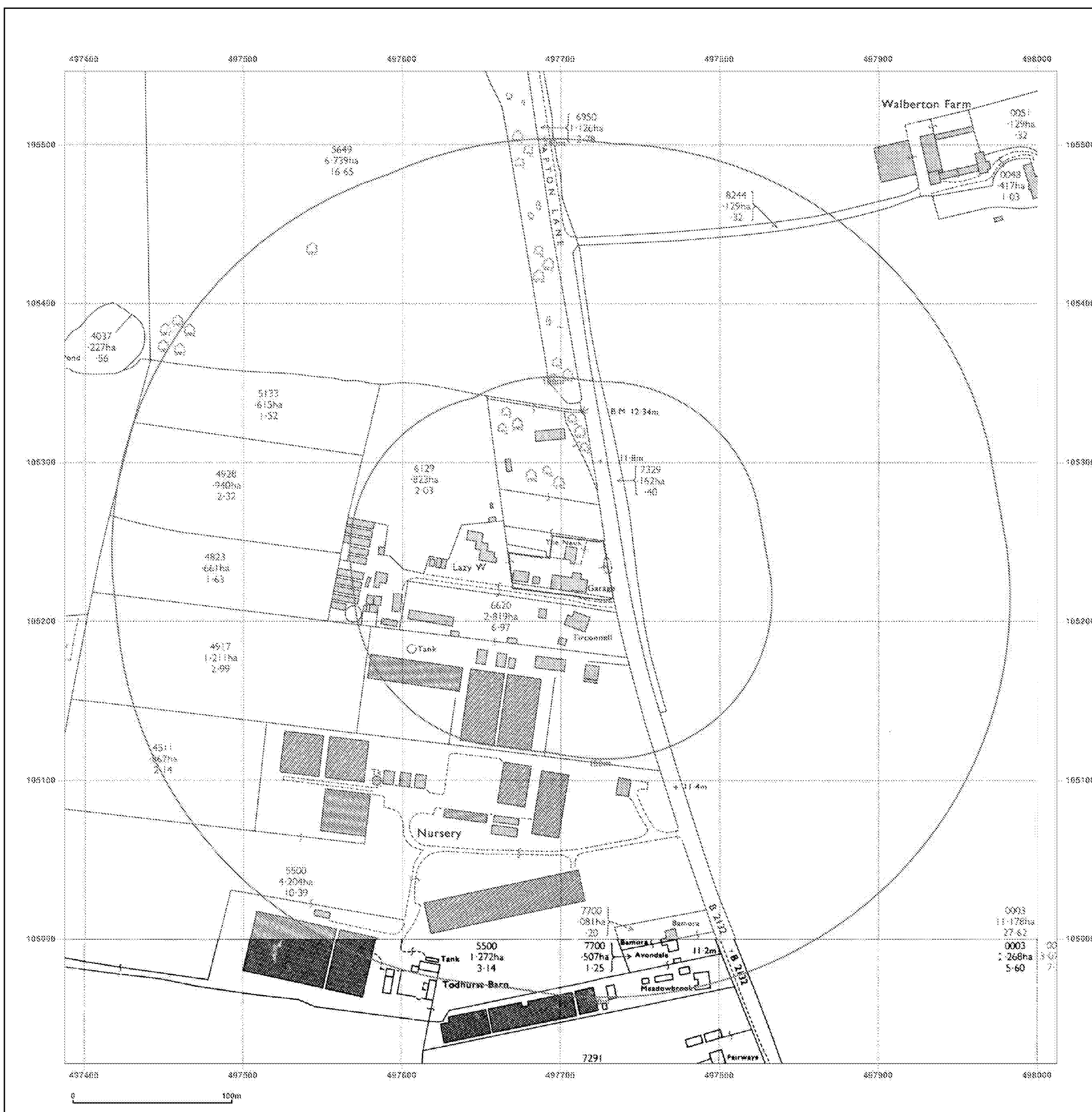


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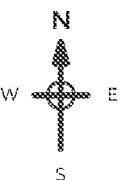
Client Ref: YE2690
Report Ref: GS-3427023
Grid Ref: 497700, 105234

Map Name: National Grid

Map date: 1984

Scale: 1:2,500

Printed at: 1:2,500



Surveyed 1975
Revised 1984
Edition N/A
Copyright 1984
Levelled 1975

Surveyed 1975
Revised 1984
Edition N/A
Copyright 1984
Levelled 1975

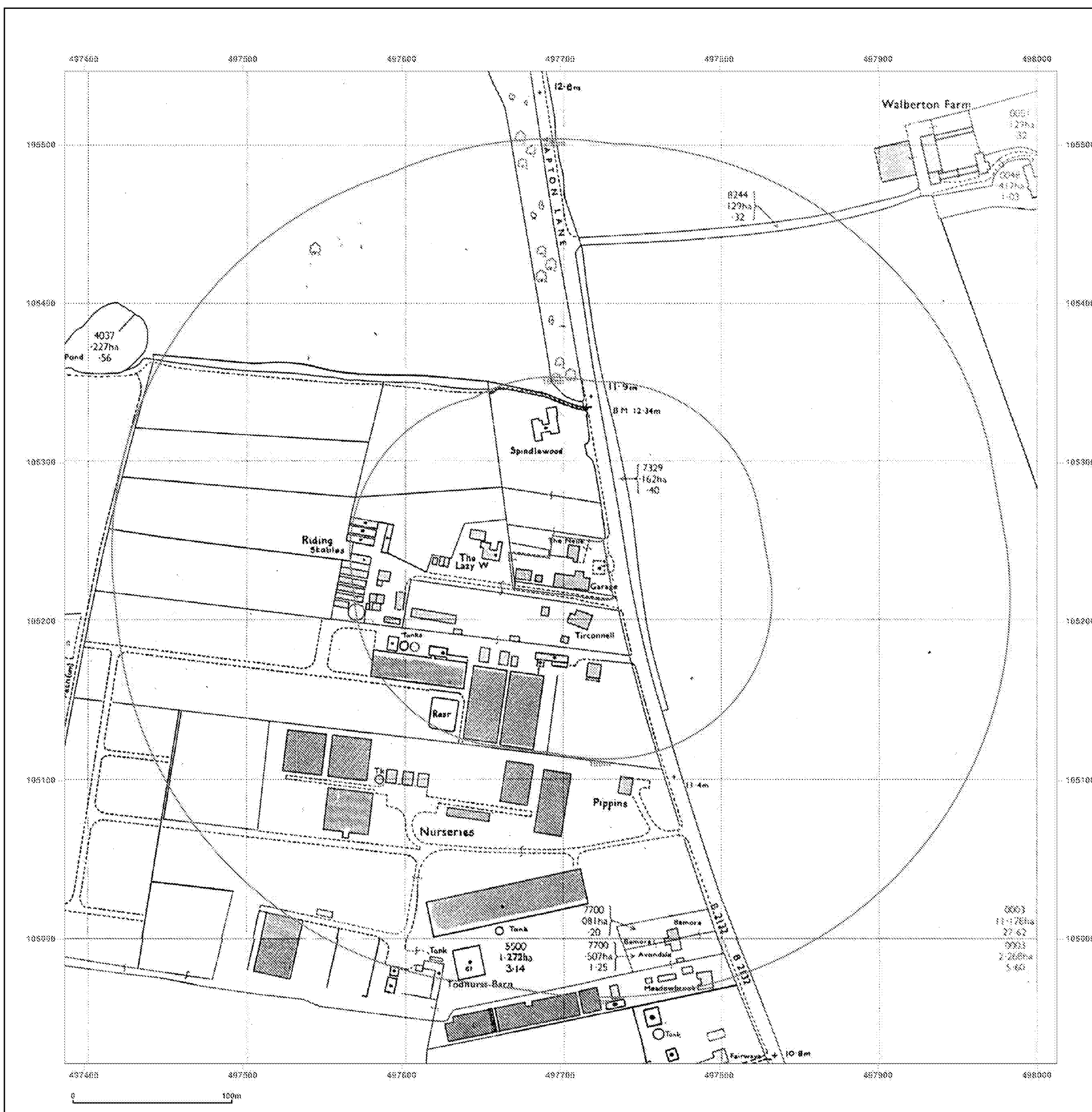


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Production date: 07 November 2016

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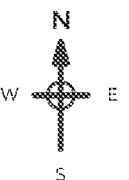
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Report Ref: GS-3427023
Grid Ref: 497700, 105234

Map Name: National Grid

Map date: 1992-1994

Scale: 1:2,500

Printed at: 1:2,500



Surveyed 1994
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Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1994
Revised 1994
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1975
Revised 1992
Edition N/A
Copyright 1992
Levelled 1975

Surveyed 1975
Revised 1992
Edition N/A
Copyright 1992
Levelled 1975

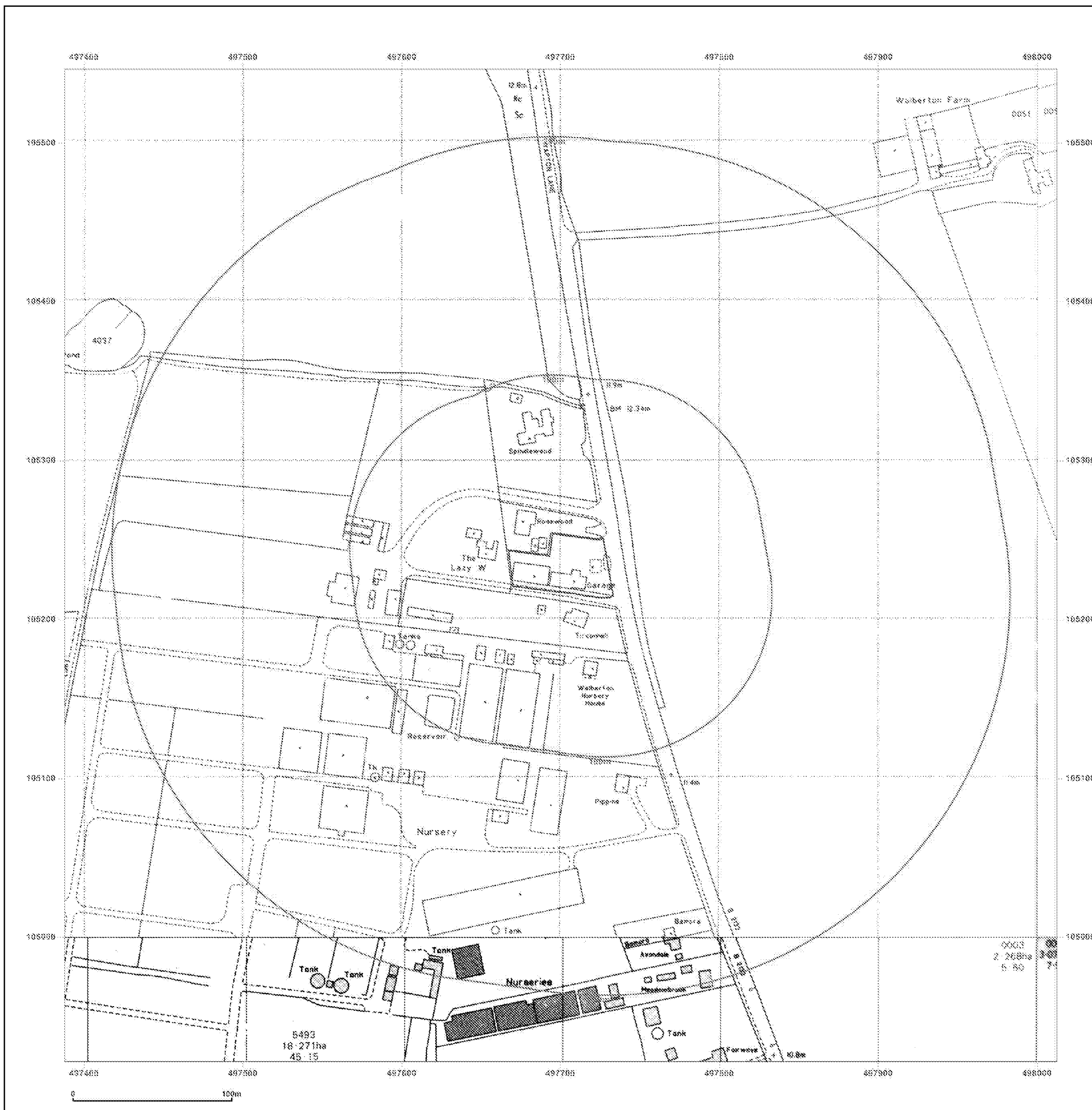


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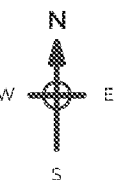
Client Ref: YE2690
Report Ref: GS-3427023
Grid Ref: 497700, 105234

Map Name: County Series

Map date: 1876

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1876
Revised 1876
Edition N/A
Copyright N/A
Levelled N/A

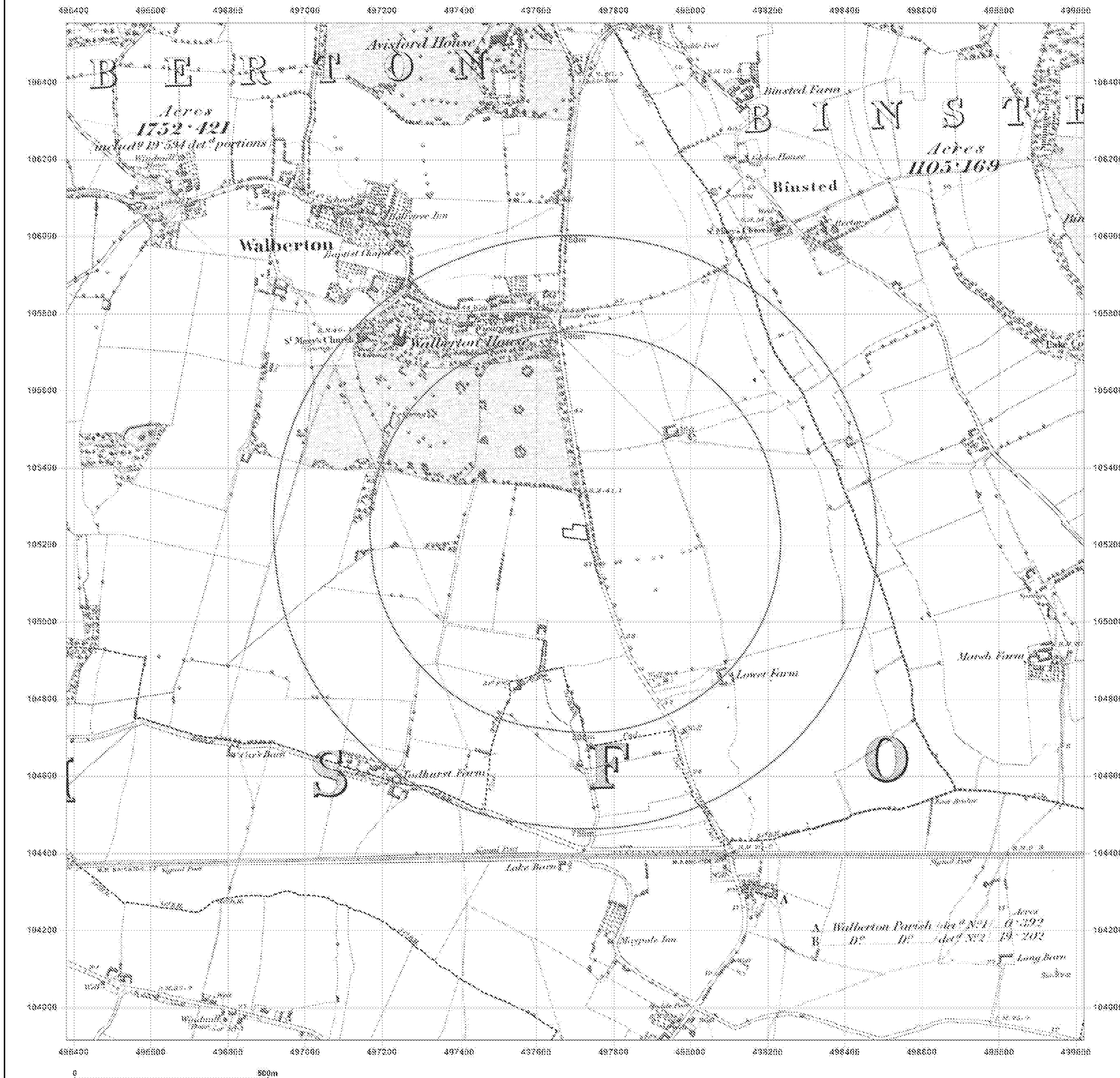


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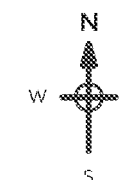
Client Ref: YE2690
Report Ref: GS-3427023
Grid Ref: 497700, 105234

Map Name: County Series

Map date: 1896

Scale: 1:10,560

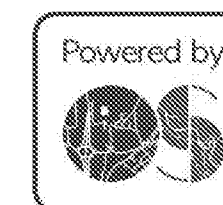
Printed at: 1:10,560



Surveyed 1876
Revised 1896
~~Edition N/A~~
Copyright N/A
Levelled N/A

Surveyed 1876
Revised 1896
Edition N/A

Copyright N/A
Levelled N/A



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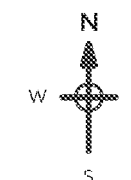
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Grid Ref: 497700, 105234

Map Name: County Series

Map date: 1910

Scale: 1:10,560

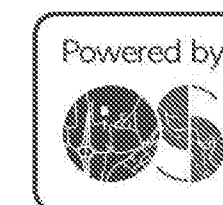
Printed at: 1:10,560



Surveyed 1874
Revised 1810
~~Edition N/A~~
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Levelled N/A

Surveyed 1875
Revised 1910
Edition N/A

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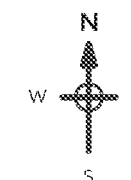
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Report Ref: GS-3427023
Grid Ref: 497700, 105234

Map Name: County Series

Map date: 1950

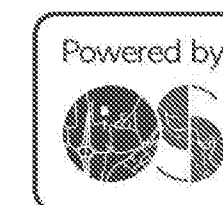
Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1874
Revised 1950
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1875
Revised 1950
Edition N/A
Copyright N/A
Levelled N/A

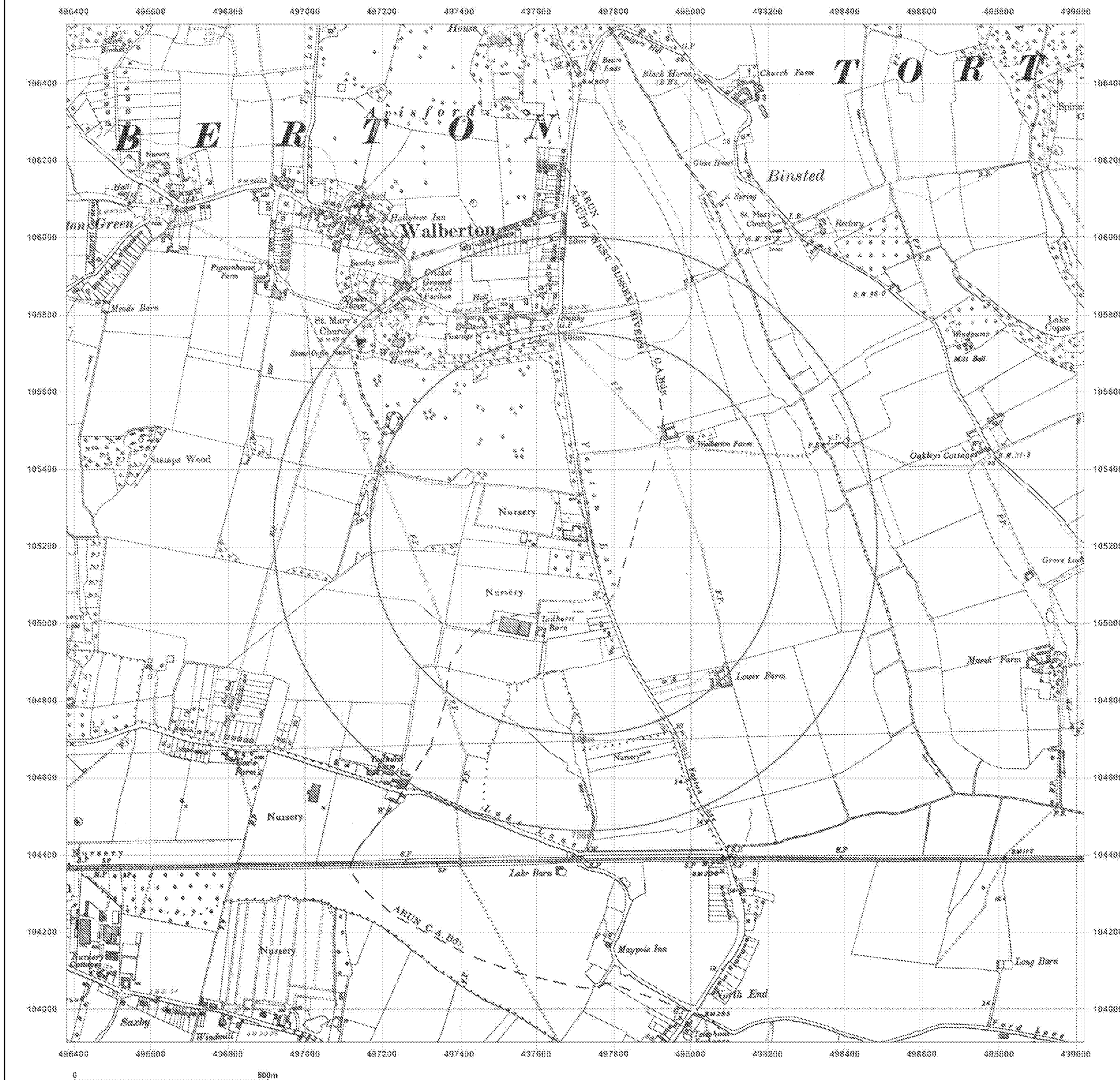


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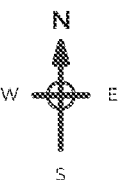
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Report Ref: GS-3427023
Grid Ref: 497700, 105234

Map Name: Provisional

Map date: 1961

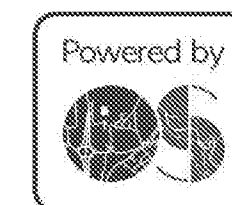
Scale: 1:10,560

Printed at: 1:10,560



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

Surveyed N/A
Revised 1961
Edition N/A
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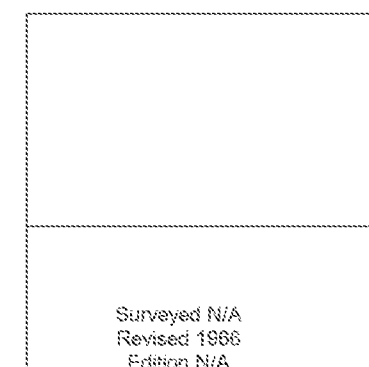
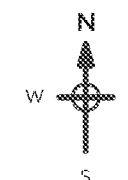
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Map Name: Provisional

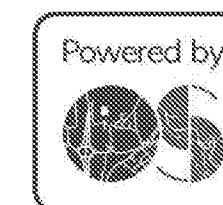
Map date: 1966

Scale: 1:10,560

Printed at: 1:10,560



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

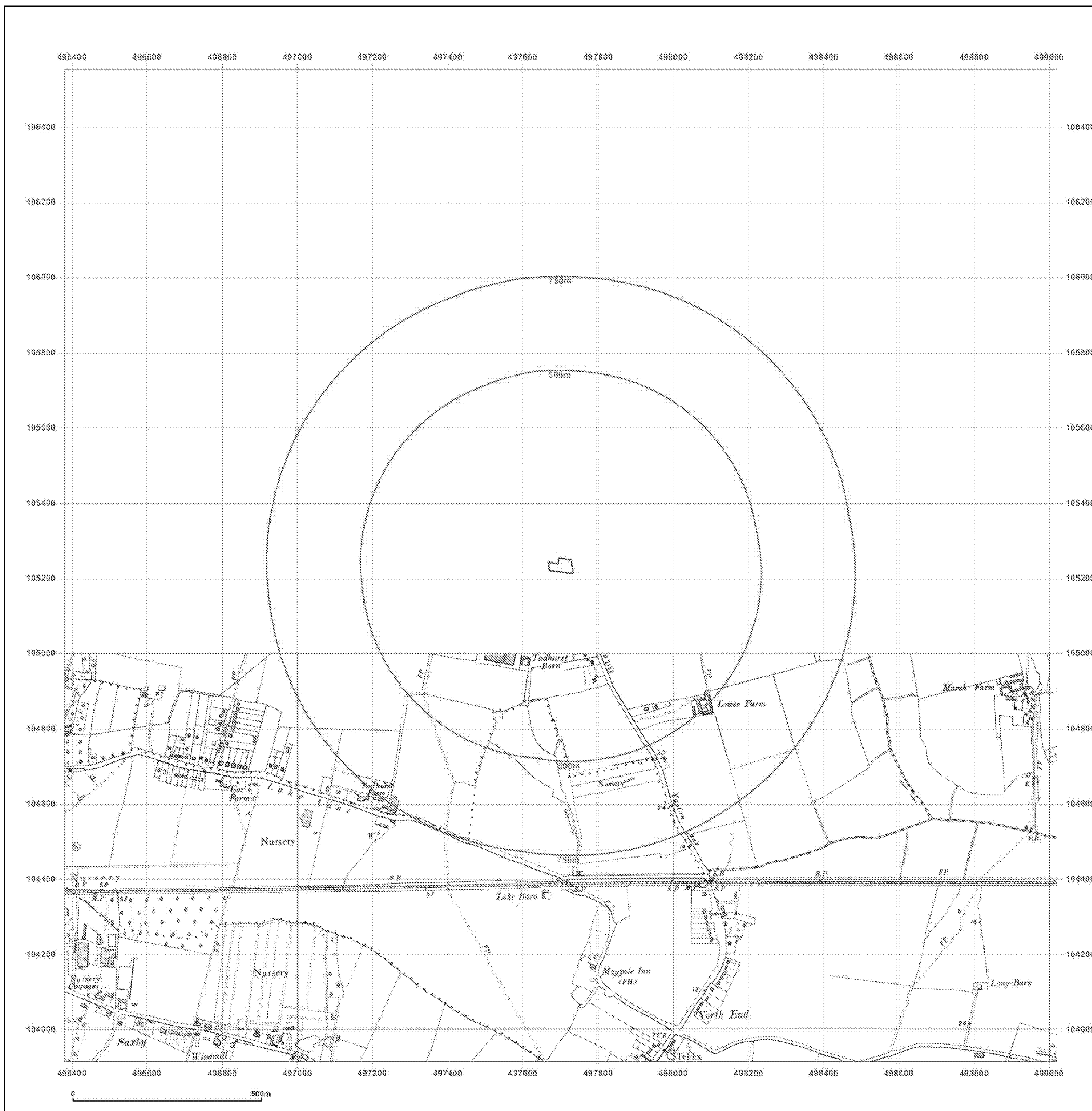


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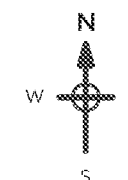
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Report Ref: GS-3427023
Grid Ref: 497700, 105234

Map Name: National Grid

Map date: 1979-1980

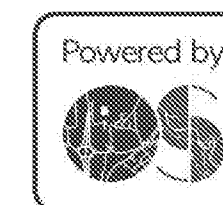
Scale: 1:10,000

Printed at: 1:10,000



Surveyed 1974
Revised 1979
Edition N/A
Copyright 1979
Levelled 1975

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

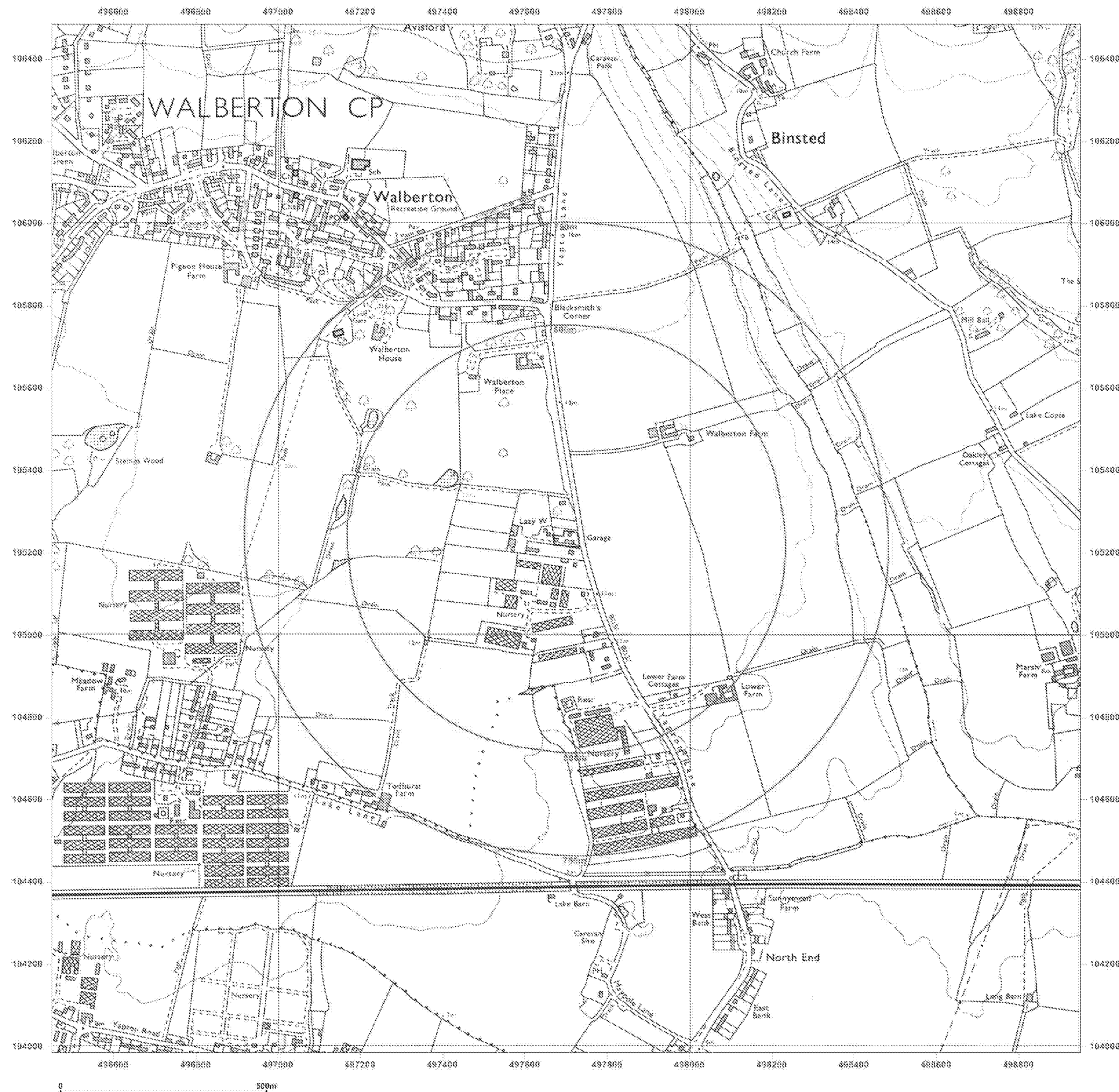


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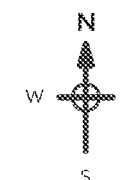
Client Ref: YE2690
Report Ref: GS-3427023
Grid Ref: 497700, 105234

Map Name: National Grid

Map date: 1990-1991

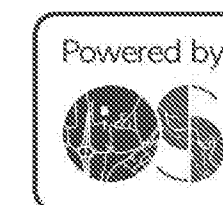
Scale: 1:10,000

Printed at: 1:10,000



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Edition N/A
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Levelled N/A

Surveyed 1991
Revised 1991
Edition N/A
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Levelled N/A



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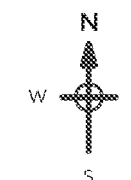
Client Ref: YE2690
Report Ref: GS-3427023
Grid Ref: 497700, 105234

Map Name: 1:10,000 Raster

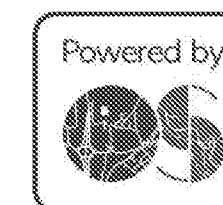
Map date: 2002

Scale: 1:10,000

Printed at: 1:10,000



2002.



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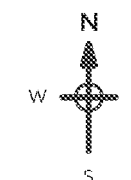
Client Ref: YE2690
Report Ref: GS-3427023
Grid Ref: 497700, 105234

Map Name: National Grid

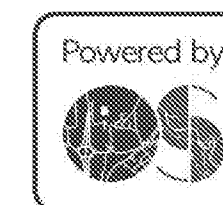
Map date: 2010

Scale: 1:10,000

Printed at: 1:10,000



2010



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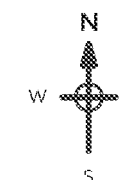
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Report Ref: GS-3427023
Grid Ref: 497700, 105234

Map Name: National Grid

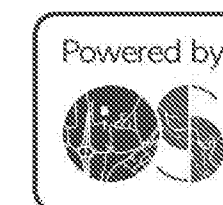
Map date: 2014

Scale: 1:10,000

Printed at: 1:10,000



2014



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APPENDIX D: Site Walkover Photographs

A.



B.



C.



D.

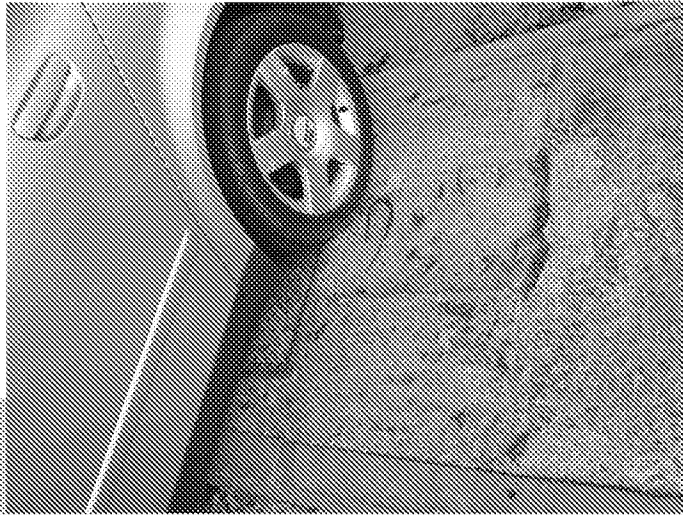



Your Environment

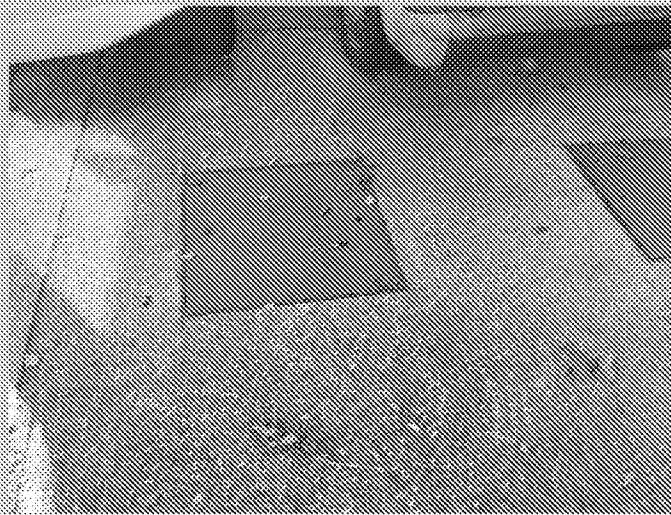
- A. Photo A: Forecourt of Progress Garage
- B. Photo B: Decommissioned petrol pumps in forecourt
- C. Photo C: Car storage in the main building
- D. Photo D: petrol carrier in the forecourt



E.



F.



G.



H.




Your Environment

E. Photo I: Decommissioned petrol pump

F. Photo F: Man hole cover probably to tanks access

G. Photo G: Man hole covers probably to tanks access

H. Photo H: Forecourt in the west



Job Reference: YE2690, Dated: October 2016

A black and white photograph of a parking lot. In the foreground, a light-colored sedan is parked, angled towards the right. Behind it, another car is partially visible. To the right, a dark-colored sedan is parked. In the background, a large, light-colored building with a flat roof is visible. Trees and bushes are on the left side of the frame. The image has a grainy, halftone texture.



Your Environment

I. Photo I: Further car storage in the west

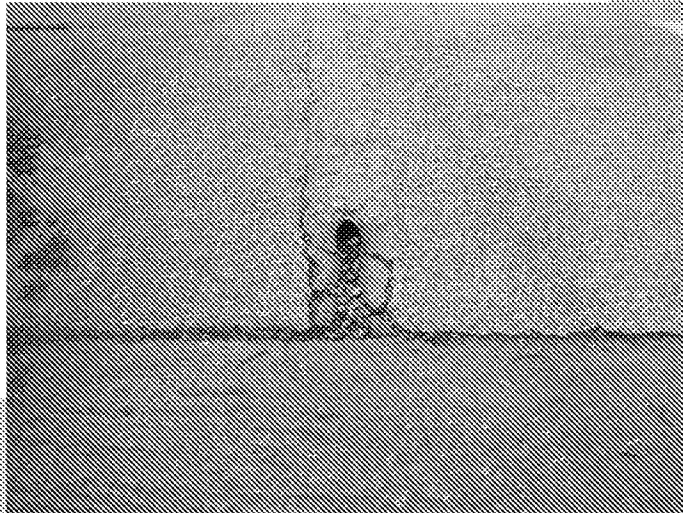
**J. Photo J: vegetation dividing sites
forecourt and rear storage area**

K. Photo K: Forecourt interceptor trap

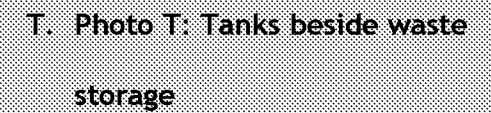
L. Photo L: Main hole cover

A black and white photograph showing a car lift in a garage. A sign on the front of the lift reads "Fiberglass Services" and "LOTUS DEALER". A car is partially visible on the lift. The garage floor is concrete, and there are some tools or equipment scattered around.

P. Photo P: Storage of engine parts
within rear of forecourt building



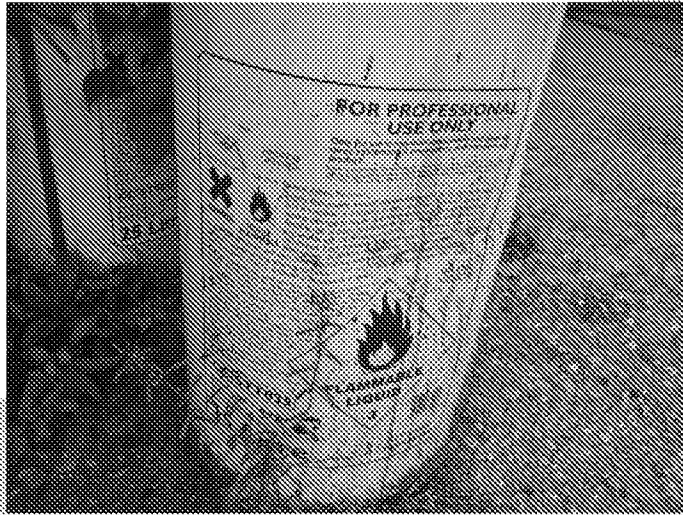
R



T.



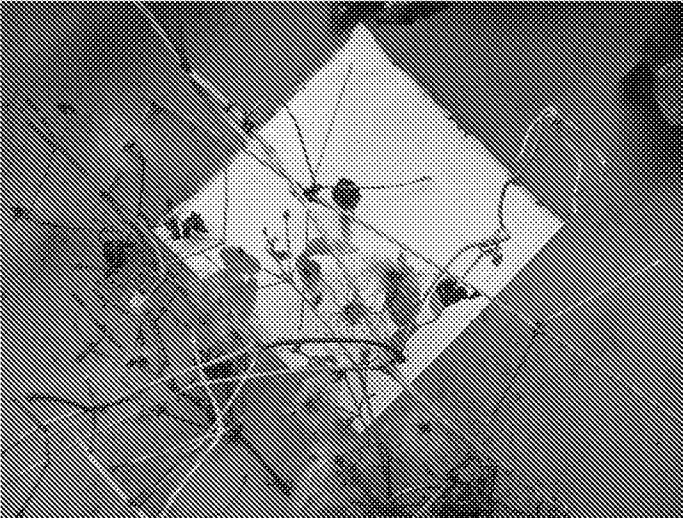
U.



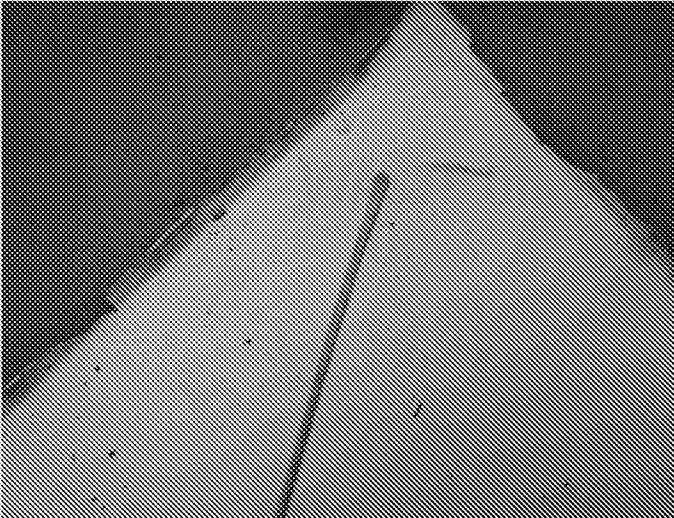
V.



W.



X.




Your Environment

U. Photo U: Close up of tanks beside
waste storage

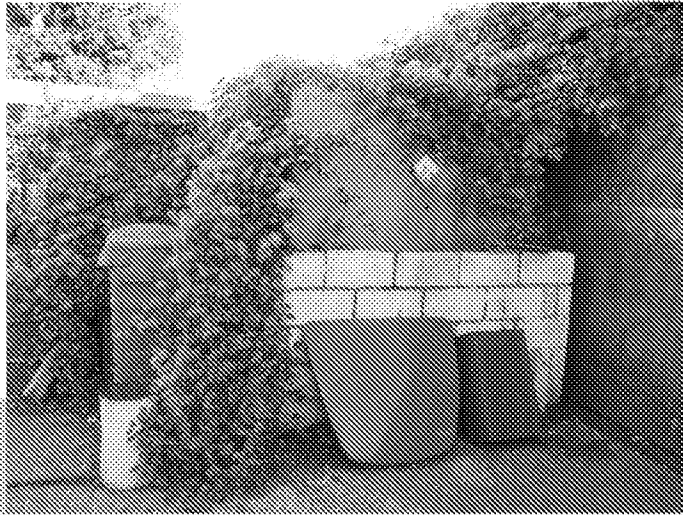
V. Photo V: Bunded tank behind
waste storage

W. Photo W: Close up of label on
bunded tank

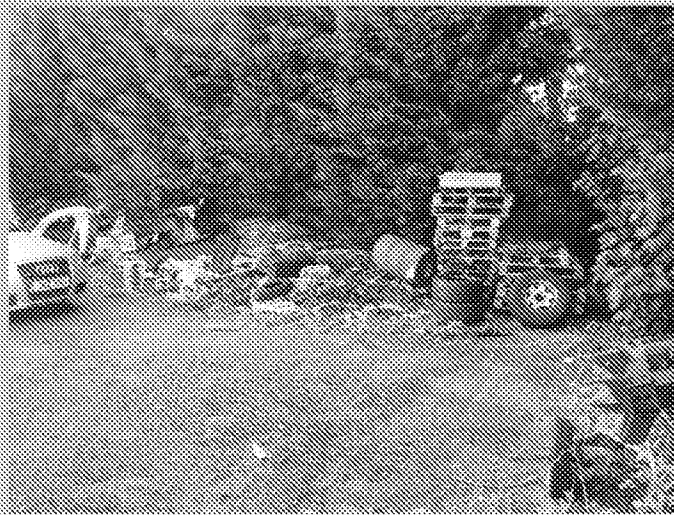
X. Photo X: Label on bunded tank:
Waste oil only



Y.



Z.



AA.



BB.




Your Environment

Y. Photo Y: Bunded tank

Z. Photo Z: Waste stored to the east
of the site

AA. Photo AA: rusting trailer to the
east of the site

BB. Photo BB: rear storage/ workshop
space

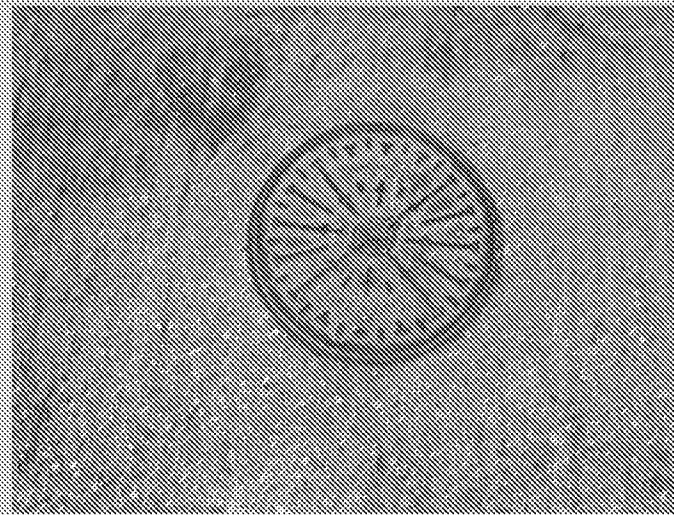


Site: Progress Garage, Walberton, Arundel
Client: Domusea
Job Reference: YE2690, Dated: October 2016

CC.



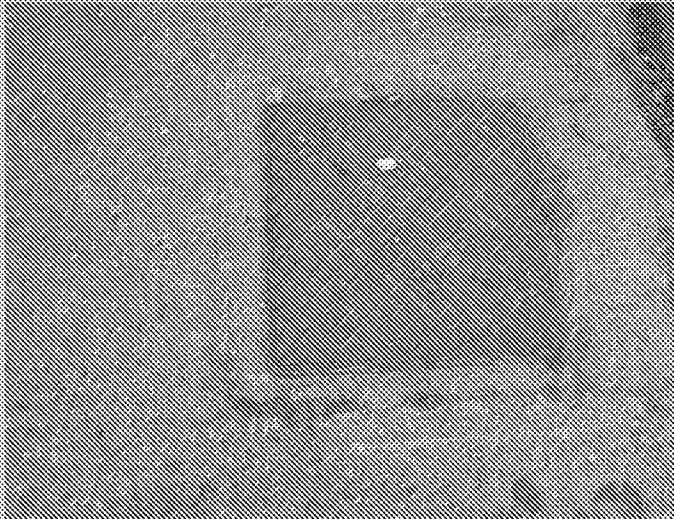
DD.



EE.



FF.



Your Environment

CC. Photo CC: Drain cover

DD. Photo DD: Drain cover

EE. Photo EE: Inside rear storage/
workshop area

FF. Photo FF: Man hole cover

GG.



HH.



II.



JJ.




Your Environment

GG. Photo GG: Rear of workshop/
storage area

HH. Photo HH: Workshop/ storage area

II. Photo II: Boiler behind workshop
area

JJ. Photo JJ: Rear boundary



KK.



LL.



MM.



NN.




Your Environment

KK. Photo KK: Eastern boundary

LL. Photo LL: Close up of waste
stored in the east of the site

MM. Photo MM: tank in waste stored to
the east of the site

NN. Photo NN: view from the security
booth in the east of the site,
across the forecourt



KK.



LL.



MM.




Your Environment

KK. Photo KK: security booth in the
east

LL. Photo LL: eastern boundary

MM. Photo MM: land use to the west



APPENDIX E: Feedback from Arun District Council

Kevin Brown

From: Matthew Kennett [REDACTED]
Sent: 20 October 2016 15:33
To: 'Veronica'
Subject: RE: FAO Contaminated Land Officer - Progress Garage

Hi Veronica,

The information we hold says

the tanks were installed pre 1953
License No.488006
There were three of them
Capacity 22730L
They were made safe by slurry filling in October 1992

thanks

Matthew Kennett
Pollution Officer
Environmental Health Department

[REDACTED]
Arun Civic Centre, Maltravers Road, Littlehampton BN17 5LF
[REDACTED]



From: Veronica [REDACTED]
Sent: 20 October 2016 10:14
To: Matthew Kennett
Subject: RE: FAO Contaminated Land Officer - Progress Garage

Morning Matthew,

Please find attached a site plan, highlighted in red, on google its labelled as Fibreglass Services if that helps!

Thanks,

Kind Regards

Veronica Bennett
Junior Geo-Environmental Engineer

