ARDENT
CONSULTING ENGINEERS

BELLWAY HOMES LTD (SOUTH LONDON)

LAND OFF CHURCH LANE, ASHINGTON

FLOOD RISK ASSESSMENT

REPORT REF.
2108611-01

February 2023

HEAD OFFICE: 3rd Floor, The Hallmark Building, 52-56 Leadenhall Street, London, EC3M 5JE **T** | 020 7680 4088

Email: enquiries@ardent-ce.co.uk

CONTENTS

	Page
1. INTRODUCTION	**4**
Scope	4
Sources of Information	5
Existing Site	5
Development Proposals	7
2. POLICY CONTEXT	**8**
National Planning Policy Framework	8
Planning Practice Guidance	9
3. BASELINE CONDITIONS	**11**
Topography	11
Existing Sewers	11
Hydrology	11
Ground conditions	12
4. SOURCES OF FLOODING	**13**
Fluvial/Tidal Flooding	13
Groundwater Flooding	14
Pluvial Flooding	14
5. FOUL AND SURFACE WATER MANAGEMENT	**16**
Existing Surface Water Discharge	16
Proposed Surface Water Drainage and Options consideration	0
Long Term Storage and Urban Creep	2
Stages of Treatment	2
Exceedance Routes	2
Future Maintenance	3
Proposed Foul Water Drainage	3
6. FLOOD RISK MANAGEMENT	**4**
7. CONCLUSIONS	**5**

APPENDICES

Appendix A Site Layout
Appendix B Topographic Survey
Appendix C Geotechnical Investigation Report
Appendix D Greenfield Runoff Calculations
Appendix E MicroDrainage Calculations
Appendix F Drainage Strategy Plan
Appendix G SuDS Treatment
Appendix H Maintenance Plan

DOCUMENT CONTROL SHEET

REV	ISSUE PURPOSE	AUTHOR	CHECKED	APPROVED	DATE
-	DRAFT	DAM	JM	BB	14/12/22
A	DRAFT	JM	JM	BB	26/01/23
B	ISSUED FOR PLANNING	JM	JM	BB	24/02/23

1. INTRODUCTION

1.1. Ardent Consulting Engineers (ACE) has been commissioned by Bellway Homes Ltd (South London), to carry out a Flood Risk Assessment (FRA) and Drainage Strategy for the proposed development at Church Lane in Ashington (herein referred to as the 'Site'). The proposed development consists of 180 units with public open space situated to the west of the Site. The public open space incorporates a sports pavilion, multi-use games area and attenuation basin.

1.2. The proposed Site currently has no planning status; however, it is an allocated site in the Ashington Neighbourhood Plan.

1.3. The wider site area is approximately 14.95ha, the developable area is approximately 6.61ha excluding the adjacent open spaces and sports fields.

1.4. The Environment Agency (EA) Flood Map shows that the Site is located within Flood Zone 1 however due to the scale of development, this FRA has been prepared to support the full planning application for the proposed development.

1.5. This FRA has been prepared in compliance with both the National Planning Policy Framework (NPPF), local planning policy and the supporting Planning Practice Guidance (PPG). It has also been written with reference to the Horsham Strategic Flood Risk Assessment and West Sussex LLFA policy for the management of surface water (2018), and West Sussex Preliminary Flood Risk Assessment (2011).

Scope

1.6. In accordance with the assessment criteria found in NPPF, this FRA will ultimately seek to;

- Ensure that flood mitigation is provided where/if required within the area to avoid detrimental impacts to third parties;
- Ensure that the impact of climate change is assessed;
- Ensure impermeable areas within the development are minimised where practicable; and
- Ensure the use of sustainable drainage systems (SuDS) is optimised in line with current best practice.

Sources of Information

1.7. Key reports/documents reviewed as part of this study are:

- Local Flood Risk Management Strategy for West Sussex County Council (May 2014);
- West Sussex Preliminary Flood Risk Assessment (2011);
- Horsham District Council Strategic Flood Risk Assessment (April 2010);
- West Sussex County Council Strategic Flood Risk Assessment (2010);
- West Sussex County Council LLFA Policy for the Management of Surface Water (November 2018);
- Topographical Survey Drawing by Maltby Surveys (Dec 2021)
- Southern Water Drainage Asset Plans;
- Flood Maps; and
- Site Investigation report by RSK Geosciences (January 2021)

Existing Site

1.8. The Site is located approximately twelve kilometres north of Worthing and twenty-two kilometres south-west of Crawley town centre. The National Grid Reference for the centre of the Site is TQ 12334 15967 (512334E, 115967N). A location plan is presented on Figure 1-1 below.

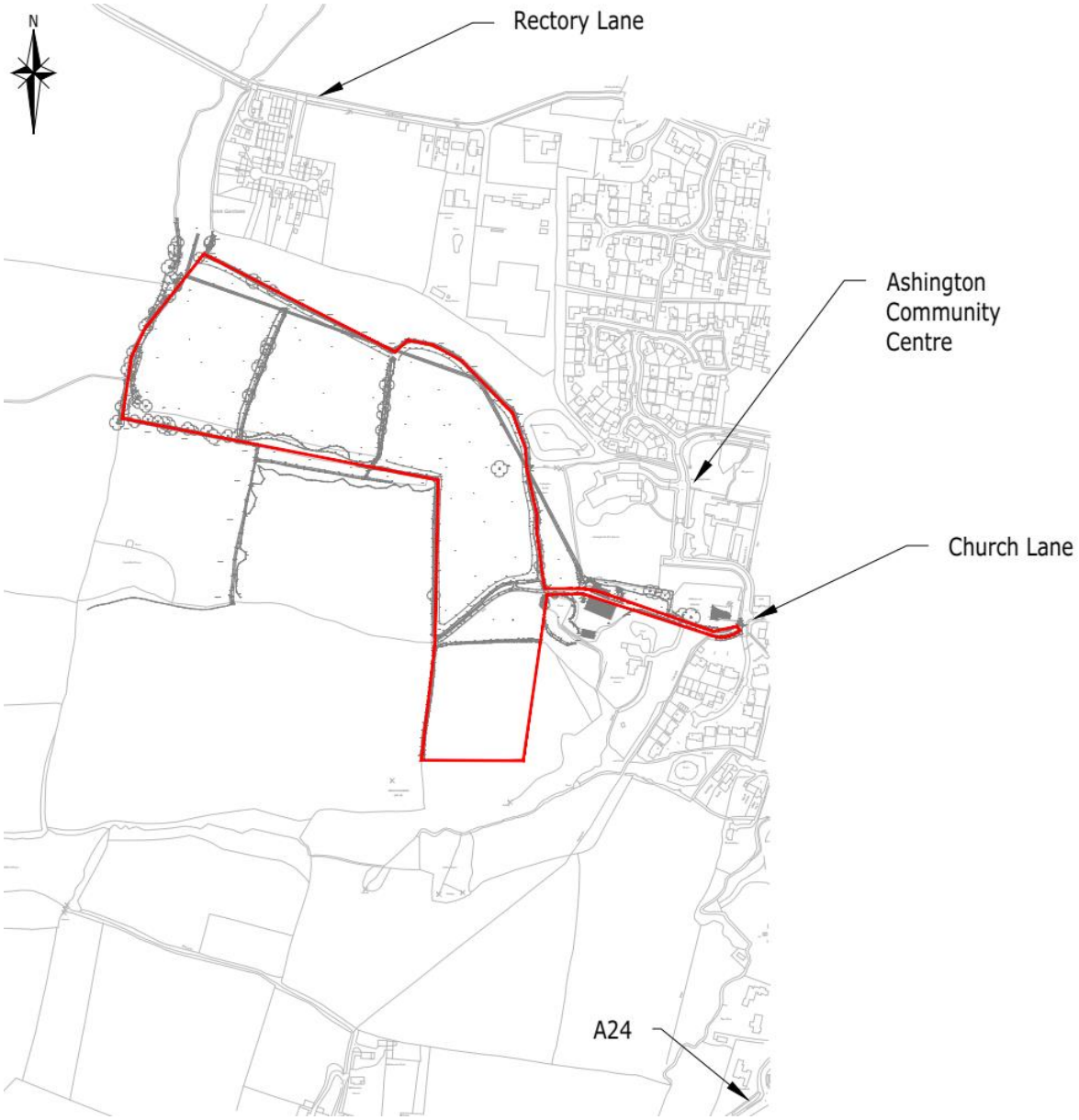


Figure 1-1: Site Location Plan

Development Proposals

1.9. The proposal is for a single development of 180 units with access provided towards the south-east of the site. West of the development, the public open space will include allotments, a multi-use games area (MUGA), a sports pavilion and associated infrastructure.

1.10. A extract of the latest site layout is shown below and included in **Appendix A**.

2. POLICY CONTEXT

National Planning Policy Framework

2.1. The National Planning Policy Framework (NPPF) was published in March 2012 and most recently updated on the 20 July 2021; paragraph 159 to 169 inclusive, establishes the Planning Policy relating to flood risk management. The Technical Guide to the NPPF has been superseded by the Planning Practice Guidance (PPG) in March 2014

2.2. The main focus of the policy is to direct development towards areas of the lowest practicable flood risk and to ensure that all development is safe, without increasing flood risk elsewhere. The main considerations are:

- Applying the Sequential Test, and if necessary, apply the Exception Test;
- Safeguarding land from development that is required for current and future flood management;
- Using opportunities offered by new development to reduce the causes and impacts of flooding; and,
- Where climate change is expected to increase flood risk so that some existing development may not be sustainable in the long-term, seeking opportunities to facilitate the relocation of development, including housing, to more sustainable locations.

2.3. The NPPF states that a Flood Risk Assessment is required *"for proposals of 1 hectare or greater in Flood Zone 1; all proposals for new development (including minor development and change of use) in Flood Zones 2 and 3, or in an area within Flood Zone 1 where proposed development or a change of use to a more vulnerable class may be subject to other sources of flooding."*

2.4. For the NPPF Exception Test to be passed:

- The development is appropriately flood resistant and resilient such that, in the event of a flood, it could be quickly brought back into use without significant refurbishment; and,
- *"A site-specific flood risk assessment must demonstrate that the development will be safe for its lifetime taking account of the vulnerability of its users, without increasing flood risk elsewhere, and, where possible, will reduce flood risk overall."*

2.5. The first point of the Exception Test is for the Local Planning Authority (LPA) to consider the supporting information provided as part of the Planning Submission and considers the proposals as a whole. The second element should be demonstrated by a suitably detailed Flood Risk Assessment.

2.6. The Planning Practice Guidance (PPG) provides the methodology required to undertake the Sequential and Exception Tests. The PPG classifies the proposed residential element of the development as 'More Vulnerable', therefore in Flood Zone 3 the Exception Test would also need to be passed for the scheme.

Planning Practice Guidance

2.7. The accompanying practice guidance to the NPPF provides additional guidance to local planning authorities to ensure the effective implementation of the planning policy set out in the National Planning Policy Framework on development in areas at risk of flooding.

2.8. The practice guidance provides supporting information on:

- The application of the sequential approach and Sequential and Exception Tests;
- Measures to reduce flood risk to acceptable levels;
- How to manage residual risks; and
- Guidance on how to take climate change into account.

2.9. The May 2015 update to the practice guidance provides additional guidance on Sustainable Drainage Systems (SuDS), including:

- The importance of SuDS;
- When SuDS should be considered;
- The SuDS discharge hierarchy;
- Factors a local authority will address when considering SuDS as part of a planning application;
- When SuDS are inappropriate and relevant flood risk consultees;
- Applicability of Defra's Non-Statutory Technical Standards for Sustainable Drainage Systems;
- Design and construction cost considerations;

- Operation and maintenance considerations; and
- Where to go for further SuDS advice.

2.10. As part of the May 2015 update, the practice guidance provides details on the parties responsible for assessing the suitability of SuDS practices. As per paragraph 84 from the practice guidance:

"The decision on whether a sustainable drainage system would be inappropriate in relation to a particular development proposal is a matter of judgement for the local planning authority. In making this judgement the local planning authority will seek advice from the relevant flood risk management bodies, principally the lead local flood authority, including on what sort of sustainable drainage system they would consider to be reasonably practicable"

Sustainable Drainage Systems - Non-statutory technical standards for sustainable drainage systems (March 2015)

2.11. The Non-statutory technical standards for sustainable drainage systems were published in March 2015. This document sets out non-statutory technical standards for sustainable drainage systems. They should be used in conjunction with the Planning Practice Guidance. In addition, the Best Practice Guidance for the Planning Practice Guidance was published in July 2015.

2.12. The Local Planning Authority (LPA) may set local requirements for planning permission that have the effect of more stringent requirements than these non-statutory technical standards.

2.13. In addition, SuDS should be designed in accordance with CIRIA 753 SuDS Manual, which represents current best practice.

Regional & Local Planning Policy Review

2.14. In the preparation of this report, specific reference is made to the following regional and local planning policy pertinent to flood risk:

- Horsham District Planning Framework (Nov 2015);
- Horsham District Council Strategic Flood Risk Assessment (April 2010);
- Local Flood Risk Management Strategy for West Sussex County Council (May 2014);
- West Sussex County Council Strategic Flood Risk Assessment (2010);

- West Sussex LLFA Policy for the Management of Surface Water (November 2018).

2.15. Collectively the above documents provide a strategy for not only assessing flood risk at a regional level but also guidance on the management of surface water on a site-specific basis.

3. BASELINE CONDITIONS

Topography

3.1. A topographical survey was carried out by Maltby Surveys in December 2021 . A copy of the topographic survey is included in **Appendix B** and shows that the site falls generally from the south-east corner towards the north-west. The highest ground levels are circa 30.50m AOD and the lowest levels recorded are circa 24.50m AOD. The site is surrounded by several ditches, forming the northern and western boundary, with another ditch running north through the centre of the site.

3.2. The average gradient across the site falls at approximately 1 in 140 toward the north-west corner.

3.3. A review of the historical maps indicates that the site and the surrounding area have been utilised as agricultural land since the earliest ordnance survey map issued in 1879. The topographic survey plans show the site remains predominantly ex agricultural land with ditches and trees present on site.

Existing Sewers

3.4. Sewer records obtained from Southern Water indicate that there are 150mm and 225mm diameter foul sewers located on Church Lane flowing north toward Rectory Lane. Church Lane is to the east of the site and therefore on the high side of the site. This will require a foul water pump station to be installed.

3.5. There is no suitable surface water network within or adjacent to the site. It is proposed that the site will drain (to greenfield run-off rates) via gravity to the ditch in the north-west corner of the site.

Hydrology

3.6. There are no designated rivers within proximity of the site. However, a small unnamed watercourse begins in the south eastern portion of the site, running north towards a farm pond which is just outside of the eastern boundary. The watercourse then flows out of the

pond, north along the eastern side of the boundary. At the north eastern corner of the site, the watercourse takes a turn west, where it runs parallel to the northern site boundary, roughly 20m within the site boundary. It then runs almost exclusively within ditches surrounded by overgrown hedgerow.

Ground conditions

3.7. According to the British Geological Survey (BGS) online datasets, for the majority of the site the bedrock is made up of the Weald Clay Formation overlain by occasional head deposits of clays, silts, sands and gravels.

3.8. An intrusive ground investigation was undertaken by RSK Geosciences in January 2021. The investigation confirmed that the Site is underlain by a variable thickness of topsoil over either Atherfield or Weald Clay. A copy of the report is included in **Appendix C**.

3.9. Infiltration testing was carried out at three locations across the site. The results of the testing indicate that test pits did not empty sufficiently over a 4-hour period to obtain BRE 365 compliant results. Insufficient infiltration rates were observed across all soakaway tests and indicate that ground conditions at the Site would not support infiltration drainage methods.

3.10. The lack of permeability and presence of clay soils has been reflected in the microdrainage parameters below when calculating greenfield runoff rates.

4. SOURCES OF FLOODING

4.1. The NPPF requires flood risk from the following sources to be assessed, each of which are assessed separately below:

- Fluvial sources (river flooding);
- Tidal sources (flooding from the sea);
- Groundwater sources;
- Pluvial sources (flooding resulting from overland flows);
- Sewer / Drainage flooding;
- Artificial sources, canals, reservoirs etc.; and,
- It also requires the risk from increases in surface water discharge to be assessed (surface water management).

Fluvial/Tidal Flooding

4.2. The Environment Agency's mapping indicates that the majority of the Site is located within Flood Zone 1. This means that the site has less than a 1 in 1,000 (0.1%) annual probability of river or sea flooding (low probability). An extract from the Environment Agency's Flood Risk Map for Planning is shown in **Figure 4-1** below.

Figure 4-1: Excerpt from EA Flood Risk Map for Planning

Groundwater Flooding

4.3. According to the Environment Agency's (EA) mapping website, the site is not located within a Source Protection Zone.

4.4. The Horsham SFRA does not include information for local groundwater flood risk but refers to Groundwater Vulnerability Mapping by the EA. The mapping shows the site to sit between "Low" and "Unproductive", therefore considered to be at very low risk of groundwater flooding.

4.5. Some trial pits and window samples installed on site as part of the site investigation encountered seepage of groundwater at depths between 1.5m and 2.4m however this is thought to represent perched water rather than a continuous body. Refer to **Appendix C** for copies of the trial pit logs.

Pluvial Flooding

4.6. The EA flood map for surface water indicates that the majority of the Site is at very low risk to low risk of surface water flooding (probability between <0.1% - 1.0% AEP). The area shown as high risk is to be expected due to the watercourses surrounding the site. An excerpt from the Environment Agency Flood Risk Map for Surface Water is presented in **Figure 4-2** below.

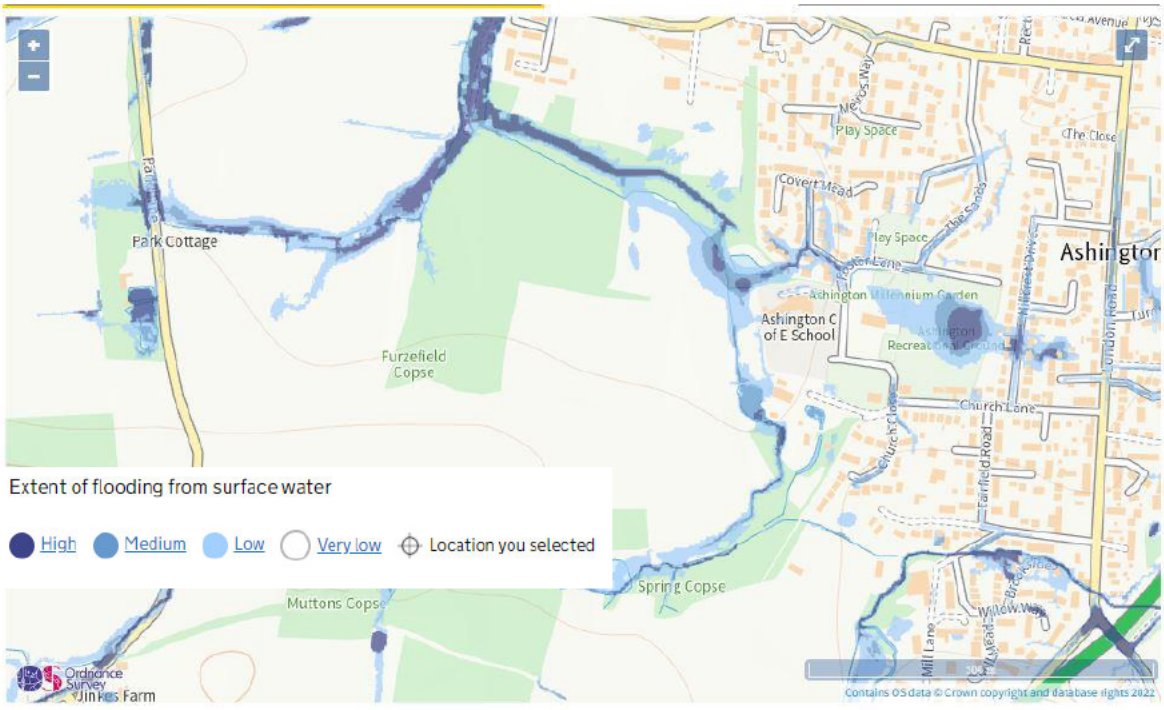


Figure 4-2: Excerpt from EA Flood Risk Map for Surface Water

4.7. The surface water mapping and topography of the site show that the site is within a separate catchment to the flood risk affecting Mill Lane referenced in 'Policy ASH7: Addressing Flooding in Mill Lane' in the Ashington Neighbourhood Plan. This development is not considered suitable to alleviate flooding in the adjacent catchments and so the design will focus on managing the flood risk of the site itself.

Artificial Sources

4.8. The Environment Agency's flood risk from reservoirs map indicates that the Site is not within an area at risk of flooding from reservoirs, canals or other artificial water bodies.

5. FOUL AND SURFACE WATER MANAGEMENT

5.1. The LLFA is West Sussex County Council, who are responsible for reviewing the surface water drainage systems for major developments (ten dwellings or more).

5.2. A non-statutory technical standard for sustainable drainage systems was published by the Department of Environment, Food and Rural Affairs in March 2015 to guide planning authorities, designers and developers on the use of SuDS. A Best Practice Guidance was published by the Local Authority SuDS Officer Organisation (LASOO) in July 2015 to accompany the aforementioned document.

5.3. The CIRIA guidance C753 (The SuDS Manual) has been used to determine the appropriate SuDS strategy, which considers the spatial and environmental constraints of the site.

5.4. The Guidance to Support the NPPF (Climate Change Allowance for Planners) was updated in February 2019. The new guidance document considers 'Upper end' and 'Central' scenarios for peak rainfall intensity allowances in small urban catchments due to climate change,.

5.5. In May 2022 the EA updated peak rainfall allowances to reflect the latest projections which resulted in allowances being sub-divided into management catchments rather than national allowances. The site sits in the Adur and Ouse Management Catchment and the central and upper allowances are shown in **Table 5-1** below.

Table 5-1: Peak Rainfall Intensity Allowance in Small Urban Catchments

Peak Rainfall Scenario	Total Potential Change for 2040 to 2060	Total Potential Change for 2061 to 2115
Upper end	45%	45%
Central	20%	25%

5.6. Therefore, under this guidance, an allowance of 45% for the effects of climate change would achieve the policy requirements for the proposed development.

Existing Surface Water Discharge

5.7. The Topographical survey indicates that the Site slopes towards the north-western corner. Surface water runoff from the site will run-off towards the surrounding field ditches.

5.8. In line with CIRIA guidance C753 (The SuDS manual), greenfield runoff rates have been calculated using the ICP SuDS method using MicroDrainage and are included in **Appendix D**. The existing Greenfield run off rates have been calculated for the proposed developable areas of the site as follows:

- 1 Year Greenfield runoff = 12.9 l/s;
- QBar Greenfield runoff = 15.2 l/s;
- 30 Year Greenfield runoff = 34.4 l/s; and
- 100 Year Greenfield runoff = 48.4 l/s.

5.9. Based on the ground condition encountered the soil index value is anticipated to be 0.400 however 0.300 has been used in the greenfield runoff calculations for robustness.

Soil Index	General Description	Soil Type
0.150	i) Well drained permeable sandy or loamy soils and shallower analogues over highly permeable limestone, chalk, sandstone or related drifts. ii) Earthy peat soil drained by dikes and pumps. iii) Less permeable soils in valleys.	1
0.300	i) Very permeable soils with shallow groundwater. ii) Permeable soils over rock or frangipani, commonly on slopes in western Britain associated with smaller areas of less permeable wet soils. iii) Moderately permeable soils, some with slowly permeable subsoils.	2
0.400	i) Relatively impermeable soils in boulder and sedimentary clays and in alluvium, especially in eastern England. ii) Permeable soils with shallow groundwater in low lying areas. iv) Mixed areas of permeable and impermeable soils in approximately equal proportions.	3
0.450	v)i) Clayey, or loamy over clayey soils with an impermeable layer at shallow depth.	4
0.500	Soils of the wet upland i) With peaty or humose surface horizons and impermeable layers at shallow depth. ii) Deep raw peat associated with gentle upland slopes or basin sites. iii) Bare rock cliffs and screes. vi) Shallow, permeable rocky soil on steep slopes.	5

Proposed Surface Water Drainage and Options consideration

5.10. In line with CIRIA guidance C753 (The SuDS manual), the drainage hierarchy needs to be considered and is listed below in order of preference:

- Store rainwater for later use;
- Use infiltration techniques, such as porous surfaces in non-clay areas;
- Attenuate rainwater by storing in tanks or sealed water features for gradual release to a watercourse;
- Discharge rainwater direct to a watercourse;
- Discharge rainwater to a surface water drain; and
- Discharge rainwater to the combined sewer.

Store rainwater for later use

5.11. The potential to reuse a percentage of the rainwater from the site on the proposed development should be explored further during detail design, in particular through the use of water butts. This assessment considers the worst-case runoff rates and assumes this option is not viable.

Use infiltration techniques, such as porous surfaces in non-clay areas

5.12. RSK Geosciences has confirmed that infiltration is not suitable for the site due to the clay soils and therefore is not feasible as a means of surface water discharge.

Discharge to a watercourse at greenfield rates

5.13. There is an existing ditch in the north-west of the Site, which the proposed drainage network will discharge to.

Proposed Sustainable Drainage Systems (SuDS)

5.14. **Table 5-2** below appraises the constraints and opportunities for the use of SuDS techniques within the Site and it adopts the management train approach outlined in CIRIA C753 'The SuDS Manual'.

Table 5-2: C753 SuDS Components - Management Train Approach

Type:	**Infiltration Devices** (Source Control)
Constraints:	The site is underlain by clay with poor infiltration capabilities.
Opportunities:	None.
Type:	**Lined Permeable Paving** (Source Control)
Constraints:	Permeable paving is not likely to be adopted by the local highway authority
Opportunities:	None within the main carriageways due to adoption limitations.
Type:	**Swales/Filter Drains** (Permeable Conveyance)
Constraints:	Limited opportunities within the development due to the development density and existing trees.
Opportunities:	A swale could be utilised before the water discharges into the ditch at the northwest of the site and adjacent to the proposed site access road.
Type:	**Attenuation Basin / Ponds** (end of pipe treatment)
Constraints:	Attenuation basins usually require large land take to accommodate enough storage for the whole development
Opportunities:	As there is an abundance of open space adjacent to the development area, an attenuation basin can be provided to the west of the site.
Type:	**Buried Storage** (end of pipe treatment)
Constraints:	None.
Opportunities:	None required at this stage, as a Basin can provide sufficient storage.

5.15. After consideration of the CIRIA C753 management train approach, the most viable SuDS option is the use of attenuation basins and swales/ditches.

5.16. The use of basins and swales in series will provide appropriate water quality treatment and will remove sediment prior to discharging into the existing ditch.

5.17. The development has been designed to discharge at the relevant greenfield rates for the site, prior to discharging to the existing ditch to the northwest of the site. The total storage required for the whole site is calculated to be 2774m^3 and has been provided within the attenuation basin on site.

5.18. The Site will discharge at the QBar greenfield runoff rate up to and including the 1 in 100 year rate plus 45% climate change storm event, mimicking the natural runoff of the site.

5.19. The surface water calculations are based on a measured impermeable area of 3.46ha, approximately 52% of the developable Site area. These are included in **Appendix E.**

5.20. The Proposed Drainage Strategy for the Site, drawing numbers 2108611-003/004 have been included in **Appendix F**.

Long Term Storage and Urban Creep

5.21. There will be an increase of impermeable area at the Site and subsequently an increase in the volume of runoff. As the site is discharged at Qbar rate no long term storage will be required.

Stages of Treatment

5.22. In terms of surface water treatment, the integration of the SuDS features outlined above allow for a SuDS management train approach to be applied to ensure that surface water runoff is of sufficient quality, so as not to cause pollutant-based detriment to the receiving ditch.

5.23. In determining the necessary SuDS treatment methods, reference is made to Table 26.2, Table 26.3 and Table 26.4 of the SuDS Manual (CIRIA C753), which have been duplicated in **Appendix G**. The tables outline the 'Simple Index Approach' which sets out the water treatment criteria in relation to land use and SuDS performance evidence. To ensure sufficient treatment is proposed for surface waters, the total pollution mitigation index of the selected SuDS methods must equal or exceed the pollution hazard index for the site.

5.24. The assessment has been carried out based on the use of a swales and an attenuation basin, which will provide treatment upstream of the discharge to the existing watercourse which will aid in pollution control.

Exceedance Routes

5.25. As a result of heavy or extreme storm events it is sometimes unavoidable for the capacities of sewers and other drainage systems to be exceeded. Drainage

exceedance will occur when the rate of surface water runoff exceeds the inlet capacity of the drainage system, when the receiving water or pipe system becomes overloaded, blocked or when the outfall becomes restricted due to flood levels in the receiving water.

5.26. The routes will ultimately mimic the current flow routes associated with the existing site as a result of the topography. Flow arrows have been added to the Proposed Drainage Strategy Plan within **Appendix F** to indicate the exceedance routes throughout the development.

Future Maintenance

5.27. It is the intention that the piped elements of the surface water network (up to the outfall into the proposed swale) will be adopted by Southern Water under a S104 agreement. The extent of the network proposed for adoption will be addressed at detailed design stage and agreed with Southern Water.

5.28. A management company or the LLFA will be appointed to maintain the SuDS elements of the surface water drainage strategy if required. Funding of the maintenance regime will be via the yearly maintenance fees from the development. All maintenance should be in accord with the best practices and the CIRIA Manual C753.

5.29. A maintenance and management plan for the SuDS features is included in **Appendix H.**

Proposed Foul Water Drainage

5.30. Due to the topography of the site, an adoptable pumping station will be required to drain the foul water.

5.31. It is proposed that the site will drain to the low point in the north-west of the site. The rising main will then run east and connect into the existing Southern Water foul network. The length of the proposed rising main is circa 815m.

5.32. The development foul discharges into MH 9801, which is owned by Southern Water.

6. FLOOD RISK MANAGEMENT

6.1. This site-specific FRA aims to demonstrate that the development will be safe for its lifetime taking account the vulnerability of its users, without increasing flood risk elsewhere, and, where possible, reduce flood risk overall.

6.2. The development is at low risk of flooding from various sources and the proposed runoff will be managed and discharged at a controlled rate to mimic the existing runoff.

6.3. The surrounding ditches will be maintained as part of the ongoing maintenance of the wider Site and this will help mitigate any localised flooding.

6.4. To minimise the impact on drainage during construction, regular sediment control should be implemented during any landscaping works to ensure the protection of the surrounding existing watercourses. Watercourse crossings/culverts shall be installed where appropriate to manage construction traffic and maintain the functionality of the watercourses at all times.

7. CONCLUSIONS

7.1. According to the EA the site is assessed to be within Flood Zone 1. The purpose of the site is suitable under these conditions.

7.2. Flood risk from groundwater, sewers, artificial sources, pluvial sources and overland flows are all considered to be low.

7.3. The intrusive ground investigation, carried out by RSK Geosciences, includes soakage testing and confirms that infiltration is not feasible on the Site.

7.4. In accordance with the requirements of Chapter 10 of the NPPF, the proposed development has been assessed for flood risk. Consideration has been given to flood risks affecting the Site, and also to flood risk elsewhere caused by the anticipated development. Based on our understanding of the site setting and the proposed development, it is considered that the proposed development can be constructed and operated safely and will not increase flood risk elsewhere.

Appendix A

Site Layout

Bellway

Copyright © 2023 DHA Architecture Ltd. All rights reserved. Unauthorised reproduction and distribution permitted for the sole purpose of the planning of this named development.

Ordnance Survey data © Crown Copyright. All rights reserved. - Licence no. 100022432.

Do not scale other than for Local Authority Planning purposes.

presentation planning layout

dha architecture ltd

Brooklands Farm Business Park
Bottle Lane
Binfield
Berkshire
RG42 5QX

t. 0118 934 9666
e. surname@dhaarchitecture.co.uk
w. www.dhaarchitecture.co.uk

land west of ashington

Presentation Planning Layout

17.01.2023 created
1:500 @ A0 scaling
SB/JeH contact

rev date by details

reference 062009-BEL-SL-01 - revision

Appendix B

Topographic Survey

A

B

C

E

F

H

J

N

W

E

S

0 900
R G R D

S V

0 00
G R D

S S

S

S 0 0

Ma by Su veys d

B Y S

RICS

S V Y

0

A

0

0

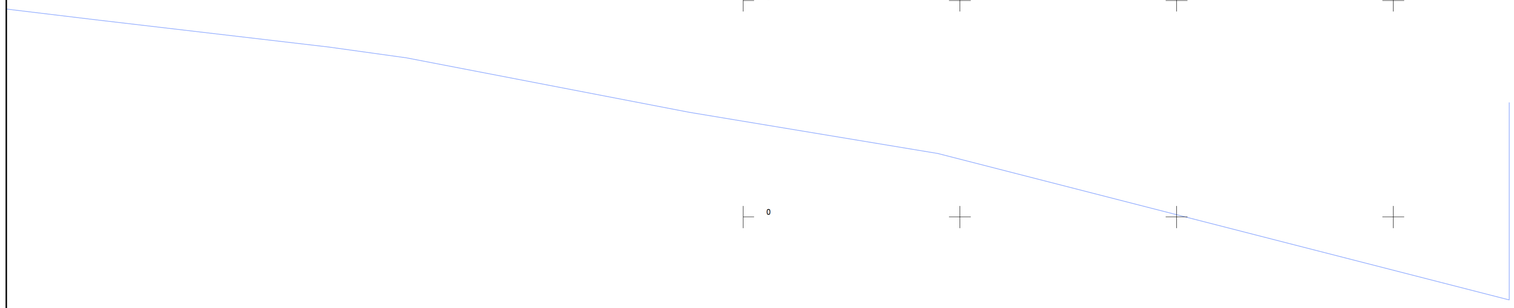
00

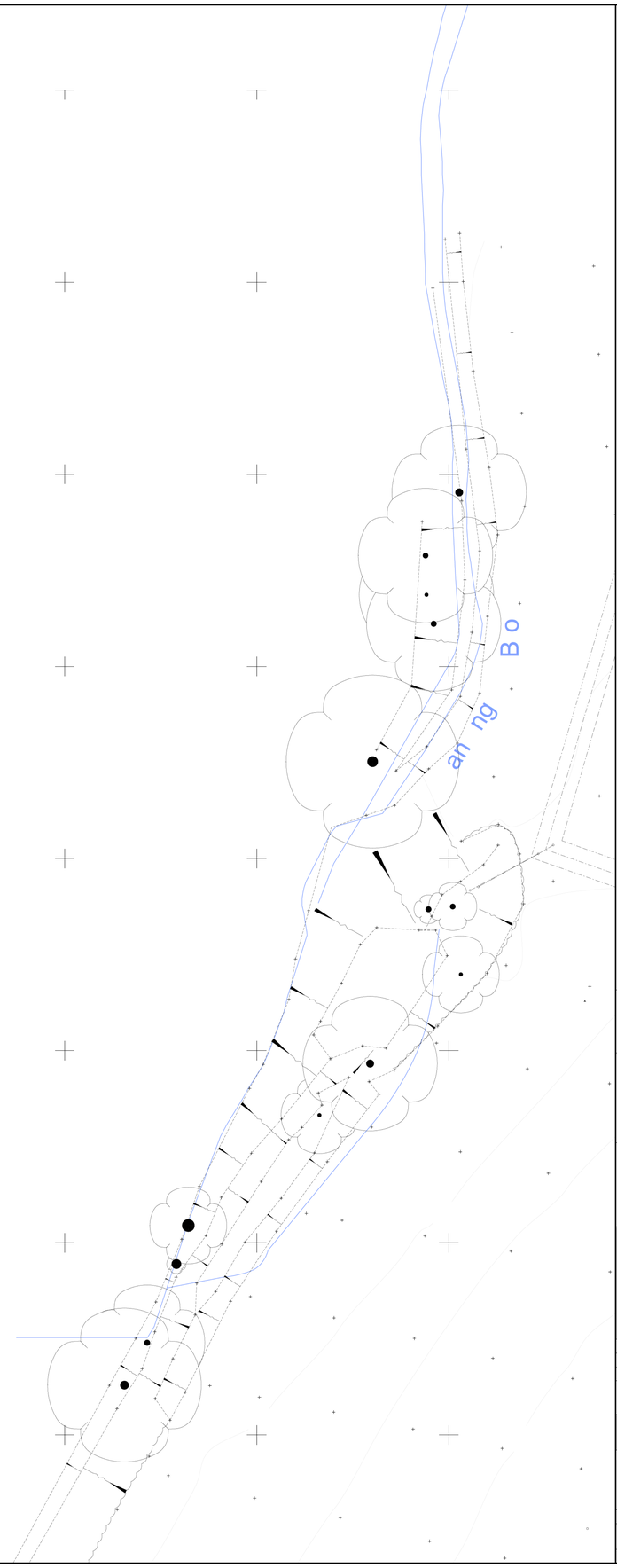
0

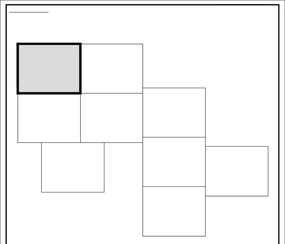
0

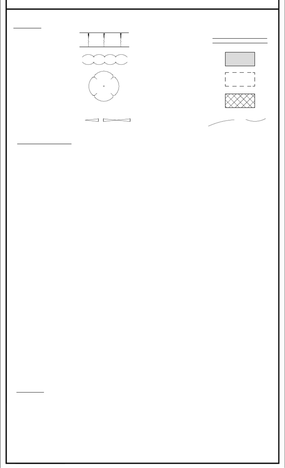
0

00









0 900
R G R D

S V

0 00
G R D

S S

S

S S 0 0

Ma by Su veys d

B Y S

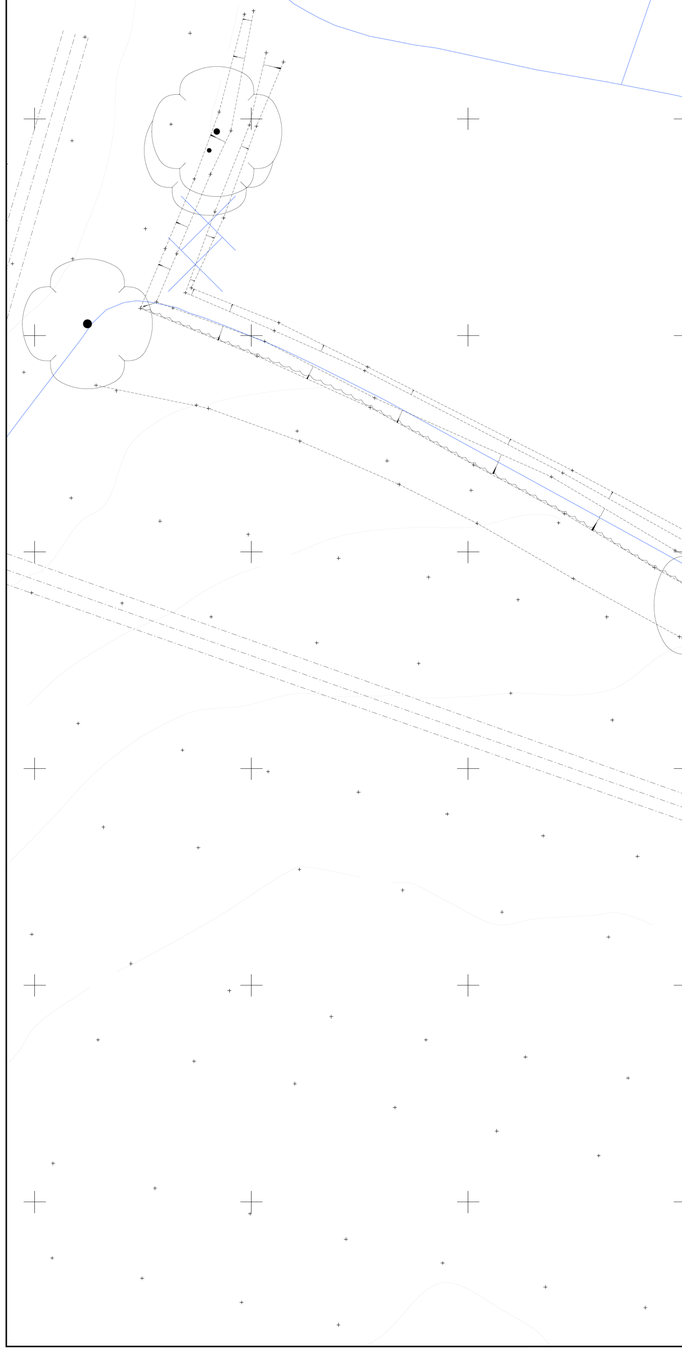
RICS

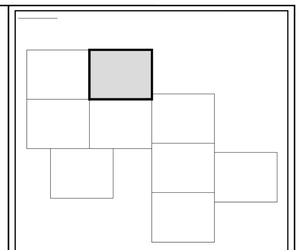
S V Y

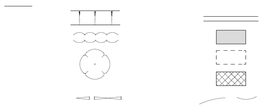
0

B

Penn Gardens







0 900
R G R D

S V

0 00
G R D

S S

S

S S 0 0

Ma by Su veys d

B Y S

RICS

S V Y

0 B

C

0

0

0

00

0 0

0 0

0 0

N

W E

S

0 900
R G R D

S V

0 00
G R D

S S

S

S S 0 0

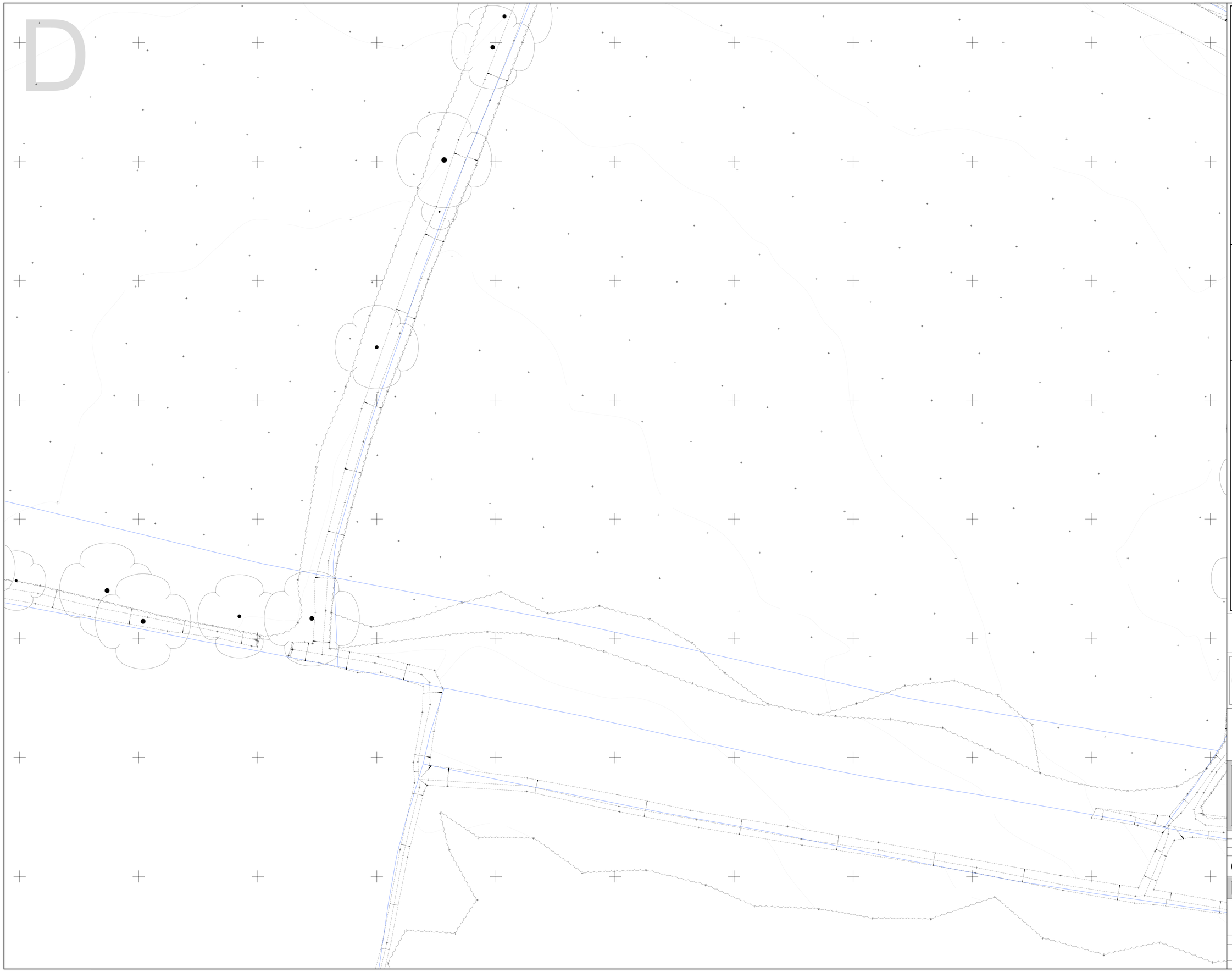
Ma by Su veys d

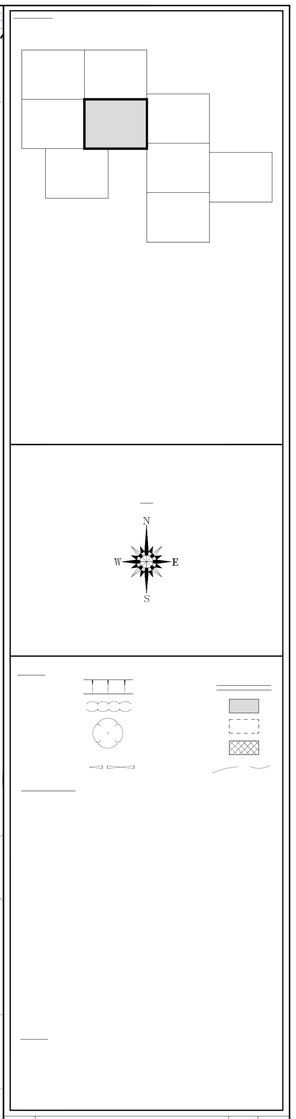
B Y S

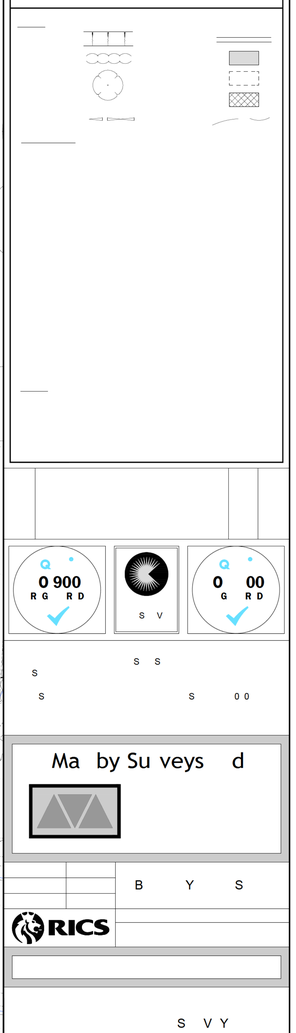
RICS

S V Y

0







Q 0 900 RG RD

S V

Q 0 00 G RD

S S

S

S S 00

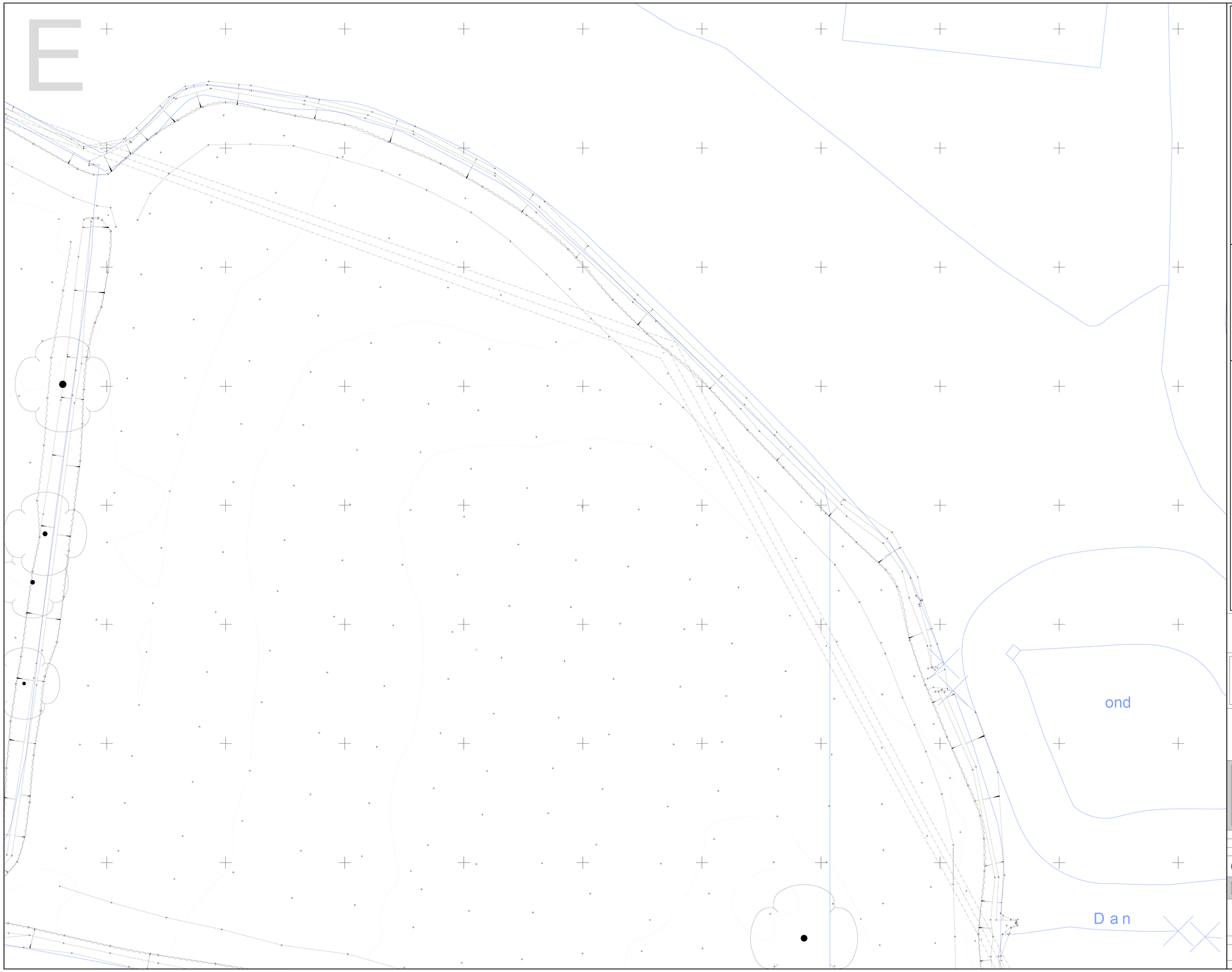
Ma by Su veys d

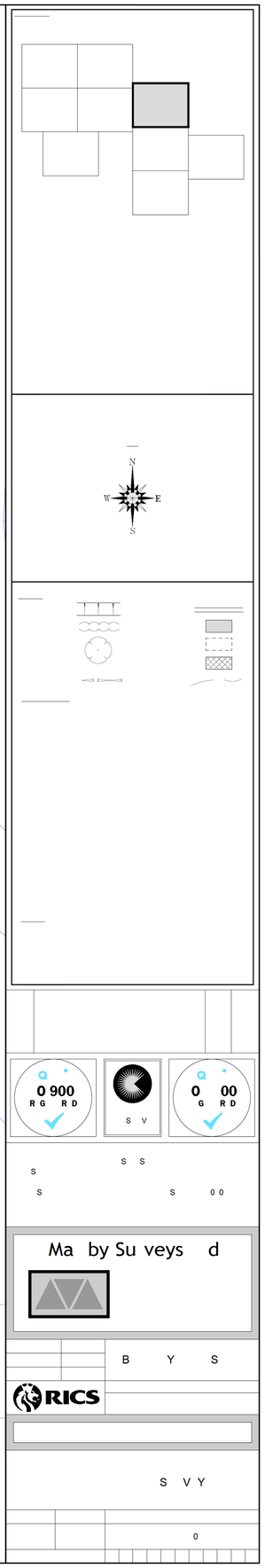
B Y S

RICS

S V Y

0


E
ond
Dan


N
W
E
S
0 900
RG RD
S V
0 00
G RD
S S
S
S
S 00
Ma by Su veys d
B Y S
RICS
S V Y
0

F

ond

u ze ie d Copse

N

W E

S

0 900
R G R D

S V

0 00
G R D

S S

S

S 0 0

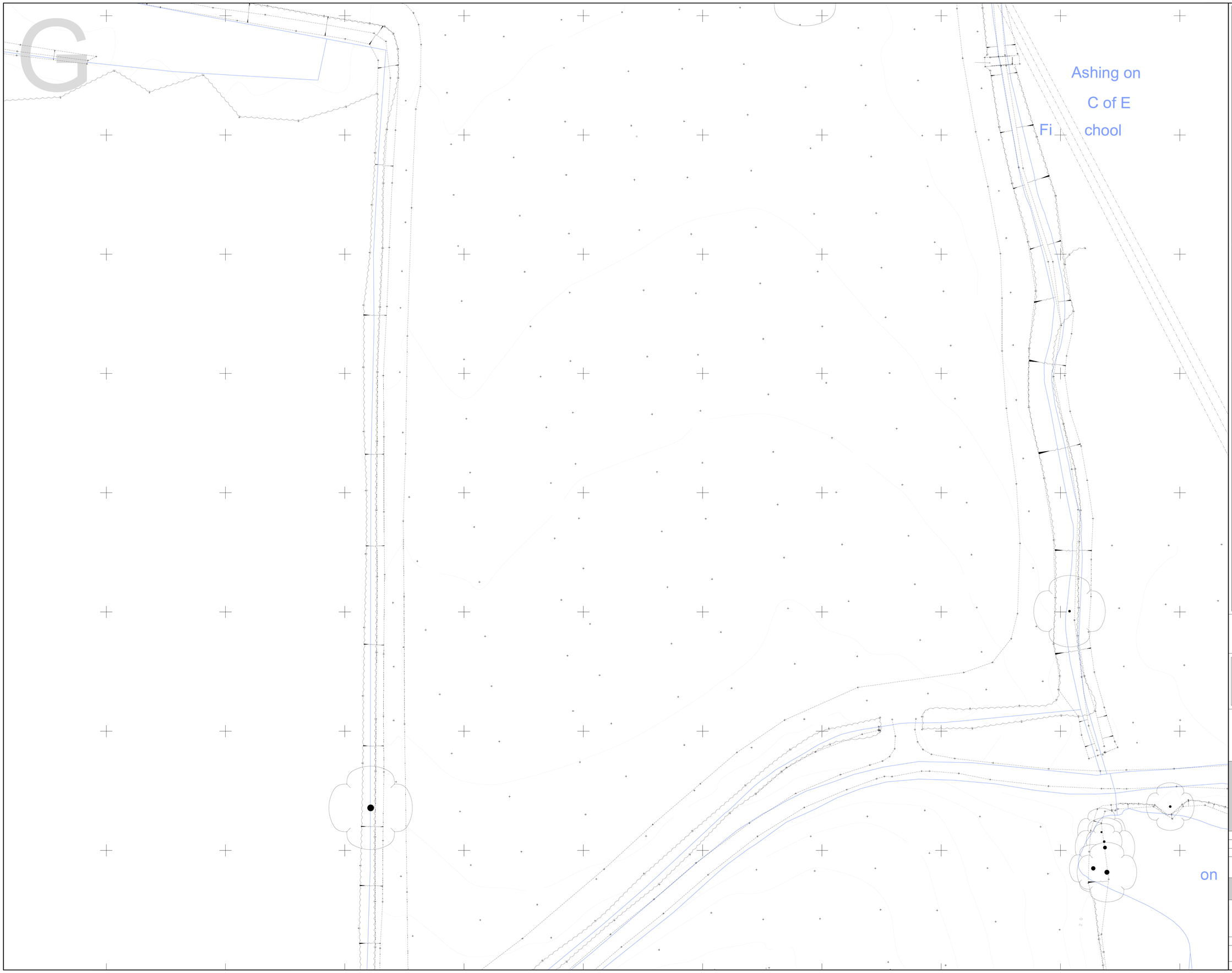
Ma by Su veys d

B Y S

RICS

S V Y

0



N
W
E
S

0 900
RG RD

S V

0 00
G RD

S S
S
S
S 00

Ma by Su veys d

B Y S

RICS

S V Y

0

Ash ngton C of E S hool

Skateboa d Park

ch

a m

St e and

St aul s

Ch ch

&

ond

N

W E

S

0 900
RG RD

S V

0 00
G RD

S S

S

S 00

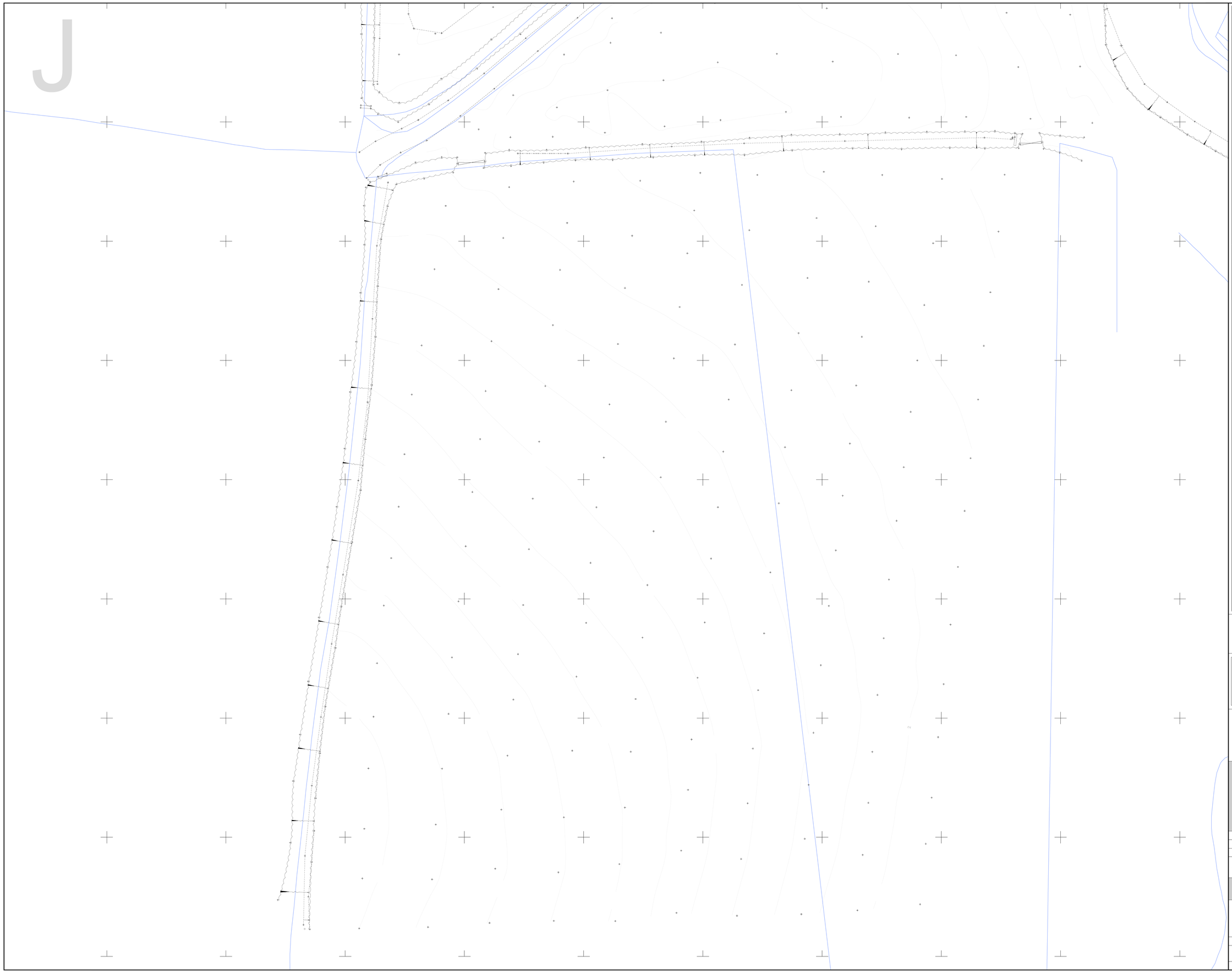
Ma by Su veys d

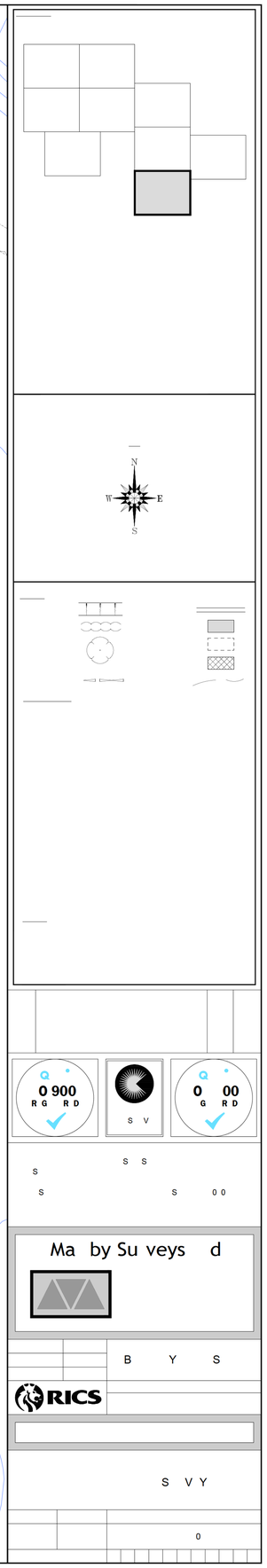
B Y S

RICS

S V Y

0


J


N
W
E
S
0 900
R G R D
S V
0 00
G R D
S S
S
S
S 0 0
Ma by Su veys d
B Y S
RICS
S V Y
0

Appendix C

Geotechnical Investigation Report

Bellway Homes Ltd

Church Lane, Ashington

Phase 1 and Phase 2 Geo-environmental Factual and Interpretive Report

52368-R01(00)

RSK GEOSCIENCES

January 2021

RSK GENERAL NOTES

Project No.: 52368

Title: Phase 1 and Phase 2 Geo-environmental Factual and Interpretive Report: Church Lane, Ashington, Church Lane, Ashington RH20 3JX

Client: Bellway Homes Ltd

Date: January 2021

Office: RSK Environment Limited, Anerley Court, Half Moon Lane, Hildenborough, Tonbridge, TN11 9HU. Tel 01732 833111

Status: Rev 00

Author [redacted]

Signature

Project ma

Signature

Revision control sheet				
Revision ref.	**Date**	**Reason for revision**	**Amended by:**	**Approved by:**
Rev 00		First issue	n/a	see above

RSK Environment Limited (RSK) has prepared this report for the sole use of the client, showing reasonable skill and care, for the intended purposes as stated in the agreement under which this work was completed. The report may not be relied upon by any other party without the express agreement of the client and RSK. No other warranty, expressed or implied, is made as to the professional advice included in this report.

Where any data supplied by the client or from other sources have been used, it has been assumed that the information is correct. No respons bility can be accepted by RSK for inaccuracies in the data supplied by any other party. The conclusions and recommendations in this report are based on the assumption that all relevant information has been supplied by those bodies from whom it was requested.

This work has been undertaken in accordance with the quality management system of RSK Environment Ltd. No part of this report may be copied or duplicated without the express permission of RSK and the party for whom it was prepared.

Where field investigations have been carried out, these have been restricted to a level of detail required to achieve the stated objectives of the work.

CONTENTS

1 INTRODUCTION 3
1.1 Commissioning 3
1.2 Objectives 3
1.3 Scope of works 3
1.4 Existing reports 4
2 SITE DETAILS 5
2.1 Site location 5
2.2 Site description 5
2.3 Surrounding land uses 5
2.4 Development plans 5
3 DESK-BASED ASSESSMENT 6
3.1 Site history 6
3.2 Information from environmental database report 7
3.3 Site geology 11
3.4 Mining and quarrying 13
3.5 Hydrogeology 13
3.6 Hydrology 14
3.7 Sensitive land uses 15
4 SITE RECONNAISSANCE FINDINGS 16
5 PRELIMINARY GEOTECHNICAL CONSTRAINTS 18
5.1 Preliminary geotechnical hazards assessment 18
6 INITIAL CONCEPTUAL SITE MODEL 20
6.1 Potential soil, soil vapour and groundwater linkages 20
6.2 Potential ground gas linkages 21
6.3 Preliminary risk assessment 22
7 SITE INVESTIGATION STRATEGY & METHODOLOGY 27
7.1 Introduction 27
7.2 Objectives 27
7.3 Selection of investigation methods 27
7.4 Investigation strategy 27
7.5 Monitoring programme 29
7.6 Laboratory testing 30
8 SITE INVESTIGATION FACTUAL FINDINGS 32
8.1 Ground conditions encountered 32
8.2 Groundwater and surface water 34
8.3 Chemical laboratory results 35
8.4 Geotechnical laboratory results 35
8.5 Ground gas monitoring 35
9 GEO-ENVIRONMENTAL ASSESSMENT 36
9.1 Refinement of initial CSM 36
9.2 Linkages for assessment 36
9.3 Methodology and assessment of human health and phytotoxic-related linkages 38

9.4 G1: Methodology and assessment of ground gas-related linkages 40
9.5 Uncertainties and implications in refined CSM and GQRA 43
10 PRELIMINARY WASTE ASSESSMENT 45
10.1 Hazardous waste assessment 45
10.2 WAC assessment 46
11 GEOTECHNICAL ASSESSMENT 47
11.1 Proposed development 47
11.2 Key geotechnical hazards/development constraints 47
11.3 Foundations 47
11.4 Roads and hardstanding 48
11.5 Excavations for foundations and services 49
11.6 Chemical attack on buried concrete 50
11.7 Infiltration drainage 51
12 CONCLUSIONS AND RECOMMENDATIONS 52
12.1 Environmental 52
12.2 Geotechnical 53
12.3 Recommendations: 53
REFERENCES 54

FIGURES

Figure 1 Site location plan
Figure 2 Site layout plan

APPENDICES

Appendix A Service constraints
Appendix B Development drawings
Appendix C Summary of legislation and policy relating to land contamination
Appendix D Environmental database report
Appendix E Site reconnaissance photographs
Appendix F Technical background
Appendix G Exploratory hole records
Appendix H Ground gas monitoring data and site conditions
Appendix I Laboratory certificates for soil analysis
Appendix J Laboratory certificates for geotechnical analysis
Appendix K Generic Assessment criteria for human health
Appendix L Generic Assessment criteria for phytotoxic effects
Appendix M Generic Assessment criteria potable water supply pipes
Appendix N WM3 assessment

1 INTRODUCTION

1.1 Commissioning

RSK Environment Limited (RSK) was commissioned by Bellway Homes Ltd to carry out a Phase 1 and Phase 2 Geo-environmental Factual and Interpretive Report of the land at Church Lane, Ashington Church Lane, Ashington RH20 3JX. The project was carried out to an agreed brief as set out in RSK's proposal (Ref. T52368, dated 2nd November 2021).

RSK's service constraints are shown in Appendix A.

The Site in question is being considered for development for residential use. Plans for the development have been included in Appendix B.

1.2 Objectives

The objective of the work is:

- to identify any land contamination and/or geotechnical constraints to the proposed development and to support discharge of relevant planning conditions and relevant building control requirements
- to identify the need for any additional investigation or remediation works to demonstrate that the site is suitable for its proposed use

1.3 Scope of works

The scope of this assessment has been developed in accordance with relevant British Standards and authoritative technical guidance as referenced through the report. The assessment of the contamination status of the site is in line with the technical approach presented in Land Contamination Risk Management (LCRM) (Environment Agency, 2021) – which supersedes CLR11 Model Procedures for Land Contamination – and in general accordance with BS 10175: 2011 + A2 2017 (BSI, 2017). It is also compliant with relevant planning policy and guidance.

The scope of the intrusive investigation has been designed in line with the recommendations of BS5930:2015+A1:2020 Code of practice for ground investigations (BSI, 2020), which maintains compliance with BS EN 1997-1 and 1997-2 and their related standards. It has also been developed in general accordance with BS 10175: 2011 + A2 2017. Ground gas assessment has been undertaken in general accordance with BS8576: 2013 and BS 8485:2015+A1:2019.

A brief summary of relevant legislation and policy relating to land contamination is given in Appendix C.

The scope of works for the assessment has included the following:

Desk Study:

- review of the history of development on the site and surroundings
- assessment of local geology, hydrogeology and hydrology

- completion of a site reconnaissance survey to assess the visual condition of the site
- development of an initial conceptual site model (CSM)
- preliminary consideration of geotechnical constraints and hazards

Intrusive Investigation

- design and implementation of an intrusive investigation, in situ testing, soil sampling, laboratory geo-environmental and geotechnical testing, groundwater and ground gas monitoring of installed boreholes
- interpretation of data to develop a refined conceptual site model (CSM)
- generic quantitative risk assessment (GQRA) of relevant contaminant linkages
- interpretation of ground conditions and geotechnical data to provide preliminary recommendations with respect to foundations and infrastructure design
- preparation of this factual and/or interpretative report.

1.4 Existing reports

No existing reports relevant to the site assessment have been provided to RSK.

2 SITE DETAILS

2.1 Site location

Site location details are presented in Table 1 and a site location plan is provided on Figure 1.

Table 1 Site location details

Site name	Church Lane, Ashington
Full site address and RH20 3JX	Church Lane, Ashington RH20 3JX
National Grid reference (centre of site)	TQ126160

2.2 Site description

The Site boundary and current site layout are shown on Figure 2. The Site covers an area of c. 15.35 hectares. It is currently occupied by open agricultural fields bounded by hedgerow, with some wooded areas in the north west of the site.

2.3 Surrounding land uses

The Site is located in Ashington, within a predominantly agricultural setting. Immediate surrounding land uses are described in Table 2.

Table 2 Surrounding land uses

North	Private residential properties and open scrubland.
East	Private residential properties and a school.
South	Open agricultural fields and woodland further afield.
West	Open agricultural fields.

2.4 Development plans

The proposed layout of the site, at the time of preparing this report, is shown in Appendix B. The proposed development comprises private residential homes with associated driveways, soft landscaping frontage and rear gardens, as well as areas of public open space and sports pitches.

3 DESK-BASED ASSESSMENT

The desktop study was designed generally to meet the objectives of a preliminary (phase 1) investigation, as defined by BS 10175:2011 + A2 2017 (BSI, 2017) and this assessment relates to LCRM Stage 1, Tier 1 preliminary risk assessment. The "vicinity" of the site for the purposes of this report is defined as locations situated within an approximate 250 m radius of the site, although certain sources and/ or sensitive targets further than 250 m may also have been considered.

The study aims principally to identify and assess the potential risks and liabilities associated with contamination of the ground, on and in the vicinity of the site. While this includes consideration of current operations and housekeeping on the site, the report does not constitute a comprehensive environmental audit of the site, as covered under ISO 14001.

3.1 Site history

3.1.1 Historical development record

The development history of the site and surrounding area based upon assessment of historical plans and records is detailed in Table 3. The historical maps reviewed are shown within the environmental database report in Appendix D.

Table 3 Summary of historical development

Date from	Date to	Historical Land Use (on-site)	Area of site
1879	Present	Open agricultural fields bounded by hedgerow and small wooded areas.	Entire site
1982	Present	Concrete track entering the site from Church Lane to the east.	Eastern most portion of the site
Date from	**Date to**	**Historical Land Use (off-site)**	**Distance (m) and orientation**
1879	Present	Open agricultural fields bounded by hedgerow and small wooded areas, with sparse farmyards and houses. Several nurseries appearing from 1960s onwards.	0m – 1000m+ north, north east, south, south west, west and north west.
1948	Present	Penn gardens private residential housing.	0m – 100m north
1952	Present	Tank / reservoir.	0m north
1879	2000	School	100m north east

1879	Present	Ashington village – private residential homes and associated infrastructure gradually expanding over time until 2006. Most of the development took place between 1952 and 2006.	0m – 400m north east, east, south east.
2006	Present	School	50m east
2006	Present	Pond appears	Adjacent to the north east
1879	Present	Heath Common village – private residential homes and associated infrastructure gradually expanding over time until 1982. Most of the development took place between 1961 and 1982.	1000m+ south west
1879	Present	A24 London Road, appears to have expanded in the 1980s.	200+ m south east
Relevant information sources: Historical OS maps ☒ Town plans ☐ Information from the Local Planning Authority ☐ Aerial photography ☐ Previous reports ☐			
Note: Reference to published historical maps provides invaluable information regarding the land use history of the site, but historical evidence may be incomplete for the period pre-dating the first edition and between successive maps.			

A review of the historical maps indicates that the site and the surrounding area have been utilised as agricultural land since the earliest ordnance survey map issued in 1879. As Agricultural land there is the potential for contamination from the historical use of pesticides and herbicides. No other potential sources of contamination have been identified from the map records.

Immediately off site a number of potential receptors have been identified including private residential and a school.

3.1.2 Unexploded ordnance

A review of publicly available unexploded ordnance (UXO) risk maps indicates that the site is located in an area with 'low' potential for wartime bombs to be present (Zetica, 2021).

3.2 Information from environmental database report

Relevant environmental permits and incidents detailed within the environmental database report (see Appendix D) are summarised below in Table 4.

Table 4 Summary of environmental permits, landfills and incidents

Data type	Entries on-site	Entries <250m from site	Entries >250m from site of relevance	Details
Agency and hydrological				
Environmental permits – incorporating Integrated Pollution Prevention and Control, Integrated Pollution Controls, Local Authority Integrated Pollution Prevention and Control	-	-	-	n/a
Enforcement and prohibition notices	-	-	-	n/a

Data type	Entries on-site	Entries <250m from site	Entries >250m from site of relevance	Details
Pollution incidents to controlled waters, Prosecutions relating to controlled waters, Substantiated pollution incident register, Water Industry Act referrals	-	5	-	Off-site <250m: Sewage pumping station 87m north, sewage overflowing manhole into stream 27.06.1997, ref: 2181. Sewage pumping station 101m north, crude sewage entering watercourse 30.12.1997, ref: 2355. Sewage pumping station 106m north, pumping main burst crude sewage entering watercourse 20.05.1996, ref: 1690. Sewage pumping station 149m north, containment failure crude sewage entering watercourse 12.10.1999, ref: 3256. Sewage pumping station 154m north, sewage discharge surcharging manhole 03.10.1995, ref: 1509.

Data type	Entries on-site	Entries <250m from site	Entries >250m from site of relevance	Details
Discharge consents	-	3	-	Off-site <250m: Pumping station on sewerage network 73m east, sewerage discharges into an unnamed tributary of Lancing Brook, ref: P07398. School/college 206m east, discharge of other matter surface water to freshwater river, ref: S01822, revoked: 01.07.1991 Domestic property sewage discharge – treated effluent into soakaway 232m south, ref: P07477
Registered radioactive substances	-	-	-	n/a
Landfill and waste				
Active landfills	-	-	-	n/a
Historic / closed landfills	-	-	-	n/a
Other waste management licences	-	-	-	n/a

Data type	Entries on-site	Entries <250m from site	Entries >250m from site of relevance	Details
Potentially in-filled land (pit, quarry, pond, marsh, river, stream, dock etc)	-	2	-	Off-site <250m of relevance: 54m east, unknown filled ground (pond, marsh, river, stream, dock etc.), mapped 1961. 228m south east, unknown filled ground (pond, marsh, river, stream, dock etc.), mapped 1961.
Hazardous substances/ industrial land uses				
Control of Major Accident Hazards (COMAH) sites	-	-	-	n/a
Explosives sites, Notification of Installations Handling Hazardous Substances (NIHHS), Planning hazardous substance consents/ enforcements	-	-	-	n/a
Contaminated land Part 2A register entries and notices	-	-	-	n/a
Contemporary trade directory entries	-	-	-	None within 500m with contaminative potential.
Fuel station entries	-	-	-	n/a
Note: Entries have only been included within the table where they are located within a 250m radius of the site or, where they fall outside of this radius but are considered to comprise a significant entry.				

3.3 Site geology

3.3.1 Anticipated geological sequence

Published records (British Geological Survey, 2021) for the area and available historical borehole logs indicate the presence of superficial head deposits covering a large proportion of the north east side of the site while no superficial deposits are mapped on the south western half. The majority of the site is underlain by the bedrock of the Weald Clay Formation (both mudstone and sandstone units) with the Atherfield Clay Formation

mapped along the southern boundary. Alluvial deposits may also be present near the site entrance on the far east side of the site. The geology of the site to be characterised by the succession recorded in Table 5. An historical BGS borehole record (ref: TQ11NW1) located at NGR 512650,116400 approximately 250 m north of the site shows Weald Clay present from surface to the termination depth of the borehole at 46mbgl.

Table 5 Site geology

Strata	Description	Estimated thickness	Permeability
Superficial			
Head Deposits mapped across the north east corner of the site	Clay, silt, sand and gravel.	Variable.	Variable depending on composition.
Alluvium (potentially present on site near to the site entrance.	Clay, silt, sand and gravel	Variable.	Variable depending on composition.
Bedrock			
Atherfield Clay Formation mapped along the southern boundary	Yellowish brown to pale grey sandy mudstone, with an impersistent phosphatic pebble bed with vertebrate bones, gritty sandstone or very shelly sandy mudstone with glauconite, at the base.	18m	Low
Weald Clay Formation – mudstone (majority of the site) and sandstone (northern portion of the site only)	Dark grey thinly bedded mudstones (shales) and mudstones with subordinate siltstones, fine- to medium-grained sandstones, including calcareous sandstone, shelly limestones and clay ironstones.	122m – 460m	Low
Relevant information sources: BGS Geoindex ☒ BGS borehole logs ☒ Previous SI reports ☐			

While the site does not appear to have been developed at any point in time, anecdotal information provided by the landowner during the site walkover suggests that the nearby pond was once infilled, and its contents was then re-excavated in recent years. This relates to the potentially infilled pond 54m east of site. The material which was excavated from the pond was mounded west of the pond, just inside the site boundary. This area

forms the triangular shaped piece of land bordering the southernmost field. The mound is elevated approximately 2m to 3m above the surrounding landscape and is comprised of unknown material.

3.3.2 Radon

The environmental database report indicates that the site is not located within an 'Affected Area'. An 'Affected Area' is one with 1% or more homes above the radon Action Level of 200 Bq m^{-3}, and therefore the risk of significant ingress of radon into structures on-site is considered 'low' and protection measures are not necessary in the construction of non-domestic buildings.

Although the radon data used in production of the ukradon indicative atlas comes from measurements in homes, the maps indicate the likely extent of the local radon hazard in all buildings.

3.4 Mining and quarrying

Evidence has been sought to identify any mining, quarrying, landfilling and land reclamation operations, past and present, which have taken place within 500m of the site.

3.4.1 Coal mining area

An initial site appraisal has been carried out based on the information provided on the Coal Authority Interactive Viewer of the UK Coalfield areas.

This indicates the site lies outside the Coal Authority Consultation Area and is not located within a coalfield area.

3.4.2 Areas of other (rock or mineral) mining

The site does not lie in a non-coal mining area of the UK and has no history of mining of rocks or minerals of any sort.

3.5 Hydrogeology

A summary of the hydrogeological setting of the site, with respect to the anticipated geological sequence set out in Section 3.3 is presented below in Table 6.

Table 6 Summary of hydrogeological setting

Condition	Description
Aquifer characteristics	The northern and eastern portion of the site is underlain by a secondary undifferentiated aquifer relating to the aforementioned head deposits. The majority of the site is underlain by an unproductive strata relating to the Weald Clay Formation mudstone. Running parallel with the northern boundary of the site is a strip of land underlain by a secondary A aquifer relating to the Weald Clay Formation sandstone.

Condition	Description
	The presence of low permeability clay at relatively shallow depths beneath the site, while restricting downwards migration, may increase the potential for lateral migration of shallow groundwater (and therefore mobile contamination, if present).
Depth to groundwater and flow	BGS borehole record (ref: TQ11NW1) located at NGR 512650,116400 approximately 250 m north of the site has been used to estimate the potential depth to groundwater at the site. Based on groundwater observations made during the drilling of the borehole it is noted that strikes were recorded at 28mAOD (3mbgl), 20mAOD (11mbgl) and 14mAOD (16mbgl) with a resting water level of 27mAOD (4mbgl). The borehole is located at 31mAOD similar to the level of the site. Similar groundwater levels have therefore been assumed in the absence of onsite information. Shallow groundwater in the site area is anticipated to flow in a north easterly direction, i.e. towards and in the direction of flow of a tributary river of Lancing Brook which runs parallel with both the eastern and northern site boundaries.
Groundwater recharge/ attenuation	Most of the site is currently unsurfaced and will therefore drain to ground.
Licensed groundwater abstractions	The environmental database report indicates that there are three current licensed groundwater abstractions within a 1km radius of the site, none of which are public water supply boreholes. All three are associated with agricultural irrigation at the nearby Malthouse farm, 516m south of the site.
Source protection zones	Information available in the Envirocheck report indicates that the site does not lie within a currently designated groundwater Source Protection Zone (SPZ), with the nearest source protection zone (Zone III) being 618m north west.

3.6 Hydrology

A summary of the hydrology within the site area is summarised in Table 7.

Table 7 Summary of hydrology in site area

Condition	Description
Surface watercourses/features	A small stream begins in the south eastern portion of the site, running north towards a farm pond which is just outside of the eastern site boundary. The watercourse then flows out of the pond, north along the eastern site boundary. At the north eastern corner of the site, the stream takes a turn towards the west, where it runs parallel to the northern site boundary, roughly 20m within the site. The stream runs almost exclusively within ditches surrounded by overgrown hedgerow. The stream is very small and appears to fluctuate greatly depending on weather conditions.
Surface water abstractions	There are no surface water abstractions identified by the environmental database, within a 1 km radius of the site.
Site drainage	Surface drainage from the site appears to be discharged into drainage ditches bounding each field, which are all connected to the tributary stream of Lancing Brook, which runs along the eastern and northern site boundary.

Condition	Description
Preliminary flood risk assessment	The indicative floodplain map for the area, shows that the northern portion of the site lies within the designated floodplain of the tributary stream of Lancing Brook, which runs along the eastern and northern site boundary. Here, the risk of flooding from surface water is high, with a 30-year return. The majority of the site however is not at risk of flooding and the general area outside the tributary stream of Lancing Brook is classified as very low risk of flooding.

3.7 Sensitive land uses

Table 8 provides a summary of any environmentally sensitive areas identified within 250 m of the site based on the environmental database report.

Table 8 Environmentally sensitive areas

Feature	Present within 250m of site?	Details	Likely pathways from site?
International designations – Ramsar wetland, Special Area of Conservation (SAC), Special Protection Area (SPA)	No	n/a	n/a
National designations – Site of Special Scientific Interest (SSSI), National Nature Reserve (NNR), ancient woodland	No	n/a	n/a
Local designations – Local Nature Reserve, Site of Importance for Nature Conservation (SINC)	No	n/a	n/a
Nearest high sensitivity development, e.g. residential	Yes	Nearby school on eastern site boundary	Unlikely

4 SITE RECONNAISSANCE FINDINGS

A site reconnaissance survey was completed on 19th November 2021 by RSK. The characteristics of the site observed during the walkover and from current ordnance Survey maps are summarised in Table 9.

All areas of the site were accessible for the site reconnaissance survey, except from an overgrown area in the west of the site, where thick undergrowth limited access

A site plan is provided in Figure 2 with photographic records included in Appendix E detailing the main features identified below.

Whilst the walkover summary includes consideration of current operations and housekeeping on the site as potential sources of contamination, it does not constitute a comprehensive environmental audit of the site, as covered under ISO 14001.

Table 9 Site reconnaissance findings

Feature	Description
Physical characteristics	
Access constraints	None.
Site topography	The Site is essentially level, with a small mound noted in the east of the site near the farmyard, and drainage ditches at the edges of fields.
Surface cover	The site is covered mostly by agricultural fields and bounded by areas of hedgerow and woodland.
Site drainage	Surface drainage from the site appears to be discharged into drainage ditches bounding each field, which are all connected to the tributary stream of Lancing Brook, which runs along the eastern and northern site boundary.
Surface water	The nearest surface watercourse to the site appears to be the tributary stream of Lancing Brook, which runs through the site in the north, and adjacent to the site boundary in the east. There is also a large pond in the farmyard, adjacent to the south eastern site boundary. The aforementioned stream runs into the pond from the south and back out from the north. Water appeared clear and uncontaminated.
Trees and hedges	Vegetation present on-site comprises crops in agricultural fields bounded by hedgerows and areas of mature woodland, comprising various trees including some large oaks to the north of the site.
Invasive species	Based upon the walkover survey obvious evidence of Japanese Knotweed or other invasive species has not been identified on-site. However, it should be noted that a detailed survey of the possible presence or absence of invasive species is outside of the scope of investigation and consideration should be given to commissioning a specialist survey, as necessary. Caveat for time of year (Oct-Apr) if applicable due to dieback.
Existing buildings on-site	No buildings are present on-site, although a corner of a barn in the farmyard in the east of the site is included within the site boundary.

Feature	Description
Retaining walls and adjacent buildings on or close to site boundary	There are no such structures on or close to the site boundary.
Basements on-site	No evidence of existing or infilled basements was observed.
Made ground, earthworks and quarrying	None observed, except the access road in the east of the site.
Potentially unstable slopes on or close to site	None observed.
Buried and overhead services present	No evidence of buried services observed. Overhead services were noted crossing most of the field, running along the eastern boundary of the site.
Environmental characteristics	
Underground/ above ground storage tanks and pipework	None observed.
Potentially hazardous materials storage and use	None observed.
Asbestos-containing materials	No obvious asbestos construction materials were observed but a detailed survey of the buildings would be required to confirm the presence or otherwise of asbestos-containing materials.
Waste storage	None observed.
Fly-tipping	None observed.
Electricity sub-stations/ transformers	None observed on or close to site.
Evidence of possible land contamination on-site	None observed.
Potential off-site sources of ground contamination	None observed.

No potentially significant land contamination or geotechnical issues were identified during the site reconnaissance survey.

5 PRELIMINARY GEOTECHNICAL CONSTRAINTS

5.1 Preliminary geotechnical hazards assessment

A summary of commonly occurring geotechnical hazards associated with the anticipated geology outlined in Section 3.3 above is given in Table 10 together with an assessment of whether the site may be affected by each of the stated hazards.

Table 10 Summary of preliminary geotechnical risks that may affect site

Hazard category	Hazard status based on desk study findings and proposed development		Engineering considerations if hazard affects site
	Could be present and/or affect site	Unlikely to be present and/or affect site	
Sudden lateral changes in ground conditions associated with variable head deposits and bedrock and the potential for areas of deeper Made Ground.	☒	☐	Likely to affect ground engineering and foundation design and construction
Shrinkable clay soils associated with cohesive head deposits and underlying bedrock	☒	☐	Design to NHBC Standards Chapter 4 or similar
Highly compressible and low bearing capacity soils, (including peat and soft clay)	☒	☐	Likely to affect ground engineering and foundation design and construction
Silt-rich soils susceptible to rapid loss of strength in wet conditions	☒	☐	Likely to affect ground engineering and foundation design and construction
Running sand at and below water table potentially in granular lenses of the Head deposits.	☒	☐	Likely to affect ground engineering and foundation design and construction
Karstic dissolution features (including 'swallow holes' in Chalk terrain)	☐	☒	May affect ground engineering and foundation design and construction.
Evaporite dissolution features and/or subsidence	☐	☒	May affect ground engineering and foundation design and construction
Ground subject to or at risk from landslides	☐	☒	Likely to require special stabilisation measures

Hazard category	Hazard status based on desk study findings and proposed development		Engineering considerations if hazard affects site
	Could be present and/or affect site	Unlikely to be present and/or affect site	
Ground subject to peri-glacial valley cambering with gulls possibly present within the Weald Clay Formation	☒	☐	Likely to affect ground engineering and foundation design and construction
Ground subject to or at risk from coastal or river erosion	☐	☒	Likely to require special protection/stabilisation measures
High groundwater table (including waterlogged ground)	☒	☐	May affect temporary and permanent works
Rising groundwater table due to diminishing abstraction in urban area	☐	☒	May affect deep foundations, basements and tunnels
Geological faults, fissures and break lines	☐	☒	May affect ground engineering and foundation design and construction
Underground mining including shafts and adits (e.g. coal, mineral)	☐	☒	Likely to require further assessment including potentially special stabilisation measures
Effects of extreme temperature (e.g. cold stores or brick kilns/furnaces)	☐	☒	Likely to affect ground engineering and foundation design and construction
Existing sub-structures (e.g. tunnels, foundations, basements, and adjacent sub-structures)	☐	☒	Likely to affect ground engineering and foundation design and construction
Filled and made ground (including embankments, infilled ponds and quarries)	☒	☐	Likely to affect ground engineering and foundation design and construction
The Weald Clay is a Pyritic geology and therefore weathering of sulphides to sulphates creating adverse chemistry for foundations can be expected.	☒	☐	May affect ground engineering and foundation design and construction
Site topography	☐	☒	May affect ground engineering and foundation design and construction
Note: Seismicity is not included in the above table as this is not normally a design consideration in the UK.			

6 INITIAL CONCEPTUAL SITE MODEL

In the UK land contamination is assessed using a risk-based approach taking account of the magnitude (severity of the hazard) and likelihood (probability) of occurrence. A 'receptor' is something that could be adversely affected by contamination (e.g. people, an ecological system, property or a water body). A 'pathway' is a route or means by which a receptor is or could be exposed to or affected by a contaminant. A 'contaminant source' is a hazard but it can only pose a risk to a receptor where a pathway is present. The relationship between sources, pathways and receptors are referred to as a conceptual site model. A risk can only be released where a contaminant source, pathway and receptor are all in place, referred to as a 'pollutant linkage'.

In line with LCRM (Environment Agency, 2021) and BS 10175: 2011 + A2 2017 (BSI, 2017), RSK has used information in the preceding sections to identify hazards (sources of contaminants), receptors that may be impacted and plausible linking pathways. Where all three are present this is termed a potentially complete contaminant linkage and a qualitative risk estimation is made.

6.1 Potential soil, soil vapour and groundwater linkages

6.1.1 Potential sources of contamination

Potential sources of soil and groundwater contamination identified from current activities and the history of the site and surrounding area are presented in Table 11. Ground gas sources are addressed in the next section.

Table 11 Potential sources of soil and groundwater contamination

Potential sources	Contaminants of concern
On-site	
Made ground (i.e., fill material) - excavations from formerly infilled pond.	Unknown fill material but potentially including brick, ash and clinker and containing toxic and phytotoxic metals, inorganics, polycyclic aromatic hydrocarbons (PAHs), asbestos.
Agricultural land use - Herbicides and pesticide	Herbicides and pesticide
Off-site	
-	n/a

6.1.2 Sensitive receptors and linking exposure/ migration pathways

Sensitive receptors identified at or in the vicinity of the site that could be affected by the potential sources identified above comprise:

- future site users – residential users [oral, dermal and inhalation exposure with impacted soil, soil vapour and dust/fibres, ingestion of home-grown produce, inhalation of vapours from groundwater]

- current adjacent site users – School, residential and public open space users [migration of contamination via dust/fibre deposition, vapour or groundwater migration combined with inhalation]
- future buildings and services [direct contact with contaminated soils or groundwater and chemical attack]
- future vegetation [direct contact with contaminated soils or groundwater and root uptake leading to phytotoxicity]
- groundwater in secondary undifferentiated aquifer within the head deposits and secondary A aquifer within the Weald Clay Formation (sandstone) from soils/ percolation to aquifer/ lateral migration of dissolved phase]
- on site surface water course (tributary to Lancing Brook) [lateral migration of dissolved phase/ site run-off/ drainage]

Potential linking pathways are show in brackets for each item above.

Please note that construction workers and future maintenance workers have not been identified in the conceptual model as receptors because risks are considered to be managed through health and safety procedures according to the CDM Regulations.

Ecological receptors are only considered within the conceptual model in the context of statutory protected sites.

6.2 Potential ground gas linkages

6.2.1 Ground gas generation potential

Potential ground gas sources identified for the site and surrounding are shown in Table 12.

Table 12 Potential ground gas sources

Potential sources	Indicative ground gas generation potential (CIEH, 2008)	Additional information
On-site		
Made ground (i.e., fill material) - excavations from formerly infilled pond. with a potential TOC up to 6%	Low to very low	

No significant potential sources of ground gas generation have been identified therefore this potential issue has not been taken forward. Notwithstanding the above it is advised that a preliminary confirmatory round of ground gas monitoring is undertaken to confirm this assessment and that it should target this area of potential deeper made ground adjacent to the pond in the north east corner of the site.

Construction workers have not been identified as receptors for the purposes of this assessment. Risks may still be present to construction workers especially where works include the entry into excavations within the ground. Construction workers should undertake appropriate risk assessments and risks should be managed through health and safety procedures and the use of PPE.

6.3 Preliminary risk assessment

The preliminary risk assessment findings and potentially complete contaminant linkages are shown in Table 13 overleaf. The risk classification based on the combination of hazard consequence and probability using a risk matrix from CIRIA C552 (Rudland et al., 2001), a summary of which is included in Appendix F. This relates to Tier 1 preliminary risk assessment in LCRM (Environment Agency, 2021).

Table 13 Risk estimation for potentially complete contaminant linkages

Potential source	Potential receptor	Possible pathway	Likelihood	Severity	Potential risk	Justification
Made ground i.e., fill material - excavations from formerly infilled pond. Agricultural land use - Herbicides and pesticide	Future site users – residential users	Oral, dermal and inhalation exposure with impacted soil, soil vapour and dust/fibres, ingestion of home-grown produce, inhalation of vapours from groundwater	Low likelihood	Medium	Moderate/ Low	Potential for significant impact within soil at the site is considered low, however if present, it is possible that future site users may come into contact through areas of soft landscaping.
	Current adjacent site users – residential and public open space users	Migration of contamination via dust/fibre deposition, vapour or groundwater migration combined with inhalation	Low likelihood	Medium	Moderate/ Low	Potential for significant impact within soil at the site is considered low, however if present, it is possible that current adjacent site users may come into contact through areas of soft landscaping.
	Future buildings and services	Direct contact with contaminated soils or groundwater and chemical attack	Low likelihood	Mild	Low	Potential for significant impact within soil at the site is considered low, however if present, it is possible that buried concrete or potable water supply pipes may be affected. The Weald Clay Formation is Pyritic and thus weathering of sulphides to sulphates can have adverse consequences for below ground structures.

Potential source	Potential receptor	Possible pathway	Likelihood	Severity	Potential risk	Justification
	Future vegetation	direct contact with contaminated soils or groundwater and root uptake leading to phytotoxicity	ow likelihood	minor	Very low	It is considered unlikely that future vegetation would come in contact with made ground present on site and would instead be planted in a suitable growing medium. The severity of potential harm caused is considered to be minor.
	Groundwater in secondary undifferentiated aquifer within the head deposits and secondary A aquifer within the Weald Clay Formation (sandstone)	Leaching from soils/ percolation to aquifer/ lateral migration of dissolved phase	Low likelihood	Mild	Low	Potential for significant impact within soil at the site is considered low, however if present, it is possible that the secondary undifferentiated aquifer within the head deposits could be affected.
	On site surface water course (tributary to Lancing Brook)	Lateral migration of dissolved phase/ site run-off/ drainage	Low likelihood	Mild	Low	Potential for significant impact within soil at the site is considered moderate/ low, however if present, it is possible that the stream in the north of the site could be affected.

Risk matrix		Consequences			
		Severe	Medium	Mild	Minor
Probability	Highly likely	Very high	High	Moderate	Moderate/low
	Likely	High	Moderate	Moderate/low	Low
	Low likelihood	Moderate	Moderate/low	Low	Very low
	Unlikely	Moderate/low	Low	Very low	Very low

Potentially complete contaminant linkages with a potential risk of moderate to low or higher identified in in Table 13 comprise:

- future site users – residential users [oral, dermal and inhalation exposure with impacted soil, soil vapour and dust/fibres, ingestion of home-grown produce, inhalation of vapours from groundwater]
- current adjacent site users – residential and public open space users [migration of contamination via dust/fibre deposition, vapour or groundwater migration combined with inhalation]

These potentially complete contaminant linkages need to be assessed further through appropriate site investigation to target the identified sources of potential contamination and assess the feasibility of identified pathways.

7 SITE INVESTIGATION STRATEGY & METHODOLOGY

7.1 Introduction

RSK carried out intrusive investigation works and subsequent monitoring of boreholes between November 2021 and December 2021.

7.2 Objectives

The specific objectives of the investigation are as follows:

- to establish the ground conditions underlying the site including the extent and thickness of any made ground
- to investigate specific potential sources of contamination identified in initial CSM
- to determine the presence and depth of groundwater
- to determine the ground gas regime underlying the site
- to assess geotechnical properties of soils

7.3 Selection of investigation methods

The techniques adopted for the investigation were chosen with consideration of the objectives and site constraints, which are described below:

- 15no.mechanically excavated trial pits to a maximum depth of 3.00 mbgl, including hand vane tests at regular intervals where possible. 3no. selected trial pit locations were chosen to undertake soakaway testing.
- 5no. window sample boreholes were progressed to a maximum depth of 4.00 mbgl. Standard penetration testing (SPT) and hand vane tests were undertaken at regular intervals. Allowance was made to install 5no. borehole locations with monitoring wells to allow for future groundwater and ground gas sampling.
- 10no. Dynamic Cone Penetrometer (DCP) tests for determining CBR values were undertaken.
- 5no. hand dug pits to a maximum of 0.50 mbgl to collect bulk samples at shallow depths for CBR testing.

Prior to conducting intrusive works, utility service plans were obtained, and buried service clearance undertaken in line with RSK's health and safety procedures.

7.4 Investigation strategy

The ground investigation was carried out using intrusive ground investigation techniques in general accordance with the recommendations of BS5930:2015+A1:2020. Whilst every attempt was made to record full details of the strata encountered in the boreholes,

techniques of hole formation and sampling will inevitably lead to disturbance, mixing or loss of material in some soils and rocks.

Details of the investigation locations, installations and rationale are presented in Table 14. Logs have been included in Appendix G and an exploratory hole location plan is included as Figure 2.

Table 14 Exploratory hole and monitoring well location rationale

Investigation type	Number	Designation	Monitoring well installation	Rationale examples below
Boreholes by dynamic/ windowless sampling methods	5	WS1 to WS5	Gas and groundwater	To prove the geological succession beneath the site and obtain geotechnical data and to determine the contamination status of the ground beneath the site. Each location was installed with a dual-purpose groundwater and gas monitoring well to allow future groundwater and ground gas monitoring visits. Insitu SPT tests undertaken at 1.00m intervals. Hand vane tests were undertaken at regular intervals.
Trial-pits excavated by mechanical excavator	15	TP1 to TP15, TPS1 to TPS3	n/a	To prove the geological succession beneath the site and obtain geotechnical data and to determine the contamination status of the ground beneath the site. Hand vane tests were undertaken at regular intervals.
Trial pit soakage tests in general accordance with BRE 365	3	TPS1 to TPS3	n/a	To determine the soakage characteristics of the shallow geology and provide infiltration parameters for soakaway design.
Trial-pits excavated by hand	5	HP1 – HP5	n/a	To accurately log the upper strata in targeted locations beneath the site at locations

Investigation type	Number	Designation	Monitoring well installation	Rationale examples below
				beneath the proposed roads. Bulk samples were collected at each location for laboratory determination of the California Bearing Ration (CBR) of a compacted soil
In-situ testing (Dynamic Cone Penetrometer)	10	DCP1 – DCP10	n/a	To determine the subgrade strength for road and pavement design (i.e. California Bearing Ratio %).

7.4.1 Implementation of investigation works

The exploratory holes were logged by an engineer in general accordance with the recommendations of BS5930:2015+A1:2020 (which incorporates the requirements of BS EN ISO 14688-1, 14688-2 and 14689-1).

The monitoring well construction and associated response zones are detailed on the exploratory hole records in Appendix G.

The soil sampling and analysis strategy was designed to characterise each encountered soil strata, permit an assessment of the potential contaminant linkages identified and investigate the geotechnical characteristics. In addition, samples were taken to allow for geo-environmental and geotechnical testing to be undertaken.

Soils collected for laboratory analysis were placed in a variety of containers appropriate to the anticipated testing suite required. They were dispatched to the laboratory in cool boxes under chain of custody documentation. Samples were stored in accordance with the RSK quality procedures to maintain sample integrity and preservation and to minimise the chance of cross contamination.

Selected samples were placed in polythene bags for headspace screening with a photo-ionisation detector (PID) fitted with a 10.6 eV bulb. The PID screening results are presented on the exploratory hole records.

7.5 Monitoring programme

7.5.1 Ground gas monitoring

Three monitoring rounds have been undertaken to provide an initial assessment of ground gas risks.

A calibrated infrared gas meter was used to measure gas flow, concentrations of carbon dioxide (CO_2), methane (CH_4) and oxygen (O_2) in percentage by volume, while hydrogen sulphide (H_2S) and carbon monoxide (CO) were recorded in parts per million.

The atmospheric pressure before and during monitoring, together with the weather conditions, were recorded. The monitoring included periods of falling atmospheric pressures and after/during rainfall.

All ground gas monitoring results together with the temporal conditions are contained within Appendix G. Equipment calibration certificates are available on request.

7.6 Laboratory testing

Laboratory testing was undertaken at a UKAS accredited laboratory with ISO17025 and MCERTS accredited test methods were specified where applicable for contamination testing and as shown in the laboratory test certificates appended.

7.6.1 Chemical analysis of soil samples

The programme of chemical tests undertaken on soil samples obtained from the intrusive investigation is presented in Table 15 with the laboratory testing results contained in Appendix I.

Table 15 Summary of chemical testing of soil samples

Stratum	Tests undertaken	No. of tests
Made ground / topsoil	Metals (As, Cd, Cr, Cu, Hg, Pb, Ni, Se, Zn) and pH	12
	Total Organic Carbon (TOC)	6
	Speciated Total Petroleum Hydrocarbons (TPH C6-C40)	6
	Speciated Polyaromatic Hydrocarbons (PAH)	12
	Asbestos soil screen	12
	Hazardous Waste Suite (minimum suite) - pH, Metals, TPH with ID, PAH 17, Moisture content & Asbestos screen	1
	Full 1 batch waste suite - (Inert, SNRHW and Hazardous Landfill suite)	1
	Pesticide C suite - Combined organochlorine and organophosphorus	3
	Herbicides (Triazine herbicides)	3
	BRE Brownfield Pyritic (Soil) , total SO4 BRE and Total S	5

7.6.2 Geotechnical analysis of soils

Where appropriate disturbed, bulk and undisturbed soil samples were taken for geotechnical classification testing with the depth and nature of samples detailed within the exploratory hole records.

Where appropriate, testing was undertaken in accordance with BS 1377:1990 Method of Tests for Soils for Civil Engineering Purposes or, where superseded, by the relevant part of BS EN ISO 17892:2014 Geotechnical investigation and testing - Laboratory Testing of Soil. Tests carried out in order to classify the concrete class required on-site have been undertaken following the procedures within BRE SD1:2005.

The programme of geotechnical tests undertaken on samples obtained from the intrusive investigation is presented in Table 16. The results and UKAS accreditation of tests methods are shown in Appendix J.

Table 16 Summary of geotechnical testing undertaken

Strata	Tests undertaken	No. of tests
Atherfield Clay Formation / Weald Clay Formation	Moisture Content %	15
	Liquid/Plastic Limits %	15
	2.5kg Compaction	5
	California Bearing Ration (CBR) of a 4kg compacted sample (soaked)	5
	BRE suite pyritic geology	5

7.6.3 Infiltration testing

Infiltration tests were carried out in trial pits, TPS1 – TPS3 to establish the infiltration rate of the Weald Clay underlying the site. The tests were carried out generally in accordance with the method described in BRE Digest 365 (BRE, 2016). This involved filling the pits with water from a tanker and recording the drop in water level with time as the water soaked into the ground.

Copies of the testing records are included in Appendix G.

8 SITE INVESTIGATION FACTUAL FINDINGS

The results of the intrusive investigation and subsequent geo-environmental and geotechnical laboratory analysis undertaken are detailed below.

8.1 Ground conditions encountered

The descriptions of the strata encountered, notes regarding visual or olfactory evidence of contamination, list of samples taken, field observations of soil and groundwater, in-situ testing and details of monitoring well installations are included on the exploratory hole records presented in Appendix G.

The exploratory holes revealed that the site is underlain by a variable thickness of topsoil over either Atherfield or Weald Clay. This appears to confirm the stratigraphical succession described within the preliminary CSM, although it should be noted made ground was encountered at several locations where it was not expected.

For the purpose of discussion, the ground conditions encountered during the fieldworks are summarised in Table 17 with the strata discussed in subsequent subsections.

Table 17 General succession of strata encountered

Stratum	Exploratory holes encountered	Depth to top of stratum m bgl	Proven thickness (m)
Made ground	TP1, TP2,TP4, WS1 and TPS1	Ground level to 0.50m	0.3m to >3.0m (depth not proven in TP2)
Cultivated Topsoil	All except TP1, TP2, WS1, TPS1	Ground Level	0.2m to 0.4m
Weald Clay Formation	All	0.2m to 2.1m	2.8m (proven to maximum depth of investigation.

8.1.1 Made ground

The made ground encountered in TP1, TP2, WS1,TPS1 and beneath the topsoil in TP4. The unit generally comprised a gravelly silty sand with glass and brick fragments and ranged in thickness from 0.3m to 2.1m where proven. The depth of the made ground extended beyond the termination depth of 3.0m in TP2. The four locations where made ground was encountered are all in the south eastern portion of the site near to the access road. Made ground was encountered to a greater depth in TP2 and WS1, adjacent to the pond in the north east.

8.1.2 Cultivated Topsoil

Topsoil deposits encountered across the remainder of the site comprised a clay rich soil comprising soft brown silty clay with frequent rootlets, ranging in thickness between 0.2 m and 0.4 m.

8.1.3 Weald Clay Formation

These strata were encountered at a depth of between 0.2m and 2.1m below ground level and have been proven to extend beyond the maximum investigation depth of 3m, with a maximum thickness of 2.8m observed. These units comprised mostly cohesive strata, with granular siltstone and mudstone bands observed at depth.

A summary of the in-situ and laboratory test results recorded in the stratum are presented in Table 18.

Table 18 Summary of in-situ and laboratory test results for cohesive unit

Soil parameters	Min. Value	Max. Value	Reference
Moisture content (%)	17	32	Appendix J
Modified moisture content (%)	20	77	Appendix J
Liquid limit (%)	38	78	Appendix J
Plasticity limit (%)	20	31	Appendix J
Plasticity index (%)	18	47	Appendix J
Modified plasticity index (%)	9	46	Appendix J
Plasticity term	Intermediate	Very High	NA
Volume change potential	Low	High	NA
SPT 'N' values	4	50	Appendix G
Undrained shear strength inferred from SPT 'N' values (kN/m^2)*	17.2	215	Appendix G
Undrained shear strength measured by shear vane testing (kN/m^2)	28	87	Appendix G
Consistency term from field description	Soft	Very stiff	Appendix G
Strength term? (based on shear vane testing)	Low	High	Appendix G
Compaction results			
Maximum dry density	1.53	1.69	Appendix J
Optimum moisture content	14.1	20.8	Appendix J
Notes: *derived using a Stroud Factor of 4.3.			

8.1.4 Visual/olfactory evidence of soil contamination

The maximum recorded PID result was 0.4ppm recorded in WS01-ES03 at 1.2m. All other samples recorded PID results below the equipment limit of detection (<0.1ppm).

The majority of the site was underlain by a nominal thickness of topsoil and or made ground. Deeper made ground was identified in the vicinity of TP2 (>3.00m depth) and WS1 (2.10m depth). Based on anecdotal information provided by the land owner it is understood that this material originates from the excavation of the pond adjacent to the north eastern boundary of the site. The made ground in this location is described as gravelly clay containing varying amounts of anthropogenic material including brick, clinker, ceramic, glass, wood and gravel of flint and chalk. Decaying organic material was noted in TP02 from 1.80m to 3.00m.

8.2 Groundwater and surface water

8.2.1 Groundwater encountered during intrusive works

Water seepage were noted in TP02, TP06, TP11 and TPS01 at depths between 1.5m and 2.4m bgl. The remaining locations remained dry during the intrusive investigation.

8.2.2 Groundwater encountered during monitoring

Rest groundwater levels recorded during the monitoring programme are summarised in Table 19 based on the data provided in Appendix H.

Table 19 Summary of groundwater monitoring results

Monitoring well	Response zone depth (m)	TOC elevation (m AOD)	Depth to water (mb TOC)	Depth to base (m)	Notes
WS01	1.0 to 3.0	33.07	2.5	4.60	Water is thought to represent rainwater / perched water rather than a continuous waterbody.
			0.66		
			0.88		
WS02	1.0 to 3.5	28.23	2.90	3.45	
			0		
			0.09		
WS03	1.0 to 3.5	26.88	1.15	2.70	
			0.21		
			0.91		
WS04	2.0 to 4.0	26.88	DRY	3.50	
			0.16		
			0.34		
WS05	1.0 to 4.0	27.18	3.5	3.60	
			0.34		
			0.30		

8.3 Chemical laboratory results

The soil testing results are presented in Appendix I.

No asbestos was detected in soil screening.

8.4 Geotechnical laboratory results

The results of the geotechnical testing are discussed in Section 11 and presented in Appendix J.

8.5 Ground gas monitoring

The results of the ground gas monitoring and testing carried out are given in Appendix H and discussed in 9.4.

All three groundwater and ground gas monitoring rounds have been completed. A peak CO2 of 6.6 %/vol in WS1, peak Methane of <0.1%/vol and peak flow of 0.8 Litres a second were recorded in WS5.

It should be noted that the response zones of each well were flooded in all locations during rounds 2 and 3 which can lead to erroneous results.

9 GEO-ENVIRONMENTAL ASSESSMENT

9.1 Refinement of initial CSM

The published geological records of the area indicate that the site is underlain by Head deposits over both the Weald Clay Formation and the Atherfield Clay Formation. The investigation identified topsoil and or made ground overlying predominately cohesive units with occasional bands of granular material and occasional mudstone and siltstone bands at depth. Water seepage were noted in TP02, TP06, TP11 and TPS01 at depths between 1.5m and 2.4m bgl. The remaining locations remained dry during the intrusive investigation.

The initial CSM identified potential sources of ground contamination at the site associated with Made Ground. The investigation identified deeper made ground in the vicinity of TP01, TP02, TP4, TPS1 and WS01 ranging from 0.5mbgl to greater than 3.00m in TP02 where the full depth of made ground was not proven. The made ground in TP02 was noted to comprise slightly gravelly silty clay with occasional brick fragments, whole bricks, plastic, rare wood, cable, glass and decaying organic matter between 1.80mbgl to 3.00mbgl. The maximum recorded PID result was 0.4ppm recorded in WS01-ES03 at 1.2m. All other samples recorded PID results below the equipment limit of detection (<0.1ppm).

All three groundwater and ground gas monitoring rounds have been completed. A peak CO2 of 6.6 %/vol in WS1, peak Methane of <0.1%/vol and peak flow of 0.8 Litres a second were recorded in WS5.

The information and results gathered from the preliminary risk assessment and ground investigation undertaken at the site to date generally confirms the initial CSM. Notwithstanding the above the slightly elevated CO2 readings recorded in WS1 suggests the possibility of ground gas risk which will be discussed in Section 9.4.

9.2 Linkages for assessment

As described in LCRM (Environment Agency, 2021), there are two stages of quantitative risk assessment (QRA), Tier 2 generic (GQRA) and Tier 3 detailed (DQRA). The GQRA comprises the comparison of soil, groundwater, soil gas and / or ground gas results with generic assessment criteria (GAC) that are appropriate to the linkage being assessed. This comparison can be undertaken directly against the laboratory results or following statistical analysis depending upon the sampling procedure that was adopted. This assessment relates to LCRM Stage 1, Tier 2 generic quantitative risk assessment

Following the refinement of the CSM, the potentially complete contaminant linkages that require further assessment and the methodology of assessment are presented in Table 20.

Table 20 Linkages for GQRA

Potentially relevant contaminant linkage	Assessment method
Human health and phytotoxic-related linkages	
H1. Oral, dermal and inhalation exposure with impacted soil, soil vapour and dust by future residents	Human health GAC in Appendix K for a proposed residential end use with home-grown produce since the proposed end use includes residential gardens.
H2. Inhalation exposure of future residents to asbestos fibres	Qualitative assessment based on the asbestos minerals present, their form, concentration, location and the nature of the proposed development.
H3. Uptake of contaminants by vegetation potentially impacting plant growth (phytotoxicity)	Comparison of soil data to GAC in Appendix L for phytotoxicity.
H4. Organic contaminants permeating potable water supply pipes	Comparison of soil data to GAC in Appendix M for plastic water supply pipes using UKWIR (2010) guidance.
Controlled waters-related linkages	
W1. Leaching of soil contaminants and dissolved phase migration to wider principal/secondary aquifer* - undifferentiated aquifer relating to the aforementioned head deposits. - Running parallel with the northern boundary of the site is a strip of land underlain by a secondary A aquifer relating to the Weald Clay Formation sandstone. W2. Migration of dissolved phase contaminants to surface waters (tributary to Lancing Brook))	Since no surface water, groundwater or leachate data is available the potential for leaching of contaminants to groundwater of overland flow into surface water has been considered qualitatively using soil chemical results.
Ground gas-related linkages	
G1. Concentrations of methane and carbon dioxide in ground gas entering and accumulating in enclosed spaces or small rooms in new buildings, which could affect future site users. For methane this could create a potentially explosive atmosphere, while death by asphyxiation could result from carbon dioxide.	Borehole hazardous gas flow rates (Qhg) have been calculated using maximum (peak) methane and carbon dioxide concentrations and steady state flow rates in accordance with BS8485. This is subject to interpretation and use of professional judgement to designate the site or zones of the site characteristic situation by comparison to a Gas Screening Value (GSV) as appropriate and in line with the CSM.

9.3 Methodology and assessment of human health and phytotoxic-related linkages

9.3.1 H1. Oral, dermal and inhalation exposure with impacted soil by future occupants/site users

In order to assess the soil results against the appropriate GAC, the soil results have been split into appropriate data sets relevant to the oral, dermal and inhalation linkage.

As an initial assessment of each dataset, all soil results in each dataset have been directly compared against the GAC for residential with home-grown produce. These values are considered most appropriate given the proposed end use. The GAC for human health (together with details of their derivation) used in this assessment are included in Appendix K

The soil samples were tested for a range of potential contaminants, including metals, petroleum hydrocarbons (TPH), speciated polycyclic aromatic hydrocarbons (PAH), herbicides and pesticides.

Of the 12no. samples submitted for metals (As, Cd, Cr, Cu, Hg, Pb, Ni, Se, Zn), lead concentrations in made ground samples from TP02 at 0.30mbgl (360mg/kg) and WS01 at 0.20mbgl (252mg/kg) exceeded the GAC of 200mg/kg. Notwithstanding the above under the proposed development this area is likely to be public open space (POS) and the results do not exceed the GAC for POS. Therefore the above should be considered a conservative approach.

In regard to speciated PAH compounds 12no samples were submitted for chemical testing, with the exception of TP02 at 0.30mbgl and WS01 at 0.20mbgl chemical test results were below the laboratory limits of detection (LLD). While PAH compounds were recorded above the LLD in both these samples none exceeded the GAC.

In total six samples were submitted for speciated TPH and one sample for total TPH. Total TPH concentrations above the LLD were found in two samples including TP1 (0.0m to 0.3m) and WS01 (0.60m) with concentrations of 145mg/kg and 60mg/kg respectively. Where identified these appear to be within the aliphatic/aromatic C16 to C40 range, indicative of ‘heavy fuel oils’ and PAHs. No evidence of fuel oils was encountered during the site investigation. While TPH compounds were recorded above the LLD in both these samples none exceeded the GAC.

Three samples were submitted for a suite of organochlorine pesticides, organophosphorous pesticides and Triazine herbicides from across the site at shallow depth including TP3 (ground level to 0.20mbgl), TP6 (ground level to 0.20mbgl), TP11 (ground level to 0.10mbgl). All were found to be at concentrations below LLD suggesting that historical herbicide and pesticide use on site has not caused significant contamination.

The chemical test results indicate that with the exception of the deeper made ground in the vicinity of TP2 and WS1, no potentially significant risks associated with the soil contamination have been identified and it is considered that the site may be regarded as suitable for the proposed end use.

In regard to the made ground within TP2 and WS1 this material would be chemically and physically unsuitable based on the test results and presence of anthropogenic material including brick, glass, plastic for use in private gardens. Based on the proposed development plans this area will remain public open space (POS). The chemical results do not exceed the GAC for POS therefore at this stage no remediation would be required. Notwithstanding the above, given the limited number of exploratory locations completed as wells as the heterogeneity of materials encountered and anecdotal evidence regarding material provenance, the potential for previously unforeseen ground conditions remains. On this basis, it would be prudent to supplement existing data with a shallow exploratory works (hand pitting exercise) to accurately defined prevailing shallow ground conditions and soil suitability.

9.3.2 H2. Inhalation exposure of future occupants/site users to asbestos fibres

The visual inspection at the laboratory identified no materials suspected of potentially containing asbestos and the scheduled laboratory screening for asbestos found no detectable asbestos fibres within the samples of made ground or topsoil across the site.

9.3.3 H3. Uptake of contaminants by vegetation potentially inhibiting plant growth (phytotoxicity)

As for the human health assessment above, samples from the Made Ground have been used to undertake a statistical analysis for the phytotoxic metals zinc, copper, nickel, lead, cadmium and mercury.

Comparison of the recorded values to the GAC presented in Appendix L for this linkage indicates that the Made Ground in the vicinity of WS1 and TP2 contains concentrations of lead above the GAC (300mg/kg) therefore a relevant contaminant linkage may associated with phytotoxic effects. Notwithstanding visual inspection of vegetation at this location and across the site has not indicated signs of vegetative distress.

All other samples were found to be below the relevant GAC.

The above indicates that a pollutant linkage is unlikely to exist outside areas of deeper made ground. The made ground in the vicinity of WS1 and TP2 is unlikely to be a suitable medium for future planting.

9.3.4 H4. Organic contaminants permeating potable water supply pipes

For initial assessment purposes, the results of the investigation have been compared with the GAC presented in Appendix M for this linkage, which are reproduced from *UKWIR Report 10/WM/03/21. Guidance for the Selection of Water Supply Pipes to be used in Brownfield Sites* (UKWIR, 2010).

The results indicate that a relevant linkage is unlikely to exist associated with organic contaminants and therefore pollutant polyethylene (PE) and/or polyvinyl chloride (PVC) water supply pipes are expected to be suitable for use on the development.

It should be noted that at the time of this investigation the future routes of water supply pipes had not been established, hence the investigation and sampling strategy may not be fully compliant with UKWIR recommendations. Consequently, a targeted investigation and specific sampling/analytical strategy may be required at a later date once the route(s)

of the supply pipe(s) are known. It has been assumed that future potable water supplies lines will not traverse areas of deeper made ground identified in the vicinity of WS1 and TP2.

In addition, it is recommended that the relevant water supply company be contacted at an early stage to confirm its requirements for assessment, which may not necessarily be the same as those recommended by UKWIR.

9.3.5 W1 Leaching of soil contaminants and dissolved phase migration to wider principal/ secondary aquifer* / Migration of dissolved phase contaminants to surface waters

With the exception of the deeper made ground in the vicinity of TP2 and WS1 all soil samples submitted for analysis were found to below the corresponding Generic Assessment Criteria (GAC) in regard to human health, phytotoxicity and potable water supply pipes. Based on this assessment and observations of the made ground and cohesive natural soils made during the site investigation no potentially significant risks associated with the migration of dissolved phase contaminants to the wider Secondary A aquifer have been identified.

9.4 G1: Methodology and assessment of ground gas-related linkages

9.4.1 Appropriate guidance

The risks to development from ground gases have been assessed in accordance with BS8485:2015+A1:2019 (BS8485), which provides guidance on ground gas (methane and carbon dioxide) characterisation and hazard assessment, as well as providing a framework for the prescription of protection measures within new buildings.

The process involves characterising the gas hazard from combining the qualitative assessment of risk (using the CSM) with ground investigation data so that a 'characteristic situation' (CS) can be derived for the site or zones within the site. Characteristic situations range from CS1 to CS6, the higher the CS, the higher the hazard potential. Gas protection measures within new buildings can be prescribed using a point scoring system, taking into consideration the CS and the proposed building type.

BS8485 indicates that the gas hazard can be characterised using the following methods:

- an empirical semi-quantitative approach using gas monitoring data to determine the 'characteristic situation' of the site (or zones of the site) and subsequent protective measures (Wilson and Card approach).
- an empirical semi-quantitative approach using TOC data to determine the 'characteristic situation' of the site (or zones of the site) and subsequent protective measures (CL:AIRE RB17 approach) or
- detailed quantitative assessment methodologies.

For the purpose of this assessment, the empirical semi-quantitative approach above has been used to characterise the gas hazard and provide advice on the protective measures likely to be required within new buildings at the site.

9.4.2 Empirical semi-quantitative approach using borehole monitoring data

The empirical semi quantitative approach using gas monitoring data requires the designation of a gas screening value (GSV) for the entire site or zones within the site, which informs the hazard potential and associated prescribed ground gas protection measures within new buildings (where necessary). BS8485 defines the GSV as the *'flow rate (l/hr) of a specific hazardous gas* ***representative of a site or zone****, derived from assessment of borehole concentration and flow rate measurements and taking account of all other influencing factors, in accordance with a conceptual site model'.*

BS8485 Section 6.3.1 outlines the process for developing a GSV for the site or a zone as follows:

- Borehole hazardous gas flow rate (Q_{hg}) is calculated for each borehole standpipe for each monitoring event. The borehole hazardous gas flow rate is defined in BS8485 as the '*flow rate of a specific hazardous gas, either methane or carbon dioxide, from a borehole standpipe'*. The Q_{hg} is calculated from individual borehole measurements of total gas flow and the concentration of the specific hazardous gas. BS8485 states in Section 6.3.4 that the **maximum** gas concentration recorded during the monitoring event should be used, together with **steady-state** values of gas flows;
- The reliability of the measured gas flow rates and concentrations are assessed taking into account borehole construction;
- Decisions are made about how to deal with any temporal or spatial shortages in the data; and
- Judgements are made about what GSV to designate for use for design purposes taking all relevant information and the conceptual site model into account.

Once the Q_{hg} has been calculated for methane and carbon dioxide, individual borehole measurements are compared to the thresholds presented in Table 2 of BS8485 which inform the CS that directly relates to each individual measurement. Taking into account the site data (i.e. borehole gas concentration and flow rate to calculate the Q_{hg}) and all other influencing factors in accordance with the CSM, a decision can then be made regarding the GSV that is considered to be representative of the site or a zone within it.

Typical threshold concentrations of methane (1% v/v) and carbon dioxide (5% v/v), and flow rates (>70 l/h), are also considered when designating the GSV for the site or zone, which in turn dictates the hazard potential and CS. It is important to note that the site or zone characteristic GSV and maximum concentration or flow thresholds are guideline values and not absolute. The thresholds may be exceeded in certain circumstances, if the CSM indicates it is safe to do so.

The results of the ground gas monitoring and testing undertaken, alongside site conditions at the time of monitoring, are given in Appendix H.

A summary of the maximum recorded concentrations per borehole (or minimum for oxygen) is presented in **Table 21** overleaf. This table also presents details of the response zone, maximum recorded initial and steady state flow rates and minimum recorded depth to water across all monitoring rounds.

The range of atmospheric pressure over the monitoring rounds was 992 to 1030mbar.

Table 21 Summary of ground gas monitoring results all data/ excluding entirely flooded response zones*

Exploratory position ID	Response zone (mbgl)	Response zone geological unit	monitoring round	monitoring round date	Peak CH_4 max. (%/vol)	Steady-state CH_4 max. (%/vol)	Peak CO_2 max. (%/vol)	Steady-state CO_2 max. (%/vol)	Oxygen min. (%/vol)	Peak gas flow max. (l/hr)	Steady-state gas flow max. (l/hr)	Atm. pressure (mb)
WS1	0.60 to 4.00	Natural and Made ground	1	1/12/2021	<0.1	<0.1	6.6	-	17.1	0.0	0.0	998 to 997
			2	8/12/2021	<0.1	<0.1	0.6	0.1	21.5	0.0	0.0	992 to 993
			3	15/12/2021	<0.1	<0.1	0.5	0.1	21.0	0.4	0.0	1030
WS2	0.45 to 3.45	Natural	1	1/12/2021	<0.1	<0.1	0.4	0.4	21.3	0.0	0.0	998 to 997
			2	8/12/2021	<0.1	<0.1	0.3	-	21.0	0.0	0.0	992 to 993
			3	15/12/2021	<0.1	<0.1	0.1	0.1	21.0	0.0	0.0	1030
WS3	0.37 to 2.70	Natural	1	1/12/2021	<0.1	<0.1	1.2	1.2	20.3	0.0	0.0	998 to 997
			2	8/12/2021	<0.1	<0.1	0.2	0.1	21.1	0.0	0.0	992 to 993
			3	15/12/2021	<0.1	<0.1	1.0	0.7	18.9	0.5	0.0	1030
WS4	1.45 to 3.45	Natural	1	1/12/2021	<0.1	<0.1	1.3	1.3	20.5	0.0	0.0	998 to 997
			2	8/12/2021	<0.1	<0.1	0.2	0.1	21.0	0.0	0.0	992 to 993
			3	15/12/2021	<0.1	<0.1	0.1	0.1	20.8	0.6	0.0	1030
WS5	0.45 to 3.45	Natural	1	1/12/2021	<0.1	<0.1	0.2	0.2	21.2	0.0	0.0	998 to 997
			2	8/12/2021	<0.1	<0.1	0.2	0.1	21.1	0.0	0.0	992 to 993
			3	15/12/2021	<0.1	<0.1	0.1	0.1	21.0	0.8	0.0	1030

A peak CO2 of 6.6 %/vol in WS1 during round 1, peak Methane of <0.1%/vol and peak flow of 0.8 Litres a second were recorded in WS5 during round 3.

It should be noted that the response zones of each well were flooded in all locations during rounds 2 and 3 which can lead to erroneous results.

Therefore a peak CO2 of 6.6 %/vol, peak Methane of <0.1%/vol and peak flow of <0.1 Litres a second have been used to calculate.

In accordance with BS8485, a 'worst case' scenario has been calculated for the site by multiplying the maximum recorded flow from any monitoring round by the maximum recorded methane or carbon dioxide concentration.

The gas monitoring data has identified a maximum methane concentration of <0.1% and a maximum concentration of carbon dioxide of 6.6%. A maximum steady gas flow rate of 0.1 l/hr has been recorded. The calculated GSV for methane (based on limits of detection) is 0.0001 l/hr and for carbon dioxide is 0.066. Based on the GSVs alone the site would be classified as Characteristic Situation 1 (Very Low Risk).

However, based upon the maximum recorded concentrations of carbon dioxide, which exceed a provisional upper threshold of 5% for a Characteristic Situation 1 classification, a more robust monitoring data set would be required to adequately characterise the site. On this basis, the site classification should provisionally be increased to Characteristic Situation 2 until further monitoring has been undertaken to characterise the site.

Notwithstanding the above the risk is associated with deeper made ground on an area of the site that will be set aside as POS. In addition to this the made ground is raised above the rest of the site and is underlain by cohesive soils of the Warhurst Clay Formation. Based on the ground conditions, position of the waste, its elevation above the site and the results of the ground gas monitoring the risk posed by groundgas on site has been ruled out and no further assessment is required in terms of groundgas.

9.5 Uncertainties and implications in refined CSM and GQRA

In accordance with good practice, data gaps and uncertainties in the refined CSM have been identified at this stage. These are summarised in Table 22 along with the likely implications.

Table 22 Data gaps and uncertainties

Data gap/ uncertainty	Details	Implications
The area on the south west corner of the site was heavily vegetated and not accessible for investigation.	Under proposed development plans while this area lies within the site boundary it is not shown to be developed.	There is a gap in coverage for soil for this area. Notwithstanding the above the development plans available to RSK do not show development in this area so no further investigation is proposed at this stage.
Asbestos not found in made ground samples tested	Although not encountered to date, asbestos containing material (ACM) could still be present in discrete locations	Vigilance should be maintained for any potential ACM or fibrous material during below ground works especially in areas of deeper made ground (TP2 and WS1)
Only three rounds of ground gas monitoring has been completed to date. In addition the response zones during rounds 2 and 3 were flooded and therefore the data has been omitted from the ground gas assessment.	The worst case conditions for gas flow are unlikely to have been characterised, limiting the risk assessment.	The likely worst case gas regime has not been used and thus ground gas mitigation measures may be underestimated without further ground gas monitoring during a period of falling pressure
No groundwater and surface water samples were collected as part of the investigation	While water seepages were identified in a number of locations these are not thought to represent a continuous groundwater body rather perched water trapped in made ground / granular bands. Therefore it has not been possible to sample and test groundwater. Surface water sampling and testing of onsite surface water features was not included as part of the scope.	The initial risk to controlled waters and surface water has been based on soil chemical results rather than direct sampling of surface and or groundwater. Testing of surface water or groundwater samples would be a more robust assessment. Notwithstanding the above the risk to surface and controlled waters is deemed low based on the assessment undertaken and further sampling and testing is not recommended at this stage.

10 PRELIMINARY WASTE ASSESSMENT

In accordance with the definition provided in the Waste Framework Directive (WFD), materials are only considered waste if 'they are discarded, intended to be discarded or required to be discarded, by the holder'. Naturally occurring soils are not considered waste if reused on the site of origin for the purposes of development. Soils such as made ground that are not of clean and natural origin (irrespective of whether they are contaminated or not) and other materials such as recycled aggregate, do not become waste until the criteria above are met. Further background information is provided in Appendix F.

Excavation arisings from the development may therefore be classified as waste if surplus to requirements or unsuitable for reuse. The following assessments assume the material tested is classified subsequently as waste.

10.1 Hazardous waste assessment

Technical Guidance WM3 (EA, 2018) sets out in its Appendix D requirements for waste sampling. It is a legal requirement to correctly assess and classify waste. The level of sampling should be proportionate to the volume of waste and its heterogeneity. The preliminary assessment provided below is based only upon the available sample results and may not be sufficient to adequately classify the waste.

10.1.1 Chemical contaminants

Envirolab, an RSK company, has developed a waste soils characterisation assessment tool (HASWASTE), which follows the guidance within Technical Guidance WM3. The analytical results have been assessed using this tool to assess the hazardous properties to support potential off-site disposal of materials in the future. A copy of the assessment has been included in Appendix N. Note that it is ultimately for landfills to confirm what wastes they are able to accept within the constraints of their permit.

No samples were found to have hazardous properties based on this assessment. This suggests that if applicable the waste would require disposal at a suitably permitted inert or non-hazardous waste landfill.

10.1.2 Asbestos within waste soils

Technical Guidance WM3 requires that within a mixed waste the separately identifiable wastes be assessed separately.

For instance, where waste soil contains identifiable pieces of asbestos (visible to the naked eye) the asbestos should, where feasible, be separated from the soil and classified separately. This should be disposed of within a hazardous, stable non-reactive hazardous waste landfill or a special cell in a non-hazardous waste landfill.

As noted above the visual inspection on site and at the laboratory identified no materials suspected of potentially containing asbestos and the scheduled laboratory screening for asbestos found no detectable asbestos fibres within the samples of made ground or topsoil across the site. Notwithstanding the above asbestos containing materials may still be present in discrete areas of site and particular care and attention should be taken when excavating in areas of deeper made ground.

10.2 WAC assessment

A sample from 0.60mbgl in WS01 was submitted for waste acceptance criteria (WAC) testing, the results of which are presented in Appendix I.

The results of the WAC testing indicate that the leaching limit values for inert waste have been exceeded and therefore the waste is not suitable for disposal within an inert landfill but should be disposed of at a landfill or treatment facility which is permitted to take non-hazardous waste.

RSK recommends that a Sampling Plan be prepared to support any waste classifications and hazardous waste assessments, prior to any material being excavated. Given the level of data obtained, scale of the development and heterogeneity of the site soils, the following assessment should be considered indicative and further assessment should be undertaken following the preparation of a waste sampling plan.

11 GEOTECHNICAL ASSESSMENT

11.1 Proposed development

The proposed layout of the site, at the time of preparing this report, is shown in Appendix B. The proposed development comprises private residential homes with associated driveways, soft landscaping frontage and rear gardens, as well as areas of public open space and sports pitches. It has been assumed the ground-bearing floor slabs will not be required and that beam and block flooring will be utilised.

11.2 Key geotechnical hazards/development constraints

The key risks identified from the available ground investigation data are discussed below:

- presence of shrinkable clay soils associated with the weathered portion of Weald Clay Formation and Arthfield Clay;
- pyritic ground conditions associated with the underlying geology;
- lateral and vertical variable ground conditions;
- variable silt content associated with the underlying ground conditions;
- deep made ground in the vicinity of TP2 and WS1

11.3 Foundations

11.3.1 Foundation options

Given the presence of competent natural soils at a relatively shallow depth it is considered that traditional spread footings will be suitable for the proposed development.

Given the significant depth of made ground encountered in the vicinity of TP2 and WS1 spread footings are unlikely to be suitable for the development unless it is proposed to reduce the level of the site in this area as part of the proposed development.

The adoption of traditional spread foundations to support the predominantly low-rise residential development appears technically feasible. However, the deep made ground recorded to the south, together with locally low strength soils (inferred from in-situ test results and field descriptions) is likely to dictate the requirement for some of the proposed foundations to be significantly deepened. Furthermore, the presence of potentially desiccated clay soils in the vicinity of existing trees/hedges (notably to the west of the site densely populated with trees) may exist. The foundation design therefore needs to take account of the potential for damaging ground movements to occur as a result of shrinkage of the clay soils close to existing trees and the subsequent swelling where trees maybe be removed.

Whilst recommendations for the design and construction of spread foundation is provided in Section 11.3.2, it is recommended that further investigations be conducted to provide greater confidence that traditional spread foundations will prove economically viable given the likely requirement to locally deepen and support foundation excavations. Alternatively, prior treatment, such as vibro-compaction/replacement may prove a more cost effective

solution to enable the adoption of shallow foundations. However, it is recommended that advice be sought from a ground improvement specialist to confirm suitability of the ground conditions for treatment and achievable bearing capacities.

Notwithstanding the above, recourse to piled foundations could also be adopted, subject to further deeper investigations confirming design parameters.

11.3.2 Spread foundations

The recommendations for the design and construction of spread foundations in relation to the ground conditions are set out in Table 23.

Table 23 Design and construction of spread foundations

Design/construction considerations	Design/construction recommendations
Founding stratum	Weald Clay Formation
Depth	Foundations should be taken to a minimum depth of 1.0m below the final or existing ground level, whichever is lower, and at least 0.2m into the founding stratum below any overlying made ground or to any greater depth required in respect of the special design considerations given below.
Special design considerations	
Shrinkable soils	Owing to the presence of shrinkable clay soils, foundations should be designed taking into account all the normal precautions, including minimum founding depths, to minimise the risk of future foundation movements in accordance with NHBC standards or similar. The findings of the ground investigation indicate that foundations should be designed for shrinkable soils of low to high volume change potential.
Presumed bearing capacity	Strip/trench fill foundations with a width of upto 1.0m and constructed on the firm to stiff clay at a minimum depth of 1.0m may be designed using a presumed bearing capacity of 90 kN/m^2. The presumed bearing capacity includes a partial factor on bearing resistance of 3 against bearing capacity failure. Total settlements associated with the presumed bearing pressure are anticipated to be less than 25 mm.
Construction considerations	All foundation excavations should be inspected, and any made ground and soft, organic or otherwise unsuitable materials removed and replaced with mass concrete. The proposed founding stratum is a relatively silt-rich soil, hence susceptible to rapid softening once exposed. Hence all foundation excavations should immediately be blinded with concrete or the full foundation constructed.

11.4 Roads and hardstanding

In the 1 m to 1.5 m below the proposed finished ground level the exploratory holes have revealed a soil profile comprising topsoil and or mage ground overlying initially soft

becoming firm to stiff clay. The potentially poorest sub-grade material within this profile is the made ground.

In pavement design terms, the groundwater conditions are anticipated to comprise a low water table, i.e. at least 1 m below the pavement formation level.

The estimated minimum, equilibrium soil-suction, California bearing ratio (CBR) value for the soils and groundwater conditions described above under a completed pavement is 2 %, based upon Table C1 in TRRL (1984) Report LR1132.

The results of in-situ testing are summarised in Table 24.

Table 24 Summary of CBR values derived from in-situ and ex-situ methods

Test location	Material type	Minimum CBR value determined at or just below anticipated formation level
Laboratory test in line with BS1337:4 clause 7 (seating 10N and surcharge 4kg)		
HP01 0.40-0.60m	Yellowish brown slightly sandy CLAY with roots	2.8 % to 5.8 %
HP02 0.50m	Yellowish brown mottled dark brown slightly sandy CLAY.	3.7% to 4.9%
HP03 0.50m	Yellowish brown mottled grey slightly sandy CLAY.	2.3% to 3.5%
HP04 0.50m	Greyish brown slightly sandy CLAY.	1.2% to 1.6%
HP05 0.50-0.60	Yellowish brown slightly sandy CLAY with rare gravel. Gravel is fine to medium.	2.4% to 3.2%
In-Situ Dynamic Cone Penetrometer		
DCP1 (0.50) to DCP10 (0.50)	NA	3% to 10%

The recommended sub-grade soil CBR value for road pavement design is therefore 3 %. This value assumes that during construction the formation level will be carefully compacted and any soft spots removed and replaced with well-compacted granular fill.

The sub-grade soils can be regarded as potentially frost-susceptible, based upon the criteria given in Appendix 1 of TRRL (1970) Report Road Note 29. When the sub-grade is frost-susceptible the thickness of sub-base must be sufficient to give a total thickness of non-frost-susceptible pavement construction over the soil of not less than 450 mm.

11.5 Excavations for foundations and services

Generally, the trial pits remained stable during excavation which indicates that foundation excavations should also remain stable in the short term. In the event that excavations are to remain open for longer periods, consideration should be given to the use of trench support systems.

Man entry into any excavations should not be undertaken without provision of suitable shoring and support and dewatering or suitable regrading and battering of side slopes to safe angles. Confined spaces protocols for the Health and Safety of personnel should always be used where man entry into excavations is to be undertaken as low oxygen conditions may be present.

Groundwater was encountered at 1.5m in TPS1 and 2.0m in TP2. Notwithstanding the above the recommendations are expected to remain relatively dry in the short term and dewatering is not thought to be required unless pits unless excavations are likely to remain open.

The cohesive nature of the soils encountered suggests that pumping from open sumps if required should be sufficient to keep the excavations reasonably dry.

11.6 Chemical attack on buried concrete

This assessment of the potential for chemical attack on buried concrete at the site is based on BRE Special Digest 1: Concrete in aggressive ground, which represents the most up-to-date guidance on this topic currently available in the UK.

The desk study and site reconnaissance indicate that, for the purposes of assessing the aggressive chemical environment of the site, the site should be considered as comprising natural ground and some made ground likely to contain pyrite.

Based on testing results, Table 25 gives the characteristic pH, water-soluble and total sulphate content values for soils from each of the geological units and groundwater encountered on-site.

The two samples of made ground taken from 0.20m and 1.20m have been excluded from the assessment. This area under the proposed development is POS and therefore the made ground in this location will not come into contact with foundations.

Table 25 Characteristic pH, water soluble sulphate and total sulphate values

Stratum	pH	Water Soluble Sulphate (mg/l)	Total Potential Sulphate (mg/l)
Cultivated topsoil	6.6 to 7.2	10 to 55	0.06 to 0.09
Weald Clay Formation	6.06 to 8.21	<10 to 481	0.03 to 0.18

Based on the results above and following the steps outlined in the BRE guidance, the Design Sulphate Classes and Aggressive Chemical Environment for Concrete classifications are summarised in Table 26, on the basis of water soluble sulphate and total potential sulphate, respectively.

Table 26 Concrete design class

Stratum	Ground water	Water Soluble Sulphate		Total Potential Sulphate	
		DS Class	AC Class	DS Class	AC Class
Cultivated topsoil	Static	DS-1	AC-1s	DS-1	AC-1s
Weald Clay Formation	Static	DS-1	AC-1s	DS-1	AC-1s

From consideration of results for pyritic, Design Sulphate Class of DS-1, may be adopted for the site. It has been assumed that groundwater conditions are static. From consideration of the characteristic pH value, an Aggressive Chemical Environment for Concrete classification of AC-1s may be assumed for design purposes.

11.7 Infiltration drainage

Soakage testing was carried out in general accordance with BRE 365 within four of the trial pits, designated TPS1, TPS2 and TPS3. However due to the slow infiltration, the tests were carried out only once at each location, rather than the three times prescribed within BRE 365. Further, the slow soakage dictated that infiltration rates for all of the exploratory holes could not be determined between the full 75% and 25% range of the effective depth as suggested in BRE 365. Therefore the low permeability clays encountered at shallow depth do not appear suitable for the discharge of surface waters via traditional chamber soakaways. However consideration may be given to alternatives, such as sustainable urban drainage systems.

12 CONCLUSIONS AND RECOMMENDATIONS

12.1 Environmental

As an initial assessment of each dataset, all soil results in each dataset have been directly compared against the GAC for residential with home-grown produce.

The chemical test results indicate that with the exception of the deeper made ground in the vicinity of TP2 and WS1, no potentially significant risks associated with the soil contamination have been identified and it is considered that the site may be regarded as suitable for the proposed end use.

In regard to the made ground within TP2 and WS1 this material would be chemically and physically unsuitable based on the test results and presence of anthropogenic material including brick, glass, plastic for use in private gardens. Based on the proposed development plans this area will remain public open space (POS). The chemical results do not exceed the GAC for POS therefore at this stage no remediation would be required. Notwithstanding the above, given the limited number of exploratory locations completed as wells as the heterogeneity of materials encountered and anecdotal evidence regarding material provenance, the potential for previously unforeseen ground conditions remains. On this basis, it would be prudent to supplement existing data with a shallow exploratory works (hand pitting exercise) to accurately defined prevailing shallow ground conditions and soil suitability.

While ACM were not encountered during the investigation the presence of discrete asbestos fragments cannot be ruled out and may be encountered during more extensive groundworks within the made ground on site. Vigilance should be maintained for any potential ACM or fibrous material during below ground works.

A pollutant linkage is unlikely to exist in regards to phytotoxicity outside areas of deeper made ground. The made ground in the vicinity of WS1 and TP2 is unlikely to be a suitable medium for future planting.

The results indicate that a relevant linkage is unlikely to exist associated with organic contaminants and therefore pollutant polyethylene (PE) and/or polyvinyl chloride (PVC) water supply pipes are expected to be suitable for use on the development. It has been assumed at this stage that groundwater supply pipes would not be placed in areas of deep made ground.

Based on chemical test results and the soil and groundwater conditions encountered no potentially significant risks associated with the migration of dissolved phase contaminants to the wider Secondary A aquifer have been identified.

Three rounds of ground gas monitoring has been conducted to date which has locally receded elevated concentrations of carbon dioxide above the 5% threshold suggested for a very low risk Characteristic Situation 1 regime. Notwithstanding the above based on the ground conditions, position of the waste, its elevation above the site and the results of the ground gas monitoring the risk posed by groundgas has been discounted and the site can be classified as Characteristic Situation 1 for which no gas protection measures are required.

Results of the preliminary waste classification suggest made ground soils unlikely to be considered inert based on current understanding of physical constituents as well as preliminary WAC data.

Should ground conditions of concern be encountered during site development then appropriate advice must be sought from a geo-environmental consultant.

12.2 Geotechnical

Given the presence of competent natural soils at a relatively shallow depth, it is considered that spread foundations are suitable for the proposed development. Locally recourse to piled foundations may more economical where foundations need to be deepened for tree influence in line with NHBC guidance for building in cohesive soils with a high volume change potential. Should a piled foundation solution be required, then additional boreholes will be required to determine the parameters for piled foundation design.

The recommended sub-grade soil CBR value for preliminary road pavement design is 2%. The sub-grade soils can be regarded as frost-susceptible. When the sub-grade is frost-susceptible the thickness of sub-base must be sufficient to give a total thickness of non-frost-susceptible pavement construction over the soil of not less than 450 mm.

It is recommended that buried concrete for spread foundations is designed in accordance with Design Sulphate Class DS-1 and Aggressive Chemical Environment for Concrete Class AC-1s.

Excavations within the cohesive units should remain stable during construction, but some localised dewatering/pumping and shoring may be required where shallow granular material was identified.

The ground conditions do not appear to be suitable for the use of pit soakaways.

12.3 Recommendations:

It is recommended that additional investigation to delineate the extent as well as the chemical and physical composition of the deep made ground identified in the vicinity of TP2 and WS1 be undertaken including:

- Shallow hand dug pits
- Chemical testing to refine suitability assessment and waste characterisation

REFERENCES

Standards and guidance

AGS (May 2021), 'Assessment and Control of Asbestos Risk in Soil- Part 1: Protection of personnel working on Ground Investigations'.

AGS (May 2021), 'Assessment and Control of Asbestos Risk in Soil- Part 2: Protection of Personnel working in Geotechnical and Geoenvironmental Laboratories.

Baker, K., Hayward, H., Potter, L., Bradley, D. and McLeod, C. (2009), CIRIA Report C682. The VOCs Handbook. Investigating, assessing and managing risks from inhalation of VOCs at land affected by contamination.

Boyle, R. A. and Witherington, P. J. (2007), 'Guidance on Evaluation of Development Proposals on Sites where Methane and Carbon Dioxide are Present', National House-Building Council and RSK Group.

British Standards Institution (BSI) (1990), 'BS 1377:1990. Methods of test for soils for civil engineering purposes'.

British Standards Institution (BSI) (2020), 'BS 5930:2015+A1:2020. Code of practice for ground investigations'.

British Standard Institution (BSI) (2019), 'BS 8485:2015+A1:2019. Code of practice for the design of protective measures for methane and carbon dioxide ground gases for new buildings'.

British Standards Institution (BSI) (2017), 'BS 10175:2011 + A2:2017. Investigation of potentially contaminated sites: Code of practice'.

British Standards Institution (BSI) (2013), BS8576:2013. Guidance on investigations for ground gas – permanent gases and volatile organic compounds (VOCs).

Building Research Establishment (2005), BRE Special Digest 1: Concrete in aggressive ground.

Card G, Wilson S, Mortimer S, (2012). A Pragmatic Approach to Ground Gas Risk Assessment. CL:AIRE Research Bulletin RB17. CL:AIRE, London, UK. ISSN 2047- 6450 (Online).

Chartered Institute of Environmental Health (CIEH), (2008), The Local Authority Guide to Ground Gas. Wilson, Card and Haines, September 2008.

CIRIA (2014). Good practice on the testing and verification of protection systems for buildings against hazardous ground gases.

Environment Agency (2018), 'Technical Guidance WM3. Guidance on the classification of and assessment of waste, 1st Edition, v.1.1, May 2018.

Environment Agency (2020), Land contamination risk management, https://www.gov.uk/government/publications/land-contamination-risk-management-lcrm, April 2021.

National House Building Council (NHBC) (2016), Technical Extra, April 2016.

Norbury, D. (2010), Soil and Rock Description in Engineering Practice.

Part IIA of the Environmental Protection Act (Contaminated Land Regulations (England)) 2002.

Rudland, D. J., Lancefield, R. M. and Mayell, P. N. (2001), CIRIA C552. Contaminated Land Risk Assessment: A Guide to Good Practice.

Stone, K., Murray, A., Cooke, S., Foran, J., Gooderham, L., (2009) CIRIA C681, Unexploded Ordnance (UXO). A guide or the construction industry.

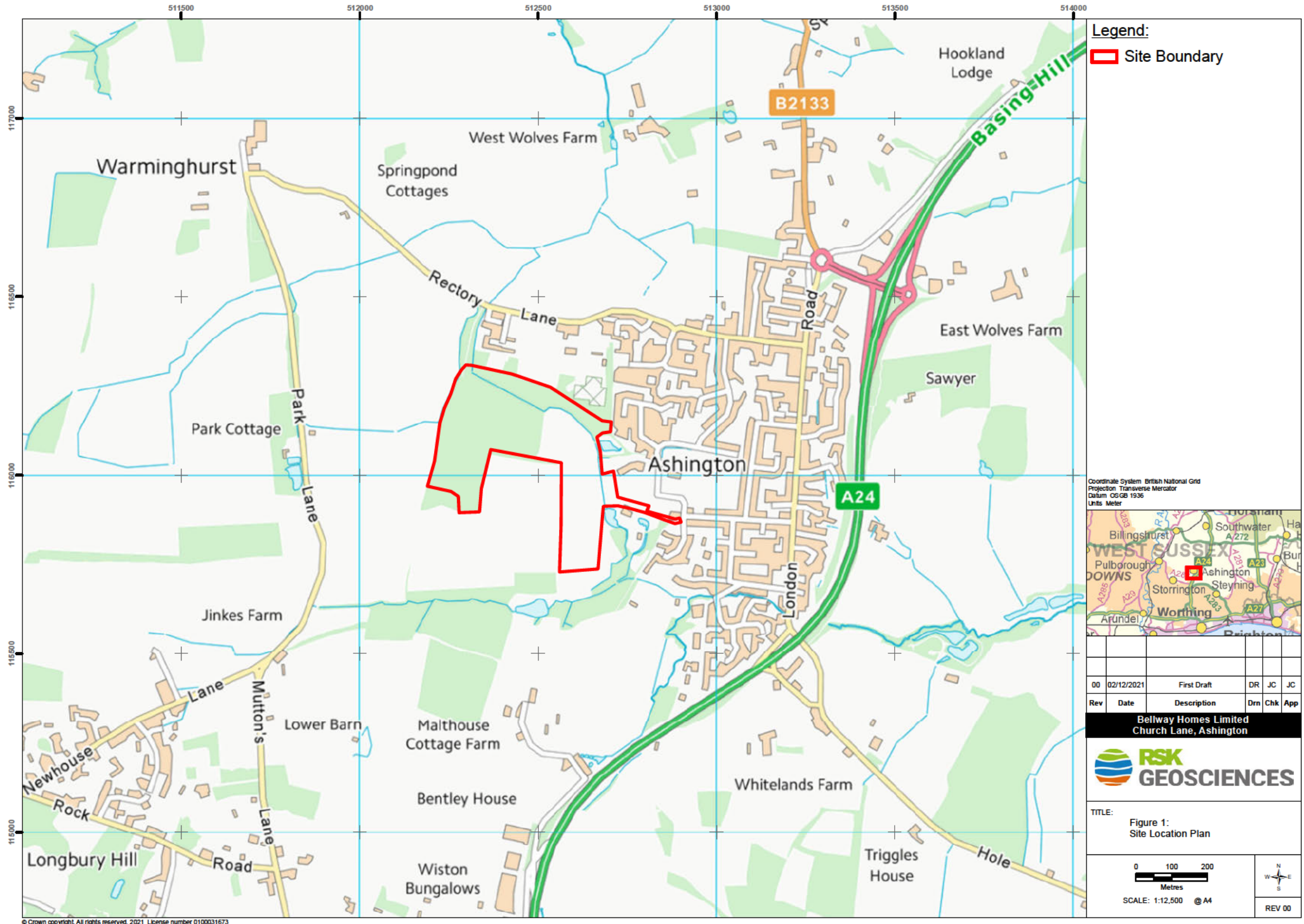
Transport and Road Research Laboratory, (1970), 'TRRL Road Note 29 (Appendix 1). Road pavement design'.

Transport and Road Research Laboratory (1984), 'TRRL Report LR1132 (Table C1)'.

UK Water Industry Research, (2010), UKWIR Report 10/WM/03/21. Guidance for the Selection of Water Supply Pipes to be used in Brownfield Sites.

FIGURES

FIGURE 1 SITE LOCATION PLAN



© Crown copyright. All rights reserved. 2021 License number 0100031673
Contains OS data © Crown Copyright and database right 2020

FIGURE 2 SITE LAYOUT PLAN

Legend:

- Site Boundary
- Hand Dug Pits
- Trial Pit
- Trial Pit (Soakaway)
- Window Sample
- DCP

Coordinate System British National Grid
Projection Transverse Mercator
Datum OSGB 1936
Units Meter

Rev	Date	Description	Drn	Chk	App
00	10/12/2021	First Draft	DR	JC	JC

Bellway Homes Limited
Church Lane, Ashington

RSK GEOSCIENCES

TITLE:
Figure 2:
Site Layout Plan

0 50 100
Metres
SCALE: 1:3,500 @ A4

N W E S

REV 00

Document Path: C:\Users\droberts\Desktop\Workings\52368 - Church Lane, Ashington\01 - GIS\Figure 2 - Site Layout Plan - A4.mxd

© Crown copyright. All rights reserved. 2021 License number 0100031673
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

APPENDICES

APPENDIX A
SERVICE CONSTRAINTS

1. This report and the site investigation carried out in connection with the report (together the "Services") were compiled and carried out by RSK Environment Limited (RSK) for Bellway Homes Ltd (the "Client") in accordance with the terms of a contract RSK Environment Standard Terms and Conditions between RSK and the Client.. The Services were performed by RSK with the reasonable skill and care ordinarily exercised by an environmental consultant at the time the Services were performed. Further, and in particular, the Services were performed by RSK taking into account the limits of the scope of works required by the client, the time scale involved and the resources, including financial and manpower resources, agreed between RSK and the Client.
2. Other than that, expressly contained in paragraph 1 above, RSK provides no other representation or warranty whether express or implied, in relation to the Services.
3. Unless otherwise agreed in writing, the Services were performed by RSK exclusively for the purposes of the Client. RSK is not aware of any interest of or reliance by any party other than the Client in or on the Services. Unless expressly provided in writing, RSK does not authorise, consent or condone any party other than the client relying upon the Services. Should this report or any part of this report, or otherwise details of the Services or any part of the Services be made known to any such party, and such party relies thereon that party does so wholly at its own and sole risk and RSK disclaims any liability to such parties. **Any such party would be well advised to seek independent advice from a competent environmental consultant and/or lawyer.**
4. It is RSK's understanding that this report is to be used for the purpose described in the introduction to the report. That purpose was a significant factor in determining the scope and level of the Services. Should the purpose for which the report is used, or the proposed use of the site change, this report may no longer be valid and any further use of or reliance upon the report in those circumstances by the client without RSK 's review and advice shall be at the client's sole and own risk. Should RSK be requested to review the report after the date of this report, RSK shall be entitled to additional payment at the then existing rates or such other terms as agreed between RSK and the client.
5. The passage of time may result in changes in site conditions, regulatory or other legal provisions, technology or economic conditions which could render the report inaccurate or unreliable. The information and conclusions contained in this report should not be relied upon in the future without the written advice of RSK. In the absence of such written advice of RSK, reliance on the report in the future shall be at the Client's own and sole risk. Should RSK be requested to review the report in the future, RSK shall be entitled to additional payment at the then existing rate or such other terms as may be agreed between RSK and the client.
6. The observations and conclusions described in this report are based solely upon the Services which were provided pursuant to the agreement between the Client and RSK. RSK has not performed any observations, investigations, studies or testing not specifically set out or required by the contract between the client and RSK. RSK is not liable for the existence of any condition, the discovery of which would require performance of services not otherwise contained in the Services. For the avoidance of doubt, unless otherwise expressly referred to in the introduction to this report, RSK did not seek to evaluate the presence on or off site of asbestos, invasive plants, electromagnetic fields, lead paint, heavy metals, radon gas, persistent, bioaccumulative or toxic chemicals (including PFAS/ PFOS) or other radioactive or hazardous materials, unless specifically identified in the Services.
7. The Services are based upon RSK's observations of existing physical conditions at the Site gained from a visual inspection of the site together with RSK's interpretation of information, including documentation, obtained from third parties and from the Client on the history and usage of the site, unless specifically identified in the Services or accreditation system (such as UKAS ISO 17020:2012 clause 7.1.6):
    a. The Services were based on information and/or analysis provided by independent testing and information services or laboratories upon which RSK was reasonably entitled to rely.

b. The Services were limited by the accuracy of the information, including documentation, reviewed by RSK and the observations possible at the time of the visual inspection.

c. The Services did not attempt to independently verify the accuracy or completeness of information, documentation or materials received from the client or third parties, including laboratories and information services, during the performance of the Services.

RSK is not liable for any inaccurate information or conclusions, the discovery of which inaccuracies required the doing of any act including the gathering of any information which was not reasonably available to RSK and including the doing of any independent investigation of the information provided to RSK save as otherwise provided in the terms of the contract between the Client and RSK.

8. The intrusive environmental site investigation aspects of the Services are a limited sampling of the site at pre-determined locations based on the known historic / operational configuration of the site. The conclusions given in this report are based on information gathered at the specific test locations and can only be extrapolated to an undefined limited area around those locations. The extent of the limited area depends on the properties of the materials adjacent and local conditions, together with the position of any current structures and underground utilities and facilities, and natural and other activities on site. In addition, chemical analysis was carried out for a limited number of parameters (as stipulated in the scope between the client and RSK, based on an understanding of the available operational and historical information) and it should not be inferred that other chemical species are not present.

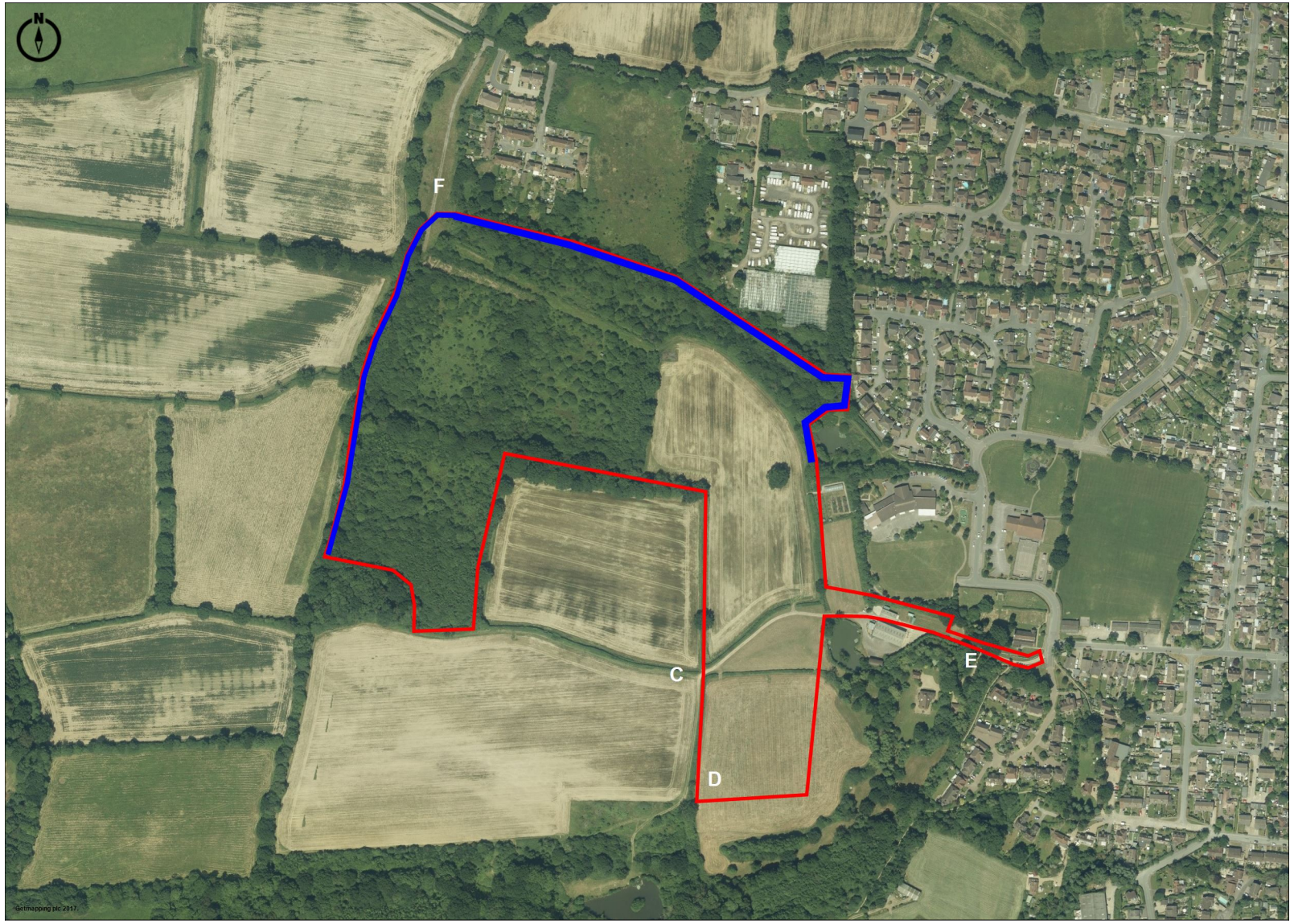
9. Any site drawing(s) provided in this report is (are) not meant to be an accurate base plan but is (are) used to present the general relative locations of features on, and surrounding, the site. Features (intrusive and sample locations etc) annotated on site plans are not drawn to scale but are centred over the approximate location. Such features should not be used for setting out and should be considered indicative only.

10. The comments given in this report and the opinions expressed are based on the ground conditions encountered during the site work and on the results of tests made in the field and in the laboratory. However, there may be conditions pertaining to the site that have not been disclosed by the investigation and therefore could not be taken into account. In particular, it should be noted that there may be areas of made ground not detected due to the limited nature of the investigation or the thickness and quality of made ground across the site may be variable. In addition, groundwater levels and ground gas concentrations and flows, may vary from those reported due to seasonal, or other, effects and the limitations stated in the data should be recognised.

11. Asbestos is often observed to be present in soils in discrete areas. Whilst asbestos-containing materials may have been locally encountered during the fieldworks or supporting laboratory analysis, the history of brownfield and demolition sites indicates that asbestos fibres may be present more widely in soils and aggregates, which could be encountered during more extensive ground works.

12. Unless stated otherwise, only preliminary geotechnical recommendations are presented in this report and these should be verified in a Geotechnical Design Report, once proposed construction and structural design proposals are confirmed.

APPENDIX B
DEVELOPMENT DRAWINGS



Promap
LANDMARK INFORMATION

Getmapping plc 2017.
Plotted Scale - **1:6000**. Paper Size - **A4**

Bellway

Copyright © 2021 DHA Architecture Ltd. All rights reserved. Limited reproduction and distribution permitted for the sole purpose of the planning of this named development only.

Ordnance Survey data © Crown Copyright. All rights reserved. Licence number 100022432.

Do not scale other than for Local Authority Planning purposes.

Church Farm Parcel, Land West of Ashington

SCHEDULE OF ACCOMMODATION

Housetype	Description	Qty	Floor Area - structure *		Floor Area - finish #	
Private Houses			Sq FT	Total	Sq FT	Total
SG (SO)	The Souter - 1 Bed Ground Floor Maisonette - 1B2P - M4(2)	2	549	1098	541	1082
SG (GV)	The Glover - 2 Bed First Floor Maisonette - 2B3P	2	699	1398	687	1374
HP	The Hooper - 2 Bed House - 2B3P - M4(2)	14	790	11060	776	10864
CN	The Coiner - 2 Bed House - 2B4P - M4(2)	15	876	13140	861	12915
WR	The Warrener - 3 Bed House - 3B4P - M4(2)	7	948	6636	934	6538
CS	The Coppersmith - 3 Bed House - 3B4P - M4(2)	4	1026	4104	1011	4044
BM	The Blemmere - 3 Bed House - 3B5P - M4(2)	5	1026	5130	1010	5050
HA	The Harper - 3 Bed House - 3B5P - M4(2)	7	1026	7182	1010	7070
HI	The Hillard - 3 Bed House - 3B5P - M4(2)	18	1052	18936	1036	18648
FM	The Framer - 3 Bed House - 3B4P - M4(2)	27	1053	28431	1037	27999
SR	The Sculptor - 4 Bed House - 4B6P - M4(2)	2	1289	2578	1271	2542
RE	The Reedmaker - 4 Bed House - 4B5P - M4(2)	6	1309	7854	1292	7752
PG	The Pargeter - 4 Bed House - 4B5P - M4(2)	7	1356	9492	1338	9366
AR	The Arkwright - 4 Bed House - 4B6P - M4(2)	1	1507	1507	1489	1489
Private Total		117		118546		116733
			Floor Area - structure *		Floor Area - finish #	
Affordable Houses			Sq FT	Total	Sq FT	Total
BA	The Baker - 2 Bed House - 2B4P - M4(2)	12	876	10512	861	10332
TI	The Tillman - 3 Bed House - 3B5P - M4(2)	14	1026	14364	1010	14140
PW	The Ploughwright - 3 Bed House - 3B5P - M4(2)	4	1026	4104	1010	4040
CT	The Cartographer - 4 Bed House - 4B5P - M4(2)	6	1096	6576	1081	6486
Affordable Apartments						
	1 Bed Apartment - 1B2P - The Burnisher	6	558	3348	550	3300
	1 Bed Apartment - 1B2P - The Pitcher	7	562	3934	554	3878
	1 Bed Apartment - 1B2P - The Burr	6	573	3438	564	3384
	2 Bed Apartment - 2B4P - The Lathe	8	771	6168	761	6088
Affordable Total		63		52444		51648
Overall Total		180		170990		168381

* Floor Areas measured from structure to structure

\# Floor Areas measured from notional plaster to plaster

062009-BEL-SL-AP04-180 UNITS--07.07.21-PI.PW

Proposed Sports Pitches

Allotments

Open Space

Existing School

60m 50m 40m 30m 20m 10m 1:500

10m 20m 30m 40m 50m 60m

appraisal layout

dha architecture

dha architecture ltd

Brooklands Farm Business Park
Bottle Lane
Binfield
Berkshire
RG42 5QX

t. 0118 934 9666
e. *surname*@dhaarchitecture.co.uk
w. www.dhaarchitecture.co.uk

rev date by details

land west of ashington, west sussex

Appraisal Layout

07.07.2021 created
1:500 @ A0 scaling
PI/DJ contact

reference 062009-BEL-SL-AP04 - revision

APPENDIX C
SUMMARY OF LEGISLATION AND POLICY RELATING TO LAND CONTAMINATION

Part IIA of the Environmental Protection Act 1990

Part IIA of the Environmental Protection Act 1990 (Part IIA) and its associated Contaminated Land Regulations 2000 (SI 2000/227), which came into force in England on 1 April 2000, formed the basis for the current regulatory framework and the statutory regime for the identification and remediation of contaminated land. Part IIA of the EPA 1990 defines contaminated land as 'any land which appears to the Local Authority in whose area it is situated to be in such a condition by reason of substances in, on or under the land, that significant harm is being caused, or that there is significant possibility of significant harm being caused, or that pollution of controlled waters is being or is likely to be caused'. Controlled waters are considered to include all groundwater, inland waters and estuaries.

In August 2006, the Contaminated Land (England) Regulations 2006 (SI 2006/1380) were implemented, which extended the statutory regime to include Part IIA of the EPA as originally introduced on 1 April 2000, together with changes intended chiefly to address land that is contaminated by virtue of radioactivity. These have been replaced subsequently by the Contaminated Land (England) (Amendment) Regulations 2012, which now exclude land that is contaminated by virtue of radioactivity.

The intention of Part IIA is to deal with contaminated land issues that are considered to cause significant harm on land that is not undergoing development (see Environmental Protection Act 1990: Part 2A Contaminated Land Statutory Guidance, April 2012). This document replaces Annex III of Defra Circular 01/2006, published in September 2006 (the remainder of this document is now obsolete).

Planning Policy

Land contamination is often addressed via the planning process during redevelopment of sites. This approach was documented in Planning Policy Statement: Planning and Pollution Control PPS23, which states that it remains the responsibility of the landowner and developer to identify land affected by contamination and carry out sufficient remediation to render the land suitable for use. PPS23 was withdrawn early in 2012 and has been replaced by much reduced guidance within the National Planning Policy Framework (NPPF), reference ISBN: 978-1-5286-1033-9, July 2021. For sites in Wales, reference should be made to Planning Policy Wales (Welsh Government. Edition 11, February 2021).

The new framework has limited guidance on contaminated land, as follows:

Chapter 11. Making effective use of land

117 Planning policies and decisions should promote an effective use of land in meeting the need for homes and other uses, while safeguarding and improving the environment and ensuring safe and healthy living conditions. Strategic policies should set out a clear strategy for accommodating objectively assessed needs, in a way that makes as much use as possible of previously-developed or 'brownfield' land.

118. Planning policies and decisions should:

c) give substantial weight to the value of using suitable brownfield land within settlements for homes and other identified needs, and support appropriate opportunities to remediate despoiled, degraded, derelict, contaminated or unstable land.

Chapter 15. Conserving and enhancing the natural environment

170. Planning policies and decisions should contribute to and enhance the natural and local environment by:

e) preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans; and

f) remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate.

Ground conditions and pollution

178. Planning policies and decisions should ensure that:

a) a site is suitable for its proposed use taking account of ground conditions and any risks arising from land instability and contamination. This includes risks arising from natural hazards or former activities such as mining, and any proposals for mitigation including land remediation (as well as potential impacts on the natural environment arising from that remediation);

b) after remediation, as a minimum, land should not be capable of being determined as contaminated land under Part 2A of the Environmental Protection Act 1990; and

c) adequate site investigation information, prepared by a competent person, is available to inform these assessments.

179. Where a site is affected by contamination or land stability issues, responsibility for securing a safe development rests with the developer and/or landowner.

Water Resources Act (WRA)

The Water Resources Act 1991 (Amendment) (England and Wales) Regulations 2009 updated the Water Resources Act 1991, which introduced the offence of causing or knowingly permitting pollution of controlled waters. The Act provides the Environment Agency with powers to implement remediation necessary to protect controlled waters and recover all reasonable costs of doing so.

Water Framework Directive (WFD)

The Water Framework Directive 2000/60/EC is designed to:

- enhance the status and prevent further deterioration of aquatic ecosystems and associated wetlands that depend on the aquatic ecosystems
- promote the sustainable use of water
- reduce pollution of water, especially by ‘priority’ and ‘priority hazardous’ substances
- ensure progressive reduction of groundwater pollution.

The WFD requires a management plan for each river basin be developed every six years.

Groundwater Directive (GWD)

The 1980 Groundwater Directive 80/68/EEC and the 2006 Groundwater Daughter Directive 2006/118/EC of the WFD are the main European legislation in place to protect groundwater. The 1980 Directive is due to be repealed in December 2013. The European legislation has been transposed into national legislation by regulations and directions to the Environment Agency.

Priority Substances Directive (PSD)

The Priority Substances Directive 2008/105/EC is a 'Daughter' Directive of the WFD, which sets out a priority list of substances posing a threat to or via the aquatic environment. The PSD establishes environmental quality standards for priority substances, which have been set at concentrations that are safe for the aquatic environment and for human health. In addition, there is a further aim of reducing (or eliminating) pollution of surface water (rivers, lakes, estuaries and coastal waters) by pollutants on the list. The WFD requires that countries establish a list of dangerous substances that are being discharged and EQS for them. In England and Wales, this list is provided in the River Basin Districts Typology, Standards and Groundwater threshold values (Water Framework Directive) (England and Wales) Directions 2010. In order to achieve the objectives of the WFD, classification schemes are used to describe where the water environment is of good quality and where it may require improvement.

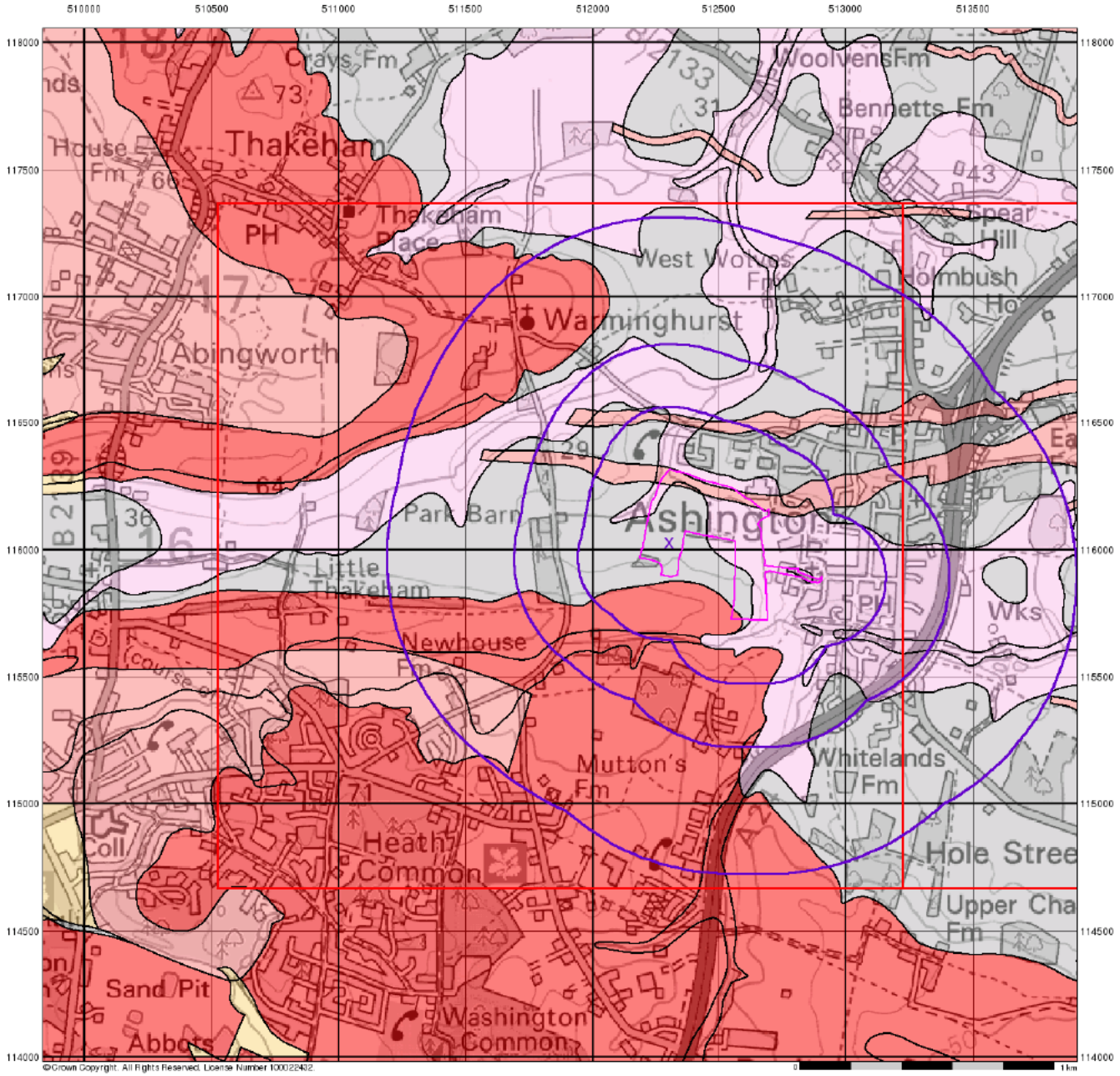
Environmental Permitting Regulations (EPR)

The Environmental Permitting (England and Wales) Regulations 2016 (as amended) provide a single regulatory framework that streamlines and integrates waste management licensing, pollution prevention and control, water discharge consenting, groundwater authorisations, and radioactive substances regulation. Schedule 22, paragraph 6 of EPR 2016 states: 'the regulator must, in exercising its relevant functions, take all necessary measures - (a) to prevent the input of any hazardous substance to groundwater; and (b) to limit the input of non-hazardous pollutants to groundwater so as to ensure that such inputs do not cause pollution of groundwater.'

Notes:

1. *The above information is provided for background but does not constitute site-specific advice*
2. *The above summary applies to England only. Variations exist within other countries of the United Kingdom*

APPENDIX D
ENVIRONMENTAL DATABASE REPORT



RSK

Groundwater Vulnerability

General

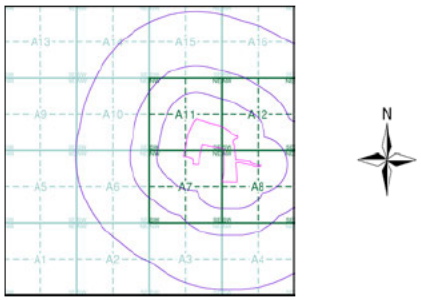
Specified Site | Specified Buffer(s) | Bearing Reference Point
Slice | Map ID

Agency and Hydrological

Bedrock Aquifers	Superficial Aquifers
High Vulnerability, Principal Aquifer	High Vulnerability, Principal Aquifer
High Vulnerability, Secondary Aquifer	High Vulnerability, Secondary Aquifer
Medium Vulnerability, Principal Aquifer	Medium Vulnerability, Principal Aquifer
Medium Vulnerability, Secondary Aquifer	Medium Vulnerability, Secondary Aquifer
Low Vulnerability, Principal Aquifer	Low Vulnerability, Principal Aquifer
Low Vulnerability, Secondary Aquifer	Low Vulnerability, Secondary Aquifer

Unproductive Aquifer
Soluble Rock

Site Sensitivity Context Map - Slice A



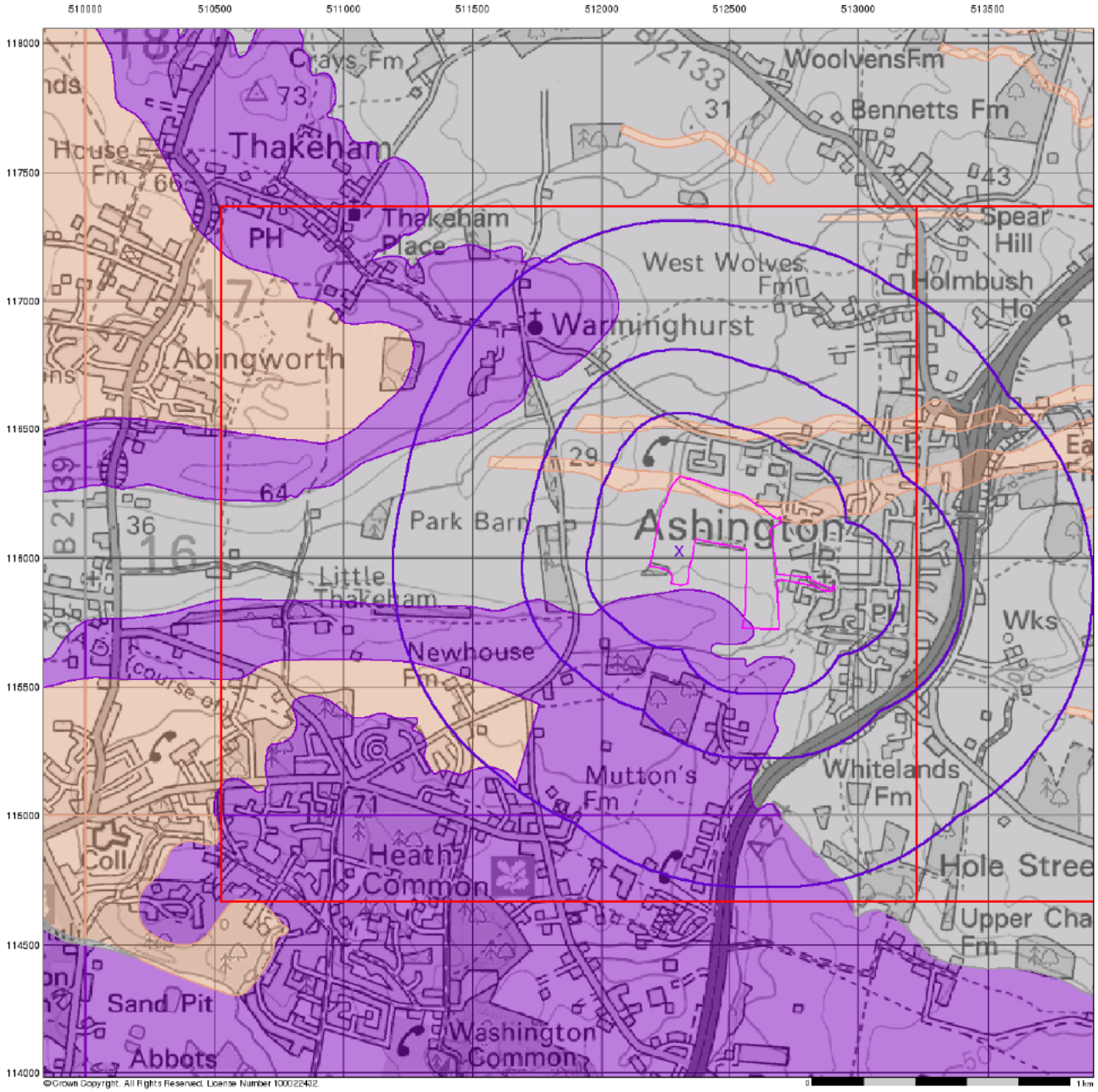
Order Details

Order Number:	287518451_1_1
Customer Ref:	52368
National Grid Reference:	512310, 116030
Slice:	A
Site Area (Ha):	15.35
Search Buffer (m):	1000

Site Details

Firle, Church Lane, Ashington, PULBOROUGH, RH20 3JX

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



Bedrock Aquifer Designation

General

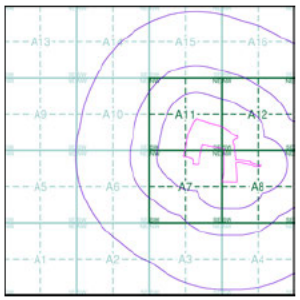
Specified Site | Specified Buffer(s) | Bearing Reference Point
Slice | Map ID

Agency and Hydrological

Geological Classes

- Principal Aquifer
- Secondary A Aquifer
- Secondary B Aquifer
- Secondary Undifferentiated
- Unproductive Strata
- Unknown
- Unknown (Lakes and Landslip)

Site Sensitivity Context Map - Slice A

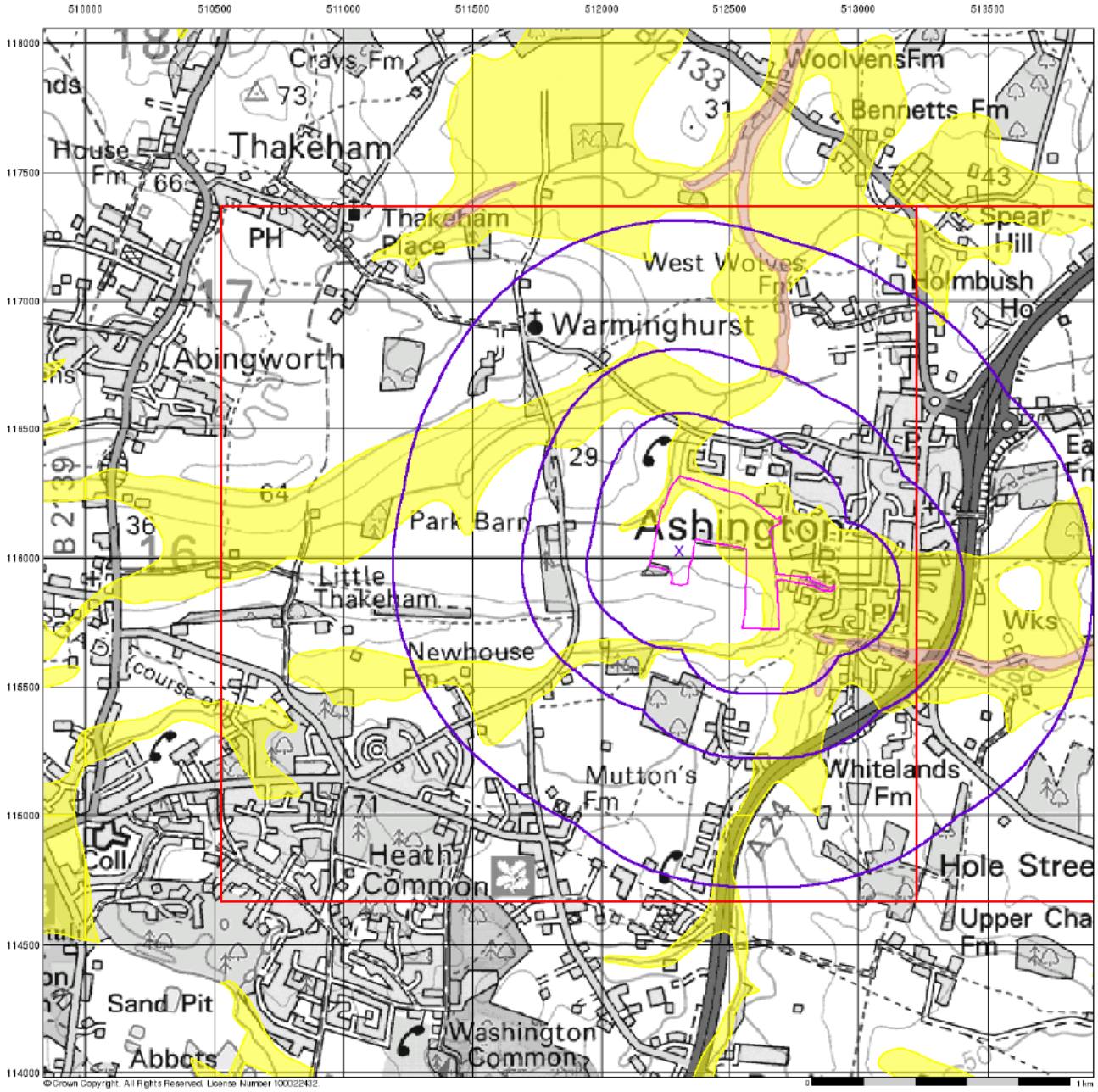


Order Details

Order Number:	287518451_1_1
Customer Ref:	52368
National Grid Reference:	512310, 116030
Slice:	A
Site Area (Ha):	15.35
Search Buffer (m):	1000

Site Details

Firle, Church Lane, Ashington, PULBOROUGH, RH20 3JX



RSK

Superficial Aquifer Designation

General

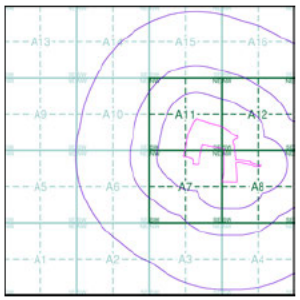
Specified Site | Specified Buffer(s) | Bearing Reference Point | Slice | Map ID

Agency and Hydrological

Geological Classes

- Principal Aquifer
- Secondary A Aquifer
- Secondary B Aquifer
- Secondary Undifferentiated
- Unproductive Strata
- Unknown
- Unknown (Lakes and Landslip)

Site Sensitivity Context Map - Slice A

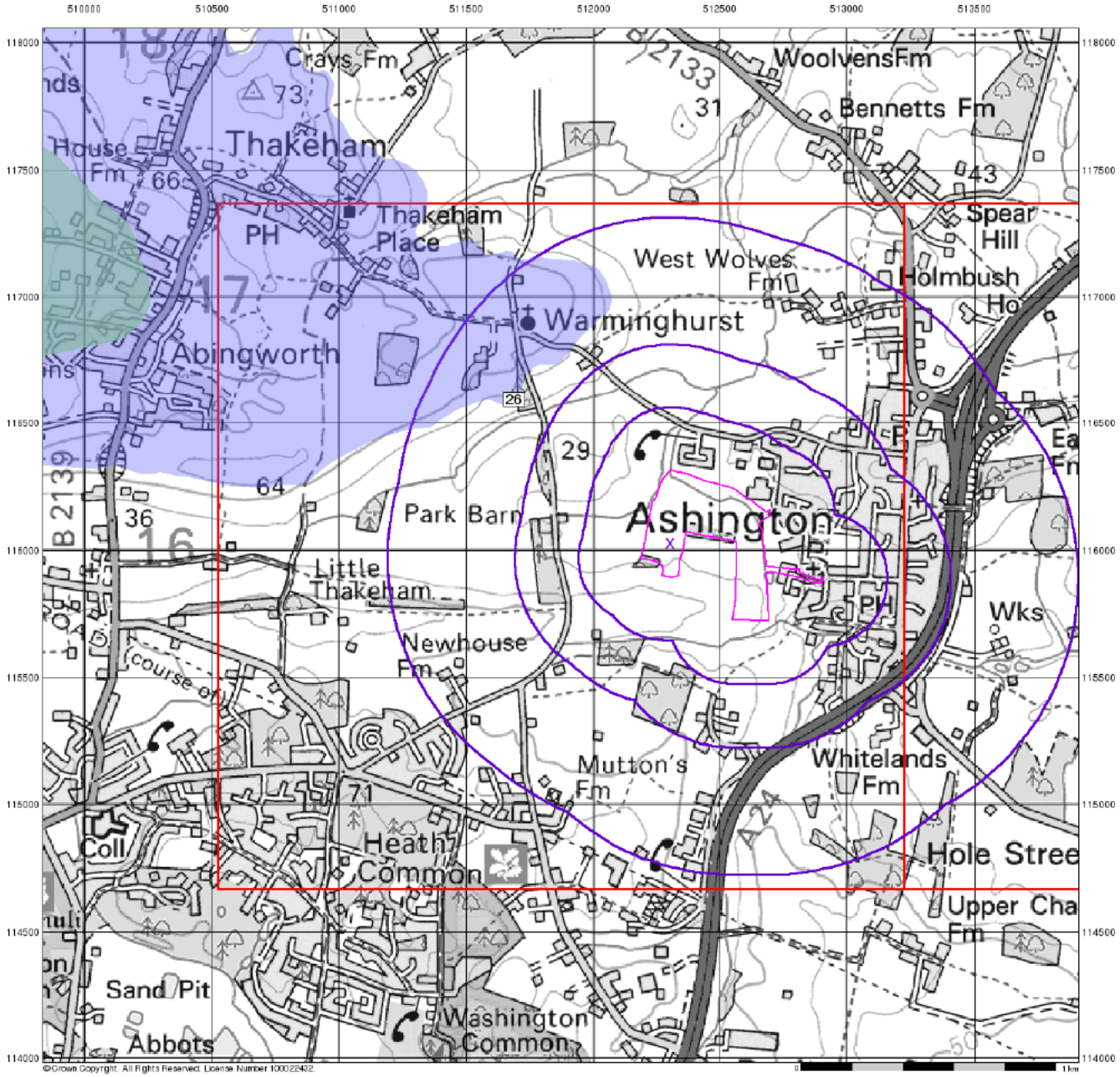


Order Details

Order Number:	287518451_1_1
Customer Ref:	52368
National Grid Reference:	512310, 116030
Slice:	A
Site Area (Ha):	15.35
Search Buffer (m):	1000

Site Details

Firle, Church Lane, Ashington, PULBOROUGH, RH20 3JX



RSK

Source Protection Zones

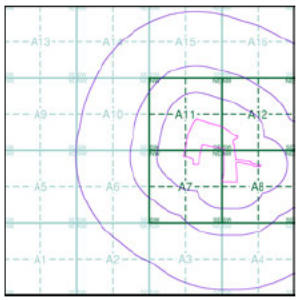
General

Specified Site | Specified Buffer(s) | Bearing Reference Point
Slice | Map ID

Agency and Hydrological

- Inner zone (Zone 1)
- Inner zone - subsurface activity only (Zone 1c)
- Outer zone (Zone 2)
- Outer zone - subsurface activity only (Zone 2c)
- Total catchment (Zone 3)
- Total catchment - subsurface activity only (Zone 3c)
- Special interest (Zone 4)

Site Sensitivity Context Map - Slice A

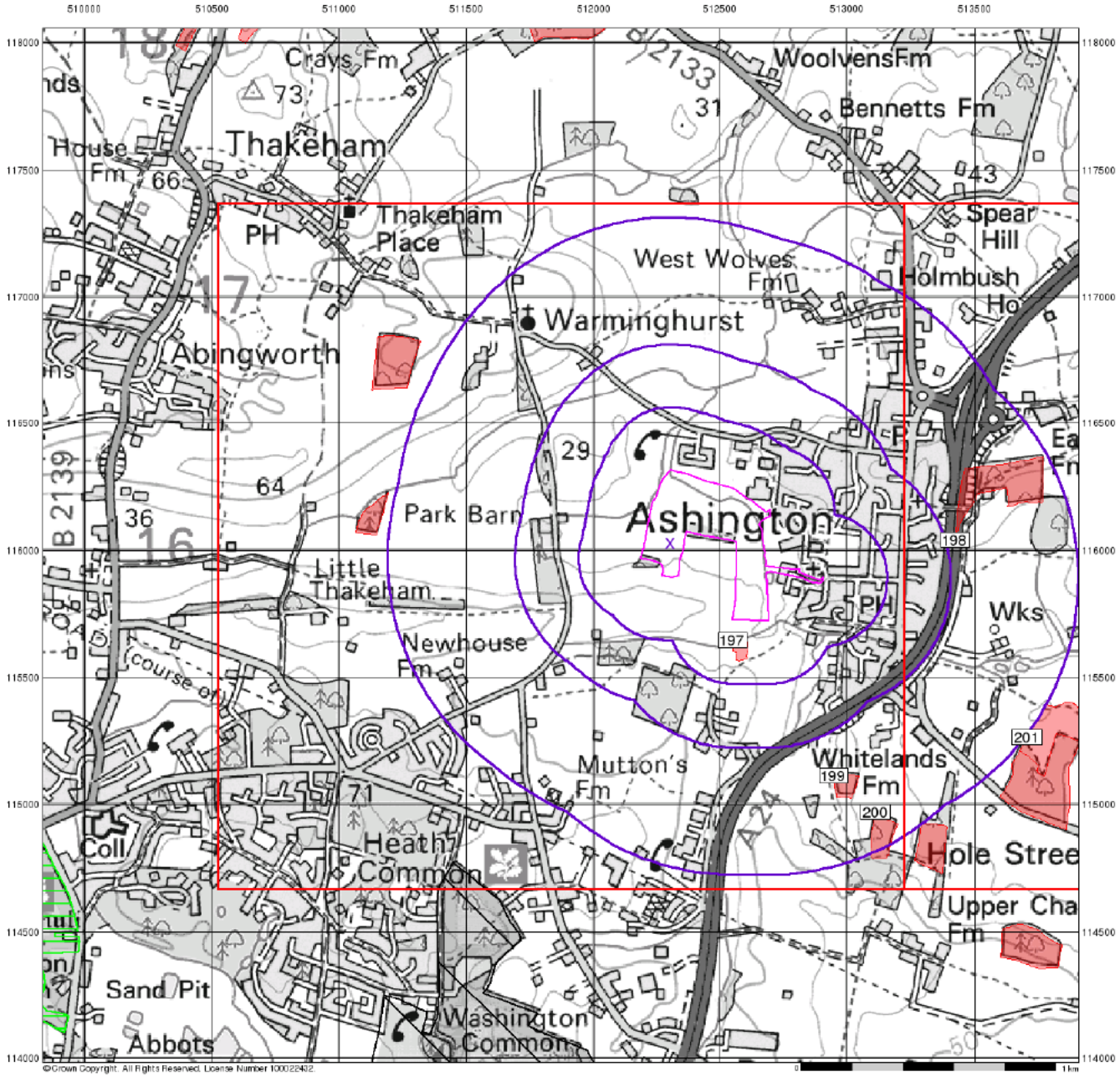


Order Details

Order Number:	287518451_1_1
Customer Ref:	52368
National Grid Reference:	512310, 116030
Slice:	A
Site Area (Ha):	15.35
Search Buffer (m):	1000

Site Details

Firle, Church Lane, Ashington, PULBOROUGH, RH20 3JX



RSK

Sensitive Land Uses

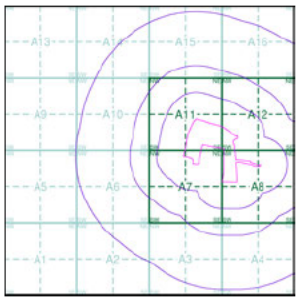
General

Specified Site | Specified Buffer(s) | Bearing Reference Point
Slice | Map ID

Sensitive Land Uses

- Ancient Woodland
- Area of Adopted Green Belt
- Area of Unadopted Green Belt
- Area of Outstanding Natural Beauty
- Environmentally Sensitive Area
- Forest Park
- Local Nature Reserve
- Marine Nature Reserve
- National Nature Reserve
- National Park
- Nitrate Sensitive Area
- Nitrate Vulnerable Zone
- Ramsar Site
- Site of Special Scientific Interest
- Special Area of Conservation
- Special Protection Area
- World Heritage Sites

Site Sensitivity Context Map - Slice A

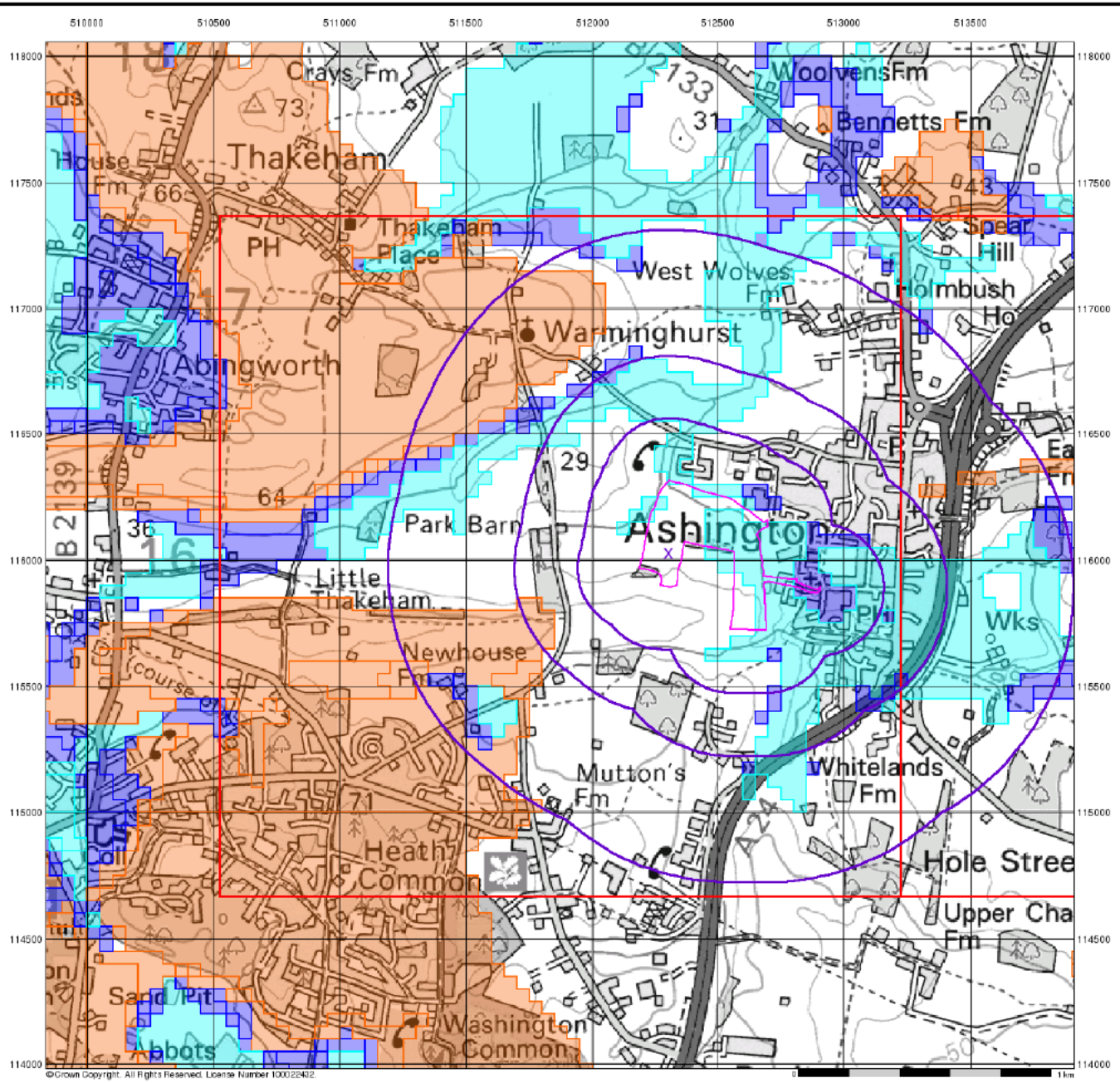


Order Details

Order Number:	287518451_1_1
Customer Ref:	52368
National Grid Reference:	512310, 116030
Slice:	A
Site Area (Ha):	15.35
Search Buffer (m):	1000

Site Details

Firle, Church Lane, Ashington, PULBOROUGH, RH20 3JX



RSK

BGS Flood GFS Data

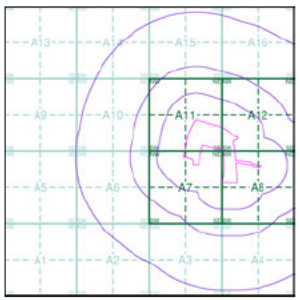
General

Specified Site | Specified Buffer(s) | Bearing Reference Point | Slice

Agency and Hydrological (Flood)

- Limited Potential for Groundwater Flooding to Occur
- Potential for Groundwater Flooding of Property Situated Below Ground Level
- Potential for Groundwater Flooding to Occur at Surface

Site Sensitivity Context Map - Slice A



Order Details

Order Number:	287518451_1_1
Customer Ref:	52368
National Grid Reference:	512310, 116030
Slice:	A
Site Area (Ha):	15.35
Search Buffer (m):	1000

Site Details

Firle, Church Lane, Ashington, PULBOROUGH, RH20 3JX

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

Envirocheck® Report:

Datasheet

Order Details:

Order Number:
287518451_1_1

Customer Reference:
52368

National Grid Reference:
512310, 116030

Slice:
A

Site Area (Ha):
15.35

Search Buffer (m):
1000

Site Details:

Firle, Church Lane
Ashington
PULBOROUGH
RH20 3JX

Client Details:

Miss S Gower
RSK Environment Ltd
18 Frogmore Road
Hemel Hempstead
Hertfordshire
HP3 9RT

Contents

Report Section	Page Number
Summary	-
Agency & Hydrological	1
Waste	30
Hazardous Substances	-
Geological	31
Industrial Land Use	35
Sensitive Land Use	38
Data Currency	39
Data Suppliers	44
Useful Contacts	45

Introduction

The Environment Act 1995 has made site sensitivity a key issue, as the legislation pays as much attention to the pathways by which contamination could spread, and to the vulnerable targets of contamination, as it does the potential sources of contamination.
For this reason, Landmark's Site Sensitivity maps and Datasheet(s) place great emphasis on statutory data provided by the Environment Agency/Natural Resources Wales and the Scottish Environment Protection Agency; it also incorporates data from Natural England (and the Scottish and Welsh equivalents) and Local Authorities; and highlights hydrogeological features required by environmental and geotechnical consultants. It does not include any information concerning past uses of land. The datasheet is produced by querying the Landmark database to a distance defined by the client from a site boundary provided by the client.
In this datasheet the National Grid References (NGRs) are rounded to the nearest 10m in accordance with Landmark's agreements with a number of Data Suppliers.

Copyright Notice

© Landmark Information Group Limited 2021. The Copyright on the information and data and its format as contained in this Envirocheck® Report ("Report") is the property of Landmark Information Group Limited ("Landmark") and several other Data Providers, including (but not limited to) Ordnance Survey, British Geological Survey, the Environment Agency/Natural Resources Wales and Natural England, and must not be reproduced in whole or in part by photocopying or any other method. The Report is supplied under Landmark's Terms and Conditions accepted by the Customer.
A copy of Landmark's Terms and Conditions can be found with the Index Map for this report. Additional copies of the Report may be obtained from Landmark, subject to Landmark's charges in force from time to time. The Copyright, design rights and any other intellectual rights shall remain the exclusive property of Landmark and /or other Data providers, whose Copyright material has been included in this Report.
© Environment Agency & United Kingdom Research and Innovation 2021. © Natural Resources Wales & United Kingdom Research and Innovation 2021.

Natural England Copyright Notice

Site of Special Scientific Interest, National Nature Reserve, Ramsar, Special Protection Area, Special Conservation Area, Marine Nature Reserve data (derived from Ordnance Survey 1:10000 raster) is provided by, and used with the permission of, Natural England who retain the copyright and Intellectual Property Rights for the data.

Scottish Natural Heritage Copyright

Contains SNH information licensed under the Open Government Licence v3 0.

Ove Arup Copyright Notice

The Mining Instability data was obtained on licence from Ove Arup & Partners Limited (for further information, contact mining review@arup com). No reproduction or further use of such Data is to be made without the prior written consent of Ove Arup & Partners Limited. The supplied Mining Instability data is derived from publicly available records and other third party sources and neither Ove Arup & Partners nor Landmark warrant the accuracy or completeness of such information or data.

Stantec Copyright Notice

The cavity data presented has been extracted from the PBA (now Stantec UK Ltd) enhanced version of the original DEFRA national cavity databases. Stantec UK Ltd retain the copyright & intellectual property rights in the data. Whilst all reasonable efforts are made to check that the information contained in the cavity databases is accurate we do not warrant that the data is complete or error free. The information is based upon our own researches and those collated from a number of external sources and is continually being augmented and updated by Stantec UK Ltd. In no event shall Stantec UK Ltd or Landmark be liable for any loss or damage including, without limitation, indirect or consequential loss or damage arising from the use of this data.

Radon Potential dataset Copyright Notice

Information supplied from a joint dataset compiled by The British Geological Survey and Public Health England.

Natural Resources Wales Copyright Notice

Contains Natural Resources Wales information © Natural Resources Wales and Database Right. All rights Reserved. Contains Ordnance Survey Data. Ordnance Survey Licence number 100019741. Crown Copyright and Database Right. Contains Natural Resources Wales information © Natural Resources Wales and Database Right. All rights Reserved. Some features of this information are based on digital spatial data licensed from the Centre for Ecology & Hydrology © NERC (CEH). Defra, Met Office and DARD Rivers Agency © Crown copyright. © Cranfield University. © James Hutton Institute. Contains OS data © Crown copyright and database right 2021. Land & Property Services © Crown copyright and database right.

Report Version v53.0

Summary

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Agency & Hydrological					
BGS Groundwater Flooding Susceptibility	pg 1	Yes	Yes	Yes	n/a
Contaminated Land Register Entries and Notices					
Discharge Consents	pg 2		3	4	13
Prosecutions Relating to Controlled Waters			n/a	n/a	n/a
Enforcement and Prohibition Notices					
Integrated Pollution Controls					
Integrated Pollution Prevention And Control					
Local Authority Integrated Pollution Prevention And Control					
Local Authority Pollution Prevention and Controls					
Local Authority Pollution Prevention and Control Enforcements					
Nearest Surface Water Feature	pg 6	Yes			
Pollution Incidents to Controlled Waters	pg 7		6	1	1
Prosecutions Relating to Authorised Processes					
Registered Radioactive Substances					
River Quality					
River Quality Biology Sampling Points					
River Quality Chemistry Sampling Points					
Substantiated Pollution Incident Register	pg 8			1	1
Water Abstractions	pg 8				3 (*6)
Water Industry Act Referrals					
Groundwater Vulnerability Map	pg 10	Yes	n/a	n/a	n/a
Groundwater Vulnerability - Soluble Rock Risk			n/a	n/a	n/a
Groundwater Vulnerability - Local Information			n/a	n/a	n/a
Bedrock Aquifer Designations	pg 13	Yes	n/a	n/a	n/a
Superficial Aquifer Designations	pg 13	Yes	n/a	n/a	n/a
Source Protection Zones	pg 13				1
Extreme Flooding from Rivers or Sea without Defences	pg 13		Yes	n/a	n/a
Flooding from Rivers or Sea without Defences	pg 13		Yes	n/a	n/a
Areas Benefiting from Flood Defences				n/a	n/a
Flood Water Storage Areas				n/a	n/a
Flood Defences				n/a	n/a
OS Water Network Lines	pg 13	7	48	24	63

Summary

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Waste					
BGS Recorded Landfill Sites					
Historical Landfill Sites					
Integrated Pollution Control Registered Waste Sites					
Licensed Waste Management Facilities (Landfill Boundaries)					
Licensed Waste Management Facilities (Locations)					
Local Authority Landfill Coverage	pg 30	2	n/a	n/a	n/a
Local Authority Recorded Landfill Sites					
Potentially Infilled Land (Non-Water)	pg 30				1
Potentially Infilled Land (Water)	pg 30		2		5
Registered Landfill Sites					
Registered Waste Transfer Sites					
Registered Waste Treatment or Disposal Sites					
Hazardous Substances					
Control of Major Accident Hazards Sites (COMAH)					
Explosive Sites					
Notification of Installations Handling Hazardous Substances (NIHHS)					
Planning Hazardous Substance Consents					
Planning Hazardous Substance Enforcements					

Summary

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Geological					
BGS 1:625,000 Solid Geology	pg 31	Yes	n/a	n/a	n/a
BGS Estimated Soil Chemistry	pg 31	Yes	Yes	Yes	Yes
BGS Recorded Mineral Sites					
BGS Urban Soil Chemistry					
BGS Urban Soil Chemistry Averages					
CBSCB Compensation District			n/a	n/a	n/a
Coal Mining Affected Areas			n/a	n/a	n/a
Mining Instability			n/a	n/a	n/a
Man-Made Mining Cavities					
Natural Cavities					
Non Coal Mining Areas of Great Britain	pg 32	Yes	Yes	n/a	n/a
Potential for Collapsible Ground Stability Hazards	pg 32	Yes		n/a	n/a
Potential for Compressible Ground Stability Hazards	pg 33	Yes	Yes	n/a	n/a
Potential for Ground Dissolution Stability Hazards				n/a	n/a
Potential for Landslide Ground Stability Hazards	pg 33	Yes	Yes	n/a	n/a
Potential for Running Sand Ground Stability Hazards	pg 33	Yes	Yes	n/a	n/a
Potential for Shrinking or Swelling Clay Ground Stability Hazards	pg 33	Yes	Yes	n/a	n/a
Radon Potential - Radon Affected Areas			n/a	n/a	n/a
Radon Potential - Radon Protection Measures			n/a	n/a	n/a
Industrial Land Use					
Contemporary Trade Directory Entries	pg 35		1	6	8
Fuel Station Entries					
Points of Interest - Commercial Services	pg 36			1	4
Points of Interest - Education and Health					
Points of Interest - Manufacturing and Production	pg 36			1	2
Points of Interest - Public Infrastructure					
Points of Interest - Recreational and Environmental	pg 37		5		
Gas Pipelines					
Underground Electrical Cables					

Summary

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Sensitive Land Use					
Ancient Woodland	pg 38		1		4
Areas of Adopted Green Belt					
Areas of Unadopted Green Belt					
Areas of Outstanding Natural Beauty					
Environmentally Sensitive Areas					
Forest Parks					
Local Nature Reserves					
Marine Nature Reserves					
National Nature Reserves					
National Parks					
Nitrate Sensitive Areas					
Nitrate Vulnerable Zones					
Ramsar Sites					
Sites of Special Scientific Interest					
Special Areas of Conservation					
Special Protection Areas					
World Heritage Sites					

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A11SE (NE)	0	1	512400 116250
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A8NW (E)	0	1	512800 116000
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A12SW (NE)	0	1	512600 116200
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A11SE (N)	0	1	512306 116300
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A11SE (NW)	0	1	512250 116150
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A11SE (E)	0	1	512450 116026
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A12SW (NE)	20	1	512600 116250
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A11SW (NW)	67	1	512150 116100
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A8SW (SE)	75	1	512700 115650
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A8SW (SE)	225	1	512700 115500
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A8NE (E)	257	1	513150 115800
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A8SW (SE)	325	1	512650 115400
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A6NE (SW)	379	1	511850 115800
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A8SE (SE)	403	1	513050 115500
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A15SW (N)	439	1	512100 116700
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A8SE (SE)	441	1	513200 115550
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A8SE (SE)	450	1	513150 115500
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A11NW (NW)	456	1	512000 116650
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A8SE (SE)	493	1	513150 115450
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A15SW (N)	498	1	512200 116800

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
1	**Discharge Consents** Operator: Southern Water Services Ltd Property Type: PUMPING STATION ON SEWERAGE NETWORK (WATER COMPANY) Location: Willard Way Ashington Wps Waste Pumping Station, Willard Way, Ashington, West Sussex, Rh20 3pq Authority: Environment Agency, Southern Region Catchment Area: Adur Reference: P07398 Permit Version: 1 Effective Date: 12th May 1999 Issued Date: 12th May 1999 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Pumping Station - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: Unnamed Trib Of Lancing Brook **Status: New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 10m	A12SW (E)	73	2	512750 116080
2	**Discharge Consents** Operator: West Sussex County Council Property Type: EDUCATION/NURSERY/SCHOOL/COLLEGE/UNI/TRAINING VENUE Location: School In Rectory Lane, Ashington, West Sussex Authority: Environment Agency, Southern Region Catchment Area: Not Given Reference: S01822 Permit Version: 1 Effective Date: 24th March 1969 Issued Date: 24th March 1969 Revocation Date: 1st July 1991 Discharge Type: Discharge Of Other Matter-Surface Water Discharge Environment: Freshwater Stream/River Receiving Water: Freshwater River **Status: Pre National Rivers Authority Legislation where issue date < 01/09/1989** Positional Accuracy: Located by supplier to within 100m	A12SE (E)	206	2	512890 116230
3	**Discharge Consents** Operator: Mr John Gilbert Property Type: DOMESTIC PROPERTY (MULTIPLE) (INCL FARM HOUSES) Location: Mitchbourn Farmhouse & The Barn, Mitchbourn Farm, Malthouse, Asington, W Sx Authority: Environment Agency, Southern Region Catchment Area: Not Supplied Reference: P07477 Permit Version: 1 Effective Date: 22nd February 1999 Issued Date: 22nd February 1999 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge Environment: Land/Soakaway Receiving Water: Into Land **Status: New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 100m	A7SE (S)	232	2	512500 115500
4	**Discharge Consents** Operator: Washington Estates Ltd. Property Type: CONSTRUCTION OF BUILDINGS Location: Residential Development, Fairfield Road, Ashington, West Sussex Authority: Environment Agency, Southern Region Catchment Area: Not Supplied Reference: S01418 Permit Version: 1 Effective Date: 3rd September 1965 Issued Date: 3rd September 1965 Revocation Date: 1st July 1991 Discharge Type: Discharge Of Other Matter-Surface Water Discharge Environment: Freshwater Stream/River Receiving Water: Freshwater River **Status: Pre National Rivers Authority Legislation where issue date < 01/09/1989** Positional Accuracy: Located by supplier to within 100m	A8NE (E)	264	2	513100 115700

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
5	**Discharge Consents** Operator: Monza Sports Timing Property Type: WAREHOUSING + SUPPORT ACTIVITIES FOR TRANSPORTATION Location: Bridge Garage, Ashington Bridge Garage, Ashington, Pulborough, West Sussex, Rh20 3dd Authority: Environment Agency, Southern Region Catchment Area: Not Given Reference: N01497 Permit Version: 1 Effective Date: 5th June 1981 Issued Date: 5th June 1981 Revocation Date: Not Supplied Discharge Type: Discharge Of Other Matter-Surface Water Discharge Environment: Freshwater Stream/River Receiving Water: Freshwater River **Status: Pre National Rivers Authority Legislation where issue date < 01/09/1989** Positional Accuracy: Located by supplier to within 100m	A8SE (SE)	384	2	513190 115620
6	**Discharge Consents** Operator: Paul E Murray Property Type: DOMESTIC PROPERTY (SINGLE) (INCL FARM HOUSE) Location: Park Barn, Park Lane, Warminghurst, West Sussex Authority: Environment Agency, Southern Region Catchment Area: Not Supplied Reference: P07106 Permit Version: 1 Effective Date: 11th March 1998 Issued Date: 11th March 1998 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge Environment: Freshwater Stream/River Receiving Water: Freshwater River **Status: New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 10m	A10SE (W)	418	2	511790 116090
7	**Discharge Consents** Operator: Mr Maarten Boers Property Type: DOMESTIC PROPERTY (SINGLE) (INCL FARM HOUSE) Location: Wortley Cottage Ashington Wortley Cottage, Malthouse Lane, Ashington, West Sussex, Rh20 3bu Authority: Environment Agency, Southern Region Catchment Area: Adur Reference: P12977 Permit Version: 1 Effective Date: 5th January 2007 Issued Date: 5th January 2007 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge Environment: Freshwater Stream/River Receiving Water: The River Adur **Status: New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 10m	A3NE (S)	431	2	512440 115310
8	**Discharge Consents** Operator: Southern Water Services Limited. + Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Location: Residential Development, Ashington Residential Development At, Rectory Close, Ashington, West Sussex Authority: Environment Agency, Southern Region Catchment Area: Not Supplied Reference: P06585 Permit Version: 1 Effective Date: 5th June 1997 Issued Date: 5th June 1997 Revocation Date: Not Supplied Discharge Type: Public Sewage: Storm Sewage Overflow Discharge Environment: Freshwater Stream/River Receiving Water: Freshwater River **Status: New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 10m	A12NE (NE)	607	2	513090 116620

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
8	**Discharge Consents** Operator: Mr A Spencer Property Type: DOMESTIC PROPERTY (SINGLE) (INCL FARM HOUSE) Location: 1 Oast House Barn, Ashington 1 Oast House Barn, Billingshurst Road, Ashington, West Sussex, Rh20 3az Authority: Environment Agency, Southern Region Catchment Area: Adur Reference: P12149 Permit Version: 1 Effective Date: 27th July 2004 Issued Date: 27th July 2004 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge Environment: Freshwater Stream/River Receiving Water: Unnamed Trib. River Adur **Status:** **New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 10m	A12NE (NE)	657	2	513120 116660
9	**Discharge Consents** Operator: A.D. Harris Esq. Property Type: Undefined Or Other Location: New House Farm, Warminghurst, THAKEHAM , West Sussex Authority: Environment Agency, Southern Region Catchment Area: Not Given Reference: S01966 Permit Version: 1 Effective Date: 7th December 1970 Issued Date: 7th December 1970 Revocation Date: Not Supplied Discharge Type: Discharge Of Other Matter-Surface Water Discharge Environment: Freshwater Stream/River Receiving Water: Freshwater River **Status:** **Pre National Rivers Authority Legislation where issue date < 01/09/1989** Positional Accuracy: Located by supplier to within 100m	A6SE (SW)	628	2	511760 115510
10	**Discharge Consents** Operator: Sylvia Louise Seymour Property Type: DOMESTIC PROPERTY (SINGLE) (INCL FARM HOUSE) Location: Land At Astor Cottage, Ivy Lane, Ashington , Pulborough West Sussex Authority: Environment Agency, Southern Region Catchment Area: Not Given Reference: P02298 Permit Version: 1 Effective Date: 15th June 1989 Issued Date: 15th June 1989 Revocation Date: Not Supplied Discharge Type: Non Water Company (Private) Sewage Discharge Environment: Freshwater Stream/River Receiving Water: Freshwater River **Status:** **Pre National Rivers Authority Legislation where issue date < 01/09/1989** Positional Accuracy: Located by supplier to within 100m	A12NE (NE)	640	2	513160 116600
11	**Discharge Consents** Operator: Mr C M Yule Property Type: DOMESTIC PROPERTY (SINGLE) (INCL FARM HOUSE) Location: 2 Oast House Farm, Ashington 2 Oast House Farm, Billingshurst Road, Ashington, West Sussex, Rh20 3az Authority: Environment Agency, Southern Region Catchment Area: Adur Reference: P12150 Permit Version: 1 Effective Date: 27th July 2004 Issued Date: 27th July 2004 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge Environment: Freshwater Stream/River Receiving Water: Unnamed Trib. River Adur **Status:** **New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 10m	A12NE (NE)	658	2	513120 116661

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
12	**Discharge Consents** Operator: Mr J Turrell / Mr Woolgrove Property Type: DOMESTIC PROPERTY (SINGLE) (INCL FARM HOUSE) Location: Jan-Da-Mia & The Pines, Billingshurst Rd, Shington, West Sussex Authority: Environment Agency, Southern Region Catchment Area: Not Supplied Reference: P09376 Permit Version: 1 Effective Date: 4th December 2000 Issued Date: 4th December 2000 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge Environment: Freshwater Stream/River Receiving Water: Freshwater River **Status: Pre National Rivers Authority Legislation where issue date < 01/09/1989** Positional Accuracy: Located by supplier to within 10m	A12NE (NE)	671	2	513210 116590
13	**Discharge Consents** Operator: Jonathan Layton Prichard Property Type: FARMS (NOT HOUSE)/CROP + ANIMAL REARING/PLANT NURSERY Location: The Old Courtyard & Whitelands Farm, Hole Street, Ashington, West Sussex Authority: Environment Agency, Southern Region Catchment Area: Adur Reference: P11105 Permit Version: 1 Effective Date: 29th January 2003 Issued Date: 29th January 2003 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge Environment: Onto Land/Into Watercourse Receiving Water: Trib Of River Adur **Status: New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 10m	A4NE (SE)	701	2	513200 115240
14	**Discharge Consents** Operator: Mr & Mrs R I Cahn Property Type: Undefined Or Other Location: Lower Barn, Muttons Farm, Ashington, West Sussex Authority: Environment Agency, Southern Region Catchment Area: Not Given Reference: P04031 Permit Version: 1 Effective Date: 16th December 1991 Issued Date: 16th December 1991 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge Environment: Freshwater Stream/River Receiving Water: Freshwater River **Status: Post National Rivers Authority Legislation where issue date > 31/08/1989** Positional Accuracy: Located by supplier to within 100m	A3NW (S)	705	2	512000 115250
15	**Discharge Consents** Operator: Frankham Real Estates Limited Property Type: HOLIDAY ACCOM/CAMP SITE/CARAVAN SITE/HOTEL/HOSTEL Location: Luckista Caravan Site, West Wolves, Billingshurst Road, Ashington, West Sussex Authority: Environment Agency, Southern Region Catchment Area: Adur Reference: P09780 Permit Version: 2 Effective Date: 5th August 2003 Issued Date: 5th August 2003 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge Environment: Freshwater Stream/River Receiving Water: Unnamed Trib Of River Adur **Status: Modified (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 10m	A16SW (NE)	754	2	512880 116920

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
15	**Discharge Consents** Operator: David Crouch Property Type: HOLIDAY ACCOM/CAMP SITE/CARAVAN SITE/HOTEL/HOSTEL Location: Luckista Caravan Site, West Wolves, Billingshurst Road, Ashington, West Sussex Authority: Environment Agency, Southern Region Catchment Area: Adur Reference: P09780 Permit Version: 1 Effective Date: 10th August 2001 Issued Date: 10th August 2001 Revocation Date: 4th August 2003 Discharge Type: Sewage And Trade Combined - Unspecified Discharge Environment: Freshwater Stream/River Receiving Water: Unnamed Trib Of River Adur **Status: New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 10m	A16SW (NE)	754	2	512880 116920
16	**Discharge Consents** Operator: Mr Daniel Aggs Property Type: WWTW (NOT WATER CO) (NOT STP AT A PRIVATE PREMISES) Location: Stw Serving Farm Buildings Warminghurst Farm, Park Lane, Ashington - Pulborough, West Sussex, Rh20 3aw Authority: Environment Agency, Southern Region Catchment Area: Not Supplied Reference: P10028 Permit Version: 1 Effective Date: 17th October 2001 Issued Date: 17th October 2001 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge Environment: Freshwater Stream/River Receiving Water: Freshwater River **Status: Pre National Rivers Authority Legislation where issue date < 01/09/1989** Positional Accuracy: Located by supplier to within 10m	A14SE (NW)	894	2	511660 116930
17	**Discharge Consents** Operator: West Sussex County Council Property Type: Undefined Or Other Location: A24 Washington, Spring Cotts/Kensetts C, Ashington, West Sussex Authority: Environment Agency, Southern Region Catchment Area: Not Given Reference: S01795 Permit Version: 1 Effective Date: 10th February 1969 Issued Date: 10th February 1969 Revocation Date: Not Supplied Discharge Type: Miscellaneous Discharges - Highway Drainage Discharge Environment: Freshwater Stream/River Receiving Water: Freshwater River **Status: Pre National Rivers Authority Legislation where issue date < 01/09/1989** Positional Accuracy: Located by supplier to within 10m	A3SE (S)	926	2	512520 114800
17	**Discharge Consents** Operator: West Sussex County Council Property Type: Undefined Or Other Location: A24 Washington, Spring Cotts/Kensetts C, Ashington, West Sussex Authority: Environment Agency, Southern Region Catchment Area: Not Given Reference: S01795 Permit Version: 1 Effective Date: 10th February 1969 Issued Date: 10th February 1969 Revocation Date: Not Supplied Discharge Type: Miscellaneous Discharges - Highway Drainage Discharge Environment: Freshwater Stream/River Receiving Water: Freshwater River **Status: Pre National Rivers Authority Legislation where issue date < 01/09/1989** Positional Accuracy: Located by supplier to within 10m	A3SE (S)	929	2	512480 114800
	Nearest Surface Water Feature	A12SW (E)	0	-	512652 116112

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
18	**Pollution Incidents to Controlled Waters** Property Type: Private Sewage (Non-PLC): Pumping Station Location: Adjacent Penn Gardens Ps, ASHINGTON Authority: Environment Agency, Southern Region Pollutant: Crude Sewage Note: Sewage, Overflowing From Manhole To Stream Incident Date: 27th June 1997 Incident Reference: 2181 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Plc Sewage Other Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A11NE (N)	87	2	512300 116400
19	**Pollution Incidents to Controlled Waters** Property Type: Water Company Sewage: Pumping Station Location: ASHINGTON Authority: Environment Agency, Southern Region Pollutant: Crude Sewage Note: Sewage Entering Water Course Incident Date: 30th December 1997 Incident Reference: 2355 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Not Given Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A11NE (N)	101	2	512400 116395
19	**Pollution Incidents to Controlled Waters** Property Type: Water Company Sewage: Pumping Station Location: ASHINGTON Authority: Environment Agency, Southern Region Pollutant: Crude Sewage Note: Sewage Entering Watercourse Incident Date: 30th December 1997 Incident Reference: Not Supplied Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Not Given Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A11NE (N)	103	2	512405 116395
20	**Pollution Incidents to Controlled Waters** Property Type: Water Company Sewage: Foul Sewer Location: Penn Gardens, /Rectory Lane, ASHINGTON Authority: Environment Agency, Southern Region Pollutant: Crude Sewage Note: Pumping Main Burst Incident Date: 20th May 1996 Incident Reference: 1690 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Sewage Works Effluent Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A11NE (N)	106	2	512400 116400
20	**Pollution Incidents to Controlled Waters** Property Type: WSC Sewage, Sewerage & Supply Location: Penn Gardens, ASHINGTON Authority: Environment Agency, Southern Region Pollutant: General Biodegradable : Crude Sewage & Sewerage Material Note: Not Supplied Incident Date: 12th October 1999 Incident Reference: 3256 Catchment Area: Adur Receiving Water: Potential River Cause of Incident: Containment Failure : Culvert / Screen Blockage Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 10m	A11NE (N)	149	2	512400 116445
20	**Pollution Incidents to Controlled Waters** Property Type: Private Sewage (Non-PLC): Other Location: Rectory Lane, Opposite Penn Gardens, ASHINGTON Authority: Environment Agency, Southern Region Pollutant: Crude Sewage Note: Sewage Discharge Surcharging Manhole; Private Sewage (Non-Plc): Foul Sewer Incident Date: 3rd October 1995 Incident Reference: 1509 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Water Company STW Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A11NE (N)	154	2	512400 116450

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
21	**Pollution Incidents to Controlled Waters** Property Type: Domestic/Residential Location: Swan Cottage, London Road, ASHINGTON Authority: Environment Agency, Southern Region Pollutant: General Biodegradable : Crude Sewage & Sewerage Material Note: Not Supplied Incident Date: 19th August 1999 Incident Reference: 2145 Catchment Area: Adur Receiving Water: Potential River Cause of Incident: Climatic Conditions : Localised High Rainfall Incident Severity: Category 3 - Minor Incident Positional Accuracy: Approximate location provided by supplier	A8SE (SE)	373	2	513200 115650
22	**Pollution Incidents to Controlled Waters** Property Type: Miscellaneous Premises: Unknown Location: Ditch, Sparrows Lane, ASHINGTON Authority: Environment Agency, Southern Region Pollutant: Chemicals - Paints / Dyes Note: Florescent Green Water Incident Date: 19th August 1996 Incident Reference: 1838 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A12NE (NE)	598	2	513100 116600
23	**Substantiated Pollution Incident Register** Authority: Environment Agency - Southern Region, Solent and South Downs Incident Date: 9th January 2019 Incident Reference: 1673001 Water Impact: Category 1 - Major Incident Air Impact: Category 4 - No Impact Land Impact: Category 4 - No Impact Positional Accuracy: Located by supplier to within 10m Pollutant: Pollutant Not Identified: Not Identified	A8SE (SE)	352	2	513166 115642
24	**Substantiated Pollution Incident Register** Authority: Environment Agency - Southern Region, Solent and South Downs Incident Date: 5th March 2003 Incident Reference: 141095 Water Impact: Category 2 - Significant Incident Air Impact: Category 4 - No Impact Land Impact: Category 4 - No Impact Positional Accuracy: Located by supplier to within 10m Pollutant: Organic Chemicals/Products: Pesticides And Biocides	A6SW (SW)	870	2	511522 115410
25	**Water Abstractions** Operator: Mr A Allan Licence Number: 10/41/331101 Permit Version: 102 Location: Malthouse Farm Ashington Authority: Environment Agency, Southern Region Abstraction: General Agriculture: Spray Irrigation - Direct Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Malthouse Farm, Ashington, See Licence Map Authorised Start: 01 April Authorised End: 30 September Permit Start Date: 8th June 2009 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A4NW (S)	516	2	512580 115210
25	**Water Abstractions** Operator: Mr R I Cahn Licence Number: 10/41/331101 Permit Version: 101 Location: Malthouse Farm Ashington Authority: Environment Agency, Southern Region Abstraction: General Agriculture: Spray Irrigation - Direct Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Malthouse Farm, Ashington, See Licence Map Authorised Start: 01 April Authorised End: 30 September Permit Start Date: 13th November 2006 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A4NW (S)	516	2	512580 115210

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
25	**Water Abstractions** Operator: R I Cahn Esq Licence Number: 10/41/331101 Permit Version: 100 Location: Malthouse Farm Ashington Authority: Environment Agency, Southern Region Abstraction: General Agriculture: Spray Irrigation - Direct Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Malthouse Farm, Ashington, See Licence Map Authorised Start: 01 April Authorised End: 30 September Permit Start Date: 19th July 1984 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A4NW (S)	516	2	512580 115210
	Water Abstractions Operator: R Muntz Licence Number: 10/41/331102 Permit Version: 100 Location: Barnards Nursery Authority: Environment Agency, Southern Region Abstraction: Horticulture and Nurseries: Animal Watering & General Use (Non Agricultural) Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Land And Buildings At Barnards Nursery, Rock Road Authorised Start: 01 April Authorised End: 31 March Permit Start Date: 20th January 1966 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	(S)	1261	2	511910 114640
	Water Abstractions Operator: Mr G.K Quick Licence Number: 23/072 Permit Version: 1 Location: The Bungalow, Washington Authority: Environment Agency, Southern Region Abstraction: Aquaculture: Fish Farm/Cress Pond Throughflow Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Outlined On Licence Map Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 3rd December 1999 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	(S)	1340	2	512300 114410
	Water Abstractions Operator: D J Squire & Company Ltd Licence Number: 23/073 Permit Version: 3 Location: Washington Garden Centre Authority: Environment Agency, Southern Region Abstraction: Aquaculture: Spray Irrigation - Direct Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Outlined In Black On Licence Map Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 1st April 2016 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	(S)	1516	2	512250 114240

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions Operator: Shoots Washington Ltd Licence Number: 23/073 Permit Version: 2 Location: Washington Garden Centre Authority: Environment Agency, Southern Region Abstraction: Aquaculture: Spray Irrigation - Direct Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Outlined In Black On Licence Map Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 16th June 2009 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	(S)	1516	2	512250 114240
	Water Abstractions Operator: Caffyn-Parsons Ltd Licence Number: 23/073 Permit Version: 1 Location: Washington Garden Centre Authority: Environment Agency, Southern Region Abstraction: Aquaculture: Spray Irrigation - Direct Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Outlined In Black On Licence Map Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 1st April 2001 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	(S)	1516	2	512250 114240
	Water Abstractions Operator: Messrs Ip&Ri Golds Licence Number: 10/41/331105 Permit Version: 100 Location: Rock House Authority: Environment Agency, Southern Region Abstraction: General Agriculture: Spray Irrigation - Direct Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Rock House Nurseries, See Licence Map Authorised Start: 01 April Authorised End: 31 March Permit Start Date: 29th June 1982 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	(S)	1973	2	512290 113770
	Groundwater Vulnerability Map Combined Classification: Principle Bedrock Aquifer - High Vulnerability Combined Vulnerability: High Combined Aquifer: Productive Bedrock Aquifer, No Superficial Aquifer Pollutant Speed: Intermediate Bedrock Flow: Well Connected Fractures Dilution: 300-550 mm/year Baseflow Index: 40-70% Superficial Patchiness: <90% Superficial Thickness: <3m Superficial Recharge: No Data	A7NE (S)	0	3	512314 115875

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Groundwater Vulnerability Map Combined Classification: Secondary Bedrock Aquifer - High Vulnerability Combined Vulnerability: High Combined Aquifer: Productive Bedrock Aquifer, No Superficial Aquifer Pollutant Speed: Low Bedrock Flow: Well Connected Fractures Dilution: 300-550 mm/year Baseflow Index: 40-70% Superficial Patchiness: <90% Superficial Thickness: <3m Superficial Recharge: No Data	A11SE (N)	0	3	512339 116251
	Groundwater Vulnerability Map Combined Classification: Secondary Superficial Aquifer - Medium Vulnerability Combined Vulnerability: Medium Combined Aquifer: Unproductive Bedrock Aquifer, Productive Superficial Aquifer Pollutant Speed: Low Bedrock Flow: Well Connected Fractures Dilution: 300-550 mm/year Baseflow Index: 40-70% Superficial Patchiness: <90% Superficial Thickness: <3m Superficial Recharge: No Data	A11SE (NE)	0	3	512411 116276
	Groundwater Vulnerability Map Combined Classification: Secondary Superficial Aquifer - Medium Vulnerability Combined Vulnerability: Medium Combined Aquifer: Unproductive Bedrock Aquifer, Productive Superficial Aquifer Pollutant Speed: Low Bedrock Flow: Well Connected Fractures Dilution: 300-550 mm/year Baseflow Index: 40-70% Superficial Patchiness: <90% Superficial Thickness: <3m Superficial Recharge: No Data	A11SE (NW)	0	3	512238 116137
	Groundwater Vulnerability Map Combined Classification: Secondary Superficial Aquifer - Medium Vulnerability Combined Vulnerability: Medium Combined Aquifer: Unproductive Bedrock Aquifer, Productive Superficial Aquifer Pollutant Speed: Low Bedrock Flow: Well Connected Fractures Dilution: 300-550 mm/year Baseflow Index: 40-70% Superficial Patchiness: <90% Superficial Thickness: <3m Superficial Recharge: No Data	A11SE (E)	0	3	512453 116044

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Groundwater Vulnerability Map Combined Classification: Secondary Bedrock Aquifer - High Vulnerability Combined Vulnerability: High Combined Aquifer: Productive Bedrock Aquifer, Productive Superficial Aquifer Pollutant Speed: Low Bedrock Flow: Well Connected Fractures Dilution: 300-550 mm/year Baseflow Index: 40-70% Superficial Patchiness: <90% Superficial Thickness: <3m Superficial Recharge: No Data	A11SE (N)	0	3	512315 116254
	Groundwater Vulnerability Map Combined Classification: Secondary Superficial Aquifer - Medium Vulnerability Combined Vulnerability: Medium Combined Aquifer: Unproductive Bedrock Aquifer, Productive Superficial Aquifer Pollutant Speed: Intermediate Bedrock Flow: Well Connected Fractures Dilution: 300-550 mm/year Baseflow Index: 40-70% Superficial Patchiness: <90% Superficial Thickness: <3m Superficial Recharge: No Data	A7NE (E)	0	3	512477 116000
	Groundwater Vulnerability Map Combined Classification: Secondary Superficial Aquifer - Medium Vulnerability Combined Vulnerability: Medium Combined Aquifer: Unproductive Bedrock Aquifer, Productive Superficial Aquifer Pollutant Speed: Intermediate Bedrock Flow: Well Connected Fractures Dilution: 300-550 mm/year Baseflow Index: 40-70% Superficial Patchiness: <90% Superficial Thickness: <3m Superficial Recharge: No Data	A8NW (E)	0	3	512769 115920
	Groundwater Vulnerability Map Combined Classification: Unproductive Aquifer (may have productive aquifer beneath) Combined Vulnerability: Unproductive Combined Aquifer: Unproductive Bedrock Aquifer, No Superficial Aquifer Pollutant Speed: Intermediate Bedrock Flow: Well Connected Fractures Dilution: 300-550 mm/year Baseflow Index: 40-70% Superficial Patchiness: <90% Superficial Thickness: <3m Superficial Recharge: No Data	A7NE (S)	0	3	512306 116000

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Groundwater Vulnerability Map Combined Classification: Unproductive Aquifer (may have productive aquifer beneath) Combined Vulnerability: Unproductive Combined Aquifer: Unproductive Bedrock Aquifer, No Superficial Aquifer Pollutant Speed: Low Bedrock Flow: Well Connected Fractures Dilution: 300-550 mm/year Baseflow Index: 40-70% Superficial Patchiness: <90% Superficial Thickness: <3m Superficial Recharge: No Data	A11SE (W)	0	3	512306 116026
	Groundwater Vulnerability - Soluble Rock Risk None				
	Bedrock Aquifer Designations Aquifer Designation: Principal Aquifer	A7NE (S)	0	3	512314 115875
	Bedrock Aquifer Designations Aquifer Designation: Secondary Aquifer - A	A11SE (N)	0	3	512339 116251
	Bedrock Aquifer Designations Aquifer Designation: Unproductive Strata	A11SE (W)	0	3	512306 116026
	Superficial Aquifer Designations Aquifer Designation: Secondary Aquifer - Undifferentiated	A11SE (NW)	0	3	512238 116137
	Superficial Aquifer Designations Aquifer Designation: Secondary Aquifer - A	A8NW (E)	0	3	512769 115920
26	**Source Protection Zones** Name: Not Supplied Source: Environment Agency, Head Office Reference: Not Supplied Type: Zone III (Total Catchment): The total area needed to support the discharge from the protected groundwater source.	A10NE (NW)	618	2	511689 116594
	Extreme Flooding from Rivers or Sea without Defences Type: Extent of Extreme Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial Models Boundary Accuracy: As Supplied	A8SW (SE)	194	2	512865 115635
	Flooding from Rivers or Sea without Defences Type: Extent of Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial Models Boundary Accuracy: As Supplied	A8SW (SE)	194	2	512860 115625
	Areas Benefiting from Flood Defences None				
	Flood Water Storage Areas None				
	Flood Defences None				
27	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 250.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A11SE (N)	0	4	512271 116264
28	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 4.0 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A11SE (N)	0	4	512315 116287

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
29	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 188.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A11SE (N)	0	4	512316 116290
30	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 419.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A11SE (NE)	0	4	512416 116232
31	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 137.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A12SW (E)	0	4	512670 116042
32	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 7.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A8NW (E)	0	4	512688 115913
33	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 250.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A11SE (NW)	0	4	512222 116149
34	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 4.7 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A12SW (E)	2	4	512661 116093
35	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 42.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A12SW (E)	2	4	512662 116089
36	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 29.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A12SW (E)	2	4	512670 116048
37	**OS Water Network Lines** Watercourse Form: Lake Watercourse Length: 70.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A8NW (E)	6	4	512690 115906

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
38	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 193.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A8NW (SE)	13	4	512707 115753
39	**OS Water Network Lines** Watercourse Form: Lake Watercourse Length: 53.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A12SW (E)	14	4	512678 116081
40	**OS Water Network Lines** Watercourse Form: Lake Watercourse Length: 45.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A8NW (E)	25	4	512782 115875
41	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 4.6 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A12SW (E)	32	4	512700 116049
42	**OS Water Network Lines** Watercourse Form: Lake Watercourse Length: 4.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A8NW (SE)	37	4	512722 115702
43	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 100.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A8NW (SE)	37	4	512766 115780
44	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 2.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A12SW (E)	37	4	512705 116048
45	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 136.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A8SW (SE)	38	4	512595 115644
46	**OS Water Network Lines** Watercourse Form: Lake Watercourse Length: 4.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A8NW (SE)	39	4	512719 115695

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
47	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 140.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A12SW (E)	39	4	512707 116047
48	**OS Water Network Lines** Watercourse Form: Lake Watercourse Length: 3.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A8NW (SE)	40	4	512722 115698
49	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 49.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A8NW (SE)	42	4	512726 115699
50	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 54.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A8NW (E)	43	4	512730 115855
51	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 70.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A8NW (SE)	60	4	512768 115779
52	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 79.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A8SW (SE)	76	4	512551 115648
53	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 5.7 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A8NW (SE)	79	4	512771 115710
54	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 60.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A8SW (SE)	81	4	512595 115644
55	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 154.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A8NW (SE)	85	4	512777 115710

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
56	**OS Water Network Lines** Watercourse Form: Lake Watercourse Length: 26.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A7SE (SE)	103	4	512529 115625
57	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 9.5 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A11SW (NW)	114	4	512106 116123
58	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 251.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A11SW (NW)	123	4	512097 116123
59	**OS Water Network Lines** Watercourse Form: Lake Watercourse Length: 5.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A7SE (SE)	126	4	512510 115607
60	**OS Water Network Lines** Watercourse Form: Lake Watercourse Length: 71.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A7SE (S)	126	4	512439 115619
61	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 89.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A12SW (E)	130	4	512847 116056
62	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 28.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A7SE (SE)	131	4	512506 115603
63	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 12.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A8SW (SE)	138	4	512575 115588
64	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 23.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A8SW (SE)	138	4	512575 115588

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
65	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 256.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A7SE (S)	155	4	512315 115654
66	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 5.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A11NE (N)	159	4	512356 116467
67	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 3.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A11NE (N)	159	4	512356 116467
68	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 8.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A11NE (N)	161	4	512351 116470
69	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 8.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A11NE (N)	162	4	512357 116470
70	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 232.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A11NE (N)	171	4	512361 116478
71	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 15.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A12SE (E)	179	4	512916 116074
72	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 1.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A12SE (E)	181	4	512914 116075
73	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 15.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A8SE (SE)	213	4	512917 115659

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
74	**OS Water Network Lines** Watercourse Form: Lake Watercourse Length: 2.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A8SE (SE)	213	4	512932 115661
75	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 3.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A8SE (SE)	213	4	512934 115661
76	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 139.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A8SE (SE)	215	4	512925 115652
77	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 57.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A8SE (SE)	215	4	512937 115660
78	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 33.6 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A8SE (SE)	235	4	512993 115659
79	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 268.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A8SW (SE)	240	4	512863 115556
80	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 173.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A8SW (SE)	240	4	512863 115556
81	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 233.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A8SE (SE)	247	4	513026 115662
82	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 99.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A7SW (S)	260	4	512206 115648

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
83	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 399.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A7SW (S)	260	4	512206 115648
84	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 429.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Lancing Brook Catchment Name: Adur and Teville Primacy: 1	A11NE (N)	337	4	512427 116633
85	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 31.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A12NW (NE)	353	4	512797 116504
86	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 4.7 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A7SW (S)	355	4	512159 115564
87	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 20.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Lancing Brook Catchment Name: Adur and Teville Primacy: 1	A11NE (N)	357	4	512489 116635
88	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 4.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A7SW (S)	360	4	512157 115560
89	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 5.6 Watercourse Level: Underground Permanent: True Watercourse Name: Lancing Brook Catchment Name: Adur and Teville Primacy: 1	A11NE (N)	367	4	512509 116639
90	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 326.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Lancing Brook Catchment Name: Adur and Teville Primacy: 1	A11NW (N)	369	4	512103 116622
91	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 9.5 Watercourse Level: Underground Permanent: True Watercourse Name: Lancing Brook Catchment Name: Adur and Teville Primacy: 1	A11NW (N)	369	4	512110 116625

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
92	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 201.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Lancing Brook Catchment Name: Adur and Teville Primacy: 1	A11NE (N)	371	4	512514 116641
93	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 4.4 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A10SE (W)	371	4	511849 116144
94	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 113.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A10SE (W)	372	4	511835 116081
95	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 39.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A10SE (W)	373	4	511847 116148
96	**OS Water Network Lines** Watercourse Form: Lake Watercourse Length: 20.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A12NW (NE)	382	4	512813 116529
97	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 99.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A8SW (SE)	385	4	512827 115364
98	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 3.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A10SE (W)	390	4	511836 116184
99	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 164.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A12NW (NE)	403	4	512823 116547
100	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 120.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A4NW (SE)	464	4	512788 115270

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
101	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 3.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A4NW (SE)	464	4	512791 115272
102	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 40.3 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A4NW (SE)	467	4	512790 115268
103	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 138.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A12NW (NE)	477	4	512729 116692
104	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 217.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A12NW (NE)	477	4	512782 116659
105	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 88.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 2	A10NE (NW)	494	4	511818 116460
106	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 8.4 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 2	A10NE (NW)	502	4	511808 116458
107	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 6.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A6SE (SW)	503	4	511851 115597
108	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 7.3 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A6SE (SW)	503	4	511851 115597
109	**OS Water Network Lines** Watercourse Form: Lake Watercourse Length: 11.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A4NW (SE)	507	4	512798 115229

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
110	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 631.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 2	A10NE (NW)	507	4	511801 116454
111	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 115.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A6SE (SW)	509	4	511844 115595
112	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 13.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Lancing Brook Catchment Name: Adur and Teville Primacy: 1	A16SW (NE)	509	4	512671 116739
113	**OS Water Network Lines** Watercourse Form: Lake Watercourse Length: 62.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A4NW (S)	510	4	512614 115215
114	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 2.3 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A4NW (S)	511	4	512606 115214
115	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 4.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A4NW (S)	511	4	512609 115214
116	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 1.1 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A4NW (S)	511	4	512614 115215
117	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 6.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A4NW (S)	511	4	512600 115214
118	**OS Water Network Lines** Watercourse Form: Lake Watercourse Length: 18.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A4NW (SE)	512	4	512691 115213

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
119	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 231.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A4NW (SE)	513	4	512790 115221
120	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 5.2 Watercourse Level: Underground Permanent: True Watercourse Name: Lancing Brook Catchment Name: Adur and Teville Primacy: 1	A16SW (NE)	522	4	512677 116751
121	**OS Water Network Lines** Watercourse Form: Lake Watercourse Length: 13.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A4NW (SE)	522	4	512674 115204
122	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 119.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Lancing Brook Catchment Name: Adur and Teville Primacy: 1	A16SW (NE)	527	4	512679 116756
123	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 7.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A4NW (SE)	533	4	512669 115192
124	**OS Water Network Lines** Watercourse Form: Lake Watercourse Length: 5.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A4NW (SE)	537	4	512657 115187
125	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 9.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Lancing Brook Catchment Name: Adur and Teville Primacy: 1	A10NE (NW)	540	4	511803 116532
126	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 7.5 Watercourse Level: Underground Permanent: True Watercourse Name: Lancing Brook Catchment Name: Adur and Teville Primacy: 1	A10NE (NW)	547	4	511793 116531
127	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 78.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Lancing Brook Catchment Name: Adur and Teville Primacy: 1	A10NE (NW)	554	4	511786 116531

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
128	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 5.4 Watercourse Level: Underground Permanent: True Watercourse Name: Lancing Brook Catchment Name: Adur and Teville Primacy: 1	A10NE (NW)	616	4	511709 116516
129	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 231.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Lancing Brook Catchment Name: Adur and Teville Primacy: 1	A10NE (NW)	620	4	511704 116515
130	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 336.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A6SE (SW)	623	4	511768 115510
131	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 13.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A6SE (SW)	623	4	511768 115510
132	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 3.5 Watercourse Level: Underground Permanent: True Watercourse Name: Lancing Brook Catchment Name: Adur and Teville Primacy: 1	A16SW (NE)	634	4	512699 116861
133	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 23.6 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A6SE (SW)	636	4	511759 115500
134	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 67.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Lancing Brook Catchment Name: Adur and Teville Primacy: 1	A16SW (NE)	636	4	512702 116862
135	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 162.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A3NW (S)	655	4	512023 115295
136	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 15.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A6SE (SW)	660	4	511741 115485

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
137	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 296.6 Watercourse Level: Not Supplied Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A4NW (S)	664	4	512626 115062
138	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 2.9 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A6SE (SW)	674	4	511727 115478
139	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 183.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A6SE (SW)	677	4	511725 115476
140	**OS Water Network Lines** Watercourse Form: Lake Watercourse Length: 32.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Lancing Brook Catchment Name: Adur and Teville Primacy: 1	A16SW (NE)	691	4	512721 116914
141	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 1.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A10SW (W)	715	4	511478 116030
142	**OS Water Network Lines** Watercourse Form: Lake Watercourse Length: 11.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A10SW (W)	716	4	511477 116032
143	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 3.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Lancing Brook Catchment Name: Adur and Teville Primacy: 1	A16SW (NE)	718	4	512713 116944
144	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 9.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A16SW (NE)	719	4	512704 116948
145	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 7.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Lancing Brook Catchment Name: Adur and Teville Primacy: 1	A16SW (NE)	721	4	512712 116948

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
146	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 459.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A10SW (W)	727	4	511465 116029
147	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 170.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Lancing Brook Catchment Name: Adur and Teville Primacy: 1	A16SW (NE)	727	4	512710 116954
148	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 4.4 Watercourse Level: Underground Permanent: True Watercourse Name: Lancing Brook Catchment Name: Adur and Teville Primacy: 1	A10NW (NW)	741	4	511520 116380
149	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 300.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Lancing Brook Catchment Name: Adur and Teville Primacy: 1	A10SW (W)	742	4	511508 116336
150	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 3.0 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A6SW (SW)	841	4	511457 115556
151	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 46.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A6SW (SW)	843	4	511454 115556
152	**OS Water Network Lines** Watercourse Form: Lake Watercourse Length: 4.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A6SE (SW)	847	4	511558 115403
153	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 59.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A6SE (SW)	851	4	511550 115407
154	**OS Water Network Lines** Watercourse Form: Lake Watercourse Length: 7.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A6SE (SW)	851	4	511550 115407

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
155	**OS Water Network Lines** Watercourse Form: Lake Watercourse Length: 29.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A6SE (SW)	852	4	511554 115401
156	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 211.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Lancing Brook Catchment Name: Adur and Teville Primacy: 1	A16NW (N)	879	4	512685 117119
157	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 91.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A16NW (N)	879	4	512685 117119
158	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 14.4 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A6SW (SW)	880	4	511529 115386
159	**OS Water Network Lines** Watercourse Form: Lake Watercourse Length: 26.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A6SW (SW)	881	4	511409 115560
160	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 124.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A6SW (SW)	894	4	511523 115373
161	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 5.2 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A16NW (N)	939	4	512766 117158
162	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 229.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A3SE (S)	939	4	512512 114788
163	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 147.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A16NW (N)	943	4	512764 117163

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
164	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 74.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Lancing Brook Catchment Name: Adur and Teville Primacy: 1	A10SW (W)	947	4	511282 116251
165	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 13.4 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A10SW (W)	947	4	511282 116251
166	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 386.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Lancing Brook Catchment Name: Adur and Teville Primacy: 1	A16NW (N)	986	4	512562 117268
167	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 2.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A16NW (N)	986	4	512562 117268
168	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 238.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	A16NW (N)	988	4	512563 117270

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Local Authority Landfill Coverage Name: Horsham District Council - Has supplied landfill data		0	5	512306 116026
	Local Authority Landfill Coverage Name: West Sussex County Council - Has supplied landfill data		0	6	512306 116026
169	**Potentially Infilled Land (Non-Water)** Bearing Ref: NE Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1982	A16SE (NE)	749	-	512912 116898
170	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1961	A8NW (E)	54	-	512747 115843
171	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1961	A8SE (SE)	228	-	512977 115659
172	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1961	A4NE (SE)	661	-	513114 115216
173	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1961	A4SW (S)	727	-	512564 114999
174	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1914	A6SE (SW)	861	-	511544 115399
175	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1961	A14SW (NW)	905	-	511520 116772
176	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1914	A6SW (SW)	906	-	511450 115445

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS 1:625,000 Solid Geology Description: Wealden Group	A11SE (W)	0	1	512306 116026
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic Concentration: 15 - 25 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 15 - 30 mg/kg	A8NW (E)	0	1	512769 115920
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic Concentration: 15 - 25 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 15 - 30 mg/kg	A11SE (W)	0	1	512306 116026
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic Concentration: <15 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 15 - 30 mg/kg	A7NE (S)	0	1	512306 116000
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic Concentration: <15 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 15 - 30 mg/kg	A11SE (NW)	0	1	512238 116137
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic Concentration: <15 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 15 - 30 mg/kg	A11SE (NE)	0	1	512411 116276
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic Concentration: 15 - 25 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 15 - 30 mg/kg	A8NW (SE)	135	1	512826 115701

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic Concentration: 15 - 25 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 15 - 30 mg/kg	A7NW (W)	190	1	512000 116000
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic Concentration: 15 - 25 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 15 - 30 mg/kg	A8SW (SE)	224	1	512873 115592
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic Concentration: 15 - 25 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 15 - 30 mg/kg	A11NE (N)	391	1	512479 116674
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic Concentration: <15 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 15 - 30 mg/kg	A16SW (NE)	775	1	512724 117000
	BGS Measured Urban Soil Chemistry No data available				
	BGS Urban Soil Chemistry Averages No data available				
	Coal Mining Affected Areas In an area that might not be affected by coal mining				
	Non Coal Mining Areas of Great Britain Risk: Highly Unlikely Source: British Geological Survey, National Geoscience Information Service	A11SE (W)	0	1	512306 116026
	Non Coal Mining Areas of Great Britain Risk: Rare Source: British Geological Survey, National Geoscience Information Service	A7NE (S)	0	1	512314 115875
	Non Coal Mining Areas of Great Britain Risk: Highly Unlikely Source: British Geological Survey, National Geoscience Information Service	A11SE (N)	0	1	512339 116251
	Non Coal Mining Areas of Great Britain Risk: Highly Unlikely Source: British Geological Survey, National Geoscience Information Service	A11NE (N)	181	1	512394 116483
	Potential for Collapsible Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A11SE (W)	0	1	512306 116026

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Potential for Collapsible Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A8NW (E)	0	1	512769 115920
	Potential for Collapsible Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A8NW (SE)	135	1	512826 115701
	Potential for Collapsible Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A8SE (SE)	200	1	512956 115681
	Potential for Collapsible Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A8SW (SE)	224	1	512873 115592
	Potential for Compressible Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A11SE (W)	0	1	512306 116026
	Potential for Compressible Ground Stability Hazards Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service	A8NW (E)	0	1	512769 115920
	Potential for Compressible Ground Stability Hazards Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service	A8NW (SE)	135	1	512826 115701
	Potential for Compressible Ground Stability Hazards Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service	A8SE (SE)	200	1	512956 115681
	Potential for Compressible Ground Stability Hazards Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service	A8SW (SE)	224	1	512873 115592
	Potential for Ground Dissolution Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A11SE (W)	0	1	512306 116026
	Potential for Landslide Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A11SE (W)	0	1	512306 116026
	Potential for Landslide Ground Stability Hazards Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A7NW (SW)	120	1	512138 115851
	Potential for Running Sand Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A11SE (NW)	0	1	512238 116137
	Potential for Running Sand Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A11SE (W)	0	1	512306 116026
	Potential for Running Sand Ground Stability Hazards Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A8NW (E)	0	1	512769 115920
	Potential for Running Sand Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A11SE (N)	37	1	512414 116322
	Potential for Running Sand Ground Stability Hazards Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A8NW (SE)	135	1	512826 115701
	Potential for Running Sand Ground Stability Hazards Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A8SE (SE)	200	1	512956 115681
	Potential for Running Sand Ground Stability Hazards Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A8SW (SE)	224	1	512873 115592
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A11SE (N)	0	1	512315 116254
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A11SE (W)	0	1	512306 116026

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service	A7NE (S)	0	1	512280 115944
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A7NE (S)	0	1	512314 115875
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A11SE (N)	0	1	512339 116251
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A11SE (N)	22	1	512247 116265
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A12SW (E)	61	1	512747 116193
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A7SE (S)	144	1	512282 115670
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A11NE (N)	181	1	512394 116483
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A11NE (N)	187	1	512425 116477
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A11NE (N)	189	1	512303 116503
	Radon Potential - Radon Affected Areas Affected Area: The property is in a Lower probability radon area (less than 1% of homes are estimated to be at or above the Action Level). Source: British Geological Survey, National Geoscience Information Service	A11SE (W)	0	1	512306 116026
	Radon Potential - Radon Protection Measures Protection Measure: No radon protective measures are necessary in the construction of new dwellings or extensions Source: British Geological Survey, National Geoscience Information Service	A11SE (W)	0	1	512306 116026

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
177	**Contemporary Trade Directory Entries** Name: A & D S Newland Cabinet Makers Location: 29, Hillcrest Drive, Ashington, Pulborough, West Sussex, RH20 3LB Classification: Furniture - Repairing & Restoring **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8NE (E)	196	-	513076 115990
178	**Contemporary Trade Directory Entries** Name: Lansdowne Reproductions Location: London Road, Ashington, Pulborough, West Sussex, RH20 3DD Classification: Furniture - Reproduction **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8NE (E)	313	-	513194 115756
179	**Contemporary Trade Directory Entries** Name: Aquaserve Water Coolers Ltd Location: 23, Warminghurst Close, Ashington, Pulborough, West Sussex, RH20 3QD Classification: Water Coolers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A12SE (NE)	322	-	512962 116341
179	**Contemporary Trade Directory Entries** Name: Aquaserve Water Coolers Location: 23, Warminghurst Close, Ashington, Pulborough, West Sussex, RH20 3QD Classification: Water Coolers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A12SE (NE)	322	-	512962 116341
180	**Contemporary Trade Directory Entries** Name: Kearney Electric Location: Glentoran, Hillcrest Drive, Ashington, Pulborough, West Sussex, RH20 3LB Classification: Washing Machines - Servicing & Repairs **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A12SE (E)	355	-	513172 116130
181	**Contemporary Trade Directory Entries** Name: Tosspell Motors Location: London Rd, Ashington, Pulborough, West Sussex, RH20 3DD Classification: Car Dealers **Status: Inactive** Positional Accuracy: Manually positioned to the road within the address or location	A8SE (SE)	388	-	513204 115631
181	**Contemporary Trade Directory Entries** Name: Monza Sports Tuning Location: London Road, Ashington, Pulborough, RH20 3DD Classification: Car Dealers **Status: Active** Positional Accuracy: Automatically positioned to the address	A8SE (SE)	391	-	513175 115595
182	**Contemporary Trade Directory Entries** Name: Rda Pest Control Location: 10, Rectory Close, Ashington, Pulborough, West Sussex, RH20 3LP Classification: Pest & Vermin Control **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A12NE (NE)	534	-	513133 116467
182	**Contemporary Trade Directory Entries** Name: R D A Pest Control Location: 10, Rectory Close, Ashington, Pulborough, West Sussex, RH20 3LP Classification: Pest & Vermin Control **Status: Active** Positional Accuracy: Automatically positioned to the address	A12NE (NE)	534	-	513133 116467
183	**Contemporary Trade Directory Entries** Name: R A Henshaw Location: Feathers, London Road, Ashington, Pulborough, West Sussex, RH20 3JT Classification: Scrap Metal Merchants **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A12SE (E)	537	-	513221 116329
184	**Contemporary Trade Directory Entries** Name: Networks Centre Location: Bentley House, Wiston Business Park, London Road, Ashington, Pulborough, RH20 3DJ Classification: Fibre Optics **Status: Active** Positional Accuracy: Automatically positioned to the address	A3SE (S)	738	-	512455 114994

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
185	**Contemporary Trade Directory Entries** Name: Kate'S Cakes Ltd Location: Unit 3, Wiston Business Park, London Road, Ashington, Pulborough, West Sussex, RH20 3DJ Classification: Food Products - Manufacturers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A3SE (S)	814	-	512434 114920
186	**Contemporary Trade Directory Entries** Name: G R S Engineering Co (Sussex) Ltd Location: Unit 1, Wiston Business Park, London Road, Ashington, Pulborough, West Sussex, RH20 3DJ Classification: Sheet Metal Work **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A3SE (S)	942	-	512408 114794
186	**Contemporary Trade Directory Entries** Name: Grs Engineering Co (Sussex) Ltd Location: Unit 1, Wiston Business Park, London Road, Ashington, Pulborough, West Sussex, RH20 3DJ Classification: Sheet Metal Work **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A3SE (S)	942	-	512408 114794
186	**Contemporary Trade Directory Entries** Name: Bell Leisure Ltd Location: Bell Leisure House, London Road, Ashington, PULBOROUGH, West Sussex, RH20 3BT Classification: Swimming Pool Contractors, Repairers & Service **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A3SE (S)	980	-	512420 114755
187	**Points of Interest - Commercial Services** Name: Light Sussex Ltd Location: 1 Woelfs Close, London Road, Ashington, Pulborough, RH20 3JU Category: Construction Services Class Code: Metalworkers Including Blacksmiths Positional Accuracy: Positioned to address or location	A12SE (E)	413	7	513172 116209
188	**Points of Interest - Commercial Services** Name: R D A Pest Control Location: 10 Rectory Close, Ashington, Pulborough, RH20 3LP Category: Contract Services Class Code: Pest and Vermin Control Positional Accuracy: Positioned to address or location	A12NE (NE)	531	7	513130 116466
189	**Points of Interest - Commercial Services** Name: R A Henshaw Location: Feathers, London Road, Ashington, Pulborough, RH20 3JT Category: Recycling Services Class Code: Scrap Metal Merchants Positional Accuracy: Positioned to address or location	A12SE (E)	537	7	513221 116329
189	**Points of Interest - Commercial Services** Name: R A Henshaw Location: Feathers, London Road, Ashington, Pulborough, RH20 3JT Category: Recycling Services Class Code: Scrap Metal Merchants Positional Accuracy: Positioned to address or location	A12SE (E)	537	7	513221 116329
190	**Points of Interest - Commercial Services** Name: Grs Engineering Co (Sussex) Ltd Location: Unit 1 Wiston Business Park, London Road, Ashington, Pulborough, RH20 3DJ Category: Construction Services Class Code: Metalworkers Including Blacksmiths Positional Accuracy: Positioned to address or location	A3SE (S)	942	7	512408 114794
191	**Points of Interest - Manufacturing and Production** Name: Tank Location: RH20 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to an adjacent address or location	A8SE (SE)	272	7	512965 115608
192	**Points of Interest - Manufacturing and Production** Name: Wiston Business Park Location: RH20 Category: Industrial Features Class Code: Business Parks and Industrial Estates Positional Accuracy: Positioned to an adjacent address or location	A3SE (S)	846	7	512422 114890

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
192	**Points of Interest - Manufacturing and Production** Name: Wiston Business Park Location: RH20 Category: Industrial Features Class Code: Business Parks and Industrial Estates Positional Accuracy: Positioned to an adjacent address or location	A3SE (S)	846	7	512423 114890
193	**Points of Interest - Recreational and Environmental** Name: Skateboard Park Location: Church Close, RH20 Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to address or location	A8NE (E)	69	7	512901 115963
194	**Points of Interest - Recreational and Environmental** Name: Playground Location: Foster Lane, RH20 Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to address or location	A12SE (E)	160	7	512893 116062
194	**Points of Interest - Recreational and Environmental** Name: Playground Location: Not Supplied Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A12SE (E)	174	7	512967 116057
195	**Points of Interest - Recreational and Environmental** Name: Play Area Location: RH20 Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A12SW (NE)	208	7	512864 116282
196	**Points of Interest - Recreational and Environmental** Name: Play Area Location: RH20 Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A12SE (E)	214	7	512912 116134

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
197	**Ancient Woodland** Name: Not Supplied Reference: 1478394 Area(m²): 3802.04 Type: Ancient and Semi-Natural Woodland	A8SW (SE)	79	8	512551 115645
198	**Ancient Woodland** Name: America Wood Reference: 1478903 Area(m²): 47148.24 Type: Ancient and Semi-Natural Woodland	(E)	537	8	513423 116041
199	**Ancient Woodland** Name: Not Supplied Reference: 1478395 Area(m²): 6913.94 Type: Ancient and Semi-Natural Woodland	A4NE (SE)	662	8	512947 115113
200	**Ancient Woodland** Name: Not Supplied Reference: 1478121 Area(m²): 12700.76 Type: Ancient and Semi-Natural Woodland	A4SE (SE)	863	8	513110 114970
201	**Ancient Woodland** Name: Not Supplied Reference: 1478899 Area(m²): 37048.13 Type: Plantation on Ancient Woodland	(SE)	998	8	513705 115266

Agency & Hydrological	Version	Update Cycle
Contaminated Land Register Entries and Notices		
Horsham District Council - Environmental Health Department	February 2015	Annual Rolling Update
Environment Agency - Head Office	June 2020	Annually
Discharge Consents		
Environment Agency - Southern Region	July 2021	Quarterly
Enforcement and Prohibition Notices		
Environment Agency - Southern Region	March 2013	
Integrated Pollution Controls		
Environment Agency - Southern Region	January 2009	
Integrated Pollution Prevention And Control		
Environment Agency - South East Region - Solent & South Downs Area	July 2021	Quarterly
Environment Agency - Southern Region	July 2021	Quarterly
Local Authority Integrated Pollution Prevention And Control		
Horsham District Council - Environmental Health Department	June 2015	Variable
Local Authority Pollution Prevention and Controls		
Horsham District Council - Environmental Health Department	June 2015	Annual Rolling Update
Local Authority Pollution Prevention and Control Enforcements		
Horsham District Council - Environmental Health Department	June 2015	Variable
Nearest Surface Water Feature		
Ordnance Survey	August 2021	
Pollution Incidents to Controlled Waters		
Environment Agency - Southern Region	December 1999	
Prosecutions Relating to Authorised Processes		
Environment Agency - Southern Region	July 2015	
Prosecutions Relating to Controlled Waters		
Environment Agency - Southern Region	March 2013	
Registered Radioactive Substances		
Environment Agency - Southern Region	June 2016	Annually
River Quality		
Environment Agency - Head Office	November 2001	Not Applicable
River Quality Biology Sampling Points		
Environment Agency - Head Office	April 2012	Annually
River Quality Chemistry Sampling Points		
Environment Agency - Head Office	April 2012	Annually
Substantiated Pollution Incident Register		
Environment Agency - South East Region - Solent & South Downs Area	July 2021	Quarterly
Environment Agency - Southern Region - Solent and South Downs	July 2021	Quarterly
Environment Agency - Southern Region - Sussex Area	July 2021	Quarterly
Water Abstractions		
Environment Agency - Southern Region	July 2021	Quarterly
Water Industry Act Referrals		
Environment Agency - Southern Region	October 2017	Quarterly
Groundwater Vulnerability Map		
Environment Agency - Head Office	June 2018	As notified
Bedrock Aquifer Designations		
Environment Agency - Head Office	January 2018	Annually
Superficial Aquifer Designations		
Environment Agency - Head Office	January 2018	Annually
Source Protection Zones		
Environment Agency - Head Office	May 2021	Bi-Annually

Agency & Hydrological	Version	Update Cycle
Extreme Flooding from Rivers or Sea without Defences Environment Agency - Head Office	September 2021	Quarterly
Flooding from Rivers or Sea without Defences Environment Agency - Head Office	September 2021	Quarterly
Areas Benefiting from Flood Defences Environment Agency - Head Office	September 2021	Quarterly
Flood Water Storage Areas Environment Agency - Head Office	September 2021	Quarterly
Flood Defences Environment Agency - Head Office	September 2021	Quarterly
OS Water Network Lines Ordnance Survey	July 2021	Quarterly
Surface Water 1 in 30 year Flood Extent Environment Agency - Head Office	May 2018	Annually
Surface Water 1 in 100 year Flood Extent Environment Agency - Head Office	May 2018	Annually
Surface Water 1 in 1000 year Flood Extent Environment Agency - Head Office	May 2018	Annually
Surface Water Suitability Environment Agency - Head Office	February 2016	Annually
BGS Groundwater Flooding Susceptibility British Geological Survey - National Geoscience Information Service	May 2013	Annually

Waste	Version	Update Cycle
BGS Recorded Landfill Sites		
British Geological Survey - National Geoscience Information Service	November 2002	Not Applicable
Historical Landfill Sites		
Environment Agency - Head Office	May 2021	Quarterly
Integrated Pollution Control Registered Waste Sites		
Environment Agency - Southern Region	January 2009	Not Applicable
Licensed Waste Management Facilities (Landfill Boundaries)		
Environment Agency - South East Region - Solent & South Downs Area	July 2021	Quarterly
Environment Agency - Southern Region - Solent and South Downs	July 2021	Quarterly
Environment Agency - Southern Region - Sussex Area	July 2021	Quarterly
Licensed Waste Management Facilities (Locations)		
Environment Agency - South East Region - Solent & South Downs Area	July 2021	Quarterly
Environment Agency - Southern Region - Solent and South Downs	July 2021	Quarterly
Environment Agency - Southern Region - Sussex Area	July 2021	Quarterly
Local Authority Landfill Coverage		
Horsham District Council - Environmental Health Department	February 2003	Not Applicable
West Sussex County Council - Environment & Development	February 2003	Not Applicable
Local Authority Recorded Landfill Sites		
Horsham District Council - Environmental Health Department	October 2018	
West Sussex County Council - Environment & Development	October 2018	
Potentially Infilled Land (Non-Water)		
Landmark Information Group Limited	December 1999	Not Applicable
Potentially Infilled Land (Water)		
Landmark Information Group Limited	December 1999	
Registered Landfill Sites		
Environment Agency - Southern Region - Solent and South Downs	March 2006	Not Applicable
Environment Agency - Southern Region - Sussex Area	March 2006	Not Applicable
Registered Waste Transfer Sites		
Environment Agency - Southern Region - Solent and South Downs	April 2018	
Environment Agency - Southern Region - Sussex Area	April 2018	
Registered Waste Treatment or Disposal Sites		
Environment Agency - Southern Region - Solent and South Downs	June 2015	
Environment Agency - Southern Region - Sussex Area	June 2015	

Hazardous Substances	Version	Update Cycle
Control of Major Accident Hazards Sites (COMAH)		
Health and Safety Executive	April 2018	Bi-Annually
Explosive Sites		
Health and Safety Executive	March 2017	Annually
Notification of Installations Handling Hazardous Substances (NIHHS)		
Health and Safety Executive	August 2001	
Planning Hazardous Substance Enforcements		
Horsham District Council - Planning Department	August 2015	Variable
West Sussex County Council - Environment & Development	October 2006	Annual Rolling Update
Planning Hazardous Substance Consents		
Horsham District Council - Planning Department	August 2015	Variable
West Sussex County Council - Environment & Development	October 2006	Annual Rolling Update

Geological	Version	Update Cycle
BGS 1:625,000 Solid Geology British Geological Survey - National Geoscience Information Service	January 2009	Not Applicable
BGS Estimated Soil Chemistry British Geological Survey - National Geoscience Information Service	December 2015	Annually
BGS Recorded Mineral Sites British Geological Survey - National Geoscience Information Service	November 2021	Bi-Annually
CBSCB Compensation District Cheshire Brine Subsidence Compensation Board (CBSCB)	August 2011	As notified
Coal Mining Affected Areas The Coal Authority - Property Searches	March 2014	Annual Rolling Update
Mining Instability Ove Arup & Partners	June 1998	Not Applicable
Non Coal Mining Areas of Great Britain British Geological Survey - National Geoscience Information Service	May 2015	Not Applicable
Potential for Collapsible Ground Stability Hazards British Geological Survey - National Geoscience Information Service	April 2020	Annually
Potential for Compressible Ground Stability Hazards British Geological Survey - National Geoscience Information Service	January 2019	Annually
Potential for Ground Dissolution Stability Hazards British Geological Survey - National Geoscience Information Service	January 2019	Annually
Potential for Landslide Ground Stability Hazards British Geological Survey - National Geoscience Information Service	January 2019	Annually
Potential for Running Sand Ground Stability Hazards British Geological Survey - National Geoscience Information Service	January 2019	Annually
Potential for Shrinking or Swelling Clay Ground Stability Hazards British Geological Survey - National Geoscience Information Service	January 2019	Annually
Radon Potential - Radon Affected Areas British Geological Survey - National Geoscience Information Service	July 2011	Annually
Radon Potential - Radon Protection Measures British Geological Survey - National Geoscience Information Service	July 2011	Annually
Industrial Land Use	**Version**	**Update Cycle**
Contemporary Trade Directory Entries Thomson Directories	July 2021	Quarterly
Fuel Station Entries Catalist Ltd - Experian	August 2021	Quarterly
Gas Pipelines National Grid	October 2021	Annually
Points of Interest - Commercial Services PointX	September 2021	Quarterly
Points of Interest - Education and Health PointX	September 2021	Quarterly
Points of Interest - Manufacturing and Production PointX	September 2021	Quarterly
Points of Interest - Public Infrastructure PointX	September 2021	Quarterly
Points of Interest - Recreational and Environmental PointX	September 2021	Quarterly
Underground Electrical Cables National Grid	May 2021	Annually

Sensitive Land Use	Version	Update Cycle
Ancient Woodland		
Natural England	February 2021	Bi-Annually
Areas of Adopted Green Belt		
Horsham District Council - Planning Department	October 2020	Quarterly
South Downs National Park	October 2020	Quarterly
Areas of Unadopted Green Belt		
Horsham District Council - Planning Department	October 2020	Quarterly
South Downs National Park	October 2020	Quarterly
Areas of Outstanding Natural Beauty		
Natural England	January 2021	Bi-Annually
Environmentally Sensitive Areas		
Natural England	January 2017	
Forest Parks		
Forestry Commission	April 1997	Not Applicable
Local Nature Reserves		
Natural England	February 2021	Bi-Annually
Marine Nature Reserves		
Natural England	July 2019	Bi-Annually
National Nature Reserves		
Natural England	January 2021	Bi-Annually
National Parks		
Natural England	February 2018	Bi-Annually
Nitrate Sensitive Areas		
Natural England	April 2016	Not Applicable
Nitrate Vulnerable Zones		
Department for Environment, Food and Rural Affairs (DEFRA - formerly FRCA)	April 2016	
Environment Agency - Head Office	June 2017	Bi-Annually
Ramsar Sites		
Natural England	August 2020	Bi-Annually
Sites of Special Scientific Interest		
Natural England	February 2021	Bi-Annually
Special Areas of Conservation		
Natural England	July 2020	Bi-Annually
Special Protection Areas		
Natural England	February 2021	Bi-Annually

Data Suppliers

A selection of organisations who provide data within this report

Data Supplier	Data Supplier Logo
Ordnance Survey	
Environment Agency	
Scottish Environment Protection Agency	
The Coal Authority	
British Geological Survey	
Centre for Ecology and Hydrology	
Natural Resources Wales	
Scottish Natural Heritage	
Natural England	
Public Health England	
Ove Arup	
Stantec UK Ltd	

Useful Contacts

Contact	Name and Address	Contact Details
1	**British Geological Survey - Enquiry Service** British Geological Survey, Environmental Science Centre, Keyworth, Nottingham, Nottinghamshire, NG12 5GG	Telephone: 0115 936 3143 Fax: 0115 936 3276 Email: enquiries@bgs.ac.uk Website: www.bgs.ac.uk
2	**Environment Agency - National Customer Contact Centre (NCCC)** PO Box 544, Templeborough, Rotherham, S60 1BY	Telephone: 03708 506 506 Email: enquiries@environment-agency.gov.uk
3	**Environment Agency - Head Office** Rio House, Waterside Drive, Aztec West, Almondsbury, Bristol, Avon, BS32 4UD	Telephone: 01454 624400 Fax: 01454 624409
4	**Ordnance Survey** Adanac Drive, Southampton, Hampshire, SO16 0AS	Telephone: 03456 05 05 05 Email: customerservices@ordnancesurvey.co.uk Website: www.ordnancesurvey.gov.uk
5	**Horsham District Council - Environmental Health Department** Park House, North Street, Horsham, Sussex, RH12 1RL	Telephone: 01403 215100 Fax: 01403 732790 Website: www.horsham.gov.uk
6	**West Sussex County Council - Environment & Development** County Hall, Tower hall, Chichester, West Sussex, PO19 1RH	Telephone: 01243 777100 Website: www.westsussex.gov.uk
7	**PointX** 7 Abbey Court, Eagle Way, Sowton, Exeter, Devon, EX2 7HY	Website: www.pointx.co.uk
8	**Natural England** County Hall, Spetchley Road, Worcester, WR5 2NP	Telephone: 0300 060 3900 Email: enquiries@naturalengland.org.uk Website: www.naturalengland.org.uk
-	**Public Health England - Radon Survey, Centre for Radiation, Chemical and Environmental Hazards** Chilton, Didcot, Oxfordshire, OX11 0RQ	Telephone: 01235 822622 Fax: 01235 833891 Email: radon@phe.gov.uk Website: www.ukradon.org
-	**Landmark Information Group Limited** Imperium, Imperial Way, Reading, Berkshire, RG2 0TD	Telephone: 0844 844 9952 Fax: 0844 844 9951 Email: customerservices@landmarkinfo.co.uk Website: www.landmarkinfo.co.uk

Please note that the Environment Agency / Natural Resources Wales / SEPA have a charging policy in place for enquiries.

Geology 1:50,000 Maps Legends

Artificial Ground and Landslip

Map Colour	Lex Code	Rock Name	Rock Type	Min and Max Age
	WGR	Worked Ground (Undivided)	Void	Not Supplied - Holocene
	MGR	Made Ground (Undivided)	Artificial Deposit	Not Supplied - Holocene
	SLIP	Landslide Deposit	Clay	Not Supplied - Quaternary

Superficial Geology

Map Colour	Lex Code	Rock Name	Rock Type	Min and Max Age
	ALV	Alluvium	Clay, Silt, Sand and Gravel	Not Supplied - Holocene
	HEAD	Head	Clay, Silt, Sand and Gravel	Not Supplied - Quaternary

Bedrock and Faults

Map Colour	Lex Code	Rock Name	Rock Type	Min and Max Age
	AC	Atherfield Clay Formation	Mudstone	Not Supplied - Aptian
	LGS	Lower Greensand Group	Sandstone, Silty	Not Supplied - Aptian
	HY	Hythe Formation	Sandstone	Not Supplied - Aptian
	F B	Fittleworth Member	Sandstone and Mudstone	Not Supplied - Aptian
	FO	Folkestone Formation	Sandstone	Not Supplied - Aptian
	MHC	Marehill Clay Member	Mudstone	Not Supplied - Aptian
	WC	Weald Clay Formation	Sandstone	Not Supplied - Hauterivian
	WC	Weald Clay Formation	Mudstone	Not Supplied - Hauterivian
	WC	Weald Clay Formation	Limestone	Not Supplied - Hauterivian
		Faults		

RSK

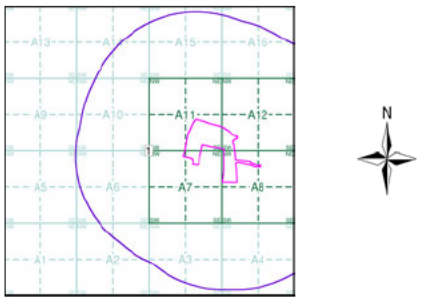
Geology 1:50,000 Maps

This report contains geological map extracts taken from the BGS Digital Geological map of Great Britain at 1 50,000 scale and is designed for users carrying out preliminary site assessments who require geological maps for the area around the site. This mapping may be more up to date than previously published paper maps.
The various geological layers - artificial and landslip deposits, superficial geology and solid (bedrock) geology are displayed in separate maps, but superimposed on the final 'Combined Surface Geology' map. All map legends feature on this page. Not all layers have complete nationwide coverage, so availability of data for relevant map sheets is indicated below.

Geology 1:50,000 Maps Coverage

Map ID: 1
Map Sheet No: 318
Map Name: Brighton and Wo
Map Date: 2006
Bedrock Geology: Available
Superficial Geology: Available
Artificial Geology: Available
Faults: Not Supplied
Landslip: Available
Rock Segments: Not Supplied

Geology 1:50,000 Maps - Slice A

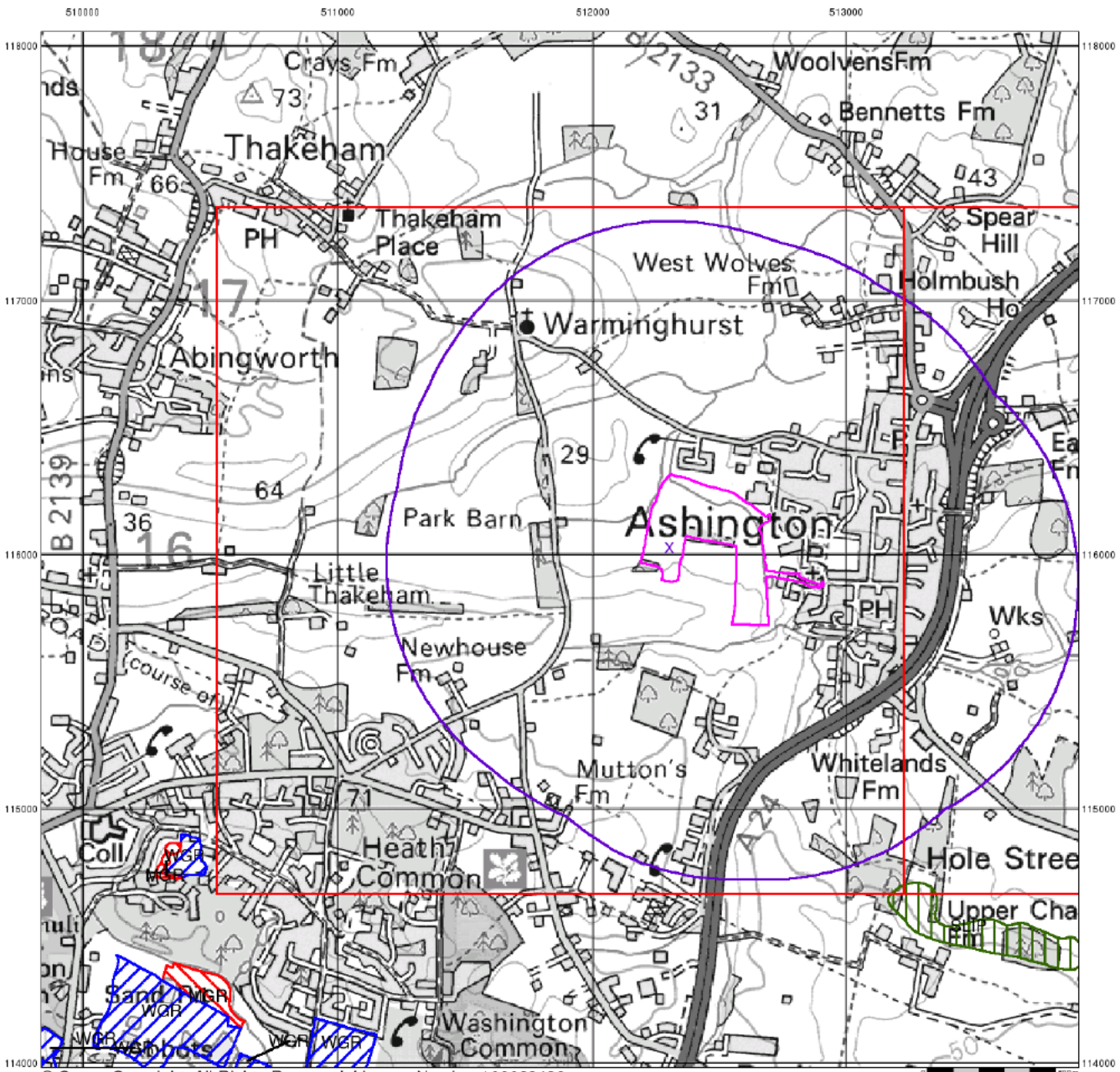


Order Details:

Order Number: 287518451_1_1
Customer Reference: 52368
National Grid Reference: 512310, 116030
Slice: A
Site Area (Ha): 15 35
Search Buffer (m): 1000

Site Details:

Firle, Church Lane, Ashington, PULBOROUGH, RH20 3JX



© Crown Copyright. All Rights Reserved. License Number 100022432.

Artificial Ground and Landslip

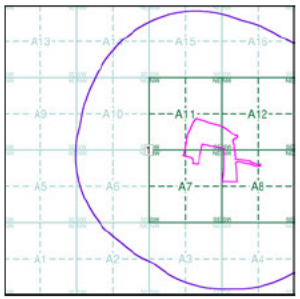
Artificial ground is a term used by BGS for those areas where the ground surface has been significantly modified by human activity. Information about previously developed ground is especially important, as it is often associated with potentially contaminated material, unpredictable engineering conditions and unstable ground.

Artificial ground includes:

- Made ground - man-made deposits such as embankments and spoil heaps on the natural ground surface.
- Worked ground - areas where the ground has been cut away such as quarries and road cuttings.
- Infilled ground - areas where the ground has been cut away then wholly or partially backfilled.
- Landscaped ground - areas where the surface has been reshaped.
- Disturbed ground - areas of ill-defined shallow or near surface mineral workings where it is impracticable to map made and worked ground separately.

Mass movement (landslip) deposits on BGS geological maps are primarily superficial deposits that have moved down slope under gravity to form landslips. These affect bedrock, other superficial deposits and artificial ground. The dataset also includes foundered strata, where the ground has collapsed due to subsidence.

Artificial Ground and Landslip Map - Slice A



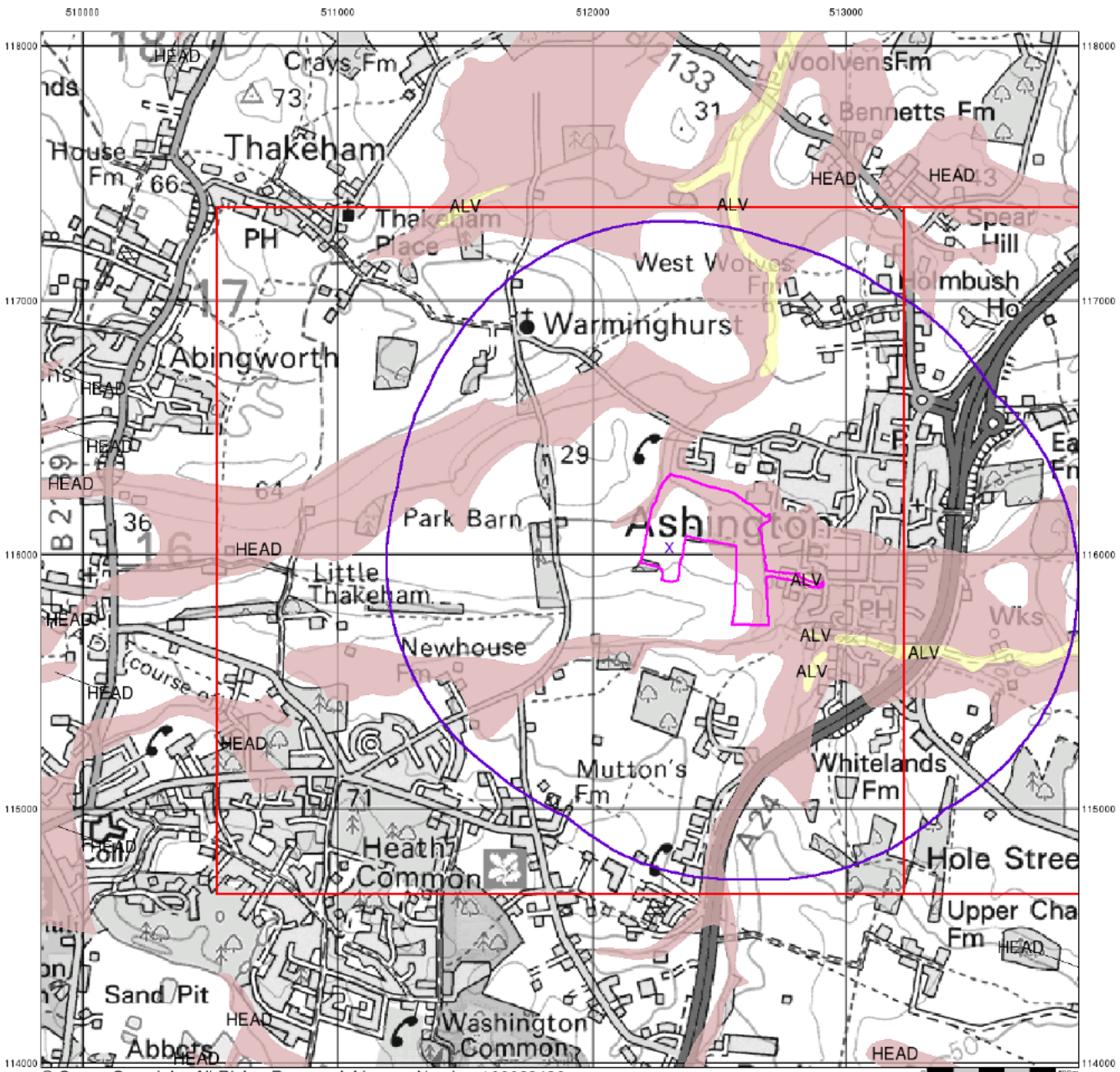
Order Details:

Order Number:	287518451_1_1
Customer Reference:	52368
National Grid Reference:	512310, 116030
Slice:	A
Site Area (Ha):	15.35
Search Buffer (m):	1000

Site Details:

Firle, Church Lane, Ashington, PULBOROUGH, RH20 3JX

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



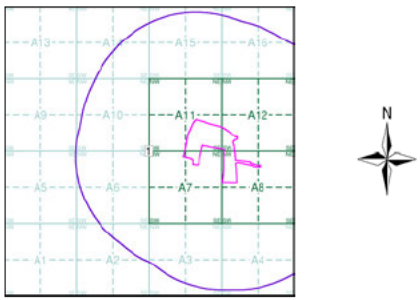
Superficial Geology

Superficial Deposits are the youngest geological deposits formed during the most recent period of geological time, the Quaternary, which extends back about 1 8 million years from the present.

They rest on older deposits or rocks referred to as Bedrock. This dataset contains Superficial deposits that are of natural origin and 'in place'. Other superficial strata may be held in the Mass Movement dataset where they have been moved, or in the Artificial Ground dataset where they are of man-made origin.

Most of these Superficial deposits are unconsolidated sediments such as gravel, sand, silt and clay, and onshore they form relatively thin, often discontinuous patches or larger spreads.

Superficial Geology Map - Slice A



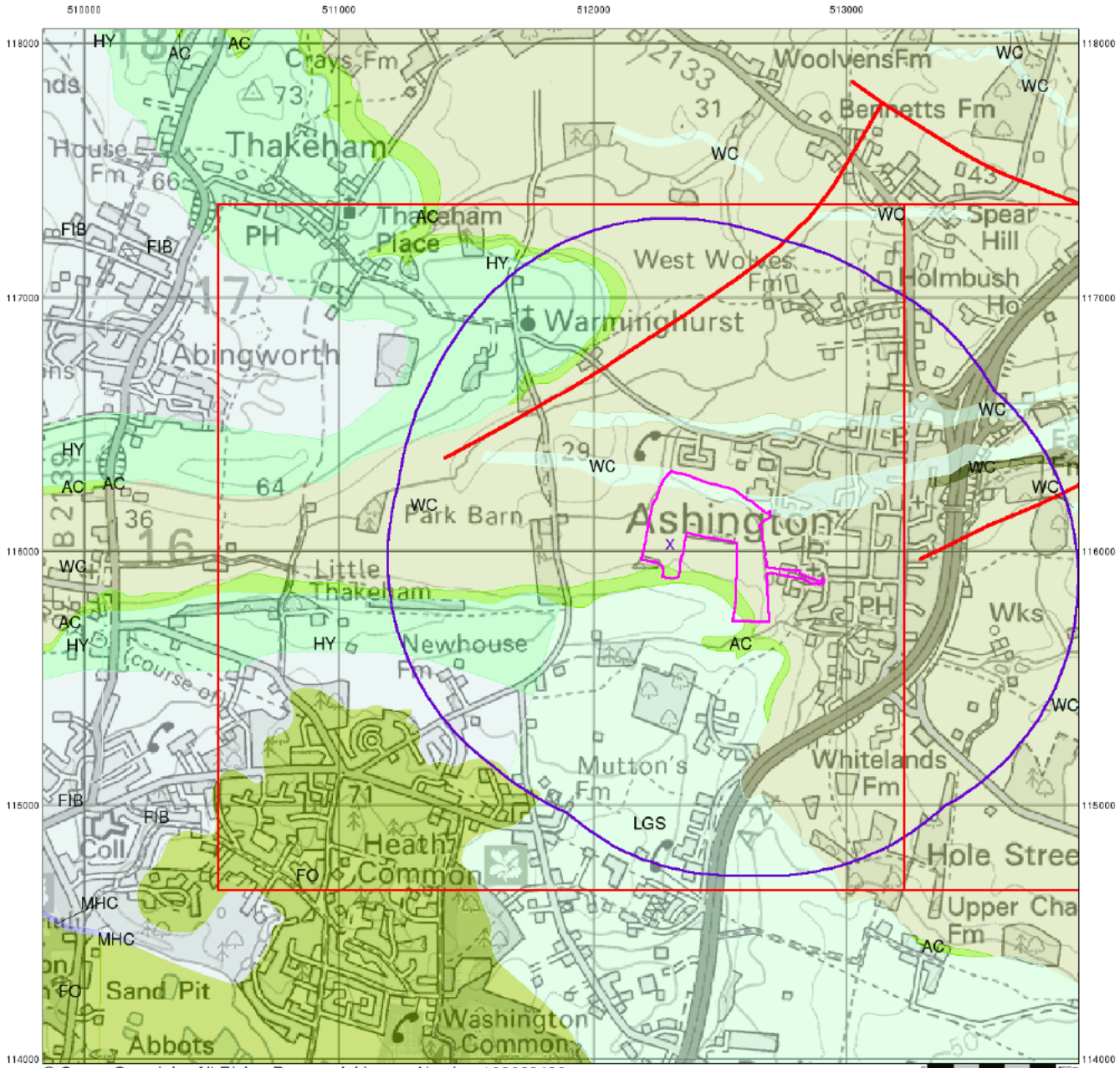
Order Details:

Order Number:	287518451_1_1
Customer Reference:	52368
National Grid Reference:	512310, 116030
Slice:	A
Site Area (Ha):	15 35
Search Buffer (m):	1000

Site Details:

Firle, Church Lane, Ashington, PULBOROUGH, RH20 3JX

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



© Crown Copyright. All Rights Reserved. License Number 100022432.

RSK

Bedrock and Faults

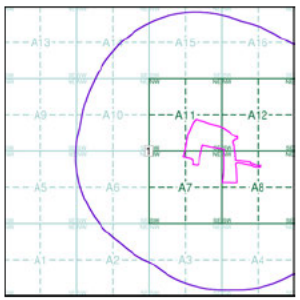
Bedrock geology is a term used for the main mass of rocks forming the Earth and are present everywhere, whether exposed at the surface in outcrops or concealed beneath superficial deposits or water.

The bedrock has formed over vast lengths of geological time ranging from ancient and highly altered rocks of the Proterozoic, some 2500 million years ago, or older, up to the relatively young Pliocene, 1.8 million years ago.

The bedrock geology includes many lithologies, often classified into three types based on origin: igneous, metamorphic and sedimentary.

The BGS Faults and Rock Segments dataset includes geological faults (e g. normal, thrust), and thin beds mapped as lines (e g. coal seam, gypsum bed). Some of these are linked to other particular 1:50,000 Geology datasets, for example, coal seams are part of the bedrock sequence, most faults and mineral veins primarily affect the bedrock but cut across the strata and post date its deposition.

Bedrock and Faults Map - Slice A



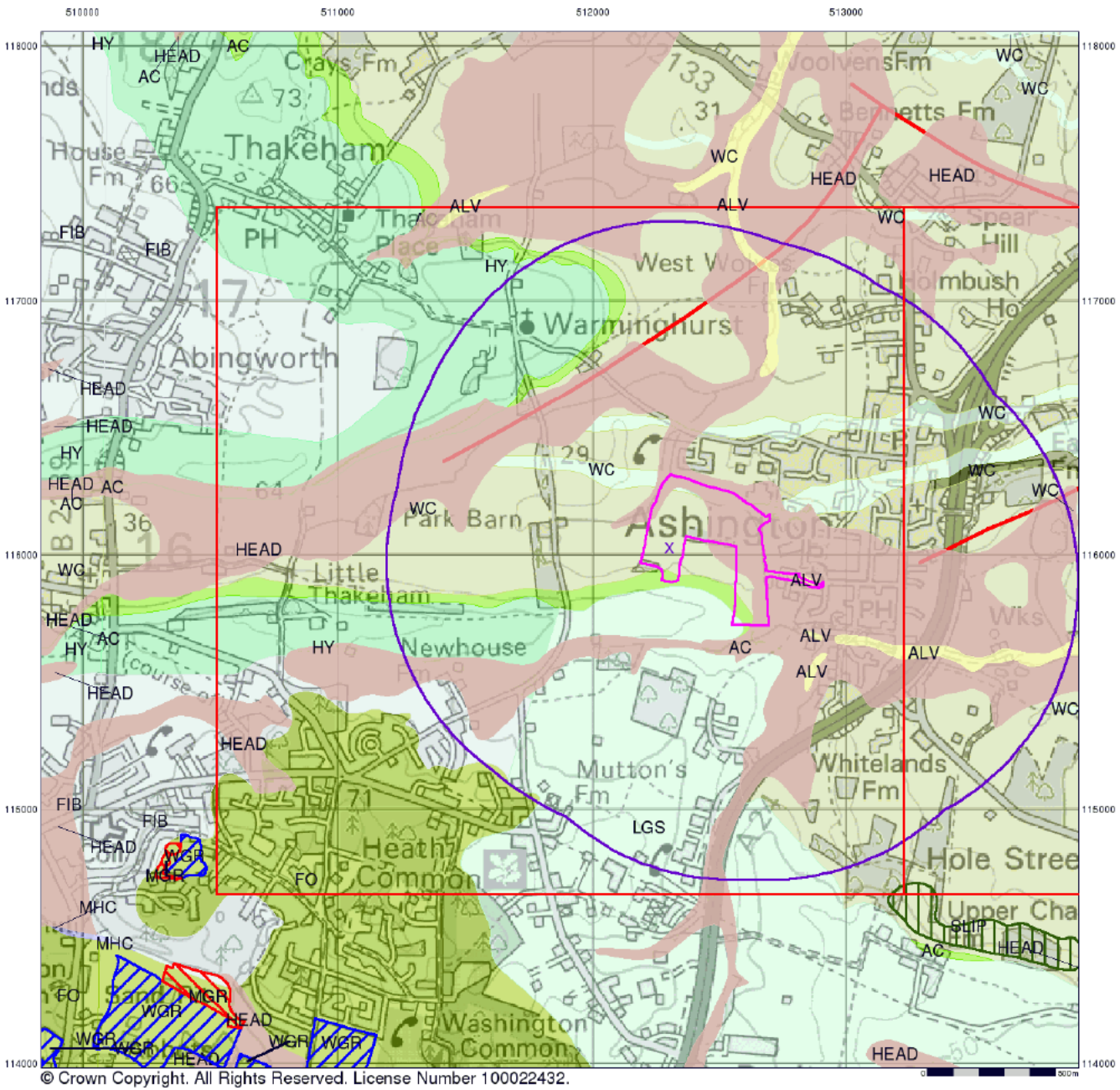
Order Details:

Order Number:	287518451_1_1
Customer Reference:	52368
National Grid Reference:	512310, 116030
Slice:	A
Site Area (Ha):	15.35
Search Buffer (m):	1000

Site Details:

Firle, Church Lane, Ashington, PULBOROUGH, RH20 3JX

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



© Crown Copyright. All Rights Reserved. License Number 100022432.

Combined Surface Geology

The Combined Surface Geology map combines all the previous maps into one combined geological overview of your site.

Please consult the legends to the previous maps to interpret the Combined "Surface Geology" map.

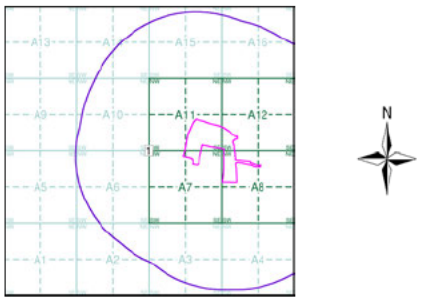
Additional Information

More information on 1:50,000 Geological mapping and explanations of rock classifications can be found on the BGS website. Using the LEX Codes in this report, further descriptions of rock types can be obtained by interrogating the 'BGS Lexicon of Named Rock Units'. This database can be accessed by following the 'Information and Data' link on the BGS website.

Contact

British Geological Survey
Kingsley Dunham Centre
Keyworth
Nottingham
NG12 5GG
Telephone: 0115 936 3143
Fax: 0115 936 3276
email: enquiries@bgs ac.uk
website: www.bgs ac.uk

Combined Geology Map - Slice A



Order Details:

Order Number:	287518451_1_1
Customer Reference:	52368
National Grid Reference:	512310, 116030
Slice:	A
Site Area (Ha):	15 35
Search Buffer (m):	1000

Site Details:

Firle, Church Lane, Ashington, PULBOROUGH, RH20 3JX

Historical Mapping Legends

Ordnance Survey County Series 1:10,560

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

Ordnance Survey Plan 1:10,000

Chalk Pit, Clay Pit or Quarry
Gravel Pit
Sand Pit
Disused Pit or Quarry
Refuse or Slag Heap
Lake, Loch or Pond
Dunes
Boulders
Coniferous Trees
Non-Coniferous Trees
Orchard
Scrub
Coppice
Bracken
Heath
Rough Grassland
Marsh
Reeds
Saltings
Building
Direction of Flow of Water
Shingle
Sand
Glasshouse
Pylon
Pylon
Electricity Transmission Line
Sloping Masonry
Cutting
Embankment
Standard Gauge Multiple Track
Road Under
Road Over
Level Crossing
Foot Bridge
Standard Gauge Single Track
Siding, Tramway or Mineral Line
Narrow Gauge
Geographical County
Administrative County, County Borough or County of City
Municipal Borough, Urban or Rural District, Burgh or District Council
Borough, Burgh or County Constituency
Shown only when not coincident with other boundaries
Civil Parish
Shown alternately when coincidence of boundaries occurs

BP, BS	Boundary Post or Stone	Pol Sta	Police Station
Ch	Church	PO	Post Office
CH	Club House	PC	Public Convenience
F E Sta	Fire Engine Station	PH	Public House
FB	Foot Bridge	SB	Signal Box
Fn	Fountain	Spr	Spring
GP	Guide Post	TCB	Telephone Call Box
MP	Mile Post	TCP	Telephone Call Post
MS	Mile Stone	W	Well

1:10,000 Raster Mapping

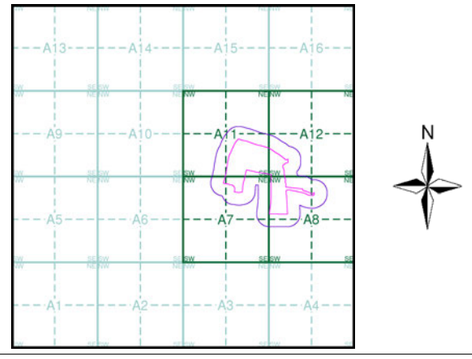
Gravel Pit
Refuse tip or slag heap
Rock
Rock (scattered)
Boulders
Boulders (scattered)
Shingle
Mud
Sand
Sand Pit
Slopes
Top of cliff
General detail
Underground detail
Overhead detail
Narrow gauge railway
Multi-track railway
Single track railway
County boundary (England only)
Civil, parish or community boundary
District, Unitary, Metropolitan, London Borough boundary
Constituency boundary
Area of wooded vegetation
Non-coniferous trees
Non-coniferous trees (scattered)
Coniferous trees
Coniferous trees (scattered)
Positioned tree
Orchard
Coppice or Osiers
Rough Grassland
Heath
Scrub
Marsh, Salt Marsh or Reeds
Water feature
Flow arrows
MHW(S) Mean high water (springs)
MLW(S) Mean low water (springs)
Telephone line (where shown)
Electricity transmission line (with poles)
BM 123.45 m Bench mark (where shown)
Triangulation station
Point feature (e.g. Guide Post or Mile Stone)
Pylon, flare stack or lighting tower
Site of (antiquity)
Glasshouse
General Building
Important Building

RSK

Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Sussex	1:10,560	1879	2
Sussex	1:10,560	1898	3
Sussex	1:10,560	1914	4
Sussex	1:10,560	1914	5
Historical Aerial Photography	1:10,560	1947 - 1948	6
Sussex	1:10,560	1952	7
Ordnance Survey Plan	1:10,000	1961	8
Ordnance Survey Plan	1:10,000	1971	9
Ordnance Survey Plan	1:10,000	1982	10
10K Raster Mapping	1:10,000	2000	11
10K Raster Mapping	1:10,000	2006	12
VectorMap Local	1:10,000	2021	13

Historical Map - Slice A



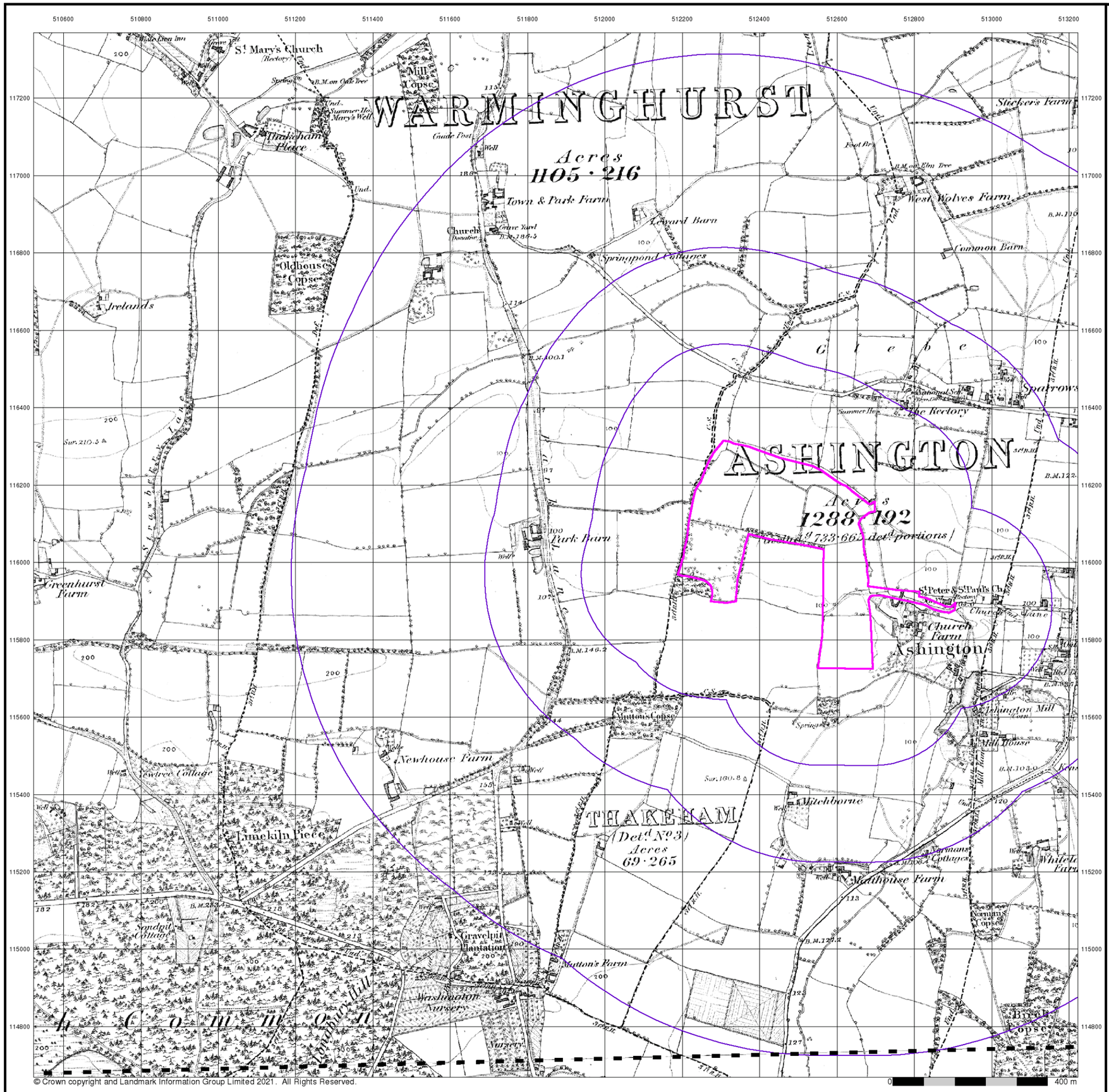
Order Details

Order Number: 287518451_1_1
Customer Ref: 52368
National Grid Reference: 512310, 116030
Slice: A
Site Area (Ha): 15.35
Search Buffer (m): 1000

Site Details

Firle, Church Lane, Ashington, PULBOROUGH, RH20 3JX

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



© Crown copyright and Landmark Information Group Limited 2021. All Rights Reserved.

RSK

Sussex

Published 1879

Source map scale - 1:10,560

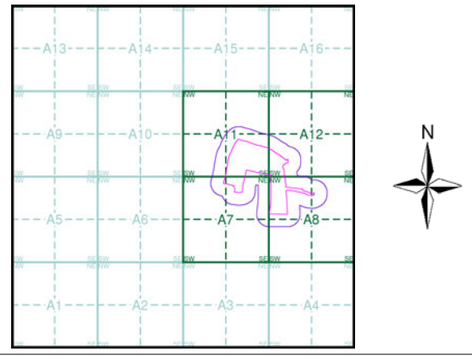
The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840`s. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some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

Map Name(s) and Date(s)

03700
1879
1:10,560

05100
1879
1:10,560

Historical Map - Slice A



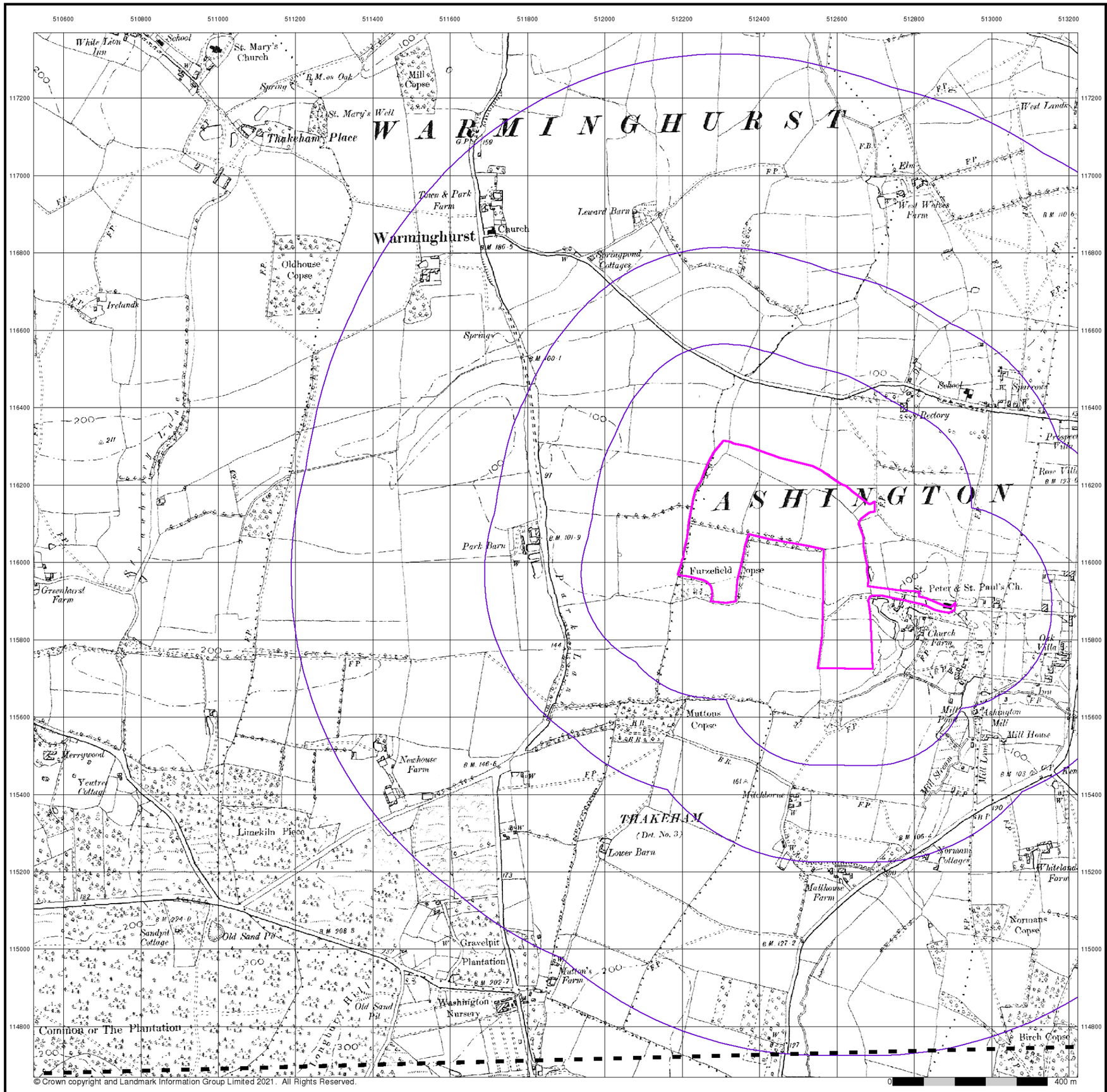
Order Details

Order Number:	287518451_1_1
Customer Ref:	52368
National Grid Reference:	512310, 116030
Slice:	A
Site Area (Ha):	15.35
Search Buffer (m):	1000

Site Details

Firle, Church Lane, Ashington, PULBOROUGH, RH20 3JX

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



© Crown copyright and Landmark Information Group Limited 2021. All Rights Reserved.

RSK

Sussex

Published 1898

Source map scale - 1:10,560

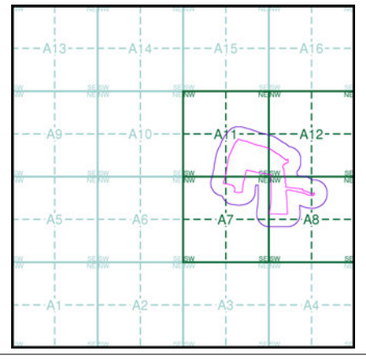
The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840`s. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some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

Map Name(s) and Date(s)

037SW
1898
1:10,560

051NW
1898
1:10,560

Historical Map - Slice A



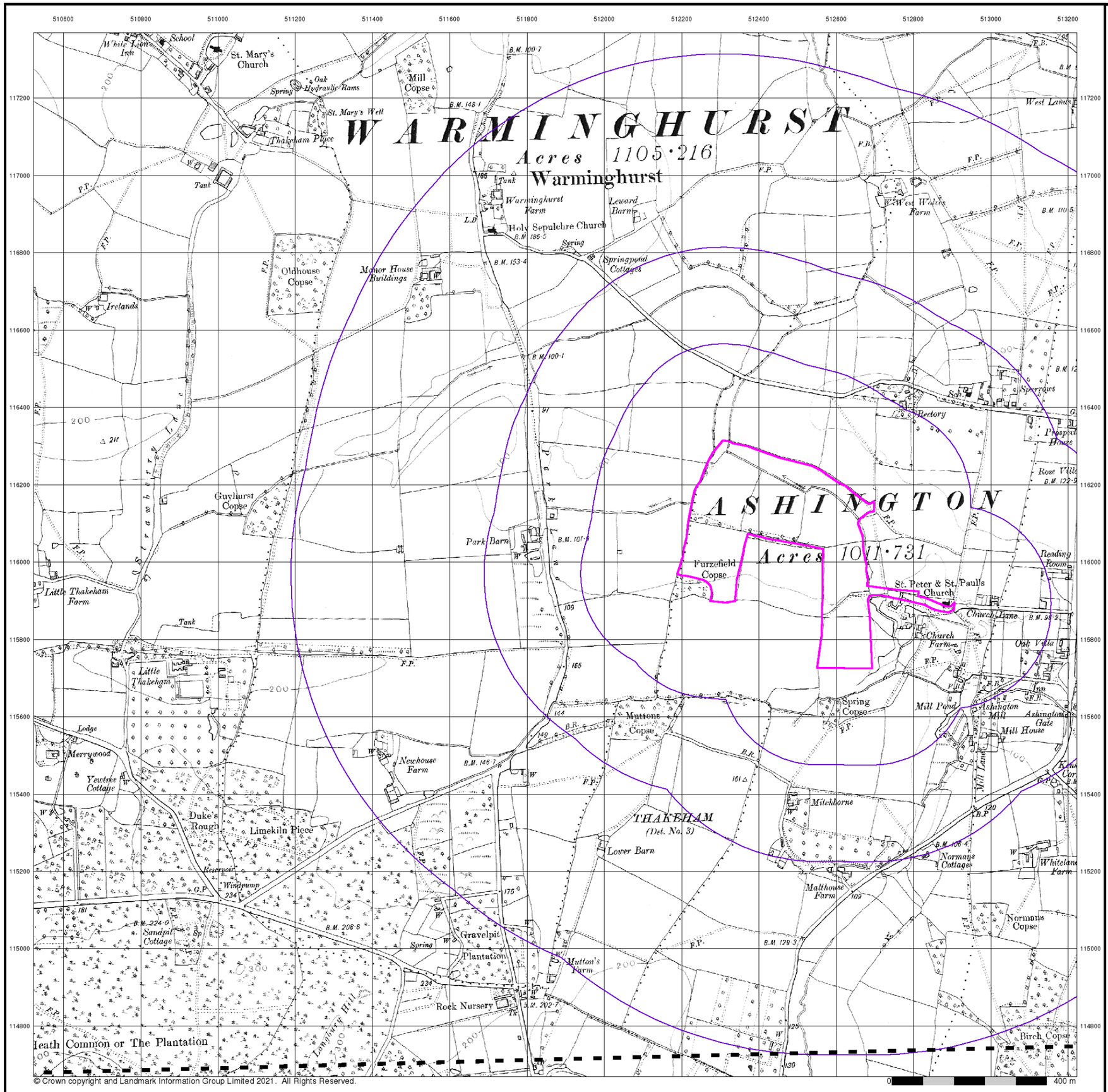
Order Details

Order Number:	287518451_1_1
Customer Ref:	52368
National Grid Reference:	512310, 116030
Slice:	A
Site Area (Ha):	15.35
Search Buffer (m):	1000

Site Details

Firle, Church Lane, Ashington, PULBOROUGH, RH20 3JX

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



© Crown copyright and Landmark Information Group Limited 2021. All Rights Reserved.

RSK

Sussex

Published 1914

Source map scale - 1:10,560

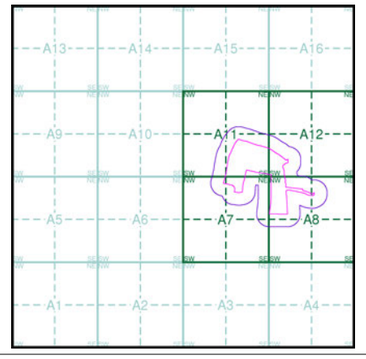
The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840`s. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some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

Map Name(s) and Date(s)

037SW
1914
1:10,560

051NW
1914
1:10,560

Historical Map - Slice A



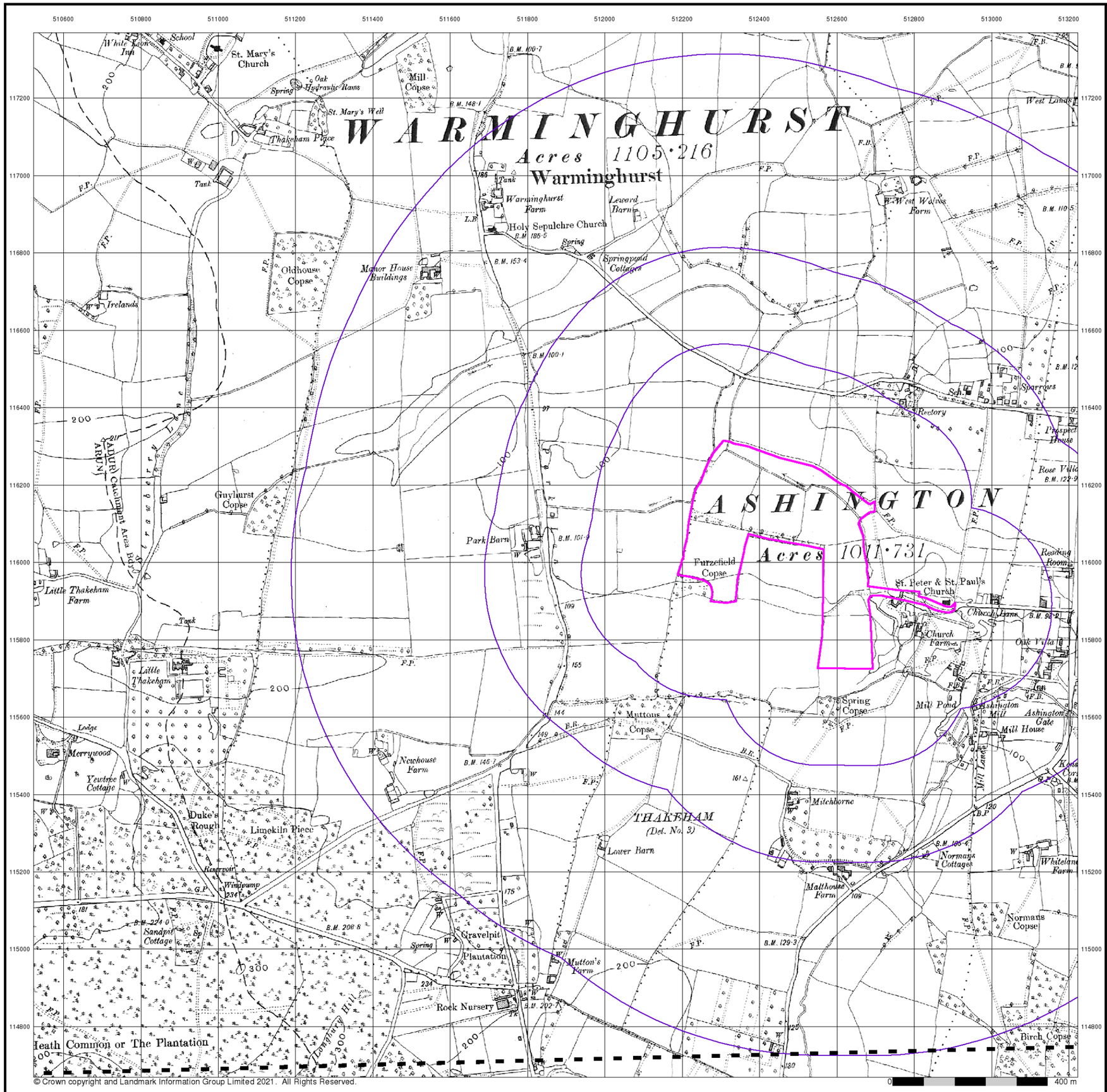
Order Details

Order Number:	287518451_1_1
Customer Ref:	52368
National Grid Reference:	512310, 116030
Slice:	A
Site Area (Ha):	15.35
Search Buffer (m):	1000

Site Details

Firle, Church Lane, Ashington, PULBOROUGH, RH20 3JX

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



RSK

Sussex

Published 1914

Source map scale - 1:10,560

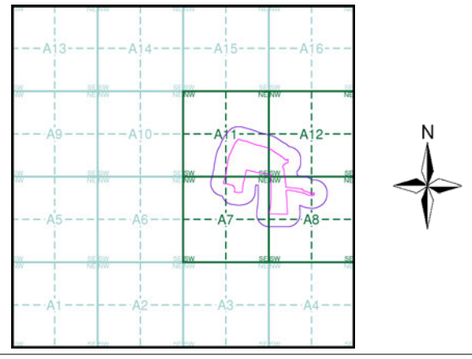
The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840`s. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some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

Map Name(s) and Date(s)

037SW
1914
1:10,560

051NW
1914
1:10,560

Historical Map - Slice A



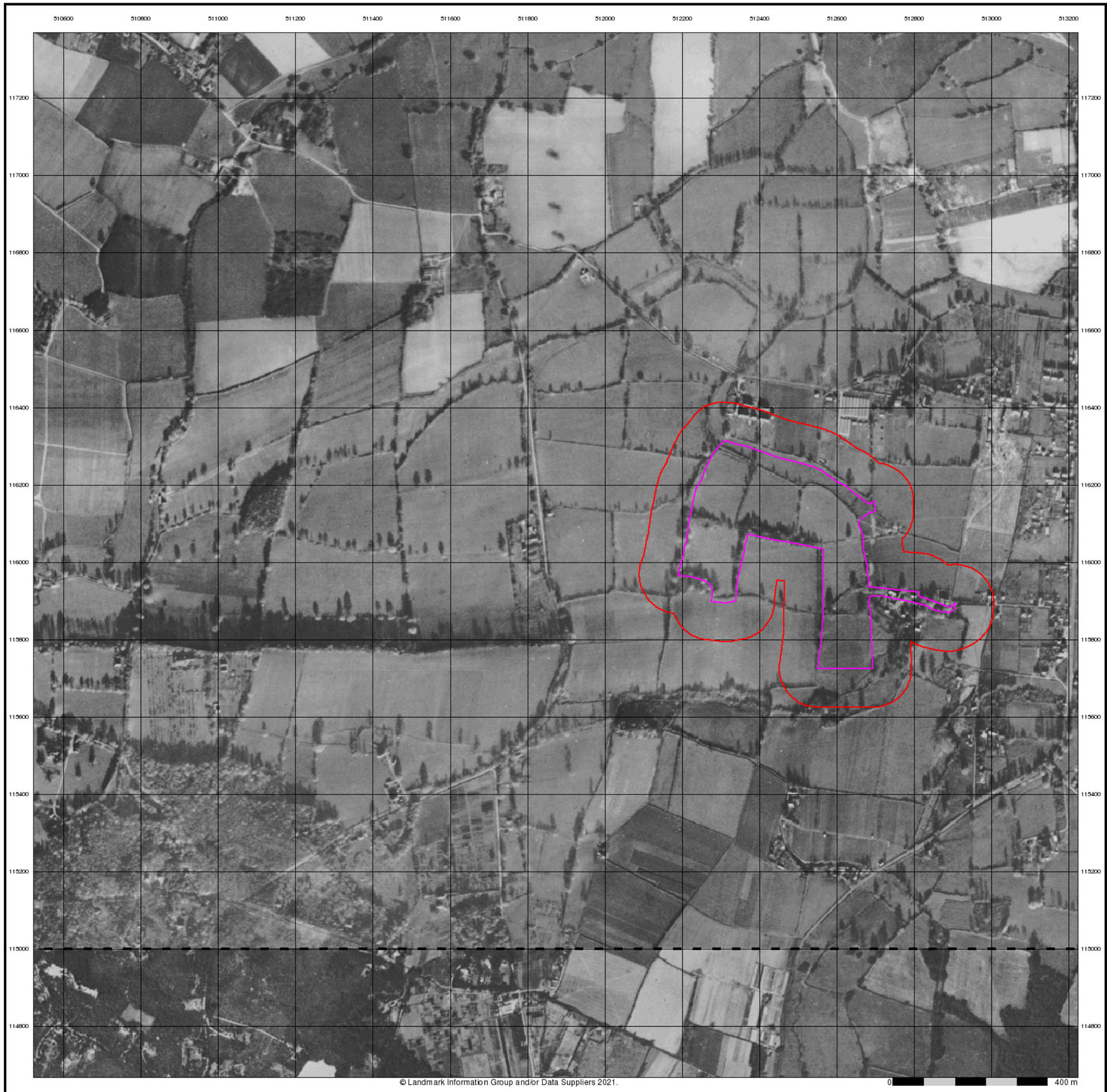
Order Details

Order Number:	287518451_1_1
Customer Ref:	52368
National Grid Reference:	512310, 116030
Slice:	A
Site Area (Ha):	15.35
Search Buffer (m):	1000

Site Details

Firle, Church Lane, Ashington, PULBOROUGH, RH20 3JX

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



RSK

Historical Aerial Photography

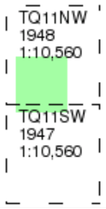
Published 1947 - 1948

Source map scale - 1:10,560

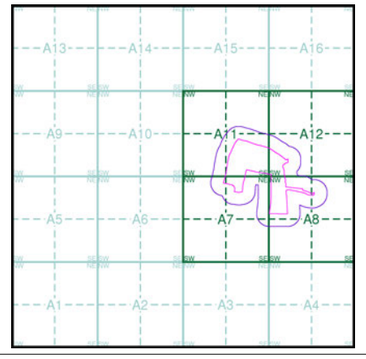
The Historical Aerial Photos were produced by the Ordnance Survey at a scale of 1:1,250 and 1:10,560 from Air Force photography. They were produced between 1944 and 1951 as an interim measure, pending preparation of conventional mapping, due to post war resource shortages. New security measures in the 1950's meant that every photograph was re-checked for potentially unsafe information with security sites replaced by fake fields or clouds. The original editions were withdrawn and only later made available after a period of fifty years although due to the accuracy of the editing, without viewing both revisions it is not easy to spot the edits. Where available Landmark have included both revisions.

© Landmark Information Group and/or Data Suppliers 2010.

Map Name(s) and Date(s)



Historical Aerial Photography - Slice A



Order Details

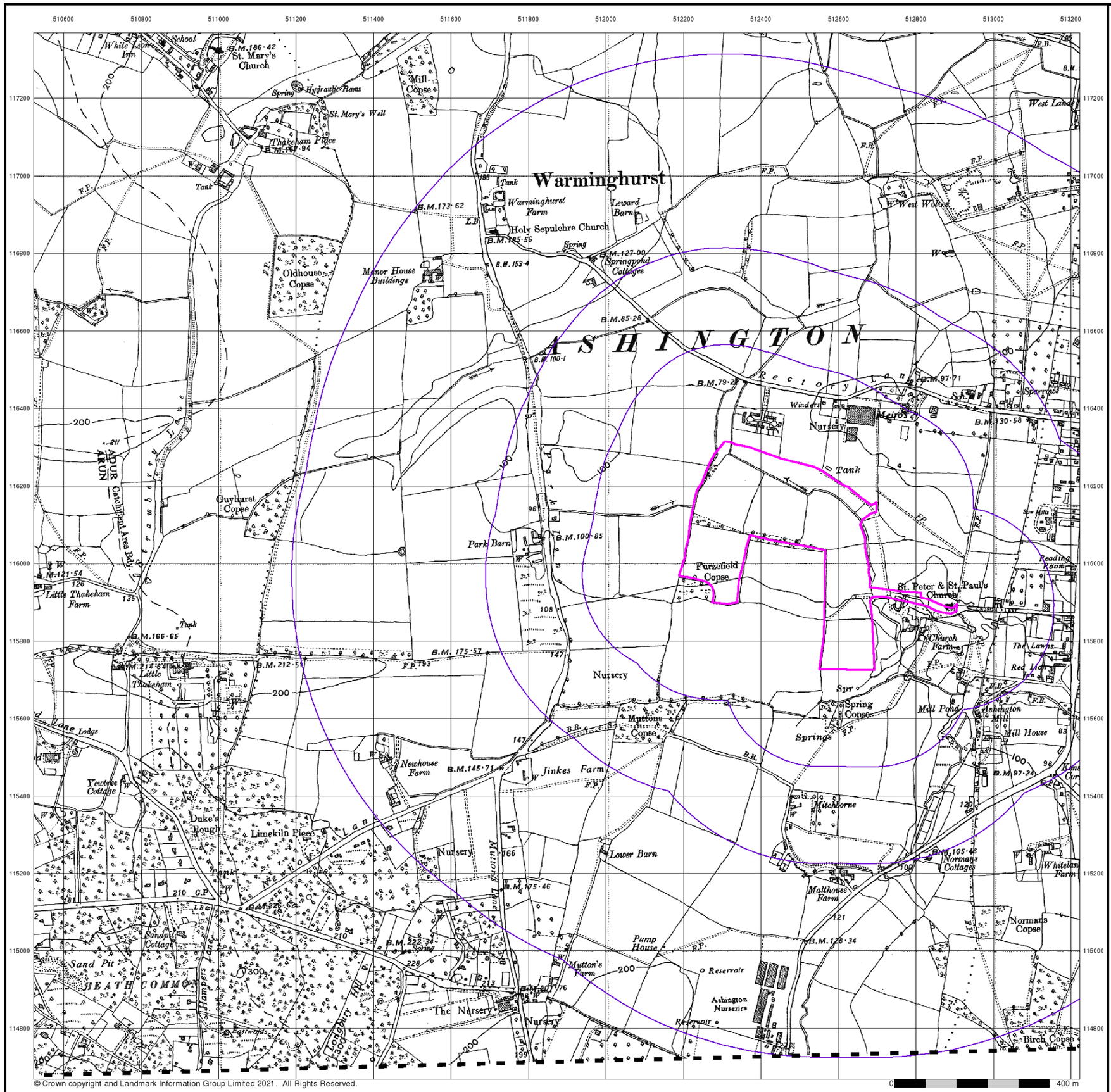
Order Number:	287518451_1_1
Customer Ref:	52368
National Grid Reference:	512310, 116030
Slice:	A
Site Area (Ha):	15.35
Search Buffer (m):	1000

Site Details

Firle, Church Lane, Ashington, PULBOROUGH, RH20 3JX

Landmark INFORMATION GROUP

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



© Crown copyright and Landmark Information Group Limited 2021. All Rights Reserved.

RSK

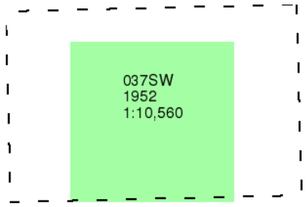
Sussex

Published 1952

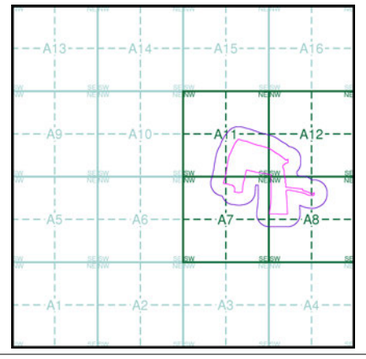
Source map scale - 1:10,560

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

Map Name(s) and Date(s)



Historical Map - Slice A



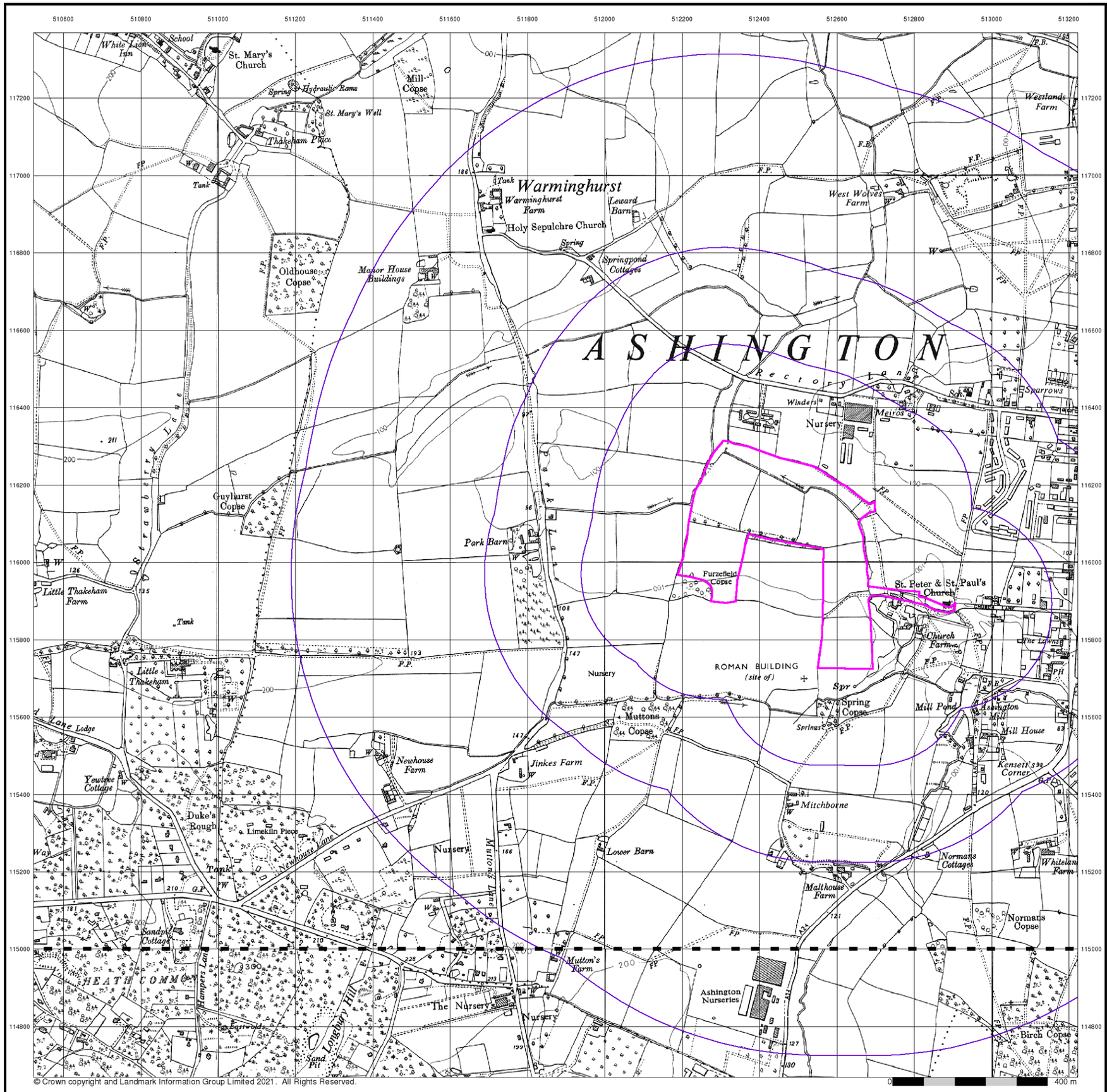
Order Details

Order Number:	287518451_1_1
Customer Ref:	52368
National Grid Reference:	512310, 116030
Slice:	A
Site Area (Ha):	15.35
Search Buffer (m):	1000

Site Details

Firle, Church Lane, Ashington, PULBOROUGH, RH20 3JX

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



© Crown copyright and Landmark Information Group Limited 2021. All Rights Reserved.

RSK

Ordnance Survey Plan

Published 1961

Source map scale - 1:10,000

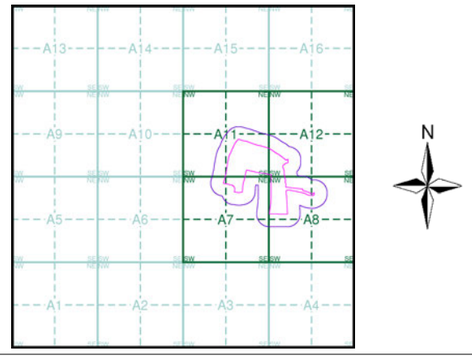
The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840`s. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some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

Map Name(s) and Date(s)

TQ11NW
1961
1:10,560

TQ11SW
1961
1:10,560

Historical Map - Slice A



Order Details

Order Number:	287518451_1_1
Customer Ref:	52368
National Grid Reference:	512310, 116030
Slice:	A
Site Area (Ha):	15.35
Search Buffer (m):	1000

Site Details

Firle, Church Lane, Ashington, PULBOROUGH, RH20 3JX

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

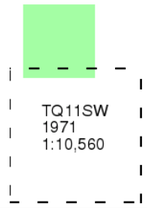
Ordnance Survey Plan

Published 1971

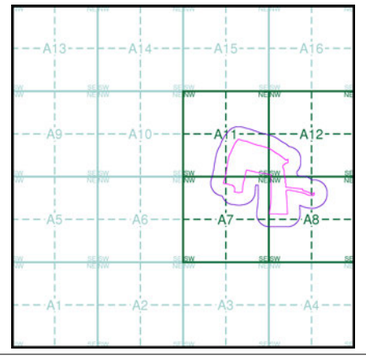
Source map scale - 1:10,000

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

Map Name(s) and Date(s)



Historical Map - Slice A



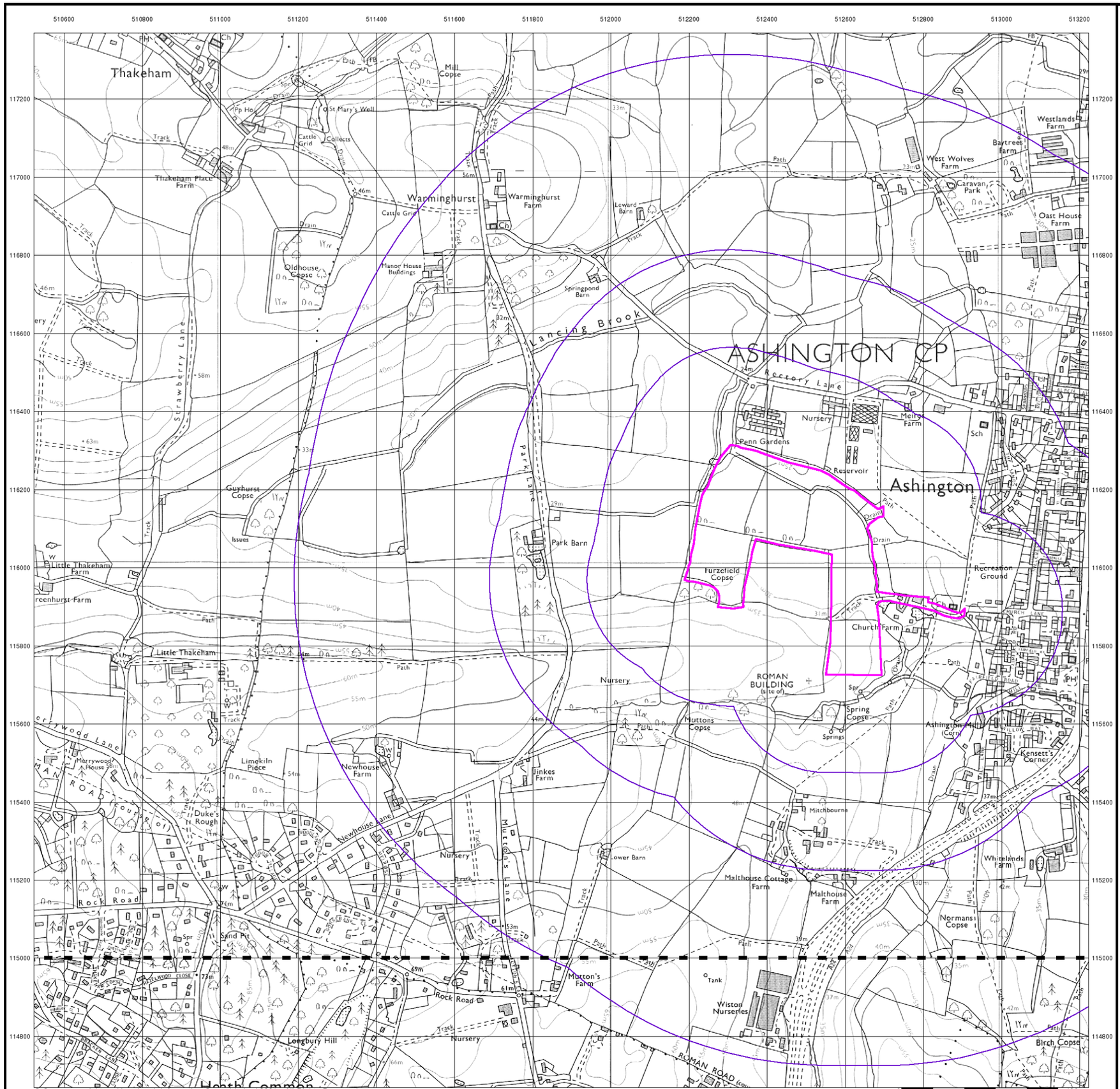
Order Details

Order Number:	287518451_1_1
Customer Ref:	52368
National Grid Reference:	512310, 116030
Slice:	A
Site Area (Ha):	15.35
Search Buffer (m):	1000

Site Details

Firle, Church Lane, Ashington, PULBOROUGH, RH20 3JX

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



RSK

Ordnance Survey Plan

Published 1982

Source map scale - 1:10,000

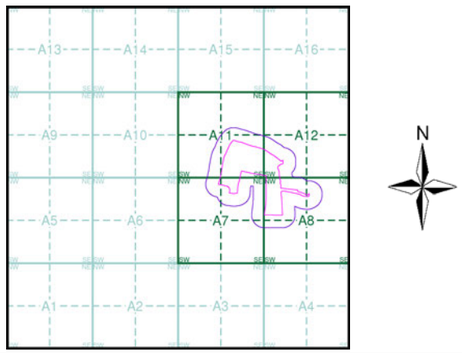
The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840`s. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some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

Map Name(s) and Date(s)

TQ11NW
1982
1:10,000

TQ11SW
1982
1:10,000

Historical Map - Slice A



Order Details

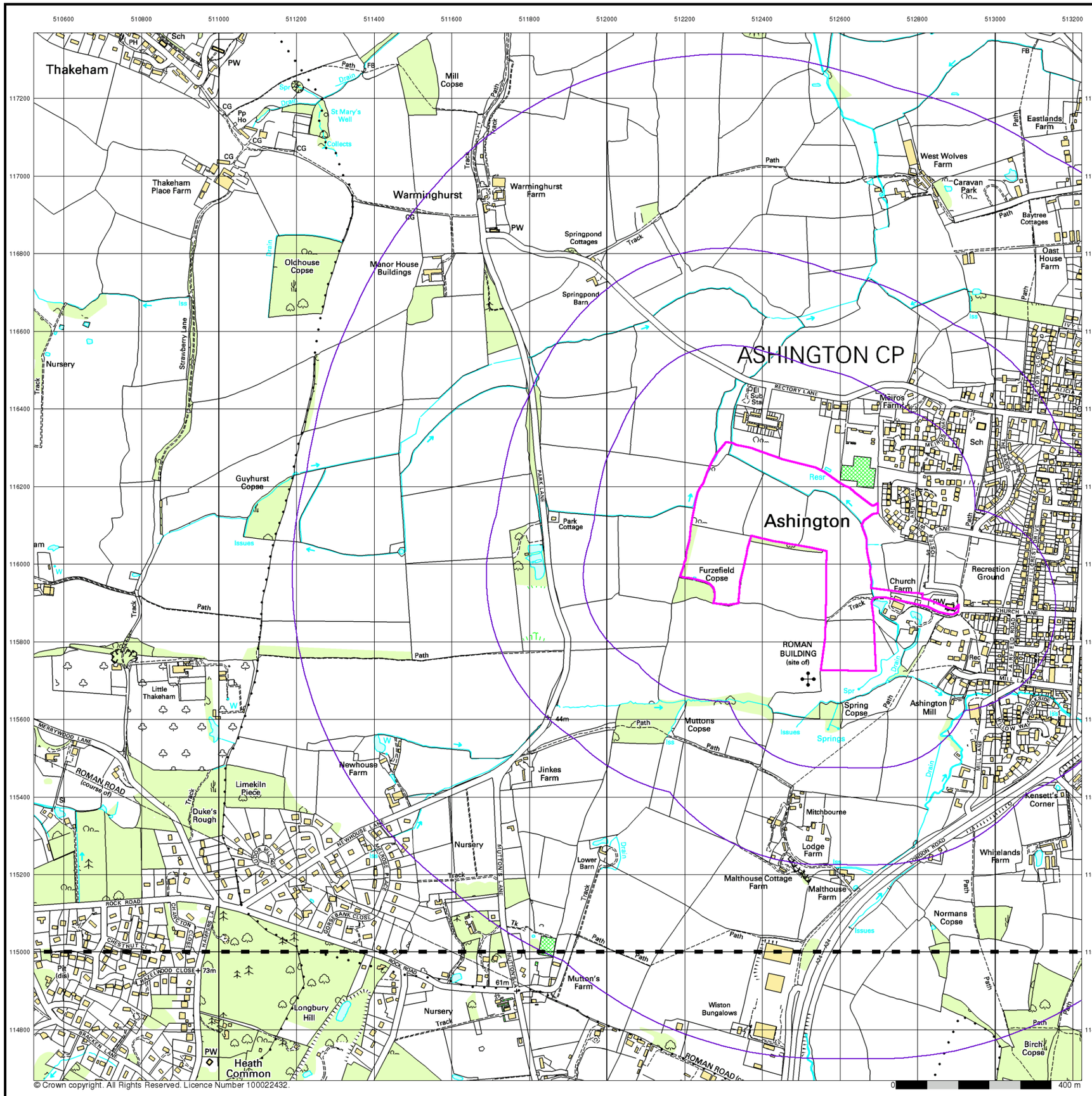
Order Number:	287518451_1_1
Customer Ref:	52368
National Grid Reference:	512310, 116030
Slice:	A
Site Area (Ha):	15.35
Search Buffer (m):	1000

Site Details

Firle, Church Lane, Ashington, PULBOROUGH, RH20 3JX

Landmark INFORMATION GROUP

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



© Crown copyright. All Rights Reserved. Licence Number 100022432.

RSK

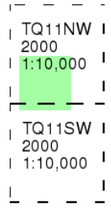
10k Raster Mapping

Published 2000

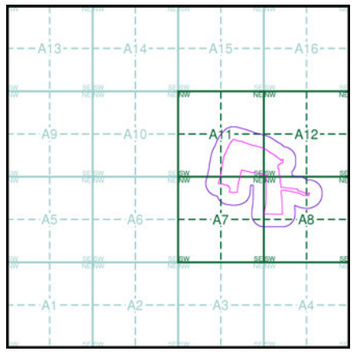
Source map scale - 1:10,000

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

Map Name(s) and Date(s)



Historical Map - Slice A



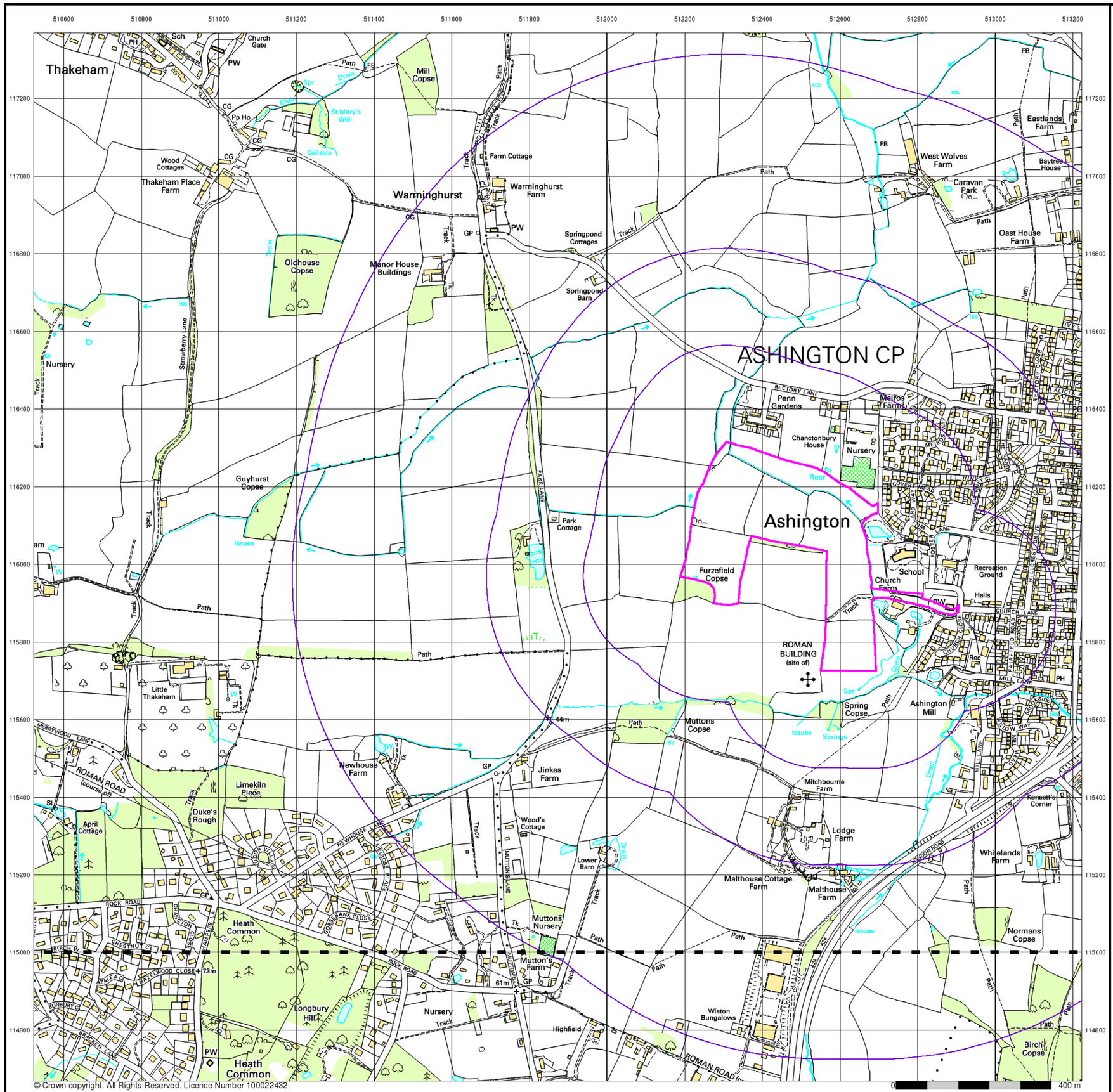
Order Details

Order Number:	287518451_1_1
Customer Ref:	52368
National Grid Reference:	512310, 116030
Slice:	A
Site Area (Ha):	15.35
Search Buffer (m):	1000

Site Details

Firle, Church Lane, Ashington, PULBOROUGH, RH20 3JX

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



© Crown copyright. All Rights Reserved. Licence Number 100022432.

RSK

10k Raster Mapping

Published 2006

Source map scale - 1:10,000

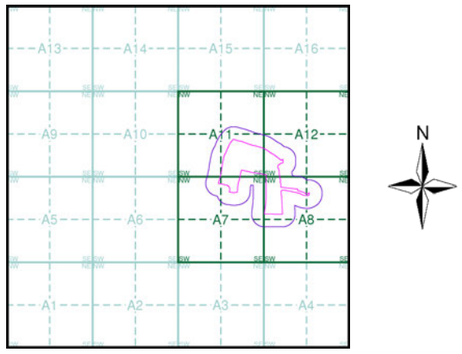
The historical maps shown were produced from the Ordnance Survey`s 1:10,000 colour raster mapping. These maps are derived from Landplan which replaced the old 1:10,000 maps originally published in 1970. The data is highly detailed showing buildings, fences and field boundaries as well as all roads, tracks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

Map Name(s) and Date(s)

TQ11NW
2006
1:10,000

TQ11SW
2006
1:10,000

Historical Map - Slice A



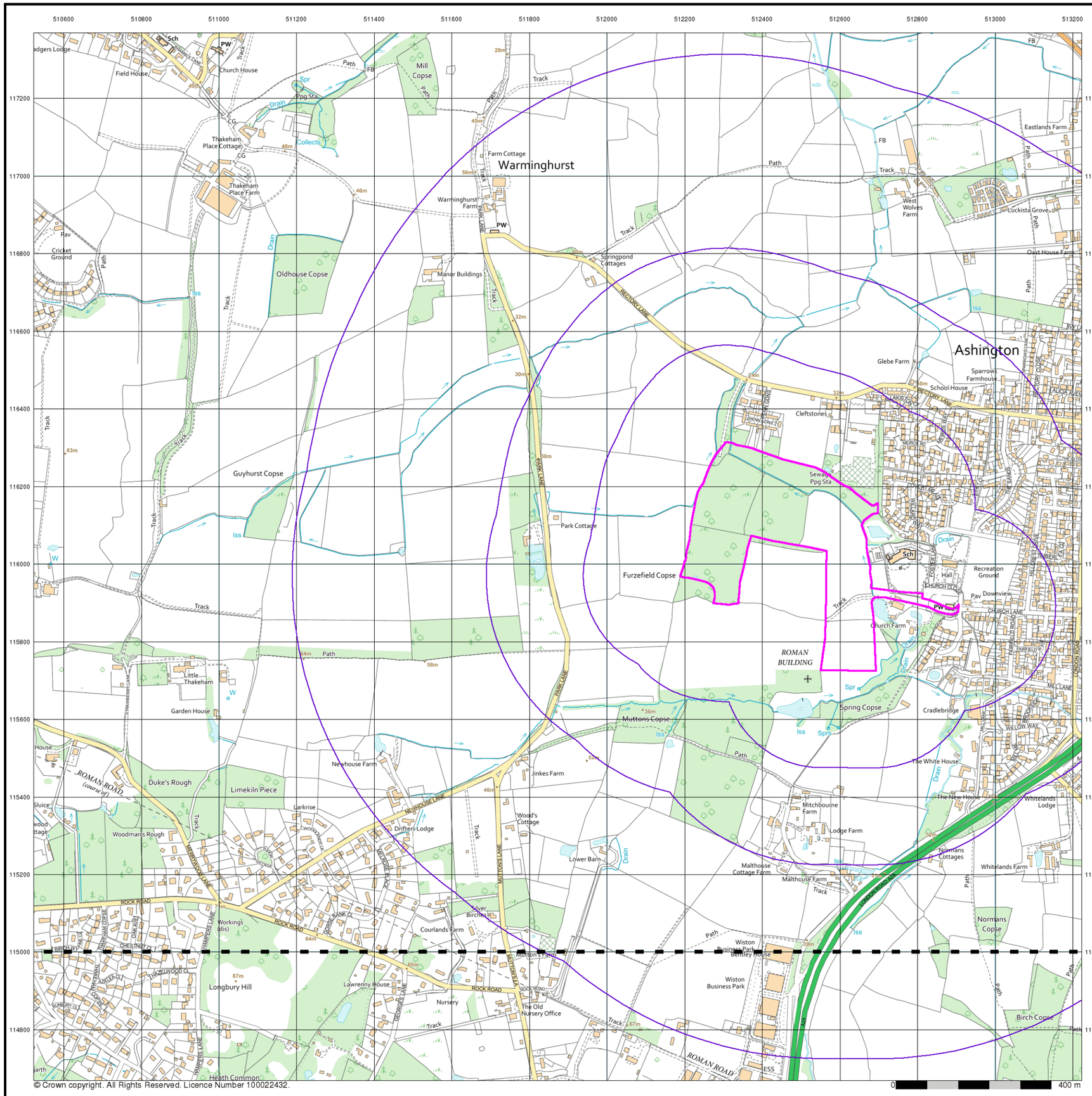
Order Details

Order Number:	287518451_1_1
Customer Ref:	52368
National Grid Reference:	512310, 116030
Slice:	A
Site Area (Ha):	15.35
Search Buffer (m):	1000

Site Details

Firle, Church Lane, Ashington, PULBOROUGH, RH20 3JX

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



VectorMap Local

Published 2021

Source map scale - 1:10,000

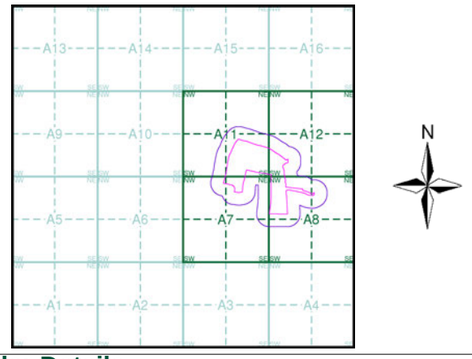
VectorMap Local (Raster) is Ordnance Survey's highest detailed 'backdrop' mapping product. These maps are produced from OS's VectorMap Local, a simple vector dataset at a nominal scale of 1:10,000, covering the whole of Great Britain, that has been designed for creating graphical mapping. OS VectorMap Local is derived from large-scale information surveyed at 1:1250 scale (covering major towns and cities),1:2500 scale (smaller towns, villages and developed rural areas), and 1:10 000 scale (mountain, moorland and river estuary areas).

Map Name(s) and Date(s)

TQ11NW
2021
Variable

TQ11SW
2021
Variable

Historical Map - Slice A



Order Details

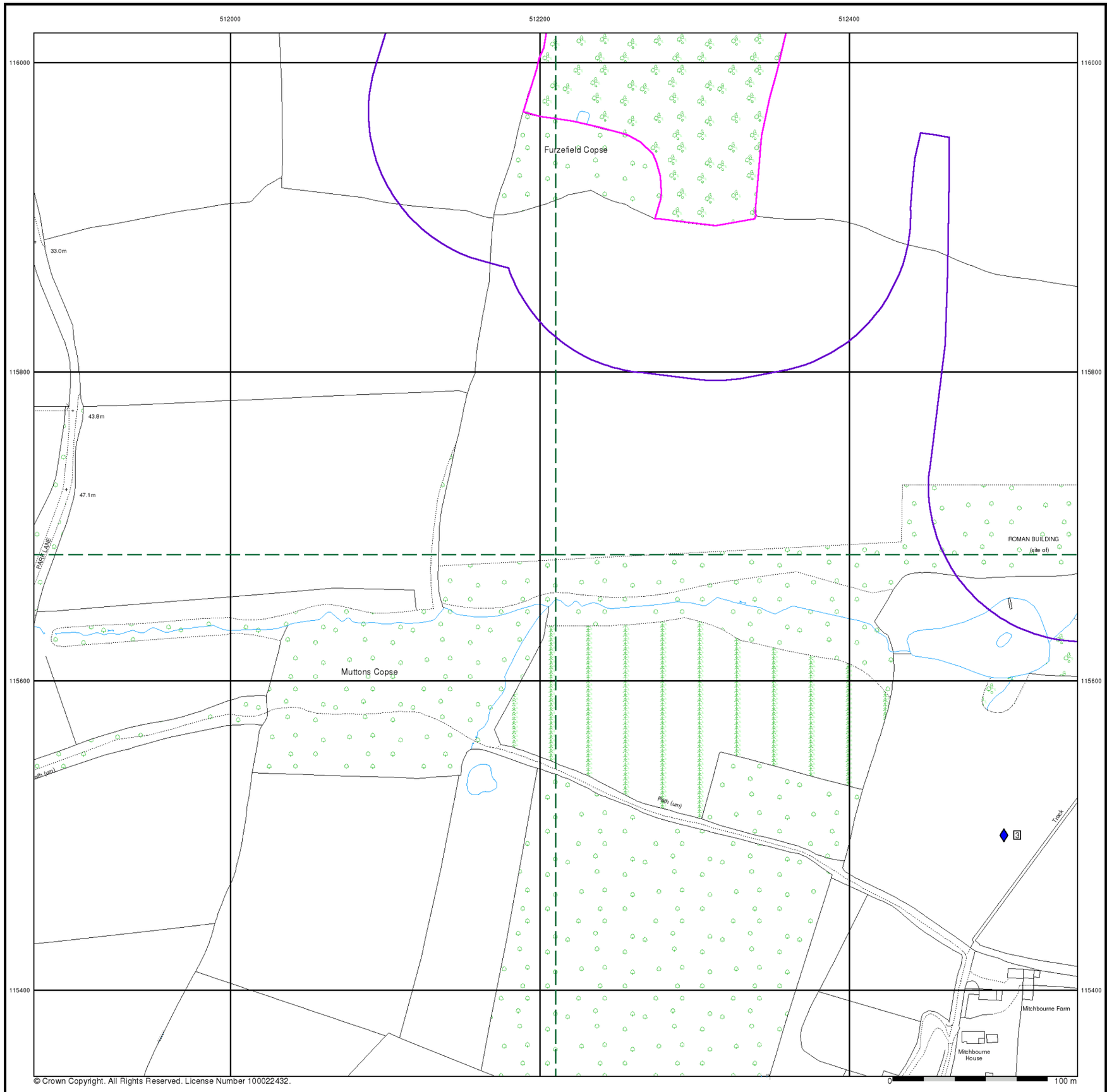
Order Number:	287518451_1_1
Customer Ref:	52368
National Grid Reference:	512310, 116030
Slice:	A
Site Area (Ha):	15.35
Search Buffer (m):	1000

Site Details

Firle, Church Lane, Ashington, PULBOROUGH, RH20 3JX

Landmark INFORMATION GROUP

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



© Crown Copyright. All Rights Reserved. License Number 100022432.

RSK

General

Specified Site
Specified Buffer(s)
Bearing Reference Point
Map ID
Several of Type at Location
Pylon
Overhead Transmission Line

Agency and Hydrological

Contaminated Land Register Entry or Notice (Location)
Contaminated Land Register Entry or Notice
Discharge Consent
Enforcement or Prohibition Notice
Integrated Pollution Control
Integrated Pollution Prevention Control
Local Authority Integrated Pollution Prevention and Control
Local Authority Pollution Prevention and Control
Local Authority Pollution Prevention and Control Enforcement
Pollution Incident to Controlled Waters
Prosecution Relating to Authorised Processes
Prosecution Relating to Controlled Waters
Registered Radioactive Substance
River Network or Water Feature
River Quality Sampling Point
Substantiated Pollution Incident Register
Water Abstraction
Water Industry Act Referral

Hazardous Substances

COMAH Site
Explosive Site
NIHHS Site
Planning Hazardous Substance Consent
Planning Hazardous Substance Enforcement

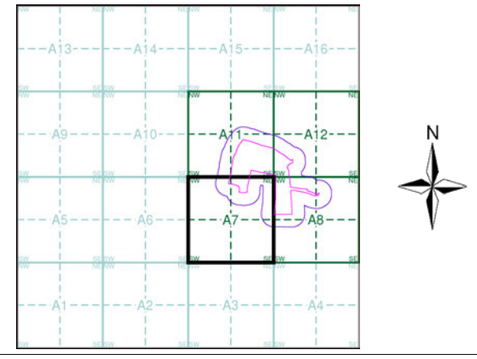
Geological

BGS Recorded Mineral Site

Waste

BGS Recorded Landfill Site (Location)
BGS Recorded Landfill Site
EA Historic Landfill (Buffered Point)
EA Historic Landfill (Polygon)
Integrated Pollution Control Registered Waste Site
Licensed Waste Management Facility (Landfill Boundary)
Licensed Waste Management Facility (Location)
Local Authority Recorded Landfill Site (Location)
Local Authority Recorded Landfill Site
Potentially Infilled Land (Non-water)
Potentially Infilled Land (Non-water)
Potentially Infilled Land (Non-water)
Potentially Infilled Land (Water)
Potentially Infilled Land (Water)
Potentially Infilled Land (Water)
Registered Landfill Site
Registered Landfill Site (Location)
Registered Landfill Site (Point Buffered to 100m)
Registered Landfill Site (Point Buffered to 250m)
Registered Waste Transfer Site (Location)
Registered Waste Transfer Site
Registered Waste Treatment or Disposal Site (Location)
Registered Waste Treatment or Disposal Site

Site Sensitivity Map - Segment A7



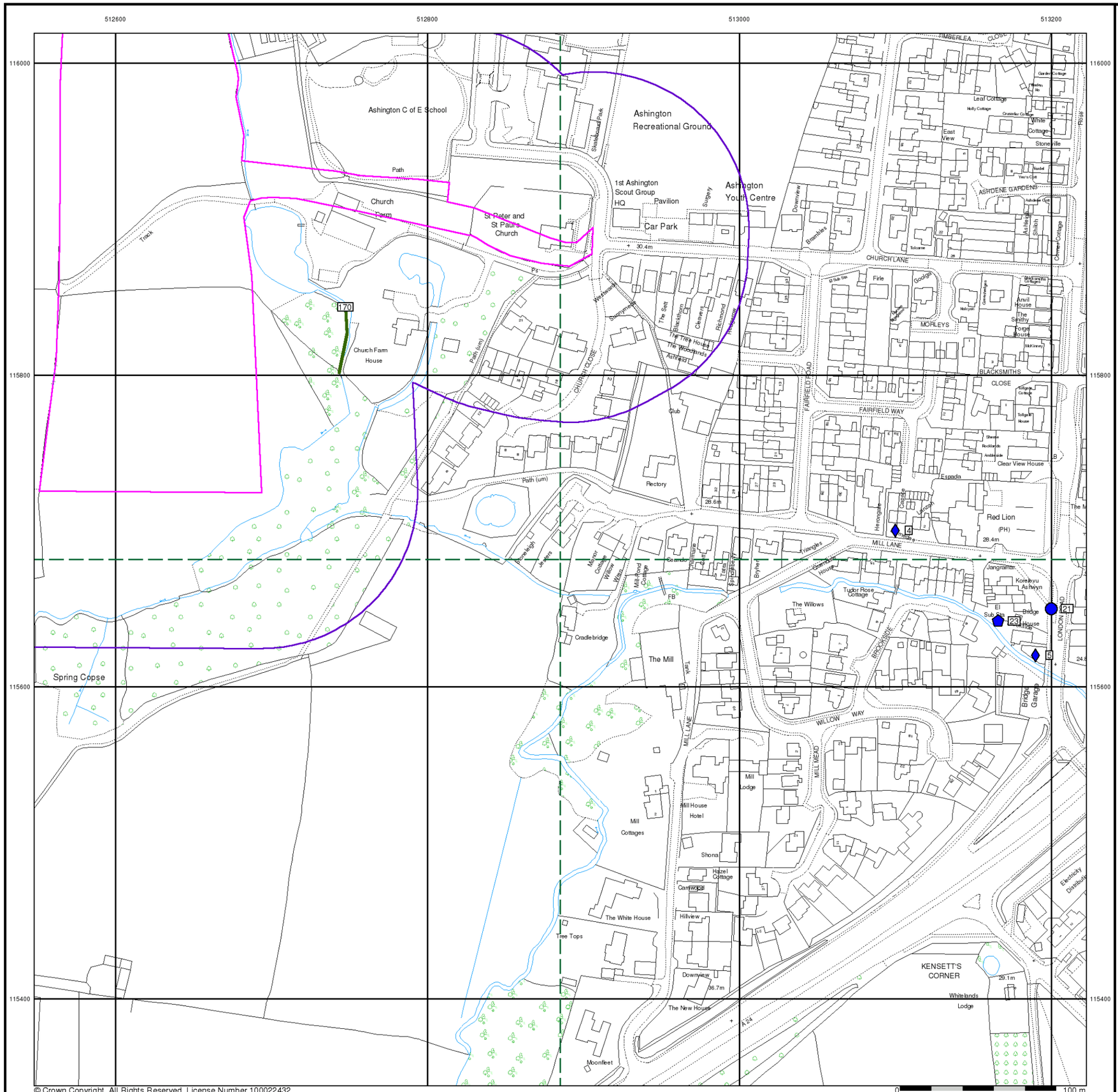
Order Details

Order Number:	287518451_1_1
Customer Ref:	52368
National Grid Reference:	512310, 116030
Slice:	A
Site Area (Ha):	15.35
Plot Buffer (m):	100

Site Details

Firle, Church Lane, Ashington, PULBOROUGH, RH20 3JX

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



© Crown Copyright. All Rights Reserved. License Number 100022432.

RSK

General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point
- Map ID
- Several of Type at Location
- Pylon
- Overhead Transmission Line

Agency and Hydrological

- Contaminated Land Register Entry or Notice (Location)
- Contaminated Land Register Entry or Notice
- Discharge Consent
- Enforcement or Prohibition Notice
- Integrated Pollution Control
- Integrated Pollution Prevention Control
- Local Authority Integrated Pollution Prevention and Control
- Local Authority Pollution Prevention and Control
- Local Authority Pollution Prevention and Control Enforcement
- Pollution Incident to Controlled Waters
- Prosecution Relating to Authorised Processes
- Prosecution Relating to Controlled Waters
- Registered Radioactive Substance
- River Network or Water Feature
- River Quality Sampling Point
- Substantiated Pollution Incident Register
- Water Abstraction
- Water Industry Act Referral

Hazardous Substances

- COMAH Site
- Explosive Site
- NIHHS Site
- Planning Hazardous Substance Consent
- Planning Hazardous Substance Enforcement

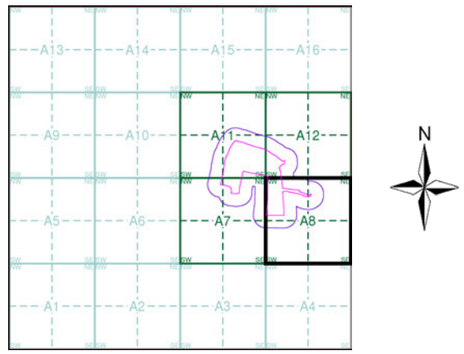
Geological

- BGS Recorded Mineral Site

Waste

- BGS Recorded Landfill Site (Location)
- BGS Recorded Landfill Site
- EA Historic Landfill (Buffered Point)
- EA Historic Landfill (Polygon)
- Integrated Pollution Control Registered Waste Site
- Licensed Waste Management Facility (Landfill Boundary)
- Licensed Waste Management Facility (Location)
- Local Authority Recorded Landfill Site (Location)
- Local Authority Recorded Landfill Site
- Potentially Infilled Land (Non-water)
- Potentially Infilled Land (Non-water)
- Potentially Infilled Land (Non-water)
- Potentially Infilled Land (Water)
- Potentially Infilled Land (Water)
- Potentially Infilled Land (Water)
- Registered Landfill Site
- Registered Landfill Site (Location)
- Registered Landfill Site (Point Buffered to 100m)
- Registered Landfill Site (Point Buffered to 250m)
- Registered Waste Transfer Site (Location)
- Registered Waste Transfer Site
- Registered Waste Treatment or Disposal Site (Location)
- Registered Waste Treatment or Disposal Site

Site Sensitivity Map - Segment A8



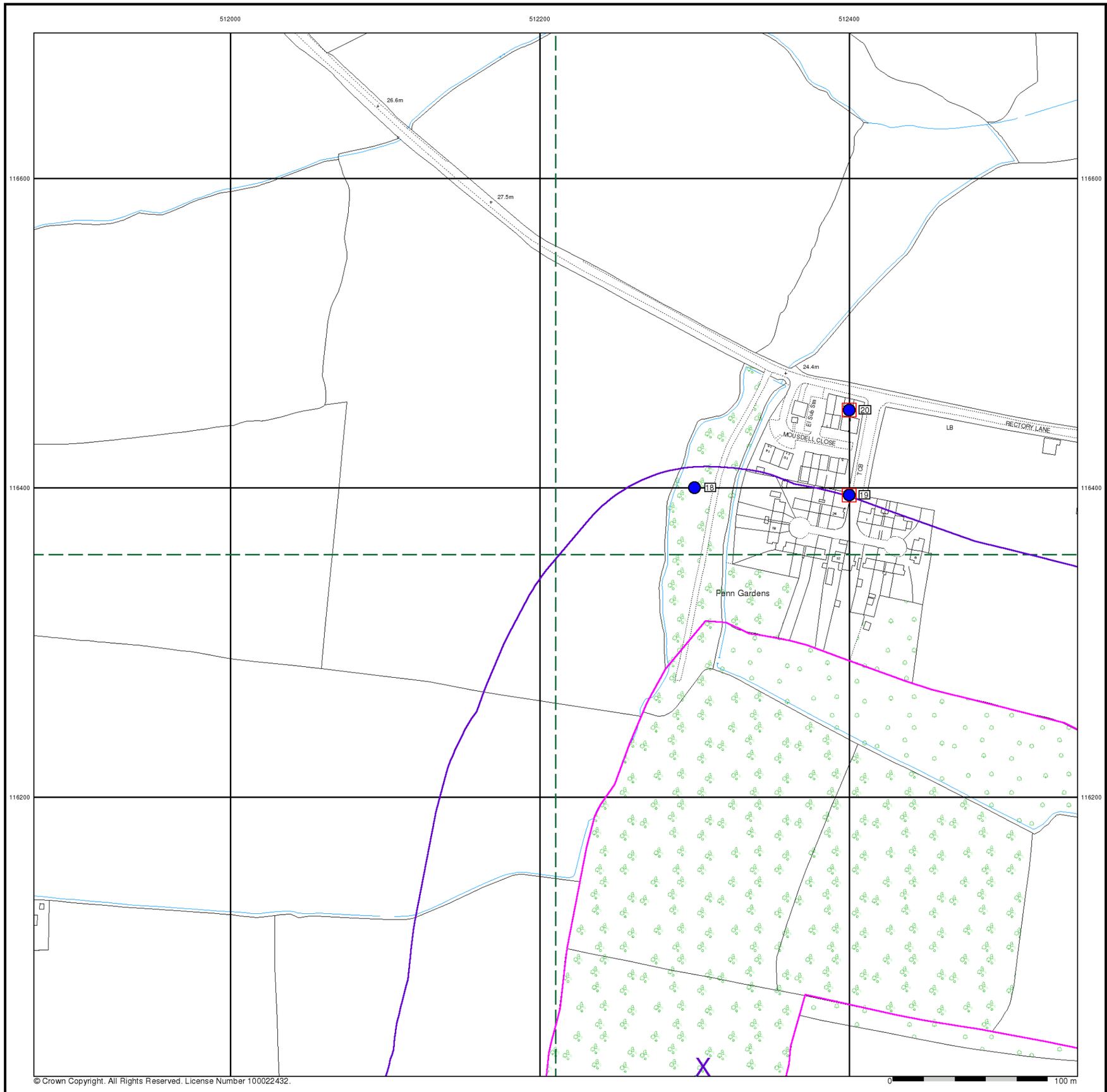
Order Details

Order Number:	287518451_1_1
Customer Ref:	52368
National Grid Reference:	512310, 116030
Slice:	A
Site Area (Ha):	15.35
Plot Buffer (m):	100

Site Details

Firle, Church Lane, Ashington, PULBOROUGH, RH20 3JX

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



RSK

General

Specified Site | Specified Buffer(s) | Bearing Reference Point | Map ID
Several of Type at Location | Pylon | Overhead Transmission Line

Agency and Hydrological

- Contaminated Land Register Entry or Notice (Location)
- Contaminated Land Register Entry or Notice
- Discharge Consent
- Enforcement or Prohibition Notice
- Integrated Pollution Control
- Integrated Pollution Prevention Control
- Local Authority Integrated Pollution Prevention and Control
- Local Authority Pollution Prevention and Control
- Local Authority Pollution Prevention and Control Enforcement
- Pollution Incident to Controlled Waters
- Prosecution Relating to Authorised Processes
- Prosecution Relating to Controlled Waters
- Registered Radioactive Substance
- River Network or Water Feature
- River Quality Sampling Point
- Substantiated Pollution Incident Register
- Water Abstraction
- Water Industry Act Referral

Hazardous Substances

COMAH Site | Explosive Site

- NIHHS Site
- Planning Hazardous Substance Consent
- Planning Hazardous Substance Enforcement

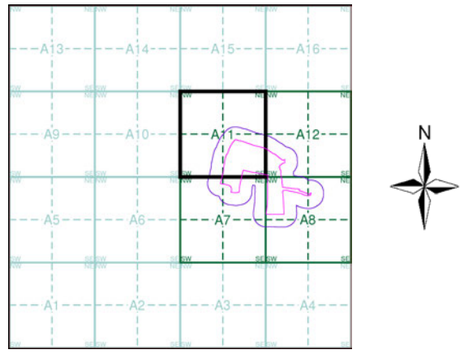
Geological

- BGS Recorded Mineral Site

Waste

- BGS Recorded Landfill Site (Location)
- BGS Recorded Landfill Site
- EA Historic Landfill (Buffered Point)
- EA Historic Landfill (Polygon)
- Integrated Pollution Control Registered Waste Site
- Licensed Waste Management Facility (Landfill Boundary)
- Licensed Waste Management Facility (Location)
- Local Authority Recorded Landfill Site (Location)
- Local Authority Recorded Landfill Site
- Potentially Infilled Land (Non-water)
- Potentially Infilled Land (Non-water)
- Potentially Infilled Land (Non-water)
- Potentially Infilled Land (Water)
- Potentially Infilled Land (Water)
- Potentially Infilled Land (Water)
- Registered Landfill Site
- Registered Landfill Site (Location)
- Registered Landfill Site (Point Buffered to 100m)
- Registered Landfill Site (Point Buffered to 250m)
- Registered Waste Transfer Site (Location)
- Registered Waste Transfer Site
- Registered Waste Treatment or Disposal Site (Location)
- Registered Waste Treatment or Disposal Site

Site Sensitivity Map - Segment A11



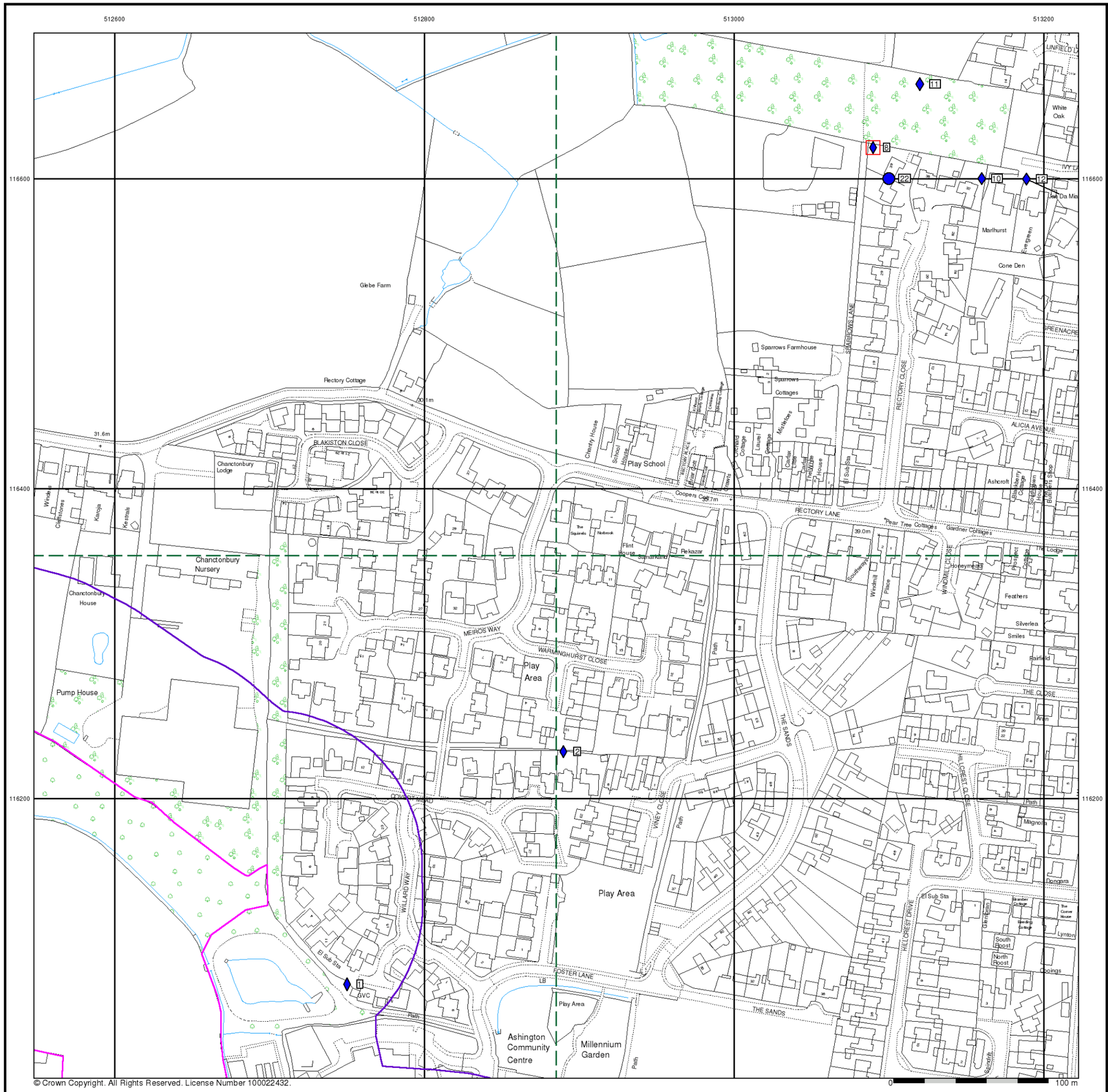
Order Details

Order Number:	287518451_1_1
Customer Ref:	52368
National Grid Reference:	512310, 116030
Slice:	A
Site Area (Ha):	15.35
Plot Buffer (m):	100

Site Details

Firle, Church Lane, Ashington, PULBOROUGH, RH20 3JX

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



© Crown Copyright. All Rights Reserved. License Number 100022432.

RSK

General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point
- Map ID
- Several of Type at Location
- Pylon
- Overhead Transmission Line

Agency and Hydrological

- Contaminated Land Register Entry or Notice (Location)
- Contaminated Land Register Entry or Notice
- Discharge Consent
- Enforcement or Prohibition Notice
- Integrated Pollution Control
- Integrated Pollution Prevention Control
- Local Authority Integrated Pollution Prevention and Control
- Local Authority Pollution Prevention and Control
- Local Authority Pollution Prevention and Control Enforcement
- Pollution Incident to Controlled Waters
- Prosecution Relating to Authorised Processes
- Prosecution Relating to Controlled Waters
- Registered Radioactive Substance
- River Network or Water Feature
- River Quality Sampling Point
- Substantiated Pollution Incident Register
- Water Abstraction
- Water Industry Act Referral

Waste

- BGS Recorded Landfill Site (Location)
- BGS Recorded Landfill Site
- EA Historic Landfill (Buffered Point)
- EA Historic Landfill (Polygon)
- Integrated Pollution Control Registered Waste Site
- Licensed Waste Management Facility (Landfill Boundary)
- Licensed Waste Management Facility (Location)
- Local Authority Recorded Landfill Site (Location)
- Local Authority Recorded Landfill Site
- Potentially Infilled Land (Non-water)
- Potentially Infilled Land (Non-water)
- Potentially Infilled Land (Non-water)
- Potentially Infilled Land (Water)
- Potentially Infilled Land (Water)
- Potentially Infilled Land (Water)
- Registered Landfill Site
- Registered Landfill Site (Location)
- Registered Landfill Site (Point Buffered to 100m)
- Registered Landfill Site (Point Buffered to 250m)
- Registered Waste Transfer Site (Location)
- Registered Waste Transfer Site
- Registered Waste Treatment or Disposal Site (Location)
- Registered Waste Treatment or Disposal Site

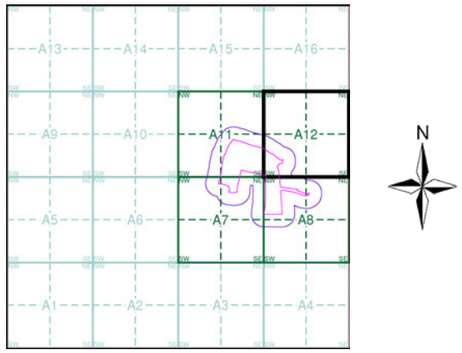
Hazardous Substances

- COMAH Site
- Explosive Site
- NIHHS Site
- Planning Hazardous Substance Consent
- Planning Hazardous Substance Enforcement

Geological

- BGS Recorded Mineral Site

Site Sensitivity Map - Segment A12



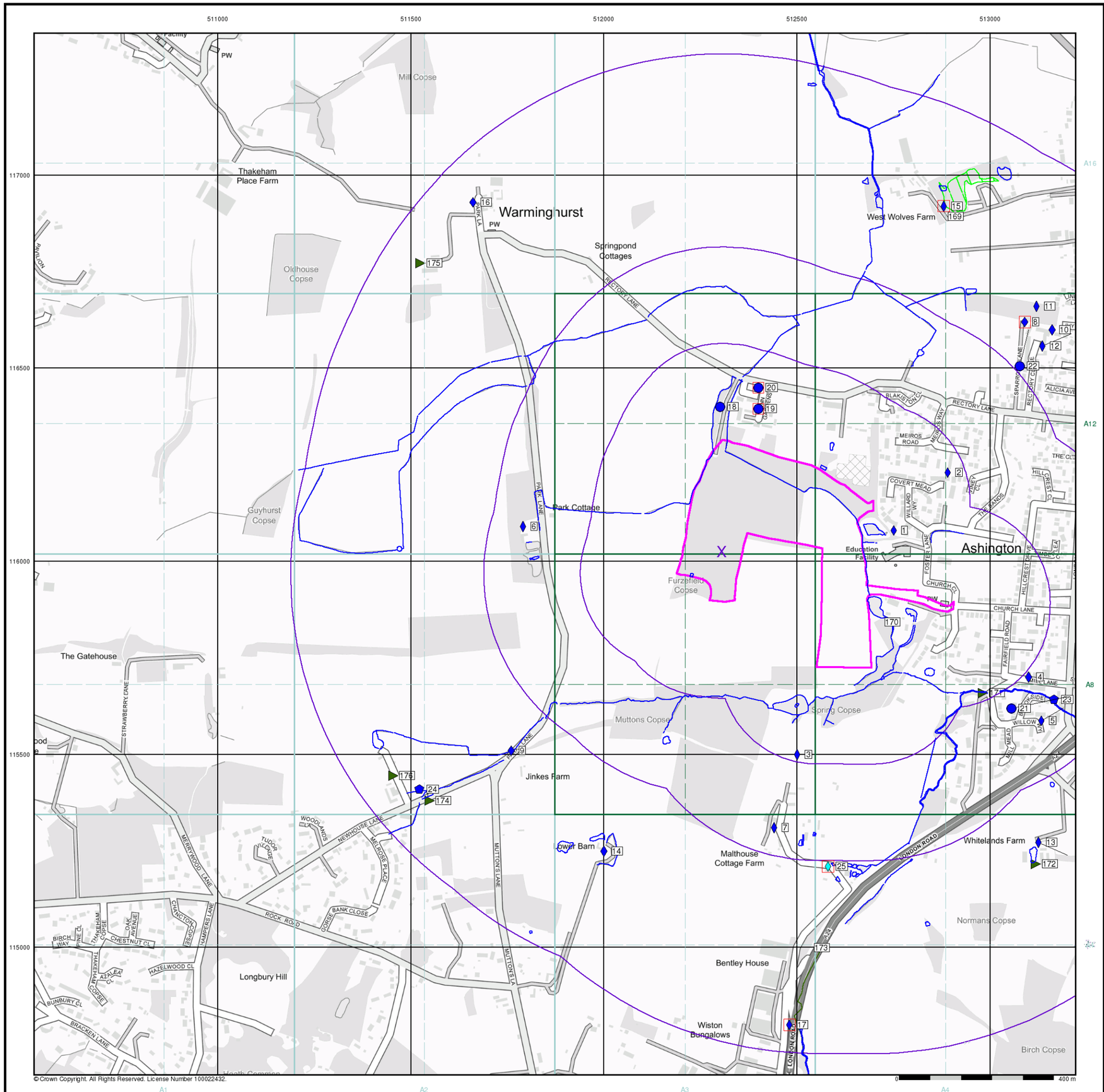
Order Details

Order Number:	287518451_1_1
Customer Ref:	52368
National Grid Reference:	512310, 116030
Slice:	A
Site Area (Ha):	15.35
Plot Buffer (m):	100

Site Details

Firle, Church Lane, Ashington, PULBOROUGH, RH20 3JX

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



© Crown Copyright. All Rights Reserved. License Number 100022432.

RSK

General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point
- Map ID
- Several of Type at Location

Agency and Hydrological

- Contaminated Land Register Entry or Notice (Location)
- Contaminated Land Register Entry or Notice
- Discharge Consent
- Enforcement or Prohibition Notice
- Integrated Pollution Control
- Integrated Pollution Prevention Control
- Local Authority Integrated Pollution Prevention and Control
- Local Authority Pollution Prevention and Control
- Local Authority Pollution Prevention and Control Enforcement
- Pollution Incident to Controlled Waters
- Prosecution Relating to Authorised Processes
- Prosecution Relating to Controlled Waters
- Registered Radioactive Substance
- River Network or Water Feature
- River Quality Sampling Point
- Substantiated Pollution Incident Register
- Water Abstraction
- Water Industry Act Referral

Hazardous Substances

- COMAH Site
- Explosive Site
- NIHHS Site
- Planning Hazardous Substance Consent
- Planning Hazardous Substance Enforcement

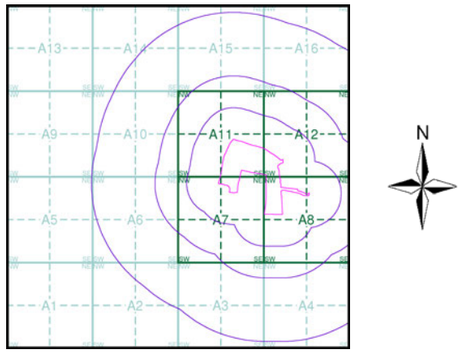
Geological

- BGS Recorded Mineral Site

Waste

- BGS Recorded Landfill Site (Location)
- BGS Recorded Landfill Site
- EA Historic Landfill (Buffered Point)
- EA Historic Landfill (Polygon)
- Integrated Pollution Control Registered Waste Site
- Licensed Waste Management Facility (Landfill Boundary)
- Licensed Waste Management Facility (Location)
- Local Authority Recorded Landfill Site (Location)
- Local Authority Recorded Landfill Site
- Potentially Infilled Land (Non-water)
- Potentially Infilled Land (Non-water)
- Potentially Infilled Land (Non-water)
- Potentially Infilled Land (Water)
- Potentially Infilled Land (Water)
- Potentially Infilled Land (Water)
- Registered Landfill Site
- Registered Landfill Site (Location)
- Registered Landfill Site (Point Buffered to 100m)
- Registered Landfill Site (Point Buffered to 250m)
- Registered Waste Transfer Site (Location)
- Registered Waste Transfer Site
- Registered Waste Treatment or Disposal Site (Location)
- Registered Waste Treatment or Disposal Site

Site Sensitivity Map - Slice A



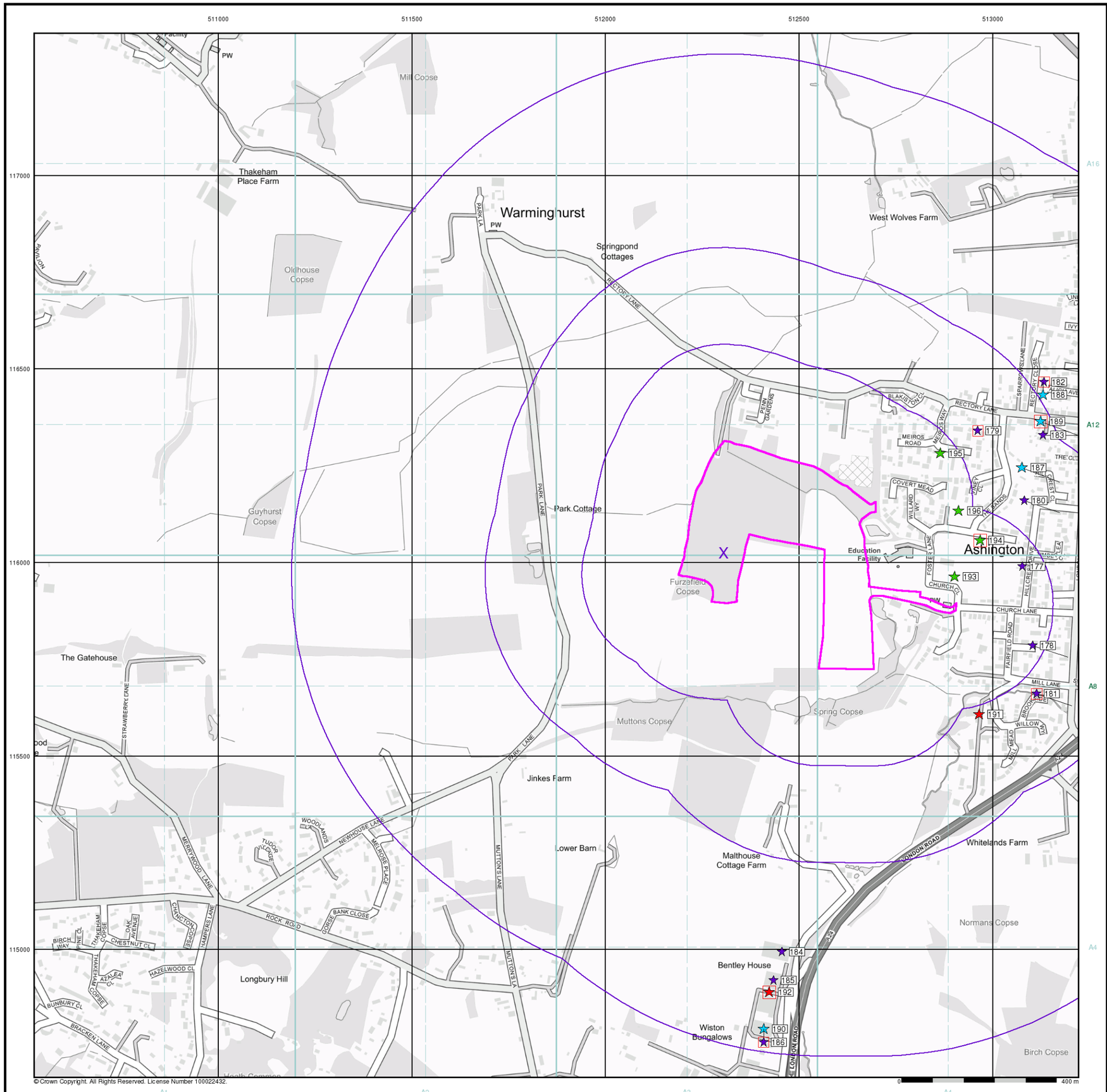
Order Details

Order Number:	287518451_1_1
Customer Ref:	52368
National Grid Reference:	512310, 116030
Slice:	A
Site Area (Ha):	15.35
Search Buffer (m):	1000

Site Details

Firle, Church Lane, Ashington, PULBOROUGH, RH20 3JX

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



RSK

Industrial Land Use Map

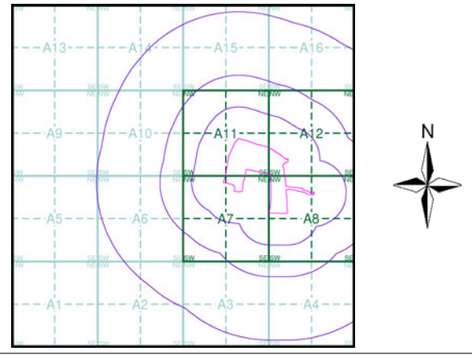
General

Specified Site
Specified Buffer(s)
Bearing Reference Point
Slice
Map ID

Industrial Land Use

- Contemporary Trade Directory Entry
- Fuel Station Entry
- Gas Pipeline
- Points of Interest - Commercial Services
- Points of Interest - Education and Health
- Points of Interest - Manufacturing and Production
- Points of Interest - Public Infrastructure
- Points of Interest - Recreational and Environmental
- Underground Electrical Cables

Industrial Land Use Map - Slice A



Order Details

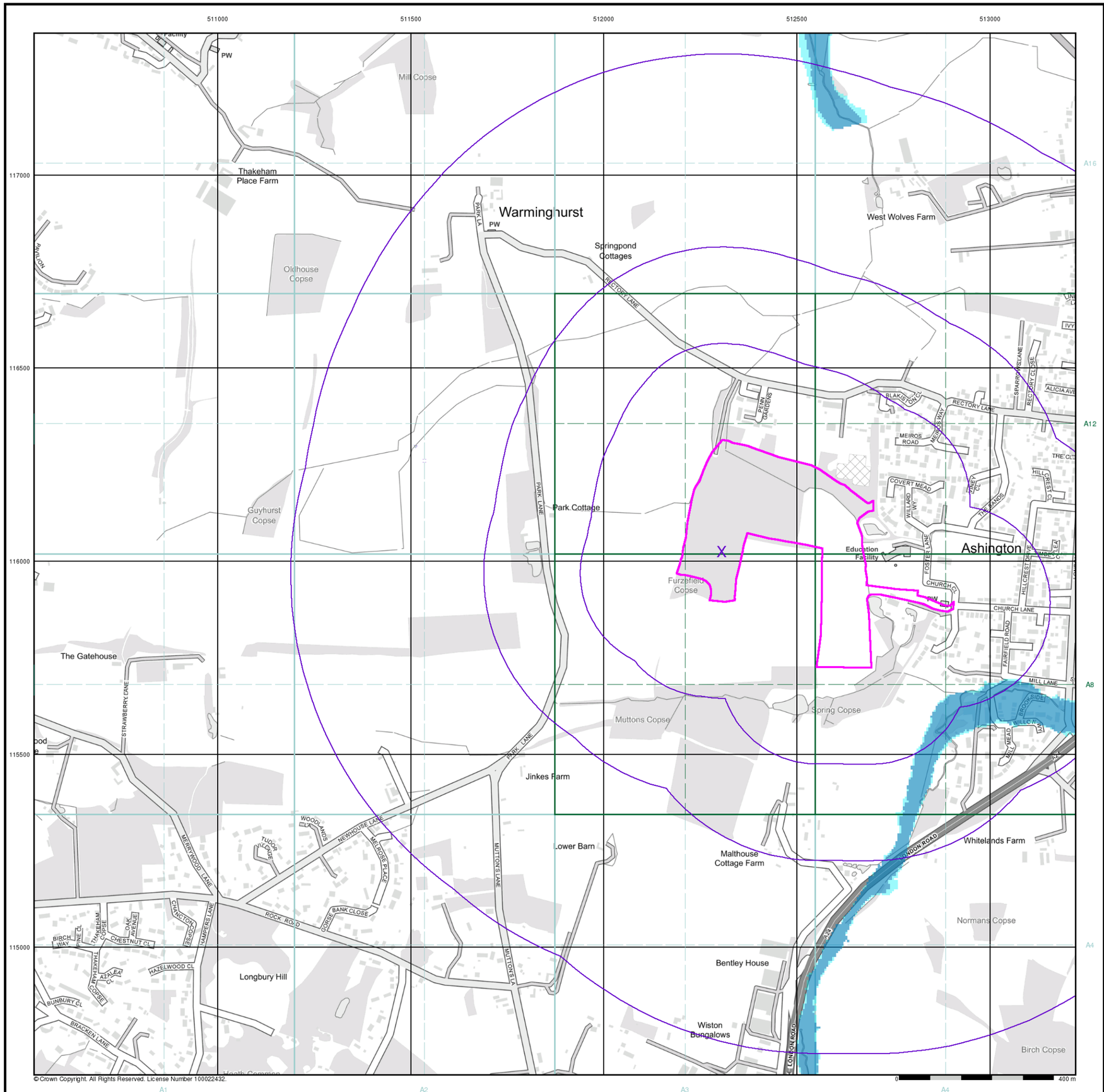
Order Number:	287518451_1_1
Customer Ref:	52368
National Grid Reference:	512310, 116030
Slice:	A
Site Area (Ha):	15.35
Search Buffer (m):	1000

Site Details

Firle, Church Lane, Ashington, PULBOROUGH, RH20 3JX

Landmark INFORMATION GROUP

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



© Crown Copyright. All Rights Reserved. License Number 100022432.

RSK

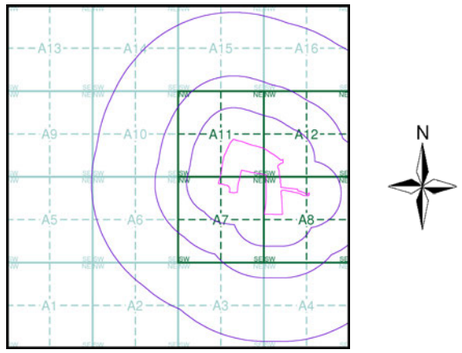
General

- Specified Site
- Specified Buffer(s)
- X Bearing Reference Point

Agency and Hydrological (Flood)

- Extreme Flooding from Rivers or Sea without Defences (Zone 2)
- Flooding from Rivers or Sea without Defences (Zone 3)
- Area Benefiting from Flood Defence
- Flood Water Storage Areas
- Flood Defence

Flood Map - Slice A



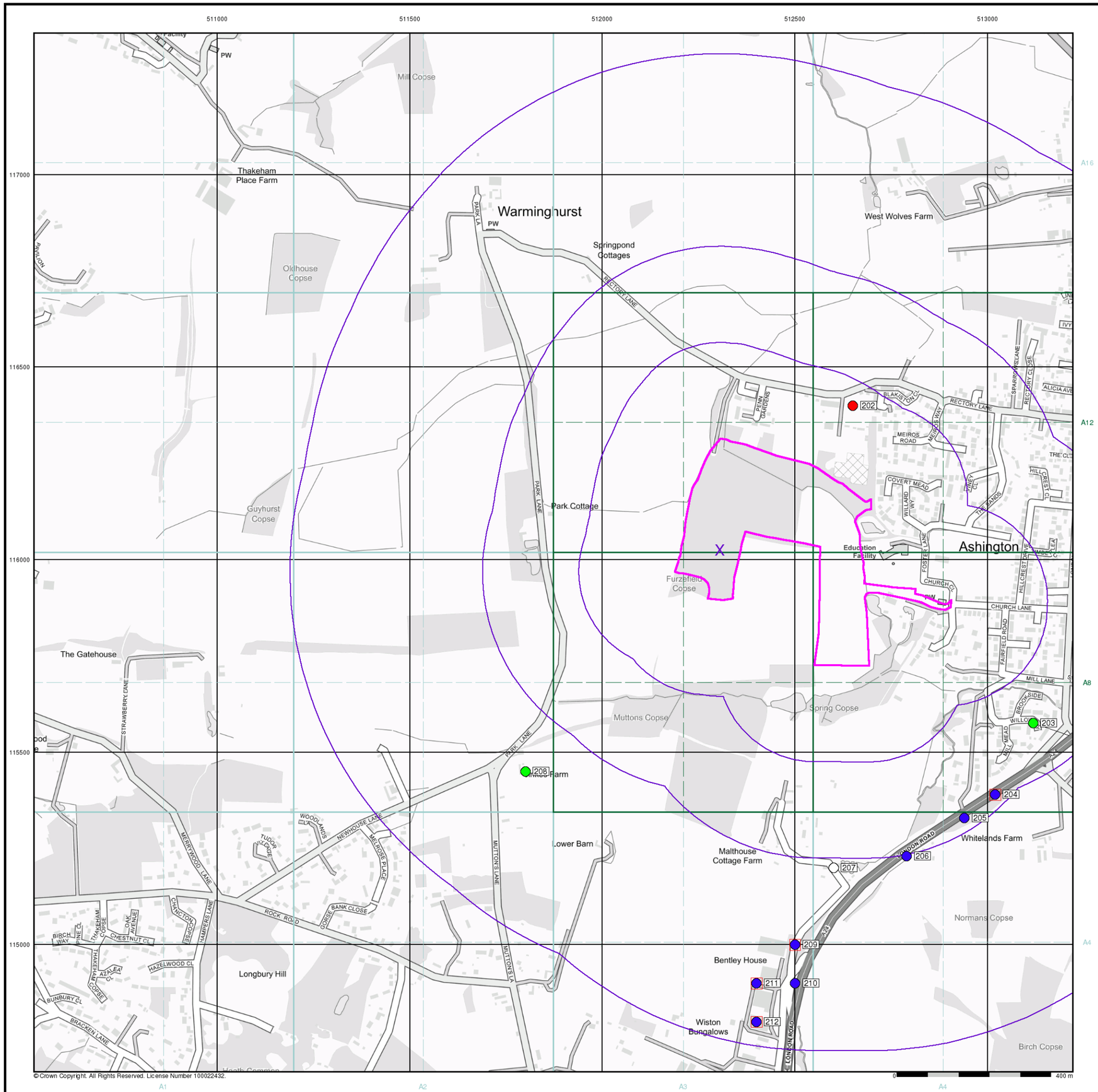
Order Details

Order Number:	287518451_1_1
Customer Ref:	52368
National Grid Reference:	512310, 116030
Slice:	A
Site Area (Ha):	15.35
Search Buffer (m):	1000

Site Details

Firle, Church Lane, Ashington, PULBOROUGH, RH20 3JX

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



© Crown Copyright. All Rights Reserved. License Number 100022432.

General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point
- Map ID
- Several of Type at Location

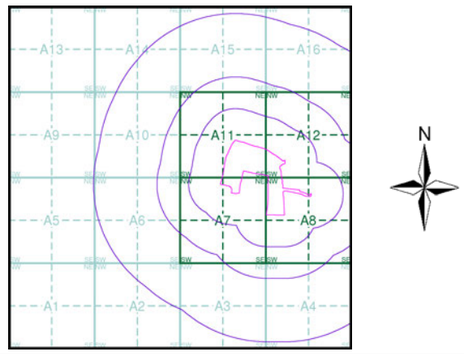
Agency and Hydrological (Boreholes)

- BGS Borehole Depth 0 - 10m
- BGS Borehole Depth 10 - 30m
- BGS Borehole Depth 30m +
- Confidential
- Other

For Borehole information please refer to the Borehole .csv file which accompanied this slice.

A copy of the BGS Borehole Ordering Form is available to download from the Support section of www.envirocheck.co.uk.

Borehole Map - Slice A



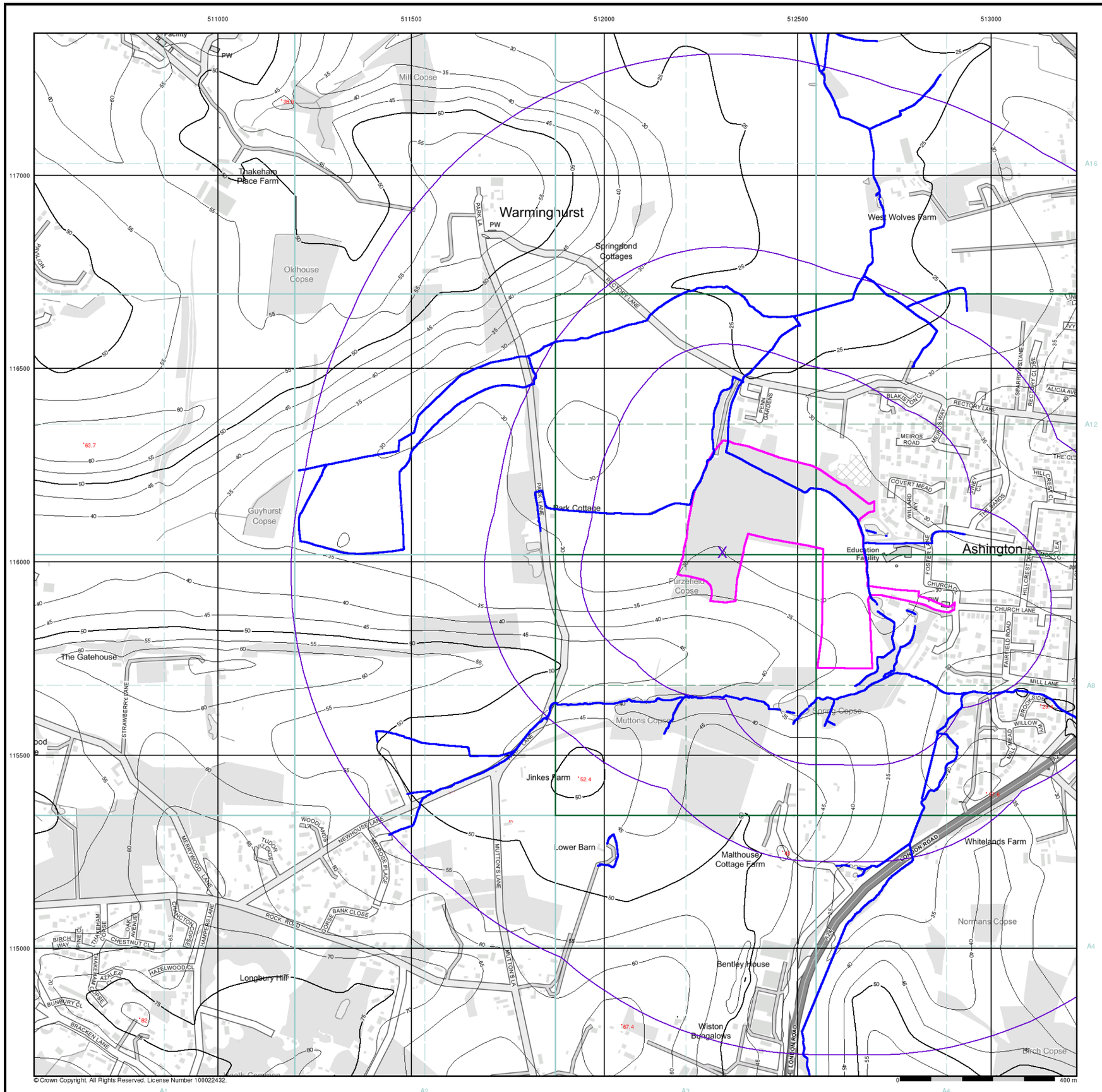
Order Details

Order Number:	287518451_1_1
Customer Ref:	52368
National Grid Reference:	512310, 116030
Slice:	A
Site Area (Ha):	15.35
Search Buffer (m):	1000

Site Details

Firle, Church Lane, Ashington, PULBOROUGH, RH20 3JX

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



RSK

General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point

OS Water Network Data

- Canal
- Reservoir
- Foreshore
- Marsh
- Tidal River
- Inland River
- Drain
- Other
- Lake
- Transfer
- Lock Or Flight Of Locks
- Sea

Contours (height in meters)

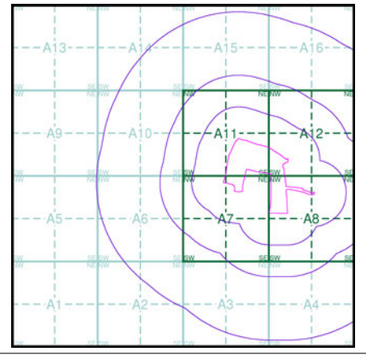
Standard Contour 105 100 95

Master Contour

Spot Height 167.3

- MLW Mean Low Water
- MHW Mean High Water

OS Water Network Map - Slice A



Order Details

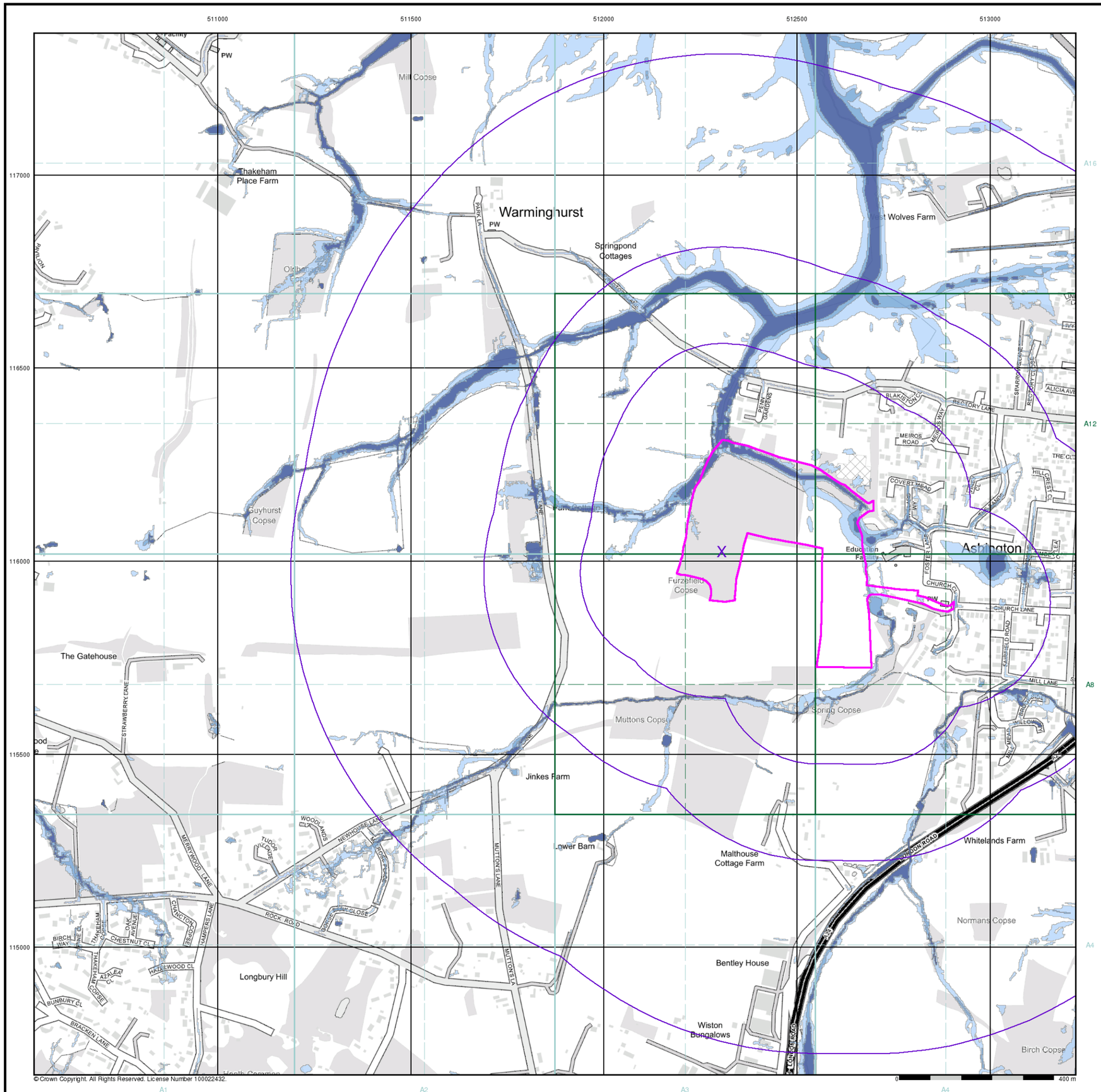
Order Number:	287518451_1_1
Customer Ref:	52368
National Grid Reference:	512310, 116030
Slice:	A
Site Area (Ha):	15.35
Search Buffer (m):	1000

Site Details

Firle, Church Lane, Ashington, PULBOROUGH, RH20 3JX

Landmark INFORMATION GROUP

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



© Crown Copyright. All Rights Reserved. License Number 100022432.

RSK

General

- Specified Site
- Specified Buffer(s)
- X Bearing Reference Point

Risk of Flooding from Surface Water

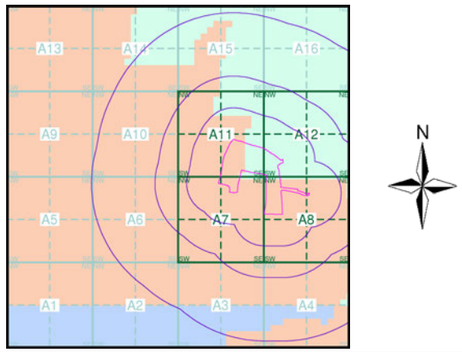
- High - 30 Year Return
- Medium - 100 Year Return
- Low - 1000 Year Return

Suitability

See the suitability map below

- National to county
- County to town
- Town to street
- Street to parcels of land
- Property

EA/NRW Suitability Map - Slice A



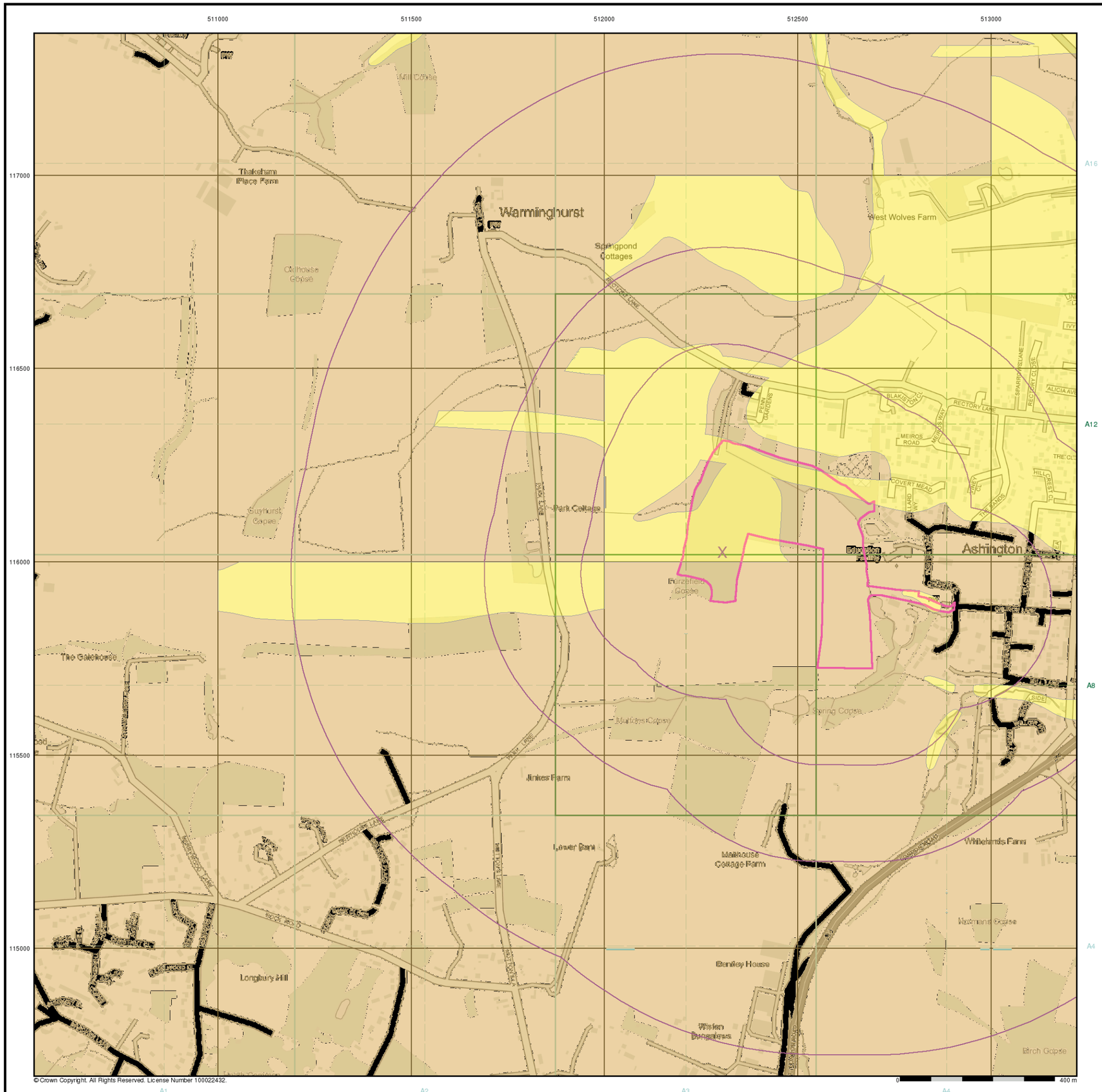
Order Details

Order Number:	287518451_1_1
Customer Ref:	52368
National Grid Reference:	512310, 116030
Slice:	A
Site Area (Ha):	15.35
Search Buffer (m):	1000

Site Details

Firle, Church Lane, Ashington, PULBOROUGH, RH20 3JX

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



RSK

General

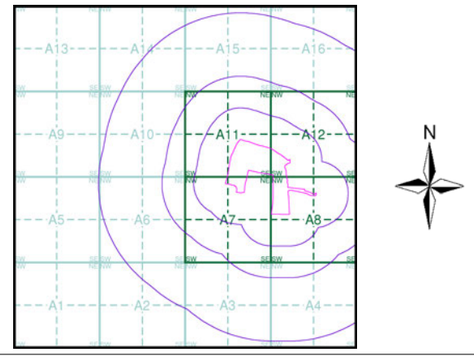
Specified Site | Specified Buffer(s) | X Bearing Reference Point

Estimated Soil Chemistry Arsenic

Arsenic Concentrations mg/kg

- < 15
- 15 - 25
- 25 - 35
- 35 - 45
- 45 - 60
- 60 - 120
- > 120

Estimated Soil Chemistry Arsenic - Slice A



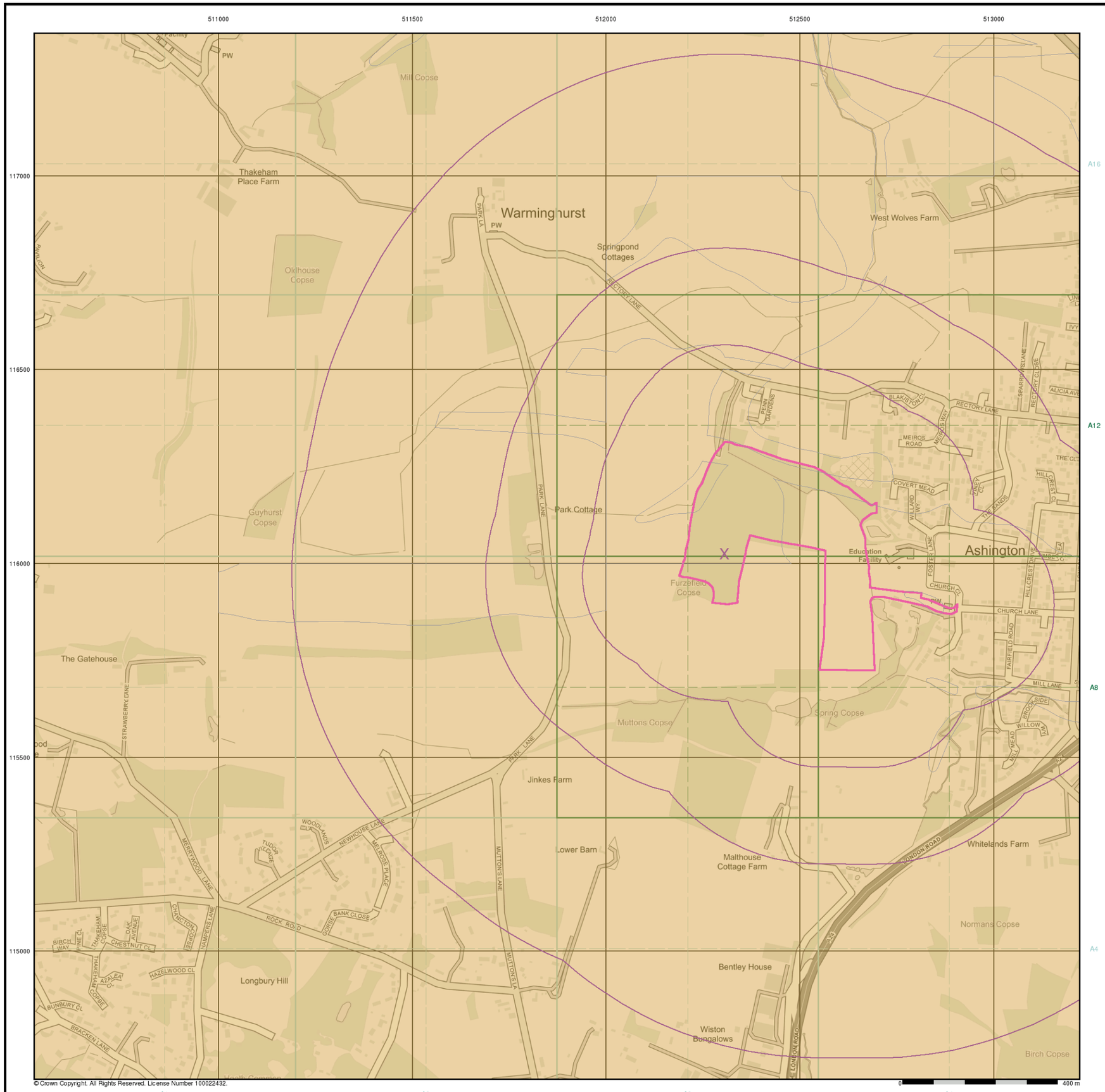
Order Details

Order Details:	287518451_1_1
Customer Ref:	52368
National Grid Reference:	512310, 116030
Slice:	A
Site Area (Ha):	15.35
Search Buffer (m):	1000

Site Details

Firle, Church Lane, Ashington, PULBOROUGH, RH20 3JX

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



© Crown Copyright. All Rights Reserved. License Number 100022432.

General

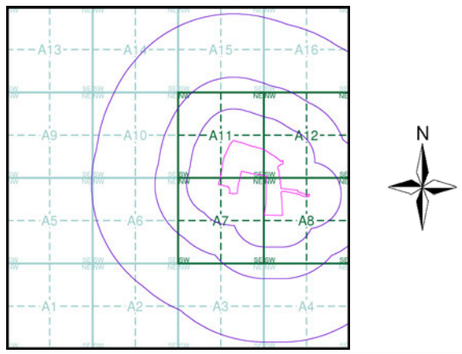
Specified Site | Specified Buffer(s) | X Bearing Reference Point

Estimated Soil Chemistry Cadmium

Cadmium Concentrations mg/kg

- < 1.8
- 1.8 - 2.2
- 2.2 - 3.0
- > 3.0

Estimated Soil Chemistry Cadmium - Slice A



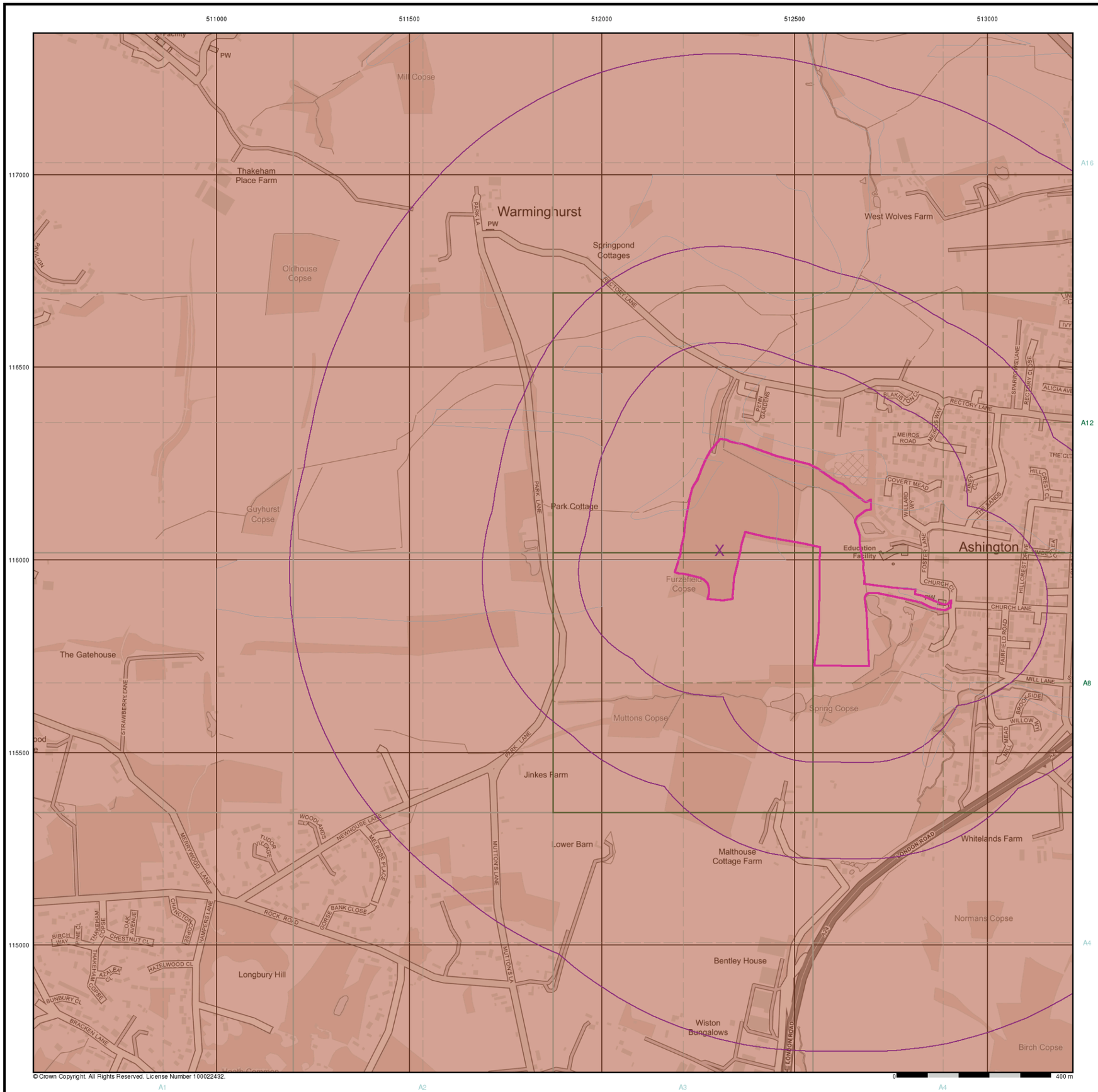
Order Details

Order Details:	287518451_1_1
Customer Ref:	52368
National Grid Reference:	512310, 116030
Slice:	A
Site Area (Ha):	15.35
Search Buffer (m):	1000

Site Details

Firle, Church Lane, Ashington, PULBOROUGH, RH20 3JX

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



RSK

General

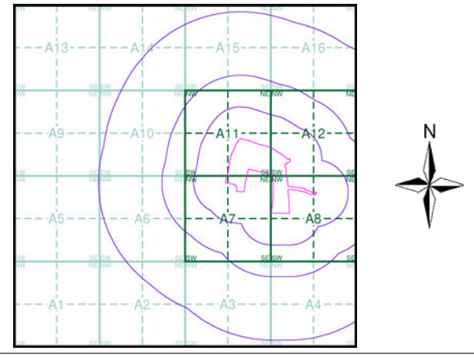
Specified Site | Specified Buffer(s) | X Bearing Reference Point

Estimated Soil Chemistry Chromium

Chromium Concentrations mg/kg

- < 20
- 20 - 40
- 40 - 60
- 60 - 90
- 90 - 120
- 120 - 180
- > 180

Estimated Soil Chemistry Chromium - Slice A



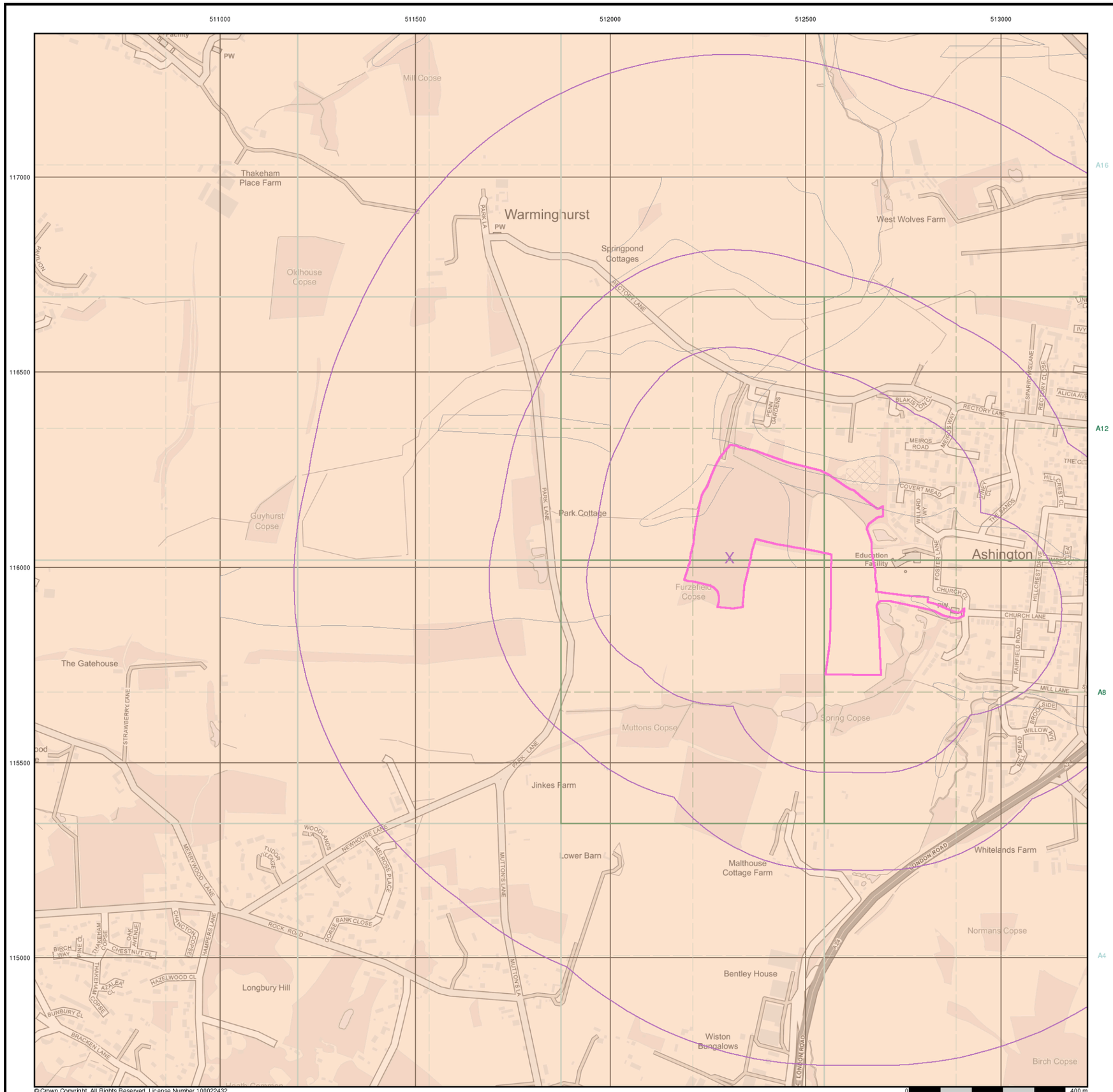
Order Details

Order Details:	287518451_1_1
Customer Ref:	52368
National Grid Reference:	512310, 116030
Slice:	A
Site Area (Ha):	15.35
Search Buffer (m):	1000

Site Details

Firle, Church Lane, Ashington, PULBOROUGH, RH20 3JX

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



© Crown Copyright. All Rights Reserved. License Number 100022432.

A1 A2 A3 A4

RSK

General

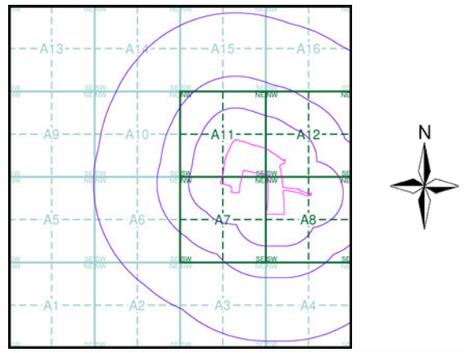
Specified Site | Specified Buffer(s) | X Bearing Reference Point

Estimated Soil Chemistry Lead

Lead Concentrations mg/kg

- <100 mg/kg
- 100 - 200
- 200 - 300
- 300 - 600
- 600 - 1200
- >1200

Estimated Soil Chemistry Lead - Slice A



Order Details

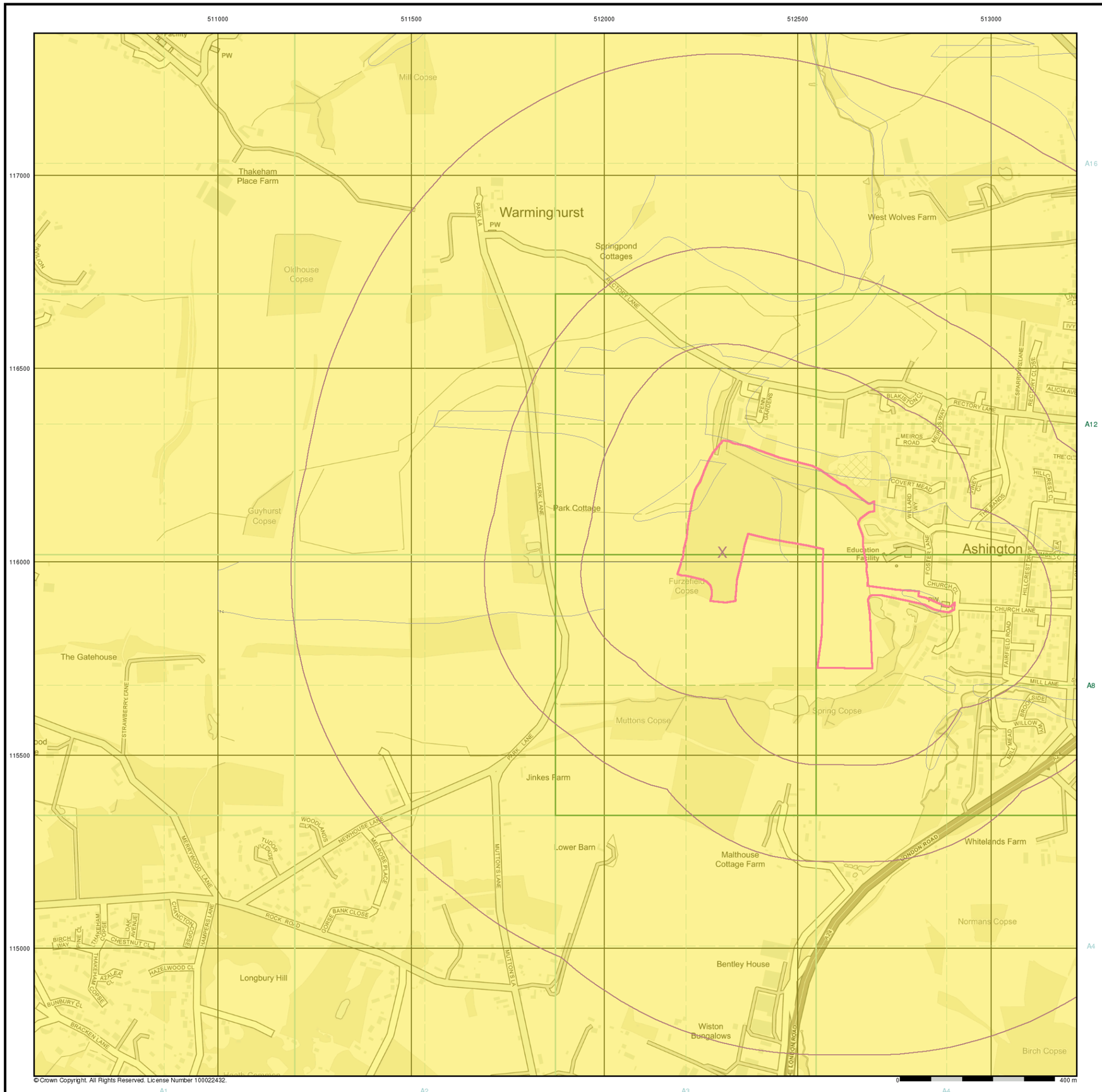
Order Details:	287518451_1_1
Customer Ref:	52368
National Grid Reference:	512310, 116030
Slice:	A
Site Area (Ha):	15.35
Search Buffer (m):	1000

Site Details

Firle, Church Lane, Ashington, PULBOROUGH, RH20 3JX

Landmark INFORMATION GROUP

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



RSK

General

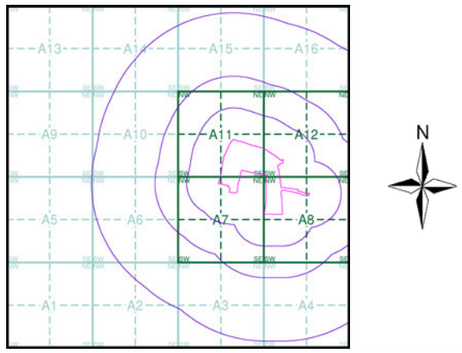
Specified Site | Specified Buffer(s) | X Bearing Reference Point

Estimated Soil Chemistry Nickel

Nickel Concentrations mg/kg

- < 15
- 15 - 30
- 30 - 45
- 45 - 60
- 60 - 80
- 80 - 100
- > 100

Estimated Soil Chemistry Nickel - Slice A



Order Details

Order Details:	287518451_1_1
Customer Ref:	52368
National Grid Reference:	512310, 116030
Slice:	A
Site Area (Ha):	15.35
Search Buffer (m):	1000

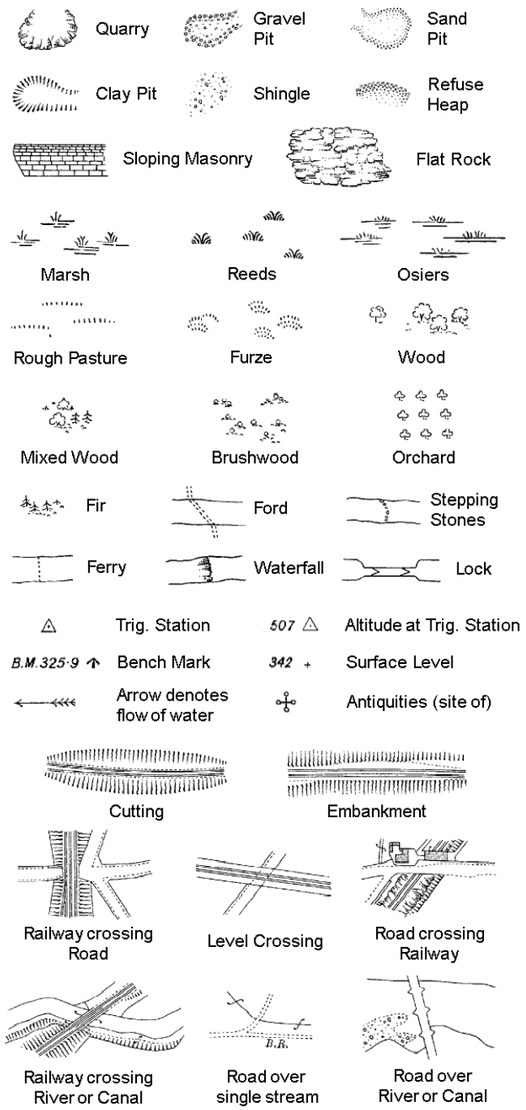
Site Details

Firle, Church Lane, Ashington, PULBOROUGH, RH20 3JX

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

Historical Mapping Legends

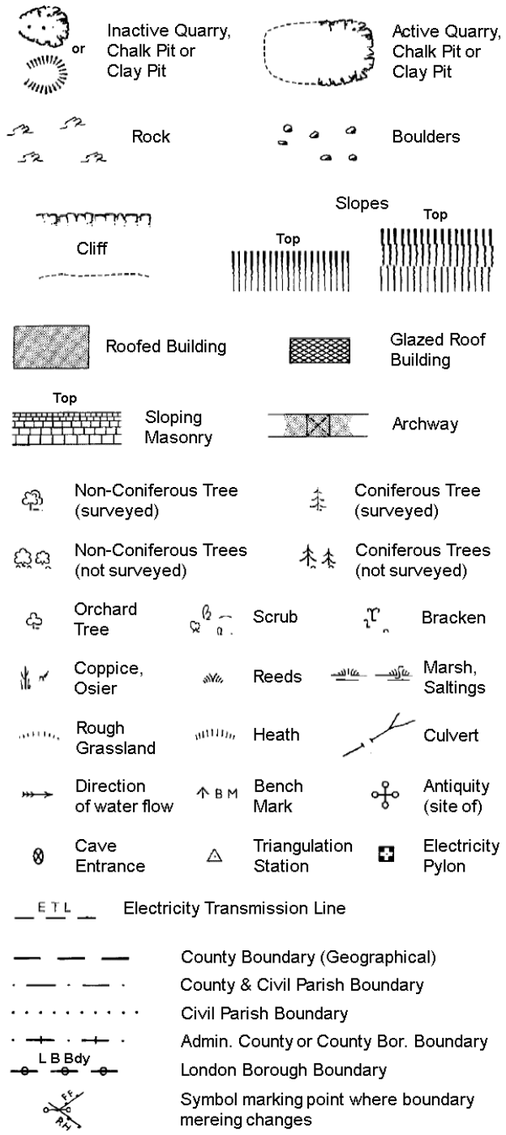
Ordnance Survey County Series and Ordnance Survey Plan 1:2,500



County Boundary (Geographical)
County & Civil Parish Boundary
Administrative County & Civil Parish Boundary
Co. Boro. Bdy. County Borough Boundary (England)
Co. Burgh Bdy. County Burgh Boundary (Scotland)

B P B S	Boundary Post or Stone	P.C.B	Police Call Box
B.R.	Bridle Road	P	Pump
E.P	Electricity Pylon	S.P	Signal Post
F.B.	Foot Bridge	St.	Sluice
F.P.	Foot Path	Sp.	Spring
G.P	Guide Post or Board	T.C.B	Telephone Call Box
M.S	Mile Stone	Tr.	Trough
M.P M.R	Mooring Post or Ring	W	Well

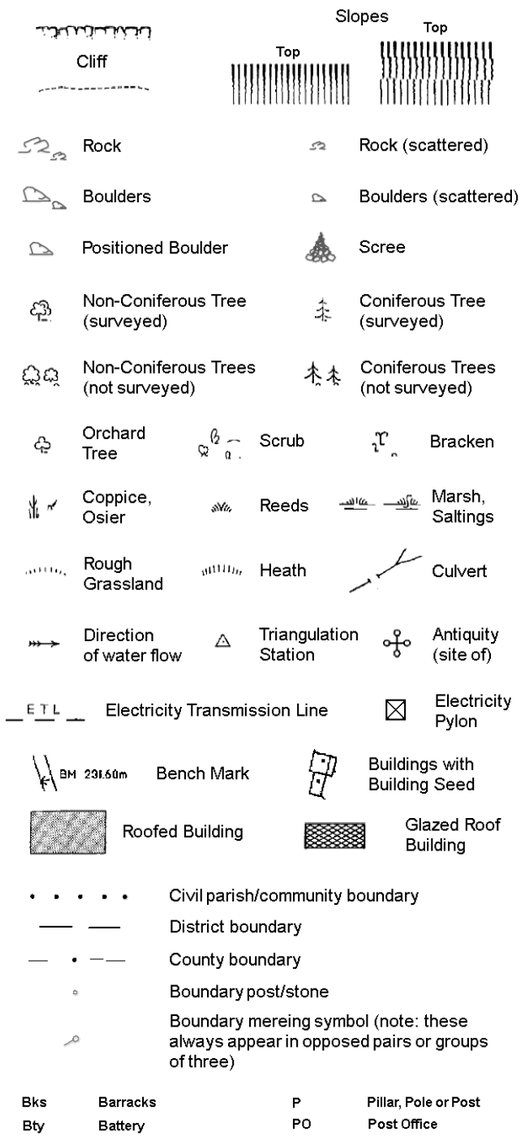
Ordnance Survey Plan, Additional SIMs and Supply of Unpublished Survey Information 1:2,500 and 1:1,250



County Boundary (Geographical)
County & Civil Parish Boundary
Civil Parish Boundary
Admin. County or County Bor. Boundary
L B Bdy London Borough Boundary
Symbol marking point where boundary mereing changes

BH	Beer House	P	Pillar, Pole or Post
BP, BS	Boundary Post or Stone	PO	Post Office
Cn, C	Capstan, Crane	PC	Public Convenience
Chy	Chimney	PH	Public House
D Fn	Drinking Fountain	Pp	Pump
El P	Electricity Pillar or Post	SB, S Br	Signal Box or Bridge
FAP	Fire Alarm Pillar	SP, SL	Signal Post or Light
FB	Foot Bridge	Spr	Spring
GP	Guide Post	Tk	Tank or Track
H	Hydrant or Hydraulic	TCB	Telephone Call Box
LC	Level Crossing	TCP	Telephone Call Post
MH	Manhole	Tr	Trough
MP	Mile Post or Mooring Post	Wr Pt, Wr T	Water Point, Water Tap
MS	Mile Stone	W	Well
NTL	Normal Tidal Limit	Wd Pp	Wind Pump

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



Civil parish/community boundary
District boundary
County boundary
Boundary post/stone
Boundary mereing symbol (note: these always appear in opposed pairs or groups of three)

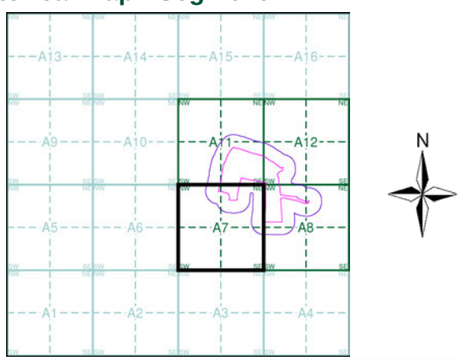
Bks	Barracks	P	Pillar, Pole or Post
Bty	Battery	PO	Post Office
Cemy	Cemetery	PC	Public Convenience
Chy	Chimney	Pp	Pump
Cis	Cistern	Ppg Sta	Pumping Station
Dismtd Rly	Dismantled Railway	PW	Place of Worship
El Gen Sta	Electricity Generating Station	Sewage Ppg Sta	Sewage Pumping Station
El P	Electricity Pole, Pillar	SB, S Br	Signal Box or Bridge
El Sub Sta	Electricity Sub Station	SP, SL	Signal Post or Light
FB	Filter Bed	Spr	Spring
Fn / D Fn	Fountain / Drinking Ftn.	Tk	Tank or Track
Gas Gov	Gas Valve Compound	Tr	Trough
GVC	Gas Governer	Wd Pp	Wind Pump
GP	Guide Post	Wr Pt, Wr T	Water Point, Water Tap
MH	Manhole	Wks	Works (building or area)
MP, MS	Mile Post or Mile Stone	W	Well

RSK

Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Sussex	1:2,500	1875	2
Sussex	1:2,500	1897	3
Sussex	1:2,500	1911	4
Sussex	1:2,500	1937	5
Ordnance Survey Plan	1:2,500	1974	6
Additional SIMs	1:2,500	1985	7
Large-Scale National Grid Data	1:2,500	1993	8
Historical Aerial Photography	1:2,500	1999	9

Historical Map - Segment A7



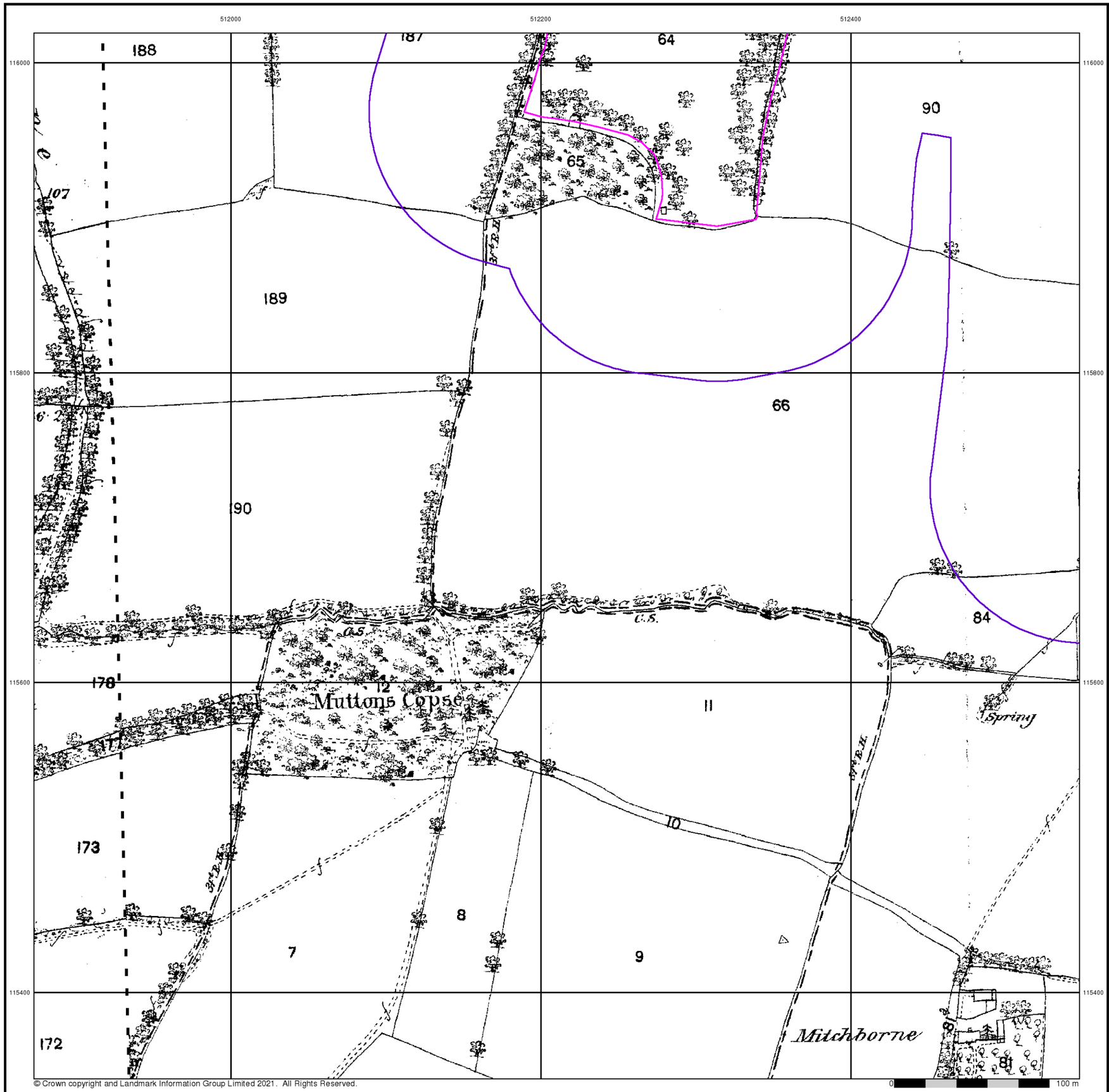
Order Details

Order Number: 287518451_1_1
Customer Ref: 52368
National Grid Reference: 512310, 116030
Slice: A
Site Area (Ha): 15.35
Search Buffer (m): 100

Site Details

Firle, Church Lane, Ashington, PULBOROUGH, RH20 3JX

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



© Crown copyright and Landmark Information Group Limited 2021. All Rights Reserved.

RSK

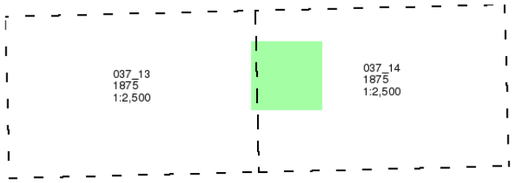
Sussex

Published 1875

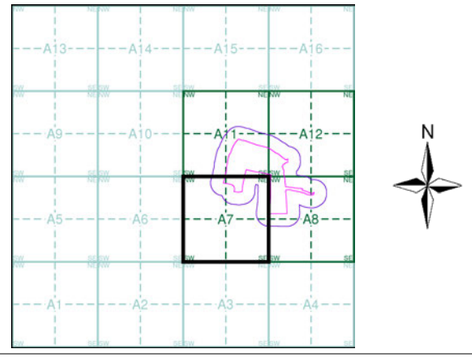
Source map scale - 1:2,500

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

Map Name(s) and Date(s)



Historical Map - Segment A7



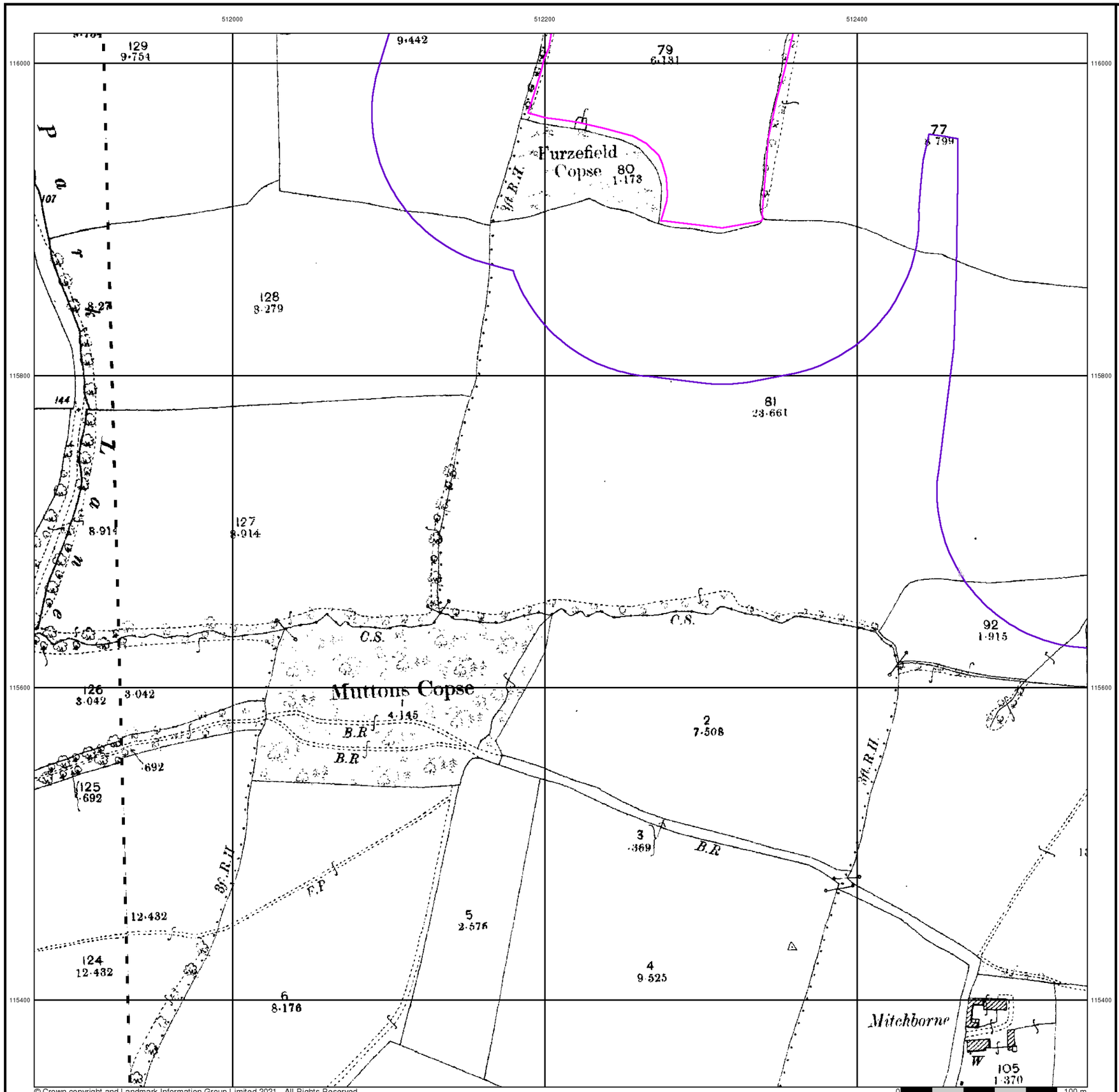
Order Details

Order Number:	287518451_1_1
Customer Ref:	52368
National Grid Reference:	512310, 116030
Slice:	A
Site Area (Ha):	15.35
Search Buffer (m):	100

Site Details

Firle, Church Lane, Ashington, PULBOROUGH, RH20 3JX

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



© Crown copyright and Landmark Information Group Limited 2021. All Rights Reserved.

RSK

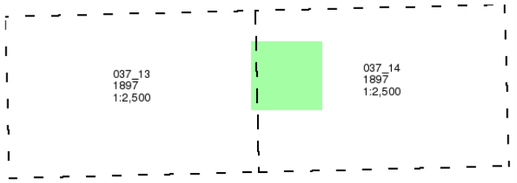
Sussex

Published 1897

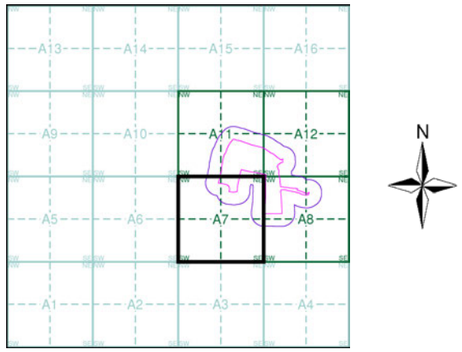
Source map scale - 1:2,500

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

Map Name(s) and Date(s)



Historical Map - Segment A7



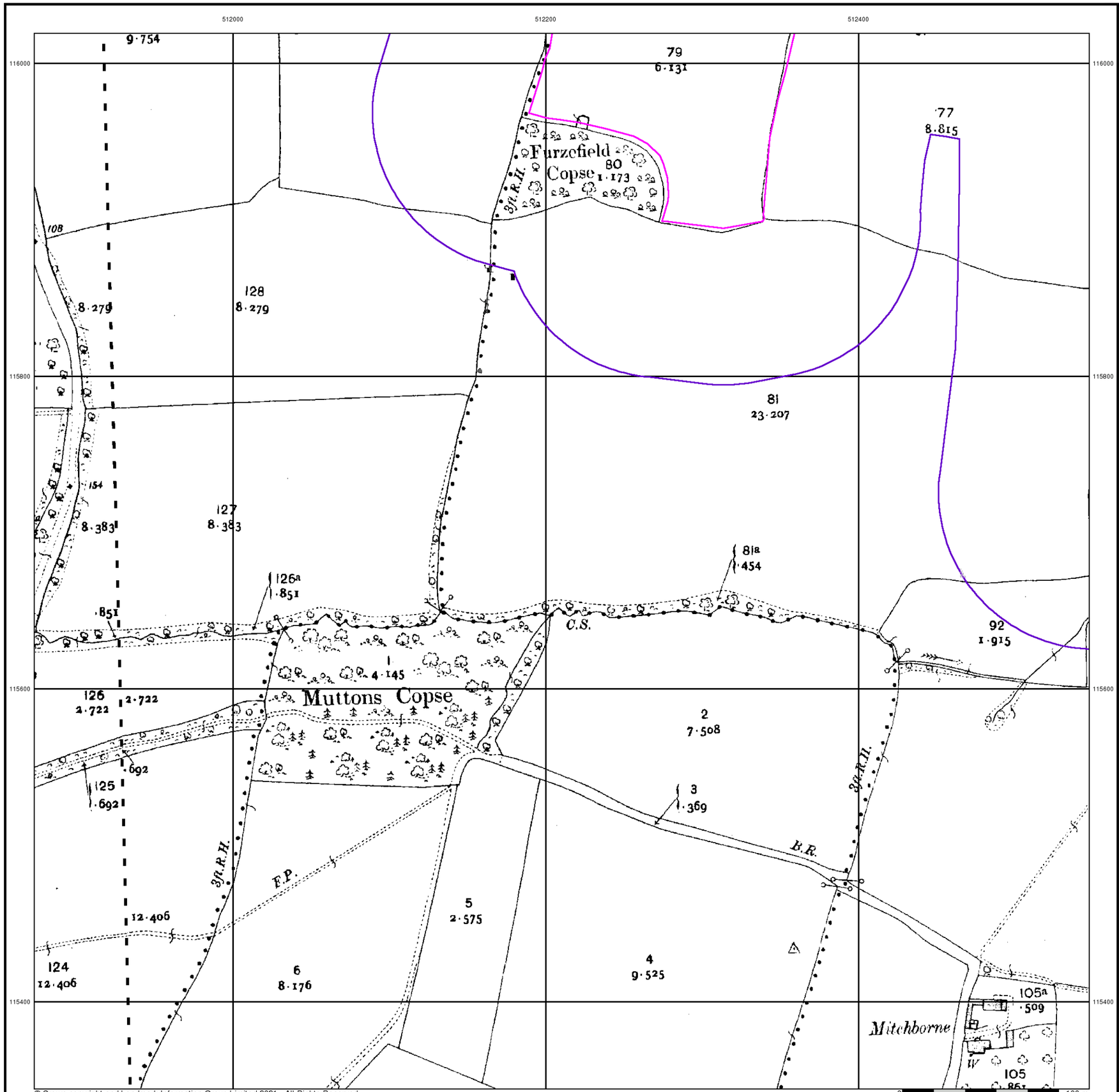
Order Details

Order Number:	287518451_1_1
Customer Ref:	52368
National Grid Reference:	512310, 116030
Slice:	A
Site Area (Ha):	15.35
Search Buffer (m):	100

Site Details

Firle, Church Lane, Ashington, PULBOROUGH, RH20 3JX

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



© Crown copyright and Landmark Information Group Limited 2021. All Rights Reserved.

RSK

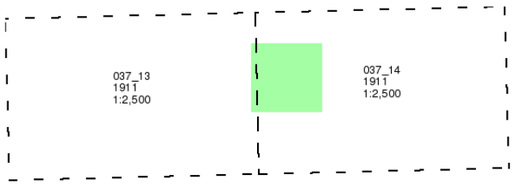
Sussex

Published 1911

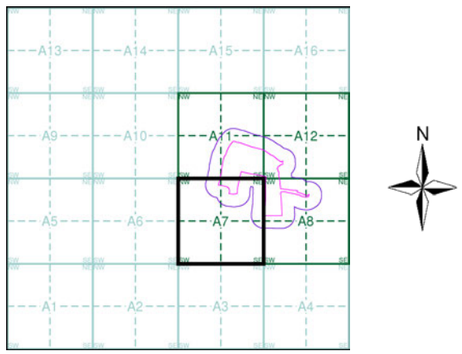
Source map scale - 1:2,500

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

Map Name(s) and Date(s)



Historical Map - Segment A7



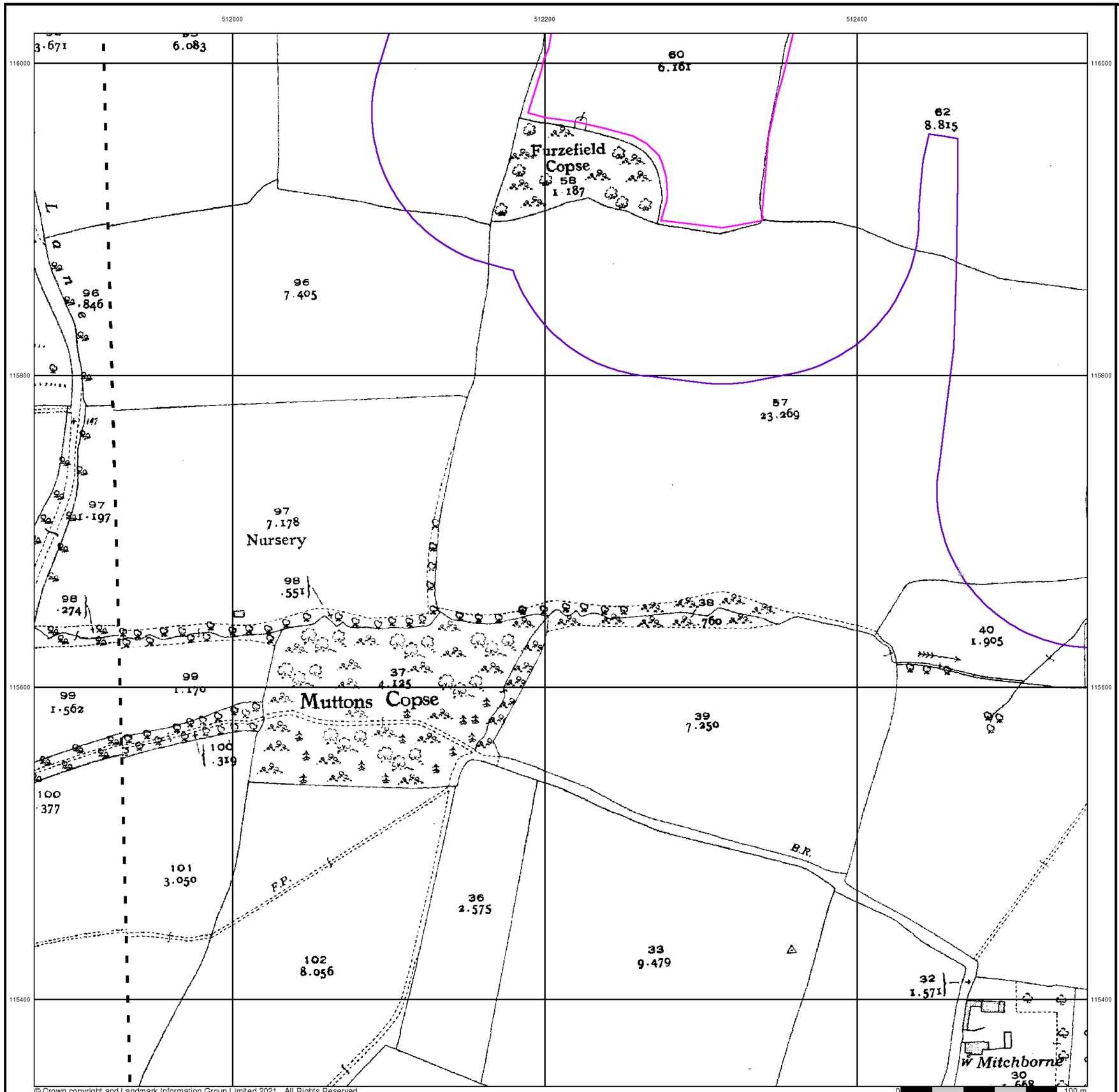
Order Details

Order Number:	287518451_1_1
Customer Ref:	52368
National Grid Reference:	512310, 116030
Slice:	A
Site Area (Ha):	15.35
Search Buffer (m):	100

Site Details

Firle, Church Lane, Ashington, PULBOROUGH, RH20 3JX

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



© Crown copyright and Landmark Information Group Limited 2021. All Rights Reserved.

RSK

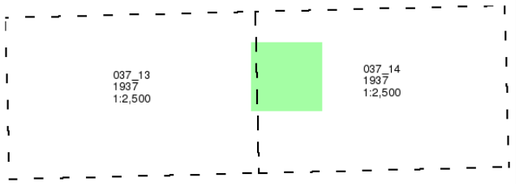
Sussex

Published 1937

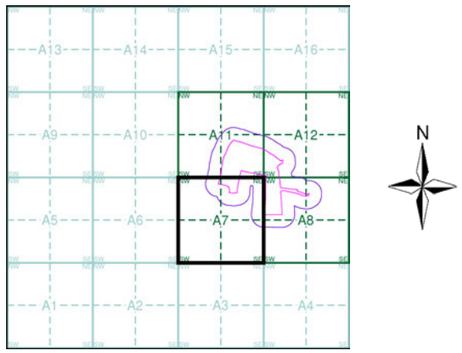
Source map scale - 1:2,500

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

Map Name(s) and Date(s)



Historical Map - Segment A7



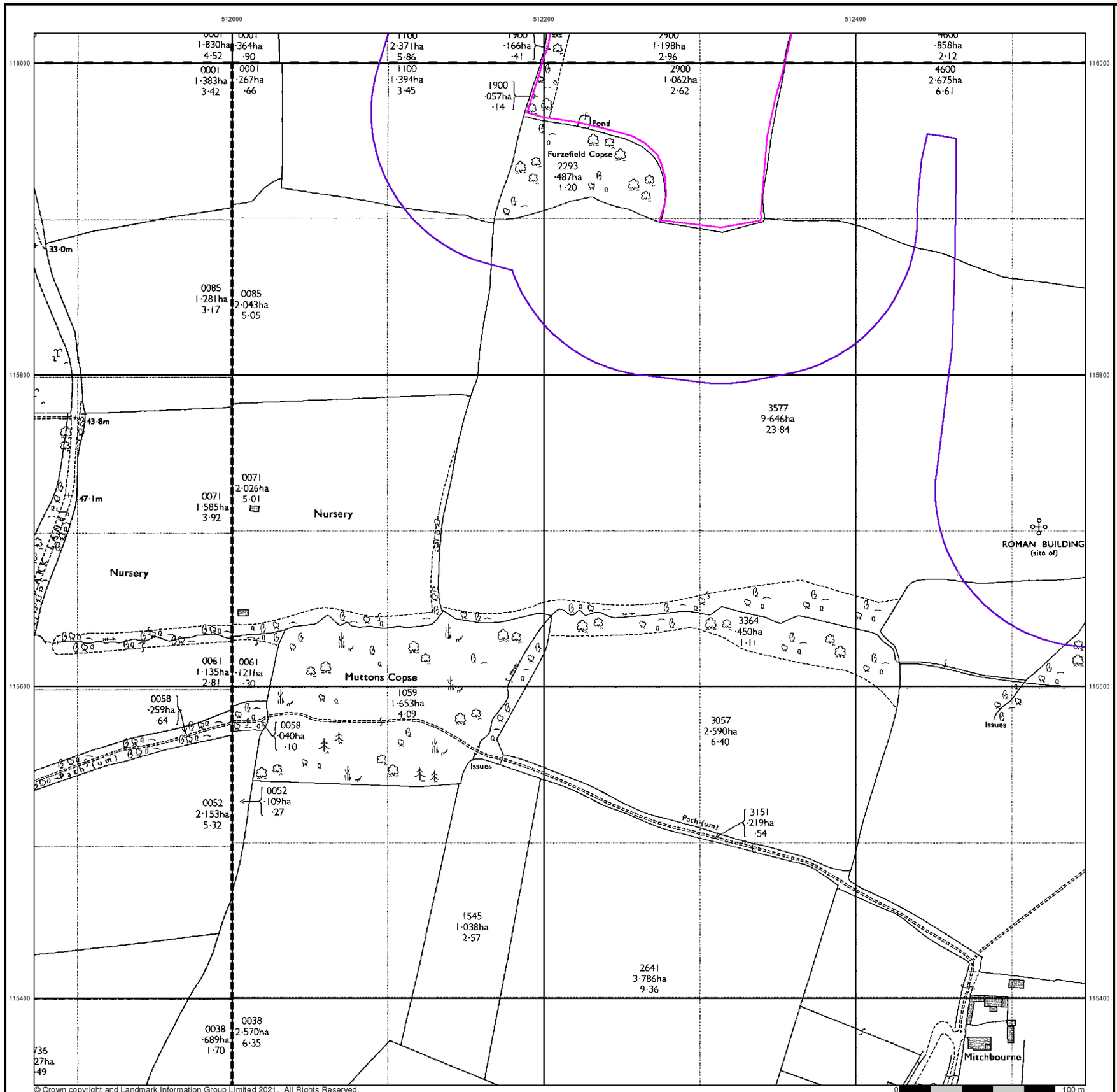
Order Details

Order Number:	287518451_1_1
Customer Ref:	52368
National Grid Reference:	512310, 116030
Slice:	A
Site Area (Ha):	15.35
Search Buffer (m):	100

Site Details

Firle, Church Lane, Ashington, PULBOROUGH, RH20 3JX

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



© Crown copyright and Landmark Information Group Limited 2021. All Rights Reserved.

RSK

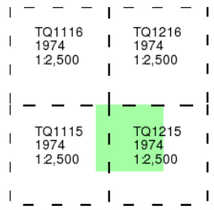
Ordnance Survey Plan

Published 1974

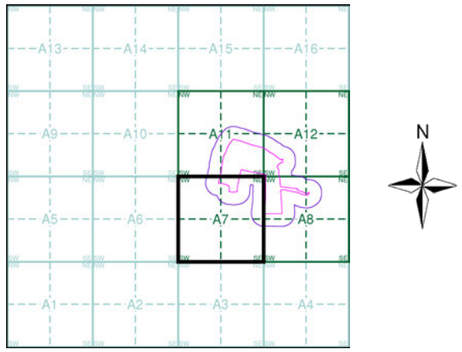
Source map scale - 1:2,500

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

Map Name(s) and Date(s)



Historical Map - Segment A7



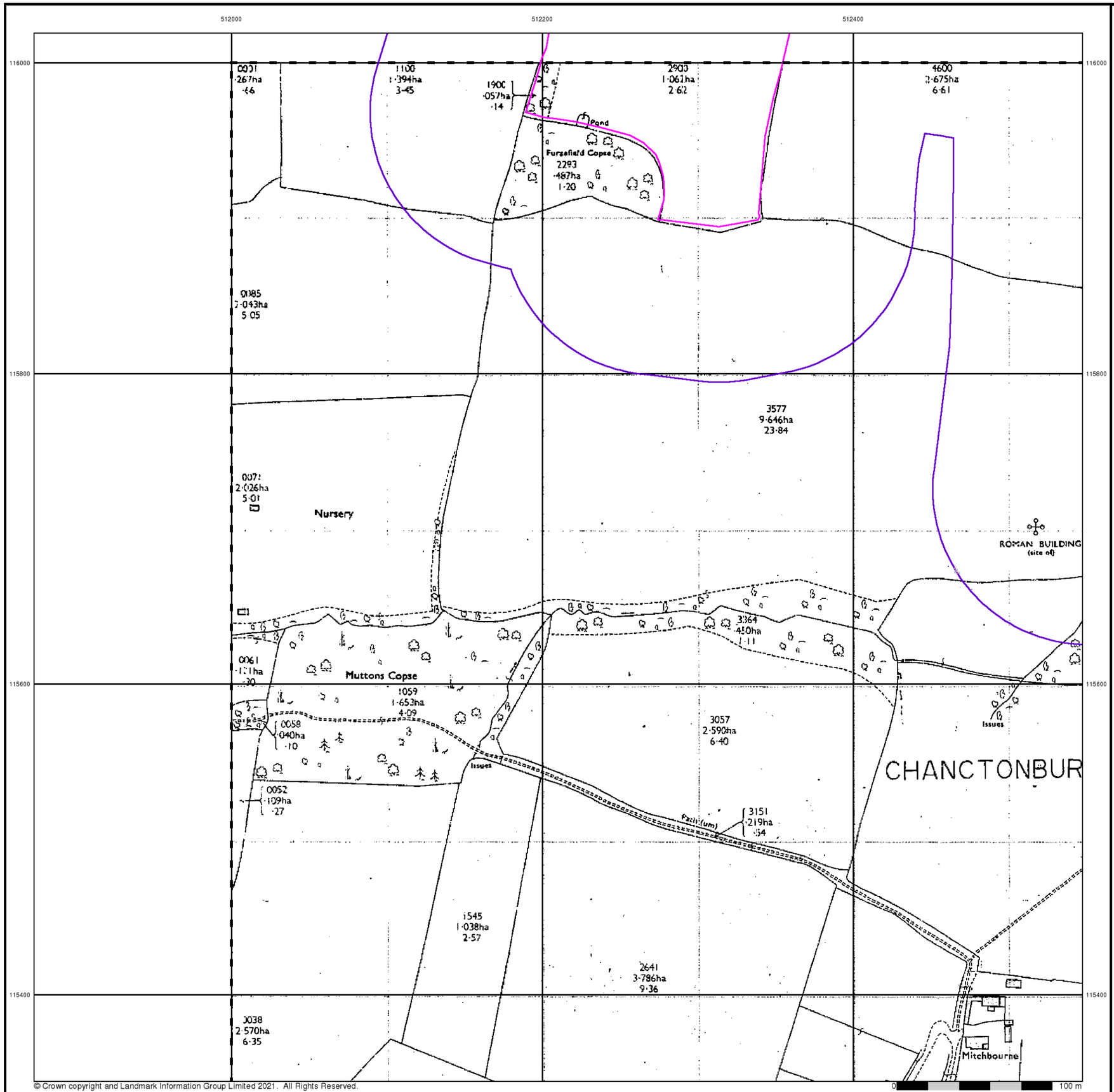
Order Details

Order Number:	287518451_1_1
Customer Ref:	52368
National Grid Reference:	512310, 116030
Slice:	A
Site Area (Ha):	15.35
Search Buffer (m):	100

Site Details

Firle, Church Lane, Ashington, PULBOROUGH, RH20 3JX

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



© Crown copyright and Landmark Information Group Limited 2021. All Rights Reserved.

RSK

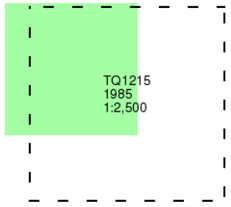
Additional SIMs

Published 1985

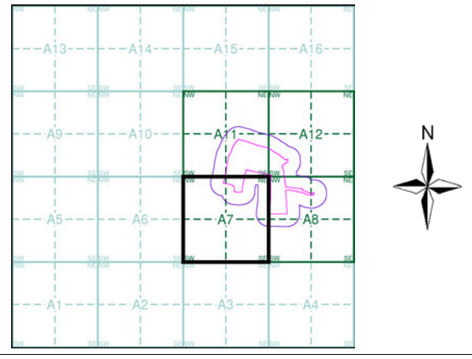
Source map scale - 1:2,500

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

Map Name(s) and Date(s)



Historical Map - Segment A7



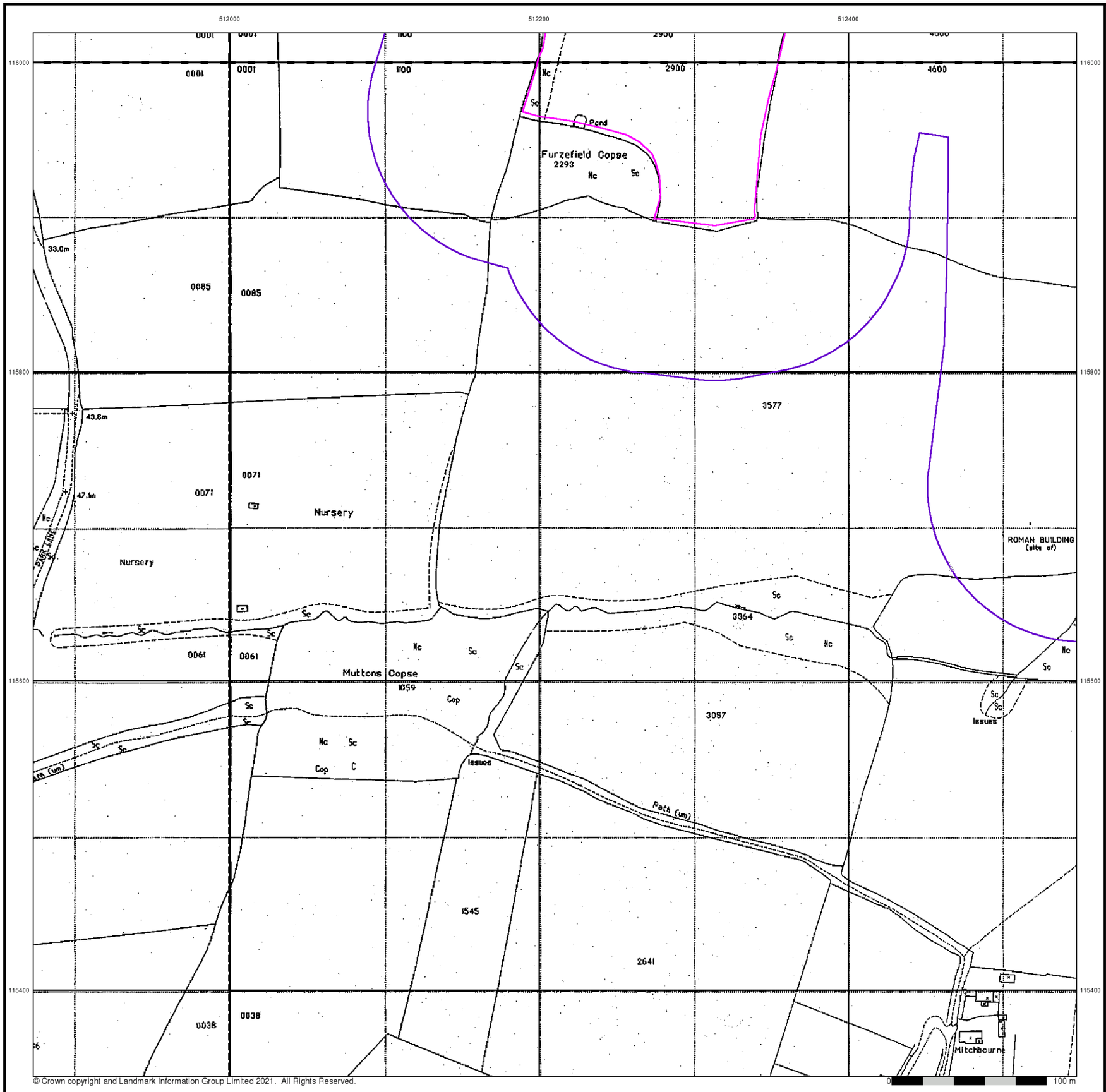
Order Details

Order Number:	287518451_1_1
Customer Ref:	52368
National Grid Reference:	512310, 116030
Slice:	A
Site Area (Ha):	15.35
Search Buffer (m):	100

Site Details

Firle, Church Lane, Ashington, PULBOROUGH, RH20 3JX

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



© Crown copyright and Landmark Information Group Limited 2021. All Rights Reserved.

RSK

Large-Scale National Grid Data

Published 1993

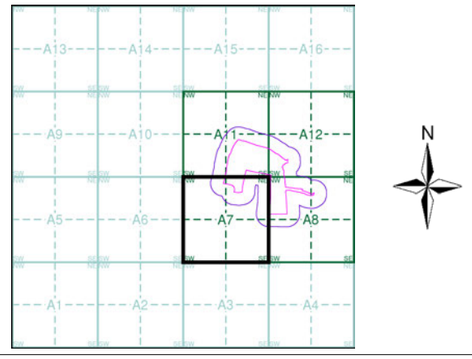
Source map scale - 1:2,500

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

Map Name(s) and Date(s)

TQ1116 1993 1:2,500	TQ1216 1993 1:2,500
TQ1115 1993 1:2,500	TQ1215 1993 1:2,500

Historical Map - Segment A7



Order Details

Order Number:	287518451_1_1
Customer Ref:	52368
National Grid Reference:	512310, 116030
Slice:	A
Site Area (Ha):	15.35
Search Buffer (m):	100

Site Details

Firle, Church Lane, Ashington, PULBOROUGH, RH20 3JX

Landmark INFORMATION GROUP

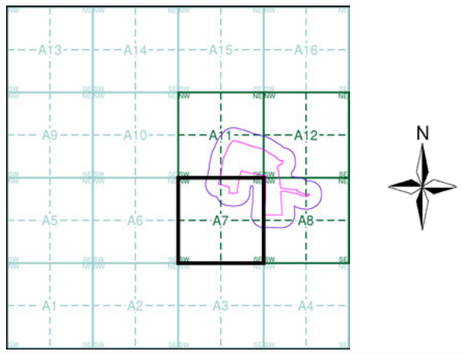
Tel: 0844 844 9952
Fax: 0844 844 9951
Web: www.envirocheck co uk

Historical Aerial Photography

Published 1999

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

Historical Aerial Photography - Segment A7



Order Details

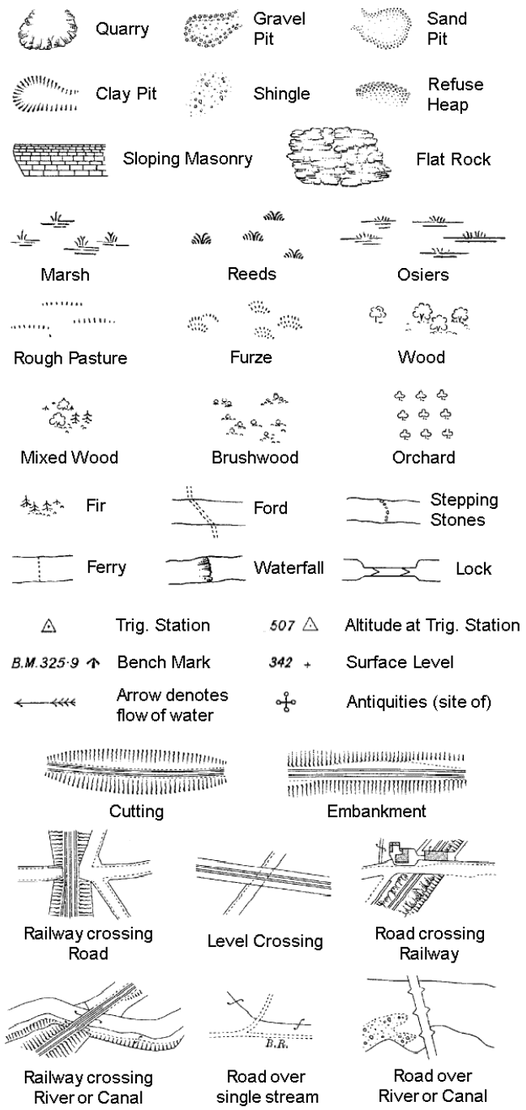
Order Number:	287518451_1_1
Customer Ref:	52368
National Grid Reference:	512310, 116030
Slice:	A
Site Area (Ha):	15.35
Search Buffer (m):	100

Site Details

Firle, Church Lane, Ashington, PULBOROUGH, RH20 3JX

Historical Mapping Legends

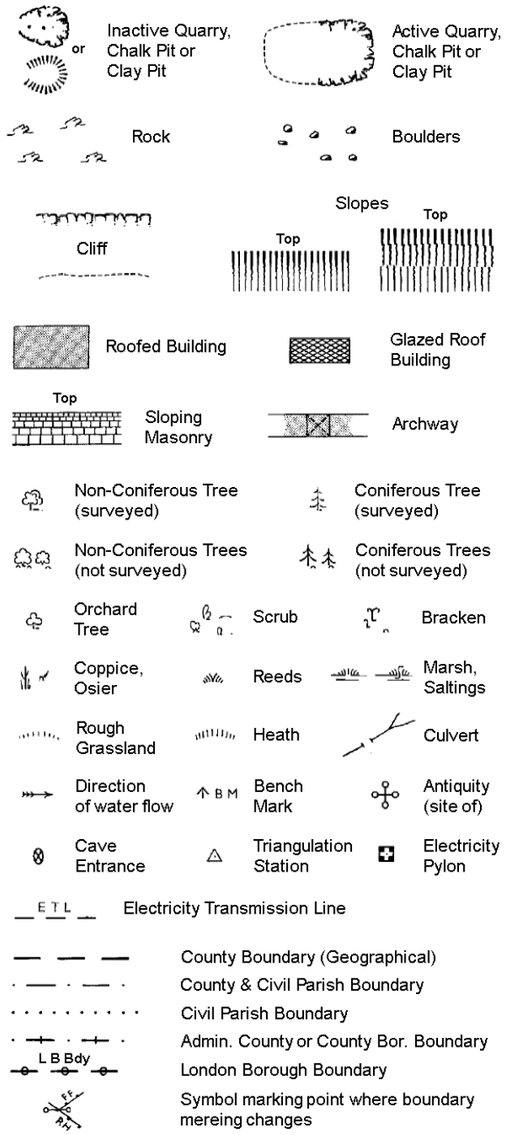
Ordnance Survey County Series and Ordnance Survey Plan 1:2,500



County Boundary (Geographical)
County & Civil Parish Boundary
Administrative County & Civil Parish Boundary
Co. Boro. Bdy. County Borough Boundary (England)
Co. Burgh Bdy. County Burgh Boundary (Scotland)

B P B S	Boundary Post or Stone	P.C.B	Police Call Box
B.R.	Bridle Road	P	Pump
E.P	Electricity Pylon	S.P	Signal Post
F.B.	Foot Bridge	St.	Sluice
F.P.	Foot Path	Sp.	Spring
G.P	Guide Post or Board	T.C.B	Telephone Call Box
M.S	Mile Stone	Tr.	Trough
M.P M.R	Mooring Post or Ring	W	Well

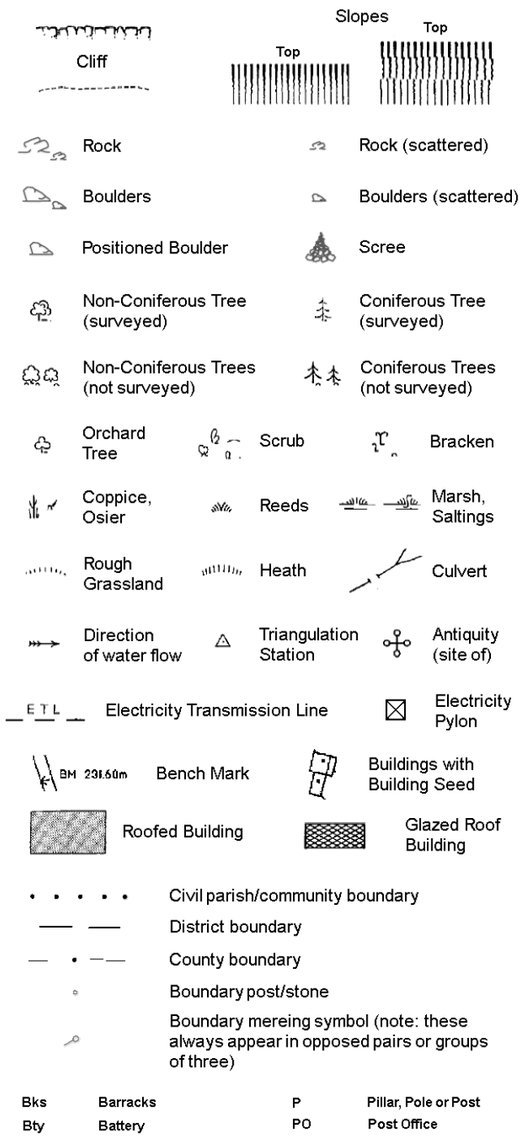
Ordnance Survey Plan, Additional SIMs and Supply of Unpublished Survey Information 1:2,500 and 1:1,250



County Boundary (Geographical)
County & Civil Parish Boundary
Civil Parish Boundary
Admin. County or County Bor. Boundary
L B Bdy London Borough Boundary
Symbol marking point where boundary mereing changes

BH	Beer House	P	Pillar, Pole or Post
BP, BS	Boundary Post or Stone	PO	Post Office
Cn, C	Capstan, Crane	PC	Public Convenience
Chy	Chimney	PH	Public House
D Fn	Drinking Fountain	Pp	Pump
El P	Electricity Pillar or Post	SB, S Br	Signal Box or Bridge
FAP	Fire Alarm Pillar	SP, SL	Signal Post or Light
FB	Foot Bridge	Spr	Spring
GP	Guide Post	Tk	Tank or Track
H	Hydrant or Hydraulic	TCB	Telephone Call Box
LC	Level Crossing	TCP	Telephone Call Post
MH	Manhole	Tr	Trough
MP	Mile Post or Mooring Post	Wr Pt, Wr T	Water Point, Water Tap
MS	Mile Stone	W	Well
NTL	Normal Tidal Limit	Wd Pp	Wind Pump

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



Civil parish/community boundary
District boundary
County boundary
Boundary post/stone
Boundary mereing symbol (note: these always appear in opposed pairs or groups of three)

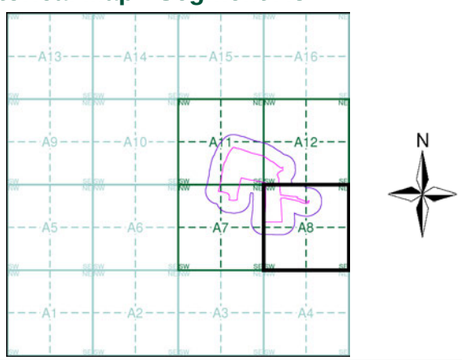
Bks	Barracks	P	Pillar, Pole or Post
Bty	Battery	PO	Post Office
Cemy	Cemetery	PC	Public Convenience
Chy	Chimney	Pp	Pump
Cis	Cistern	Ppg Sta	Pumping Station
Dismtd Rly	Dismantled Railway	PW	Place of Worship
El Gen Sta	Electricity Generating Station	Sewage Ppg Sta	Sewage Pumping Station
El P	Electricity Pole, Pillar	SB, S Br	Signal Box or Bridge
El Sub Sta	Electricity Sub Station	SP, SL	Signal Post or Light
FB	Filter Bed	Spr	Spring
Fn / D Fn	Fountain / Drinking Ftn.	Tk	Tank or Track
Gas Gov	Gas Valve Compound	Tr	Trough
GVC	Gas Governer	Wd Pp	Wind Pump
GP	Guide Post	Wr Pt, Wr T	Water Point, Water Tap
MH	Manhole	Wks	Works (building or area)
MP, MS	Mile Post or Mile Stone	W	Well

RSK

Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Sussex	1:2,500	1875	2
Sussex	1:2,500	1897	3
Sussex	1:2,500	1911	4
Sussex	1:2,500	1937	5
Ordnance Survey Plan	1:2,500	1974	6
Additional SIMs	1:2,500	1985 - 1992	7
Large-Scale National Grid Data	1:2,500	1993	8
Large-Scale National Grid Data	1:2,500	1995	9
Historical Aerial Photography	1:2,500	1999	10

Historical Map - Segment A8



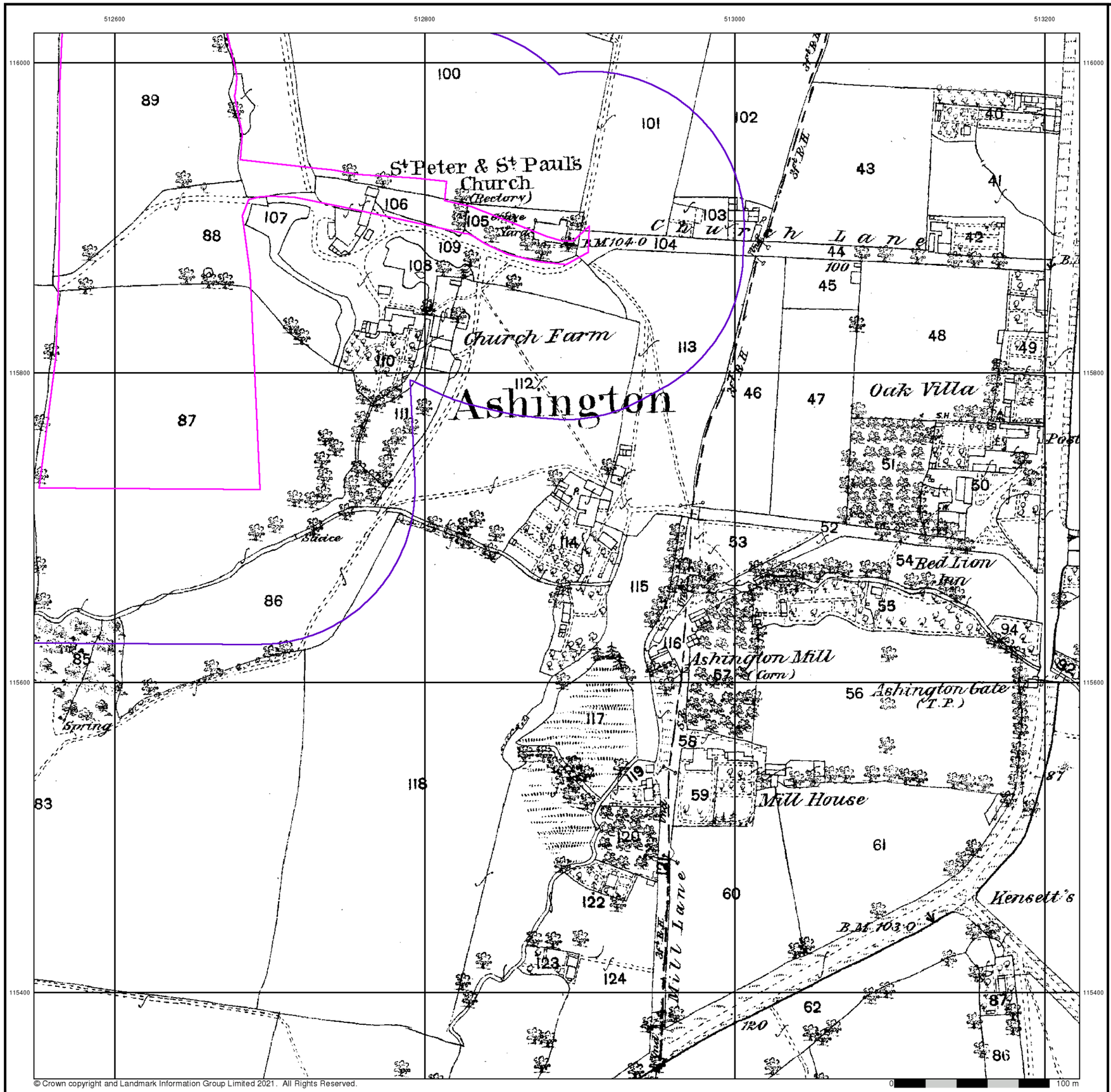
Order Details

Order Number:	287518451_1_1
Customer Ref:	52368
National Grid Reference:	512310, 116030
Slice:	A
Site Area (Ha):	15.35
Search Buffer (m):	100

Site Details

Firle, Church Lane, Ashington, PULBOROUGH, RH20 3JX

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



© Crown copyright and Landmark Information Group Limited 2021. All Rights Reserved.

RSK

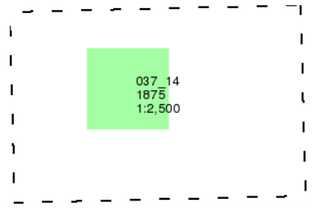
Sussex

Published 1875

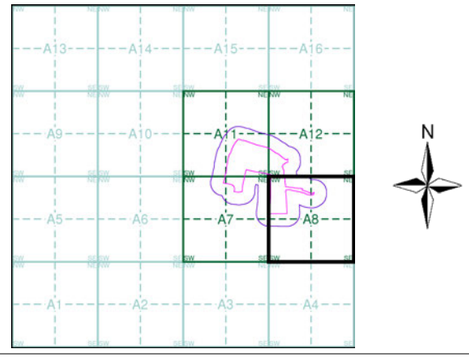
Source map scale - 1:2,500

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

Map Name(s) and Date(s)



Historical Map - Segment A8



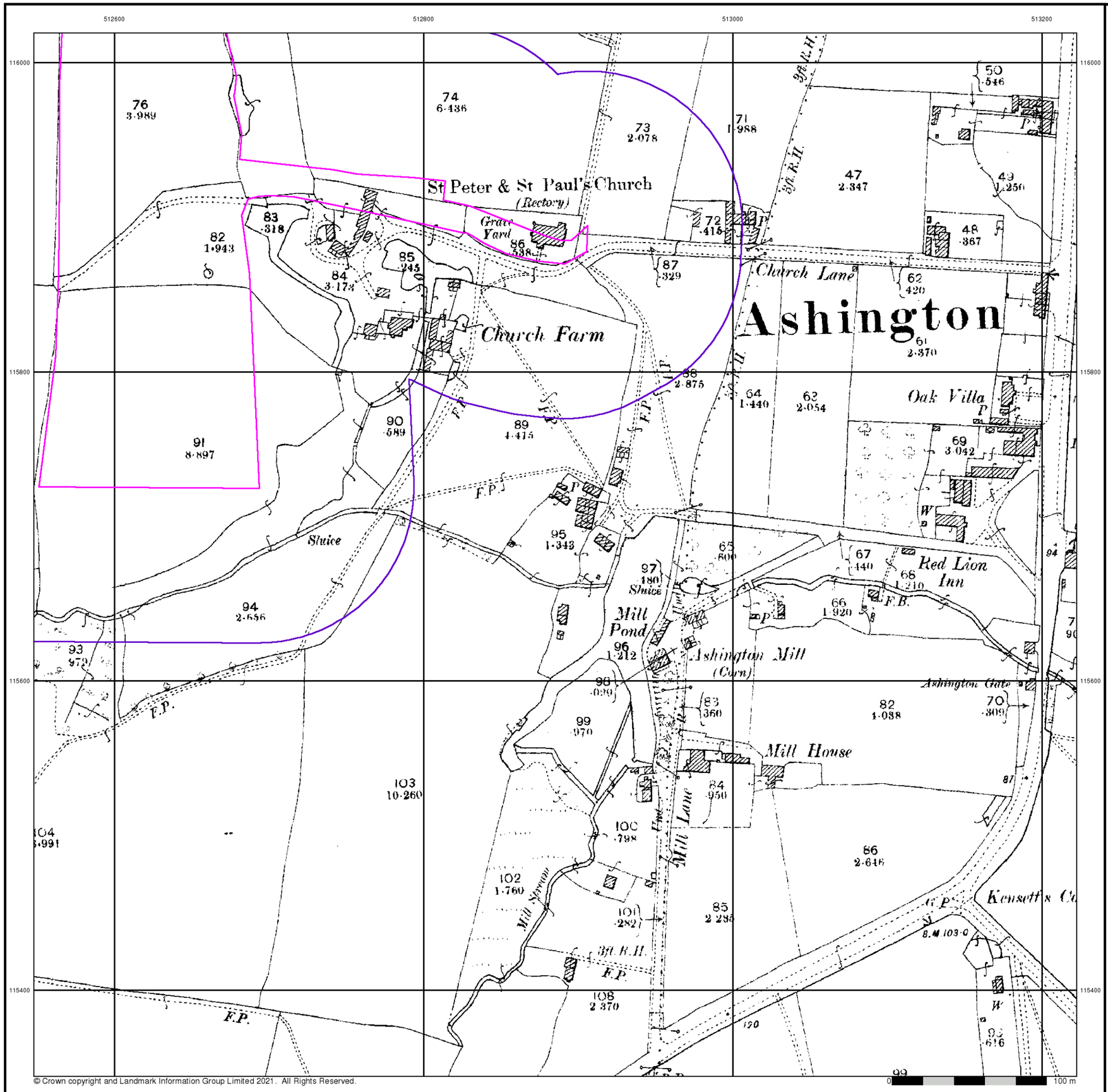
Order Details

Order Number:	287518451_1_1
Customer Ref:	52368
National Grid Reference:	512310, 116030
Slice:	A
Site Area (Ha):	15.35
Search Buffer (m):	100

Site Details

Firle, Church Lane, Ashington, PULBOROUGH, RH20 3JX

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



© Crown copyright and Landmark Information Group Limited 2021. All Rights Reserved.

RSK

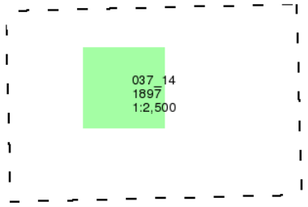
Sussex

Published 1897

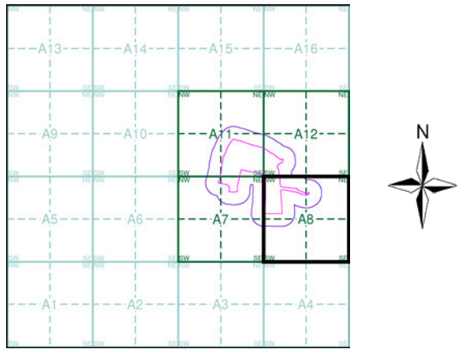
Source map scale - 1:2,500

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

Map Name(s) and Date(s)



Historical Map - Segment A8



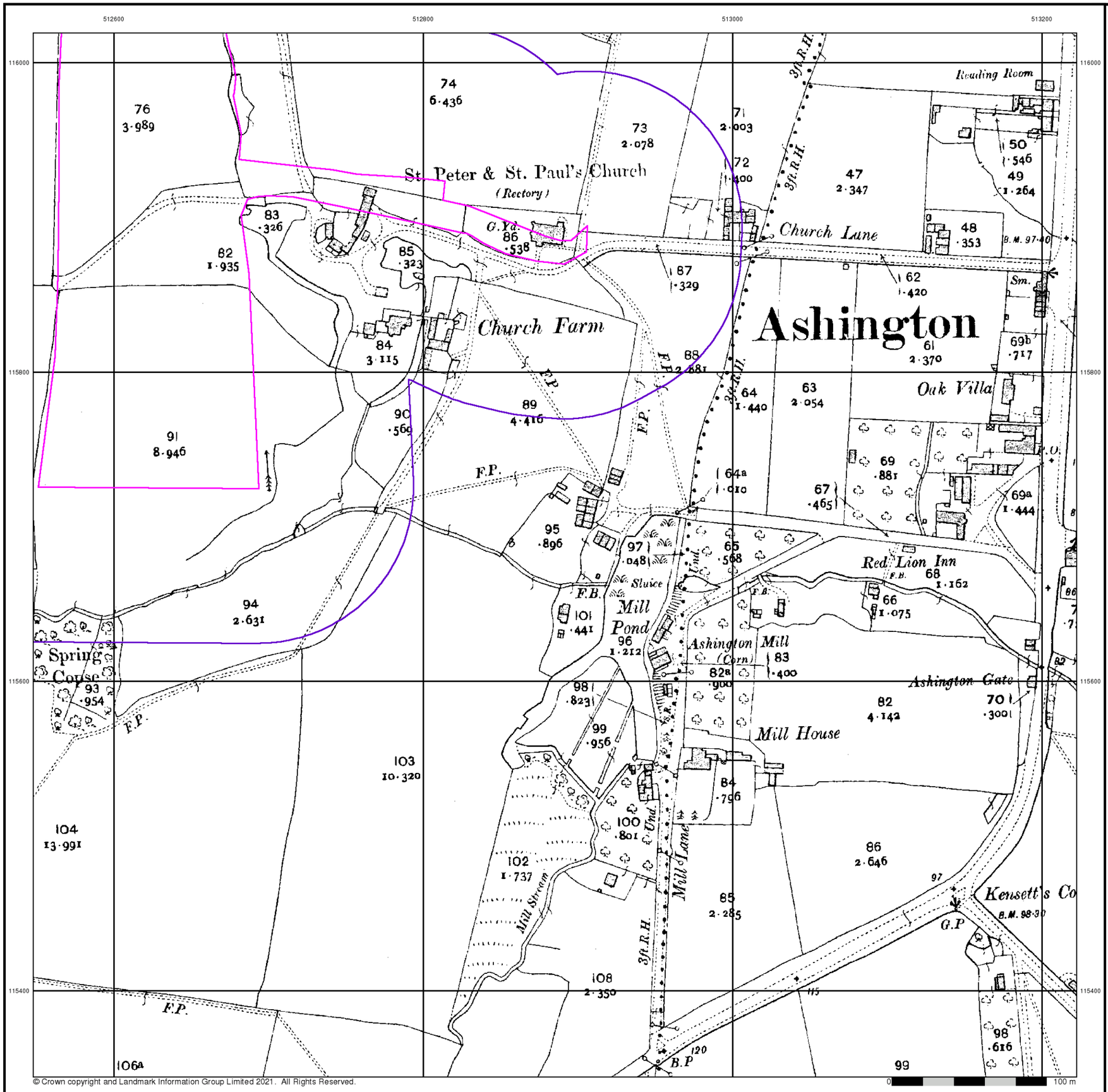
Order Details

Order Number:	287518451_1_1
Customer Ref:	52368
National Grid Reference:	512310, 116030
Slice:	A
Site Area (Ha):	15.35
Search Buffer (m):	100

Site Details

Firle, Church Lane, Ashington, PULBOROUGH, RH20 3JX

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



RSK

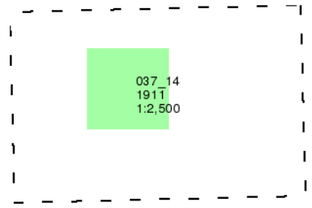
Sussex

Published 1911

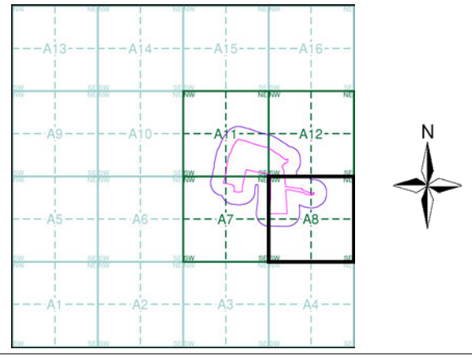
Source map scale - 1:2,500

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

Map Name(s) and Date(s)



Historical Map - Segment A8



Order Details

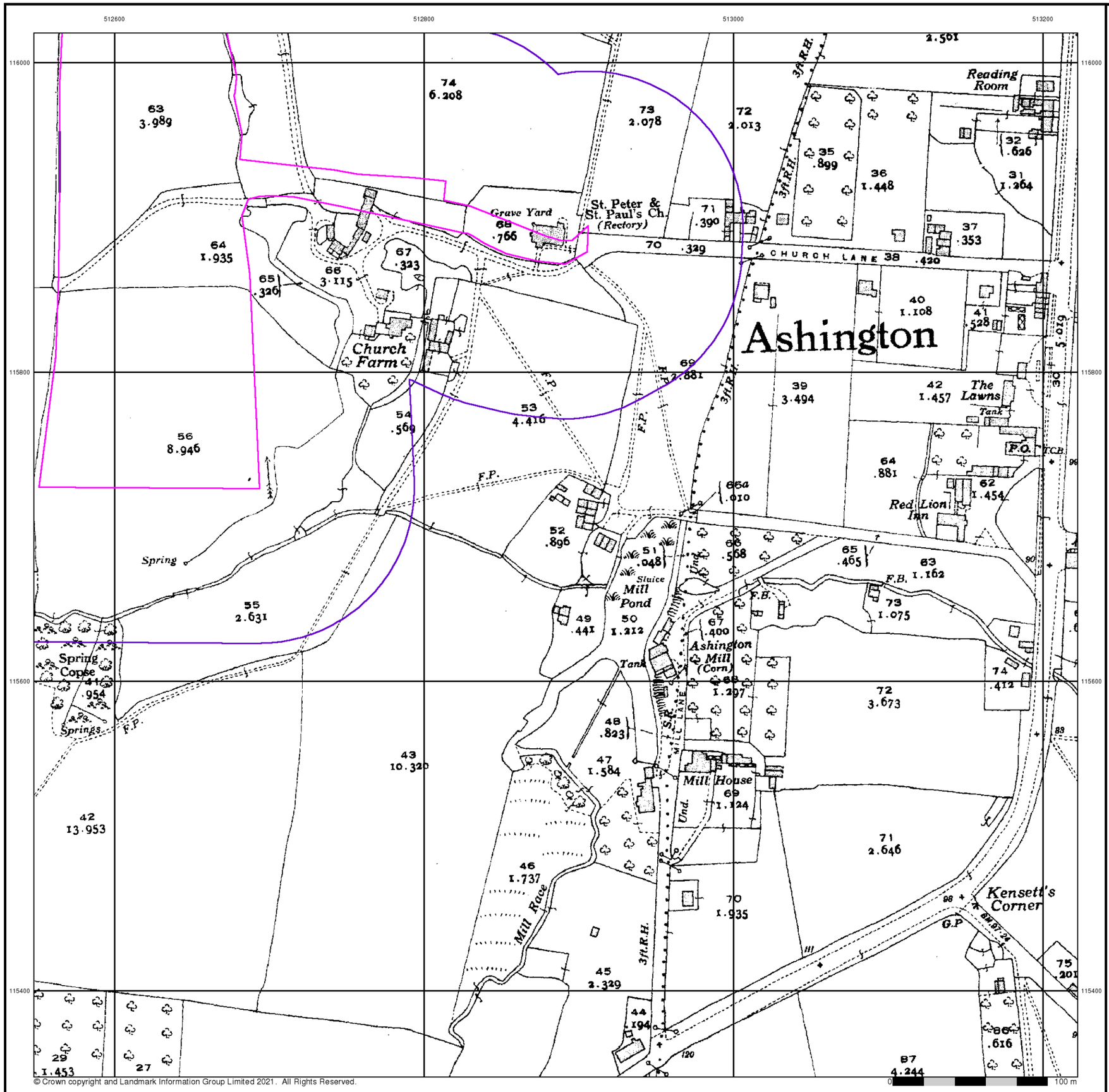
Order Number:	287518451_1_1
Customer Ref:	52368
National Grid Reference:	512310, 116030
Slice:	A
Site Area (Ha):	15.35
Search Buffer (m):	100

Site Details

Firle, Church Lane, Ashington, PULBOROUGH, RH20 3JX

Landmark INFORMATION GROUP

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



© Crown copyright and Landmark Information Group Limited 2021. All Rights Reserved.

RSK

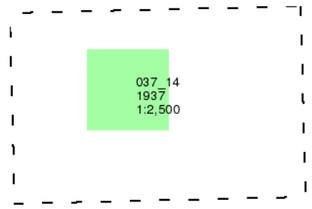
Sussex

Published 1937

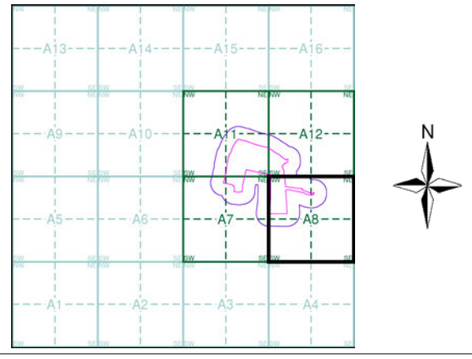
Source map scale - 1:2,500

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

Map Name(s) and Date(s)



Historical Map - Segment A8



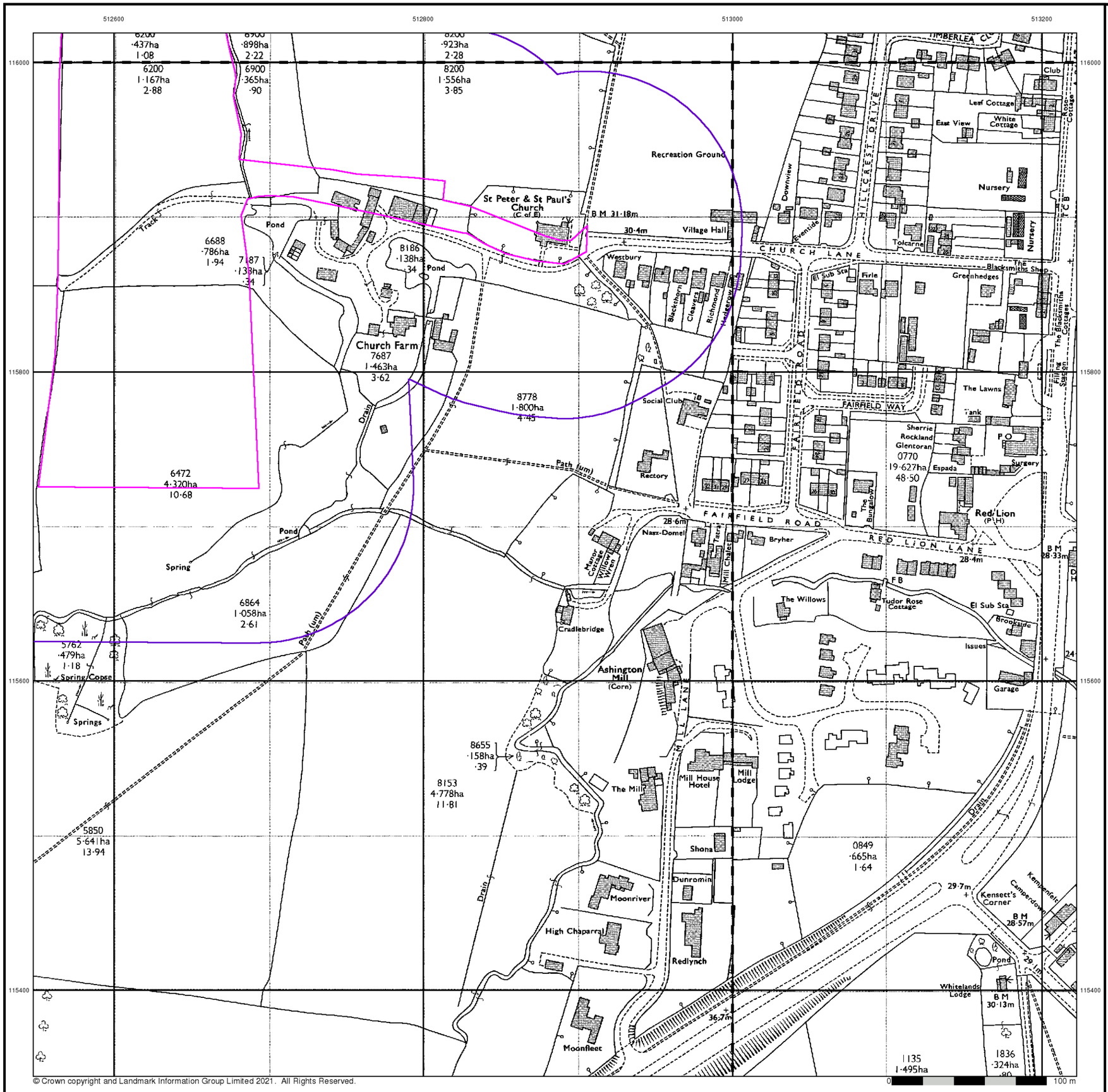
Order Details

Order Number:	287518451_1_1
Customer Ref:	52368
National Grid Reference:	512310, 116030
Slice:	A
Site Area (Ha):	15.35
Search Buffer (m):	100

Site Details

Firle, Church Lane, Ashington, PULBOROUGH, RH20 3JX

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



© Crown copyright and Landmark Information Group Limited 2021. All Rights Reserved.

RSK

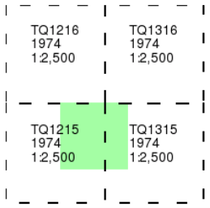
Ordnance Survey Plan

Published 1974

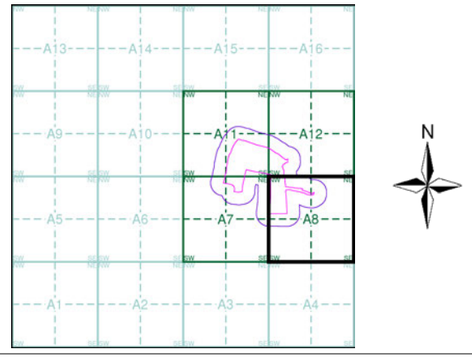
Source map scale - 1:2,500

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

Map Name(s) and Date(s)



Historical Map - Segment A8



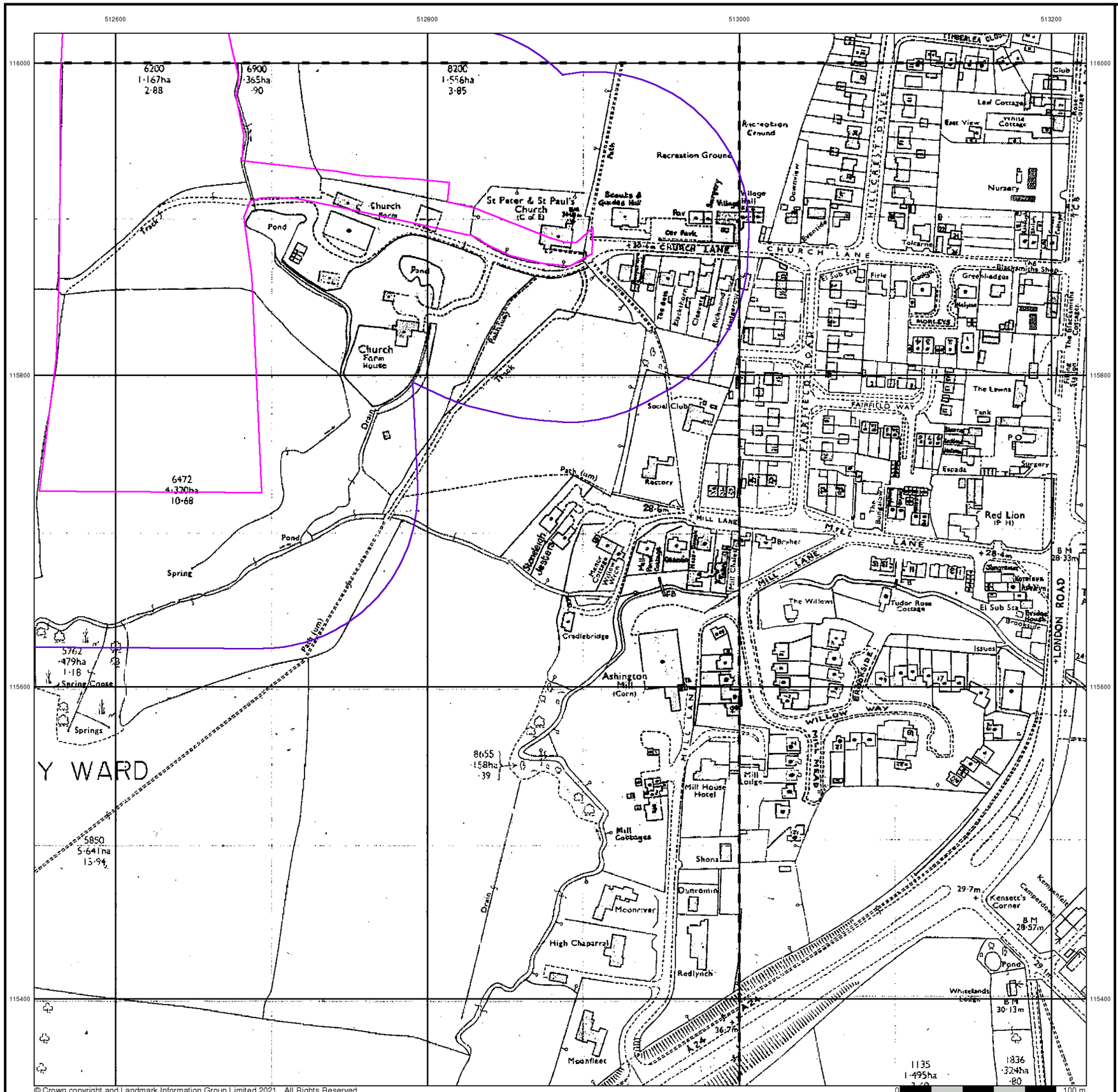
Order Details

Order Number:	287518451_1_1
Customer Ref:	52368
National Grid Reference:	512310, 116030
Slice:	A
Site Area (Ha):	15.35
Search Buffer (m):	100

Site Details

Firle, Church Lane, Ashington, PULBOROUGH, RH20 3JX

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



© Crown copyright and Landmark Information Group Limited 2021. All Rights Reserved.

RSK

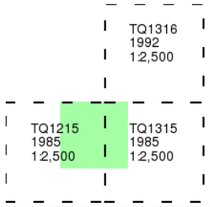
Additional SIMs

Published 1985 - 1992

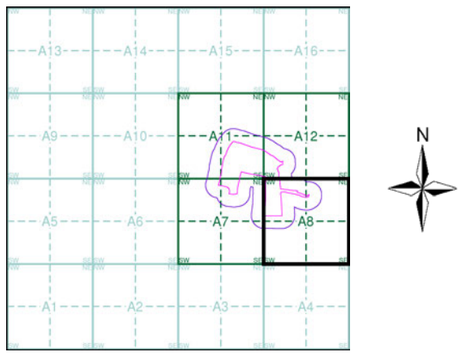
Source map scale - 1:2,500

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

Map Name(s) and Date(s)



Historical Map - Segment A8



Order Details

Order Number:	287518451_1_1
Customer Ref:	52368
National Grid Reference:	512310, 116030
Slice:	A
Site Area (Ha):	15.35
Search Buffer (m):	100

Site Details

Firle, Church Lane, Ashington, PULBOROUGH, RH20 3JX

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

© Crown copyright and Landmark Information Group Limited 2021. All Rights Reserved.

RSK

Large-Scale National Grid Data

Published 1993

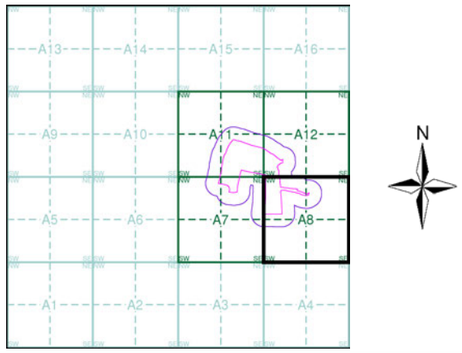
Source map scale - 1:2,500

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

Map Name(s) and Date(s)

TQ1216 1993 1:2,500	TQ1316 1993 1:2,500
TQ1215 1993 1:2,500	TQ1315 1993 1:2,500

Historical Map - Segment A8



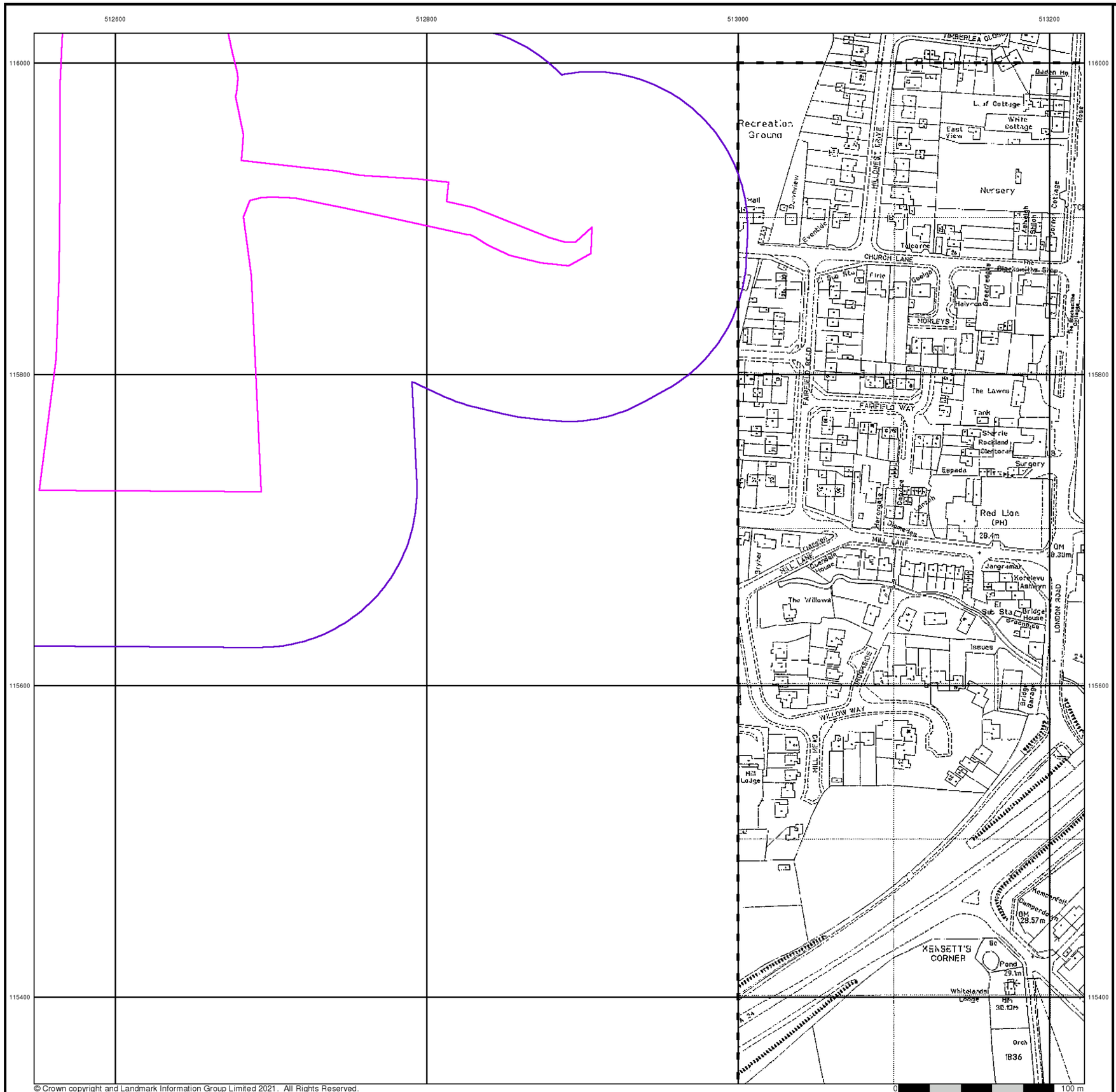
Order Details

Order Number:	287518451_1_1
Customer Ref:	52368
National Grid Reference:	512310, 116030
Slice:	A
Site Area (Ha):	15.35
Search Buffer (m):	100

Site Details

Firle, Church Lane, Ashington, PULBOROUGH, RH20 3JX

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



© Crown copyright and Landmark Information Group Limited 2021. All Rights Reserved.

RSK

Large-Scale National Grid Data

Published 1995

Source map scale - 1:2,500

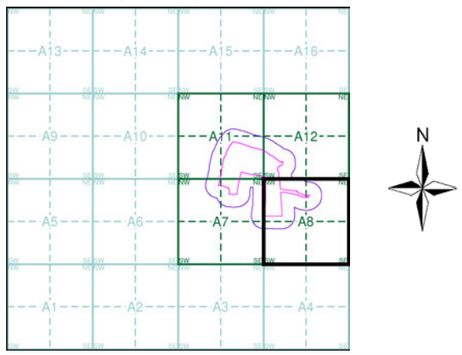
'Large Scale Na ional Grid Data' superseded S M cards (Ordnance Survey's 'Survey of Information on Microfilm') in 1992, and continued to be produced until 1999. These maps were the fore-runners of digital mapping and so provide detailed information on houses and roads, but tend to show less topographic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

Map Name(s) and Date(s)

TQ1316
1995
1:2,500

TQ1315
1995
1:2,500

Historical Map - Segment A8



Order Details

Order Number:	287518451_1_1
Customer Ref:	52368
National Grid Reference:	512310, 116030
Slice:	A
Site Area (Ha):	15.35
Search Buffer (m):	100

Site Details

Firle, Church Lane, Ashington, PULBOROUGH, RH20 3JX

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

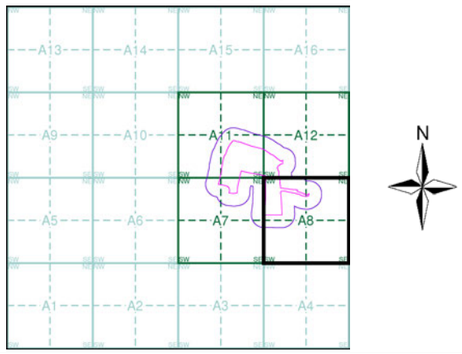
RSK

Historical Aerial Photography

Published 1999

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

Historical Aerial Photography - Segment A8



Order Details

Order Number:	287518451_1_1
Customer Ref:	52368
National Grid Reference:	512310, 116030
Slice:	A
Site Area (Ha):	15.35
Search Buffer (m):	100

Site Details

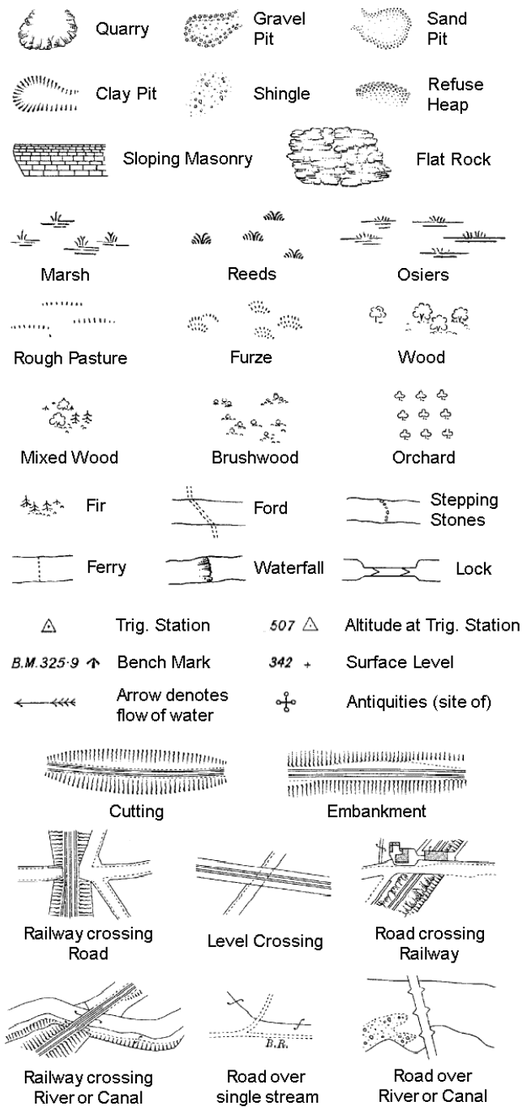
Firle, Church Lane, Ashington, PULBOROUGH, RH20 3JX

Landmark INFORMATION GROUP

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

Historical Mapping Legends

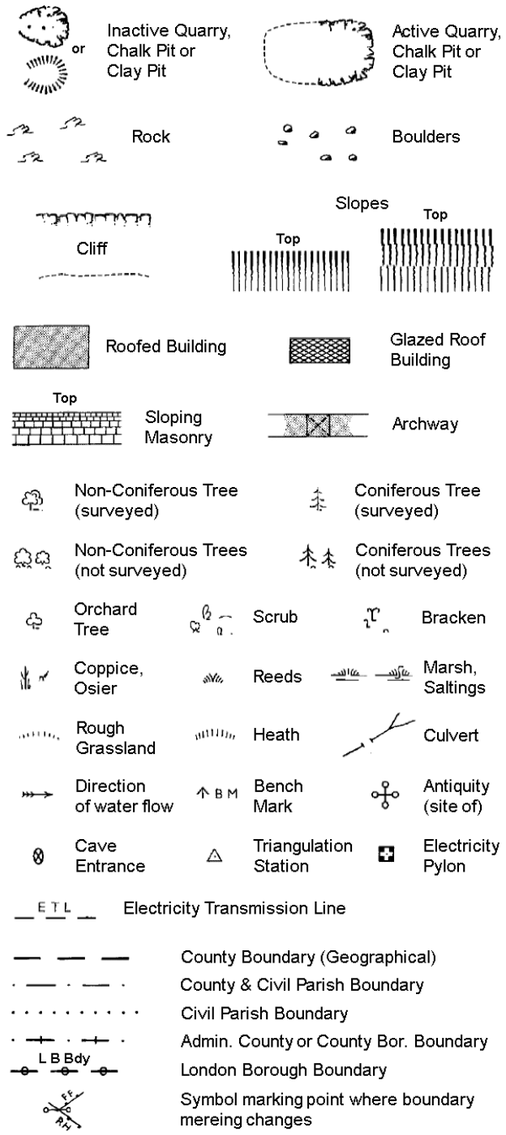
Ordnance Survey County Series and Ordnance Survey Plan 1:2,500



County Boundary (Geographical)
County & Civil Parish Boundary
Administrative County & Civil Parish Boundary
Co. Boro. Bdy. County Borough Boundary (England)
Co. Burgh Bdy. County Burgh Boundary (Scotland)

B P B S	Boundary Post or Stone	P.C.B	Police Call Box
B.R.	Bridle Road	P	Pump
E.P	Electricity Pylon	S.P	Signal Post
F.B.	Foot Bridge	Sl.	Sluice
F.P.	Foot Path	Sp.	Spring
G.P	Guide Post or Board	T.C.B	Telephone Call Box
M.S	Mile Stone	Tr.	Trough
M.P M.R	Mooring Post or Ring	W	Well

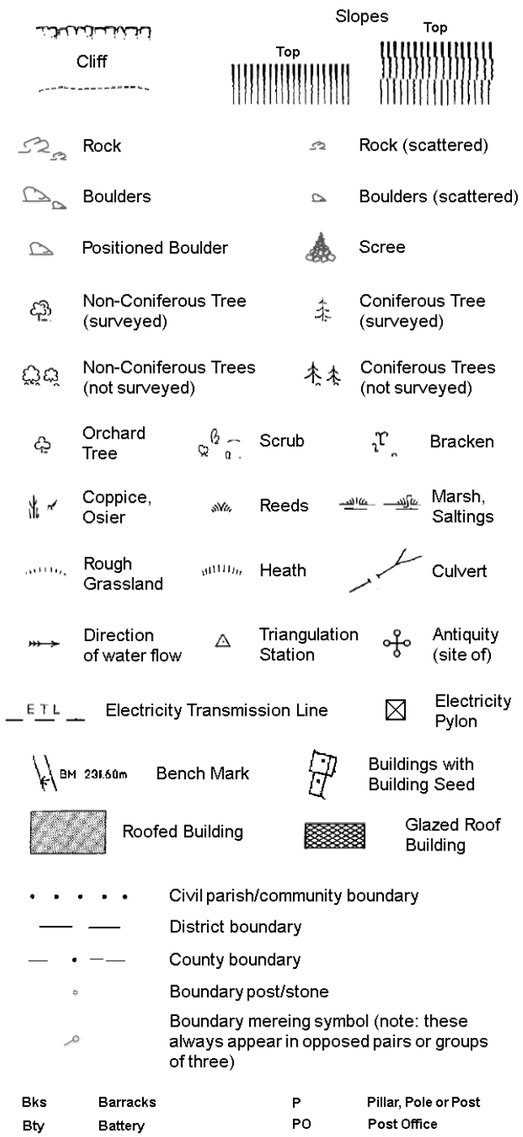
Ordnance Survey Plan, Additional SIMs and Supply of Unpublished Survey Information 1:2,500 and 1:1,250



County Boundary (Geographical)
County & Civil Parish Boundary
Civil Parish Boundary
Admin. County or County Bor. Boundary
L B Bdy London Borough Boundary
Symbol marking point where boundary mereing changes

BH	Beer House	P	Pillar, Pole or Post
BP, BS	Boundary Post or Stone	PO	Post Office
Cn, C	Capstan, Crane	PC	Public Convenience
Chy	Chimney	PH	Public House
D Fn	Drinking Fountain	Pp	Pump
El P	Electricity Pillar or Post	SB, S Br	Signal Box or Bridge
FAP	Fire Alarm Pillar	SP, SL	Signal Post or Light
FB	Foot Bridge	Spr	Spring
GP	Guide Post	Tk	Tank or Track
H	Hydrant or Hydraulic	TCB	Telephone Call Box
LC	Level Crossing	TCP	Telephone Call Post
MH	Manhole	Tr	Trough
MP	Mile Post or Mooring Post	Wr Pt, Wr T	Water Point, Water Tap
MS	Mile Stone	W	Well
NTL	Normal Tidal Limit	Wd Pp	Wind Pump

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



Civil parish/community boundary
District boundary
County boundary
Boundary post/stone
Boundary mereing symbol (note: these always appear in opposed pairs or groups of three)

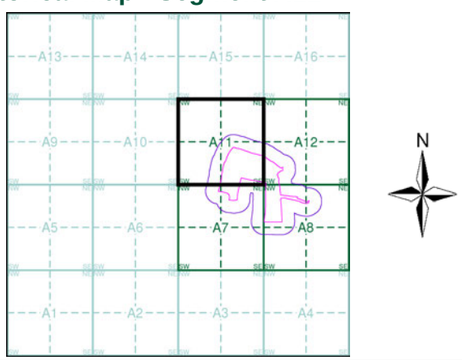
Bks	Barracks	P	Pillar, Pole or Post
Bty	Battery	PO	Post Office
Cemy	Cemetery	PC	Public Convenience
Chy	Chimney	Pp	Pump
Cis	Cistern	Ppg Sta	Pumping Station
Dismtd Rly	Dismantled Railway	PW	Place of Worship
El Gen Sta	Electricity Generating Station	Sewage Ppg Sta	Sewage Pumping Station
El P	Electricity Pole, Pillar	SB, S Br	Signal Box or Bridge
El Sub Sta	Electricity Sub Station	SP, SL	Signal Post or Light
FB	Filter Bed	Spr	Spring
Fn / D Fn	Fountain / Drinking Ftn.	Tk	Tank or Track
Gas Gov	Gas Valve Compound	Tr	Trough
GVC	Gas Governer	Wd Pp	Wind Pump
GP	Guide Post	Wr Pt, Wr T	Water Point, Water Tap
MH	Manhole	Wks	Works (building or area)
MP, MS	Mile Post or Mile Stone	W	Well

RSK

Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Sussex	1:2,500	1875 - 1879	2
Sussex	1:2,500	1897	3
Sussex	1:2,500	1911	4
Sussex	1:2,500	1937 - 1939	5
Ordnance Survey Plan	1:2,500	1974	6
Large-Scale National Grid Data	1:2,500	1993	7
Historical Aerial Photography	1:2,500	1999	8

Historical Map - Segment A11



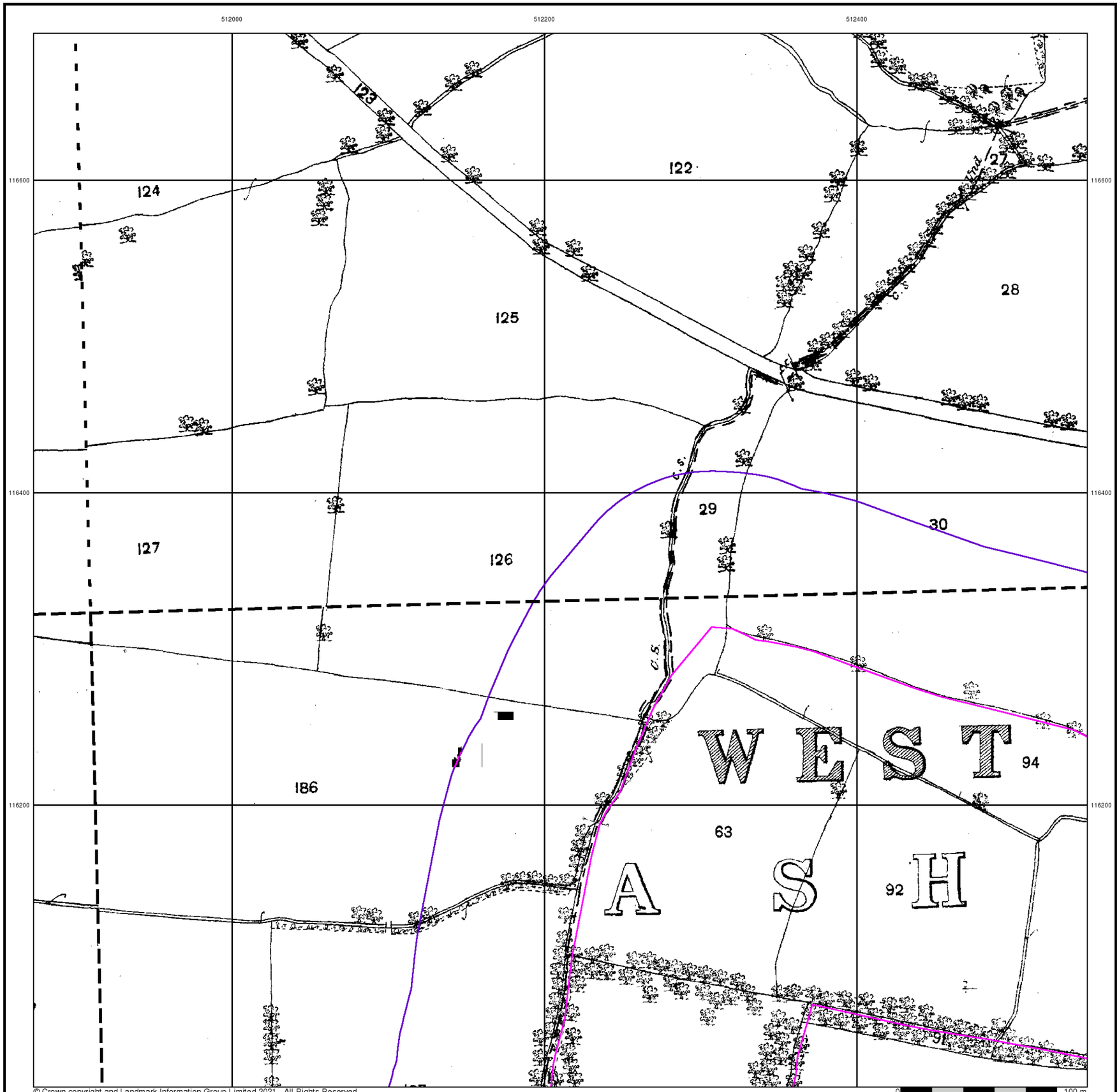
Order Details

Order Number:	287518451_1_1
Customer Ref:	52368
National Grid Reference:	512310, 116030
Slice:	A
Site Area (Ha):	15.35
Search Buffer (m):	100

Site Details

Firle, Church Lane, Ashington, PULBOROUGH, RH20 3JX

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



© Crown copyright and Landmark Information Group Limited 2021. All Rights Reserved.

0 100 m

RSK

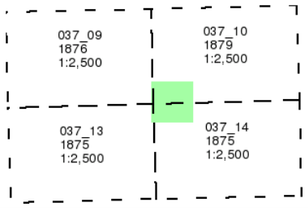
Sussex

Published 1875 - 1879

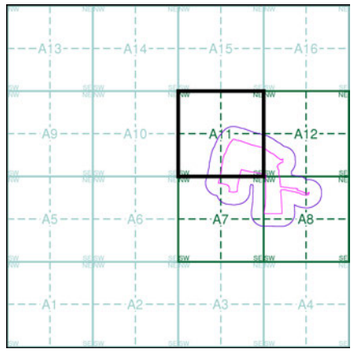
Source map scale - 1:2,500

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

Map Name(s) and Date(s)



Historical Map - Segment A11



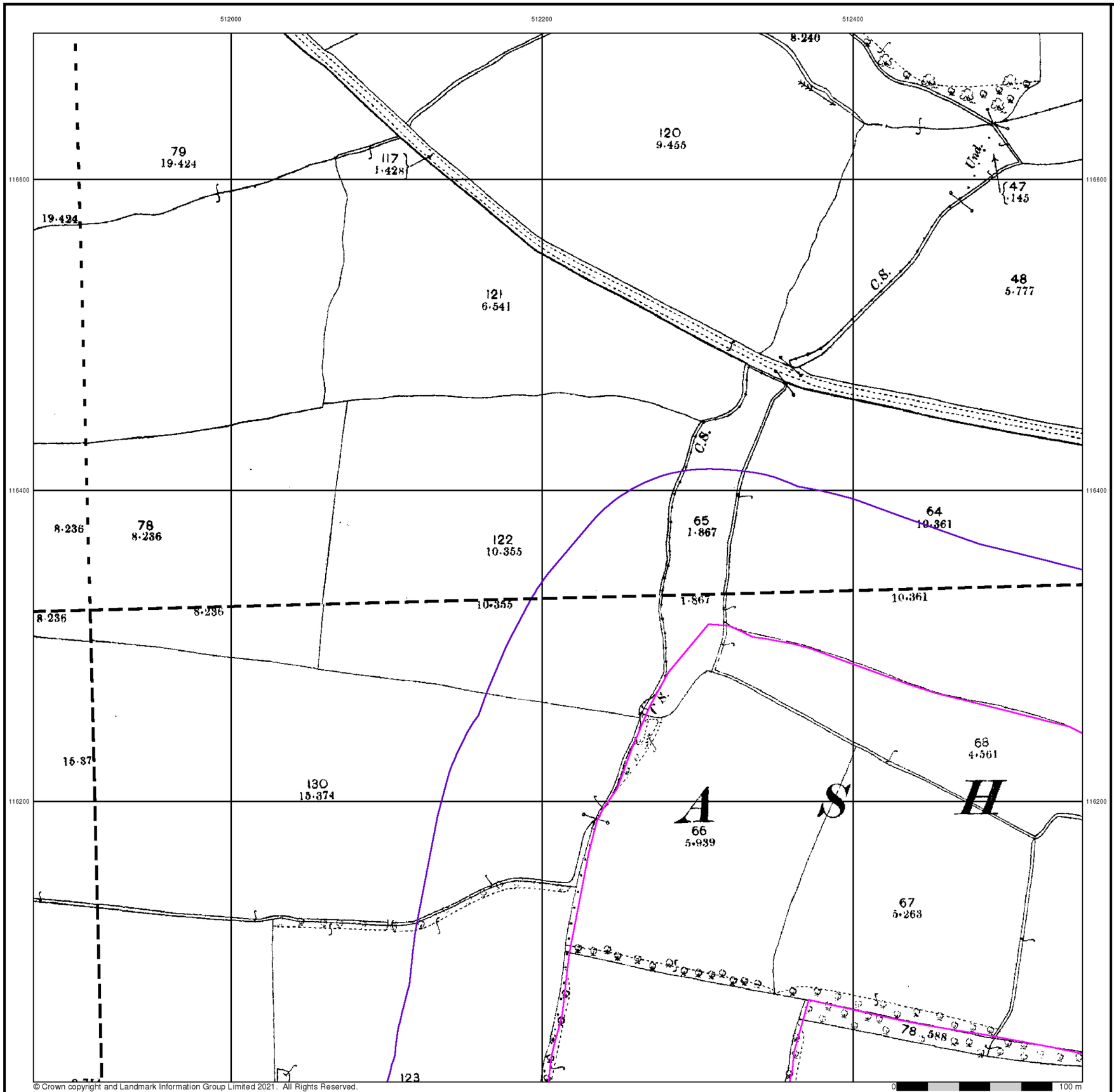
Order Details

Order Number:	287518451_1_1
Customer Ref:	52368
National Grid Reference:	512310, 116030
Slice:	A
Site Area (Ha):	15.35
Search Buffer (m):	100

Site Details

Firle, Church Lane, Ashington, PULBOROUGH, RH20 3JX

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



© Crown copyright and Landmark Information Group Limited 2021. All Rights Reserved.

RSK

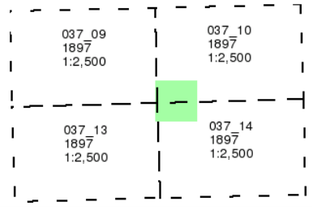
Sussex

Published 1897

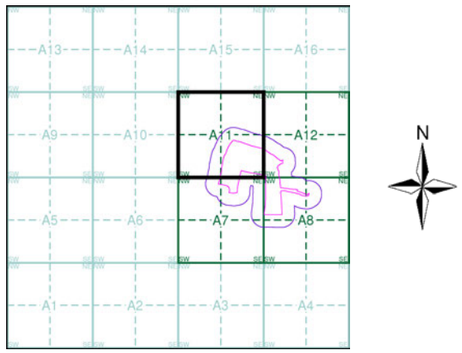
Source map scale - 1:2,500

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

Map Name(s) and Date(s)



Historical Map - Segment A11



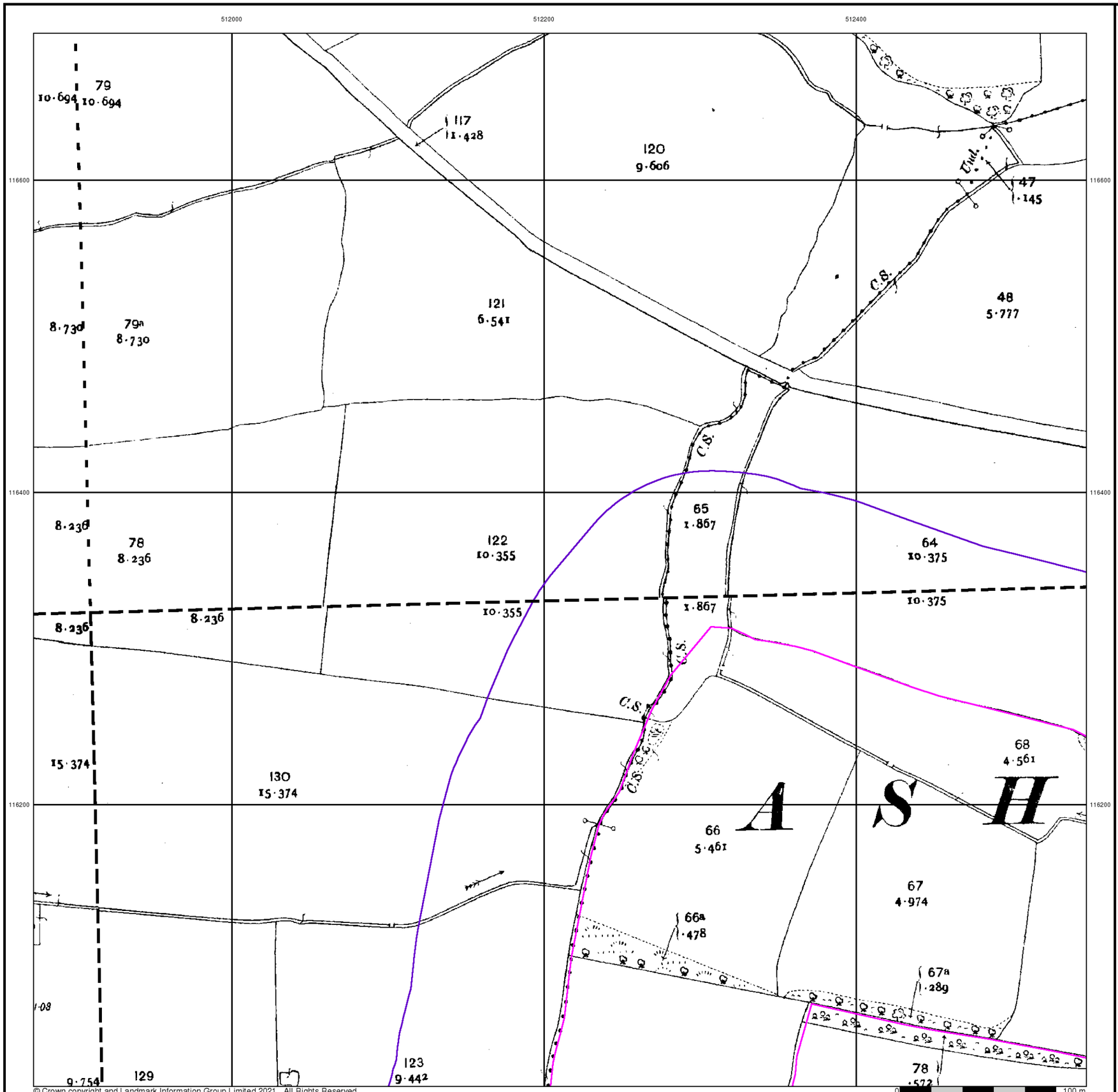
Order Details

Order Number:	287518451_1_1
Customer Ref:	52368
National Grid Reference:	512310, 116030
Slice:	A
Site Area (Ha):	15.35
Search Buffer (m):	100

Site Details

Firle, Church Lane, Ashington, PULBOROUGH, RH20 3JX

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



© Crown copyright and Landmark Information Group Limited 2021. All Rights Reserved.

RSK

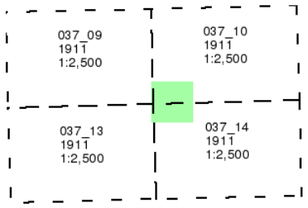
Sussex

Published 1911

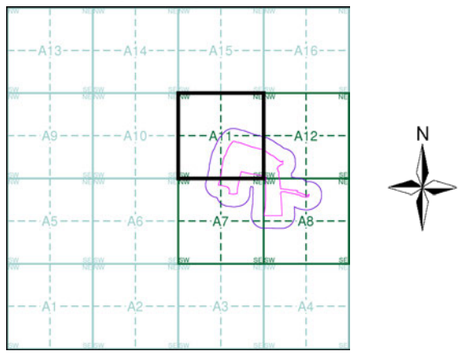
Source map scale - 1:2,500

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

Map Name(s) and Date(s)



Historical Map - Segment A11



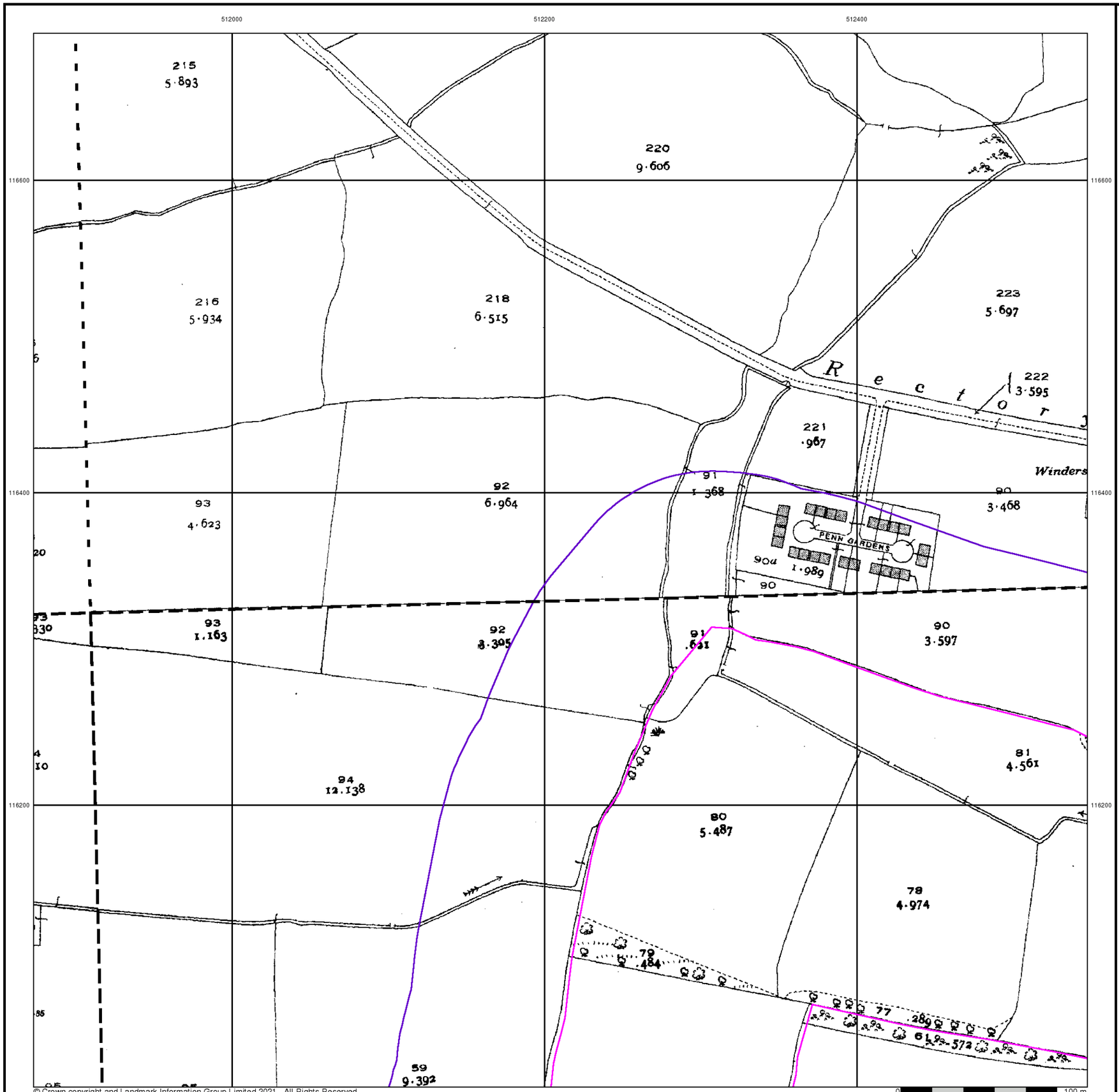
Order Details

Order Number:	287518451_1_1
Customer Ref:	52368
National Grid Reference:	512310, 116030
Slice:	A
Site Area (Ha):	15.35
Search Buffer (m):	100

Site Details

Firle, Church Lane, Ashington, PULBOROUGH, RH20 3JX

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



© Crown copyright and Landmark Information Group Limited 2021. All Rights Reserved.

RSK

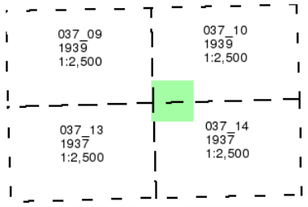
Sussex

Published 1937 - 1939

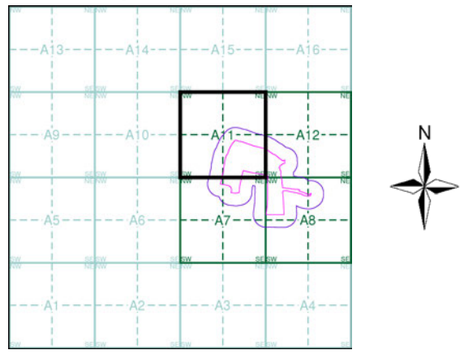
Source map scale - 1:2,500

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

Map Name(s) and Date(s)



Historical Map - Segment A11

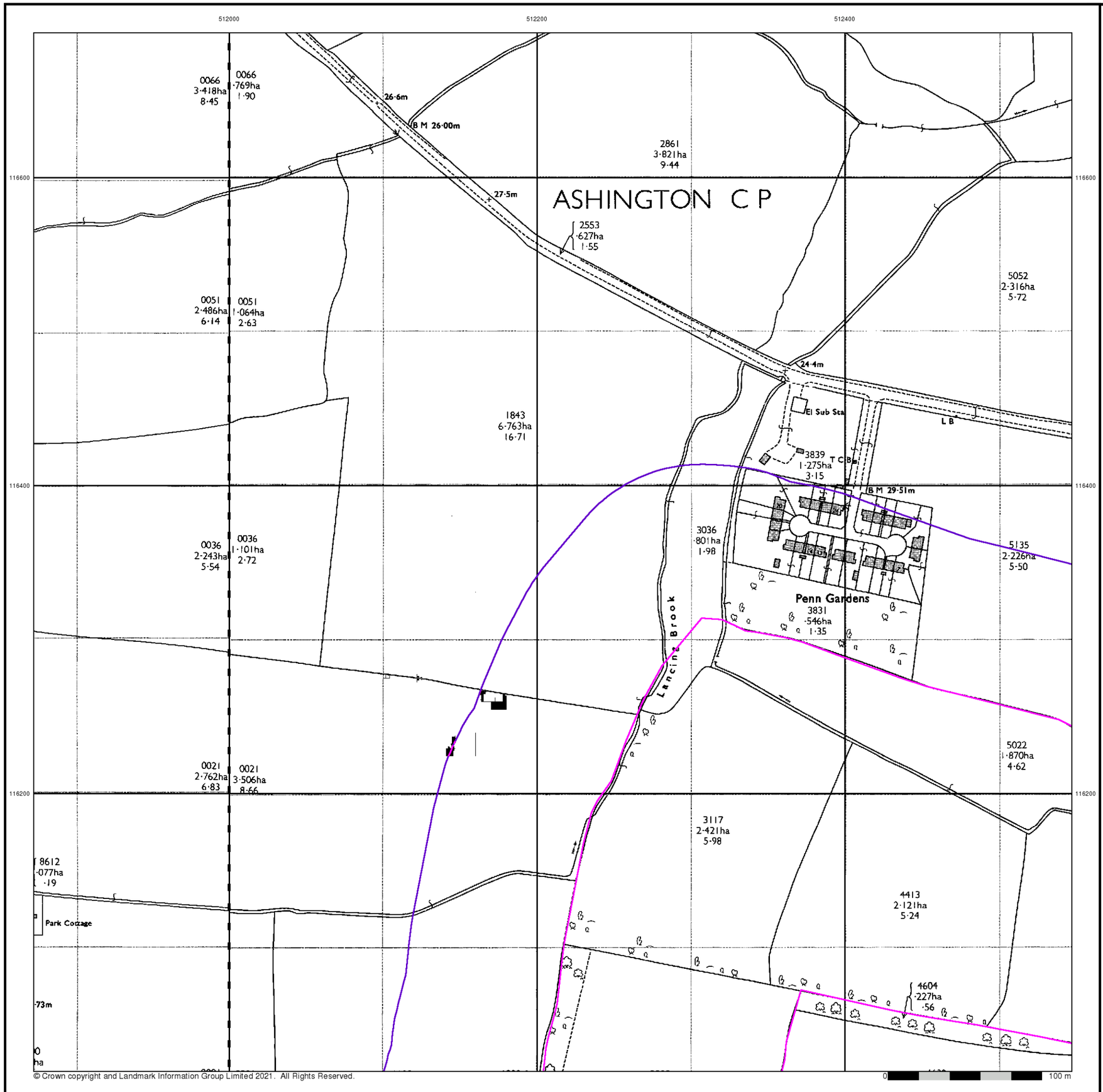


Order Details

Order Number:	287518451_1_1
Customer Ref:	52368
National Grid Reference:	512310, 116030
Slice:	A
Site Area (Ha):	15.35
Search Buffer (m):	100

Site Details

Firle, Church Lane, Ashington, PULBOROUGH, RH20 3JX



RSK

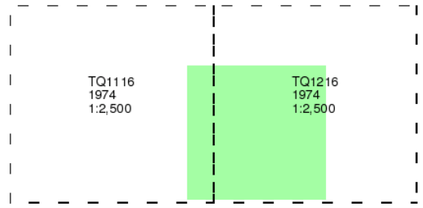
Ordnance Survey Plan

Published 1974

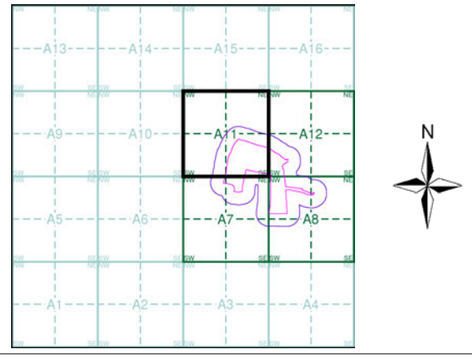
Source map scale - 1:2,500

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

Map Name(s) and Date(s)



Historical Map - Segment A11



Order Details

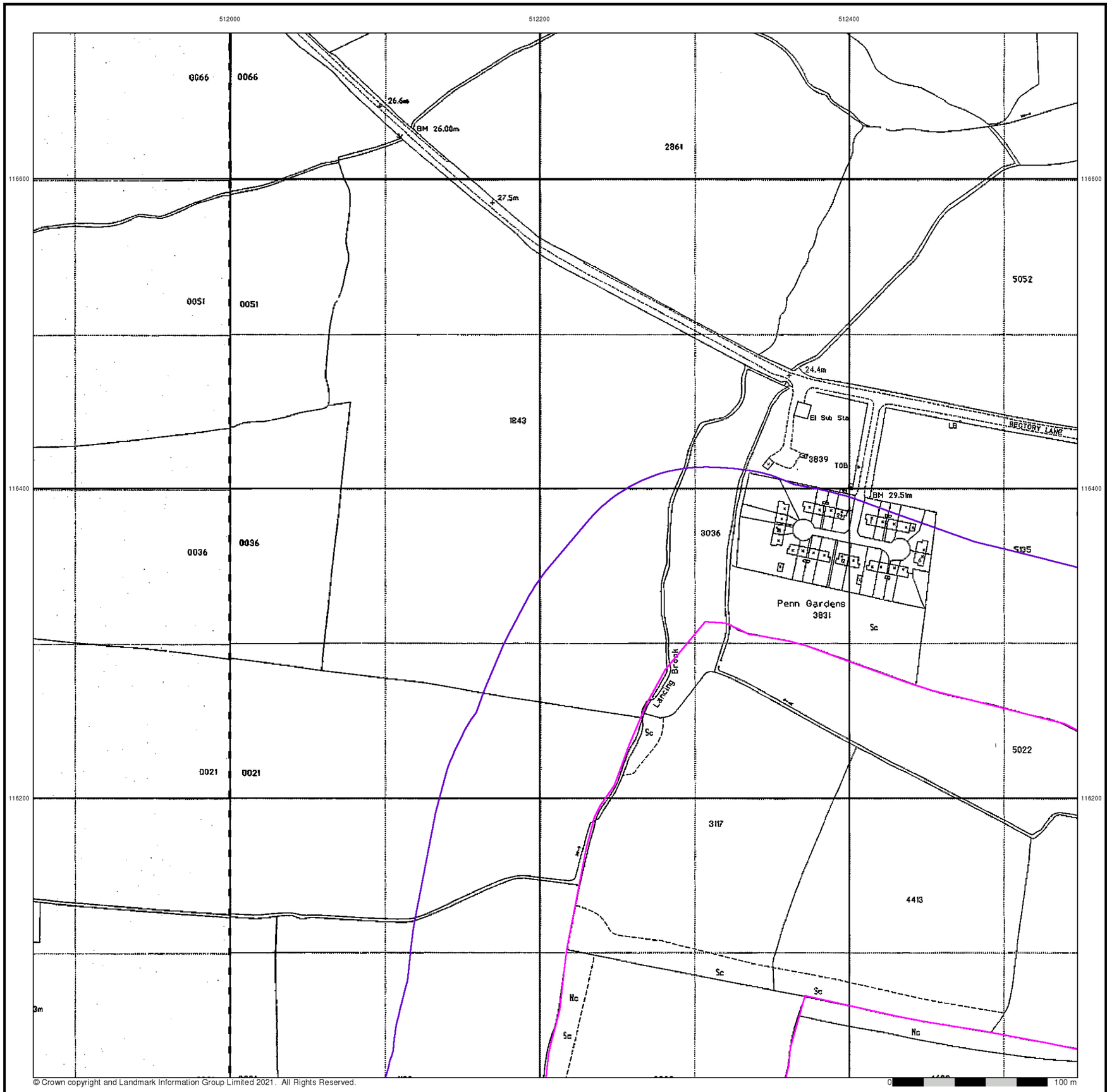
Order Number:	287518451_1_1
Customer Ref:	52368
National Grid Reference:	512310, 116030
Slice:	A
Site Area (Ha):	15.35
Search Buffer (m):	100

Site Details

Firle, Church Lane, Ashington, PULBOROUGH, RH20 3JX

Landmark INFORMATION GROUP

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



© Crown copyright and Landmark Information Group Limited 2021. All Rights Reserved.

RSK

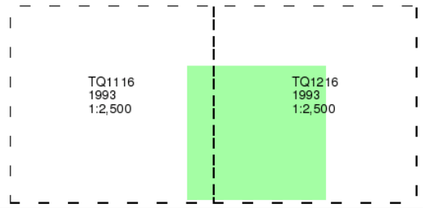
Large-Scale National Grid Data

Published 1993

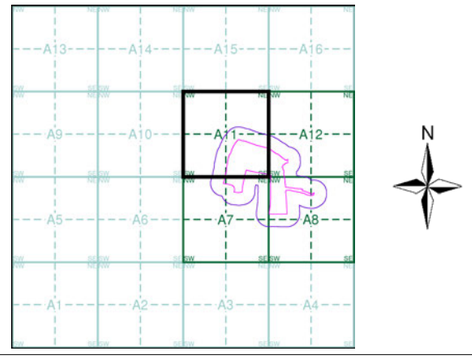
Source map scale - 1:2,500

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

Map Name(s) and Date(s)



Historical Map - Segment A11



Order Details

Order Number:	287518451_1_1
Customer Ref:	52368
National Grid Reference:	512310, 116030
Slice:	A
Site Area (Ha):	15.35
Search Buffer (m):	100

Site Details

Firle, Church Lane, Ashington, PULBOROUGH, RH20 3JX

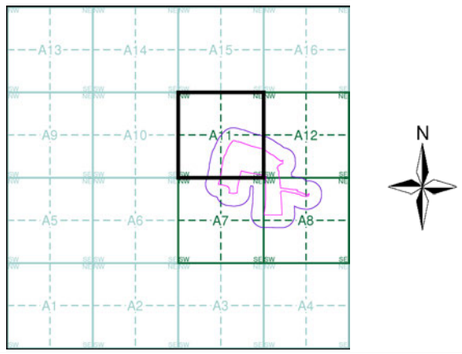
Landmark INFORMATION GROUP
Tel: 0844 844 9952
Fax: 0844 844 9951
Web: www.envirocheck co uk

Historical Aerial Photography

Published 1999

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

Historical Aerial Photography - Segment A11



Order Details

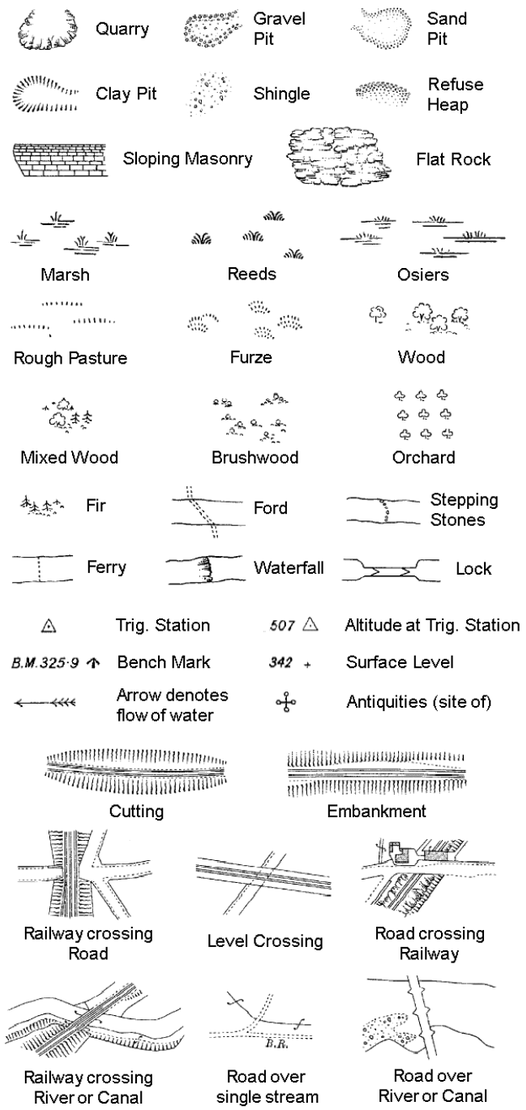
Order Number:	287518451_1_1
Customer Ref:	52368
National Grid Reference:	512310, 116030
Slice:	A
Site Area (Ha):	15.35
Search Buffer (m):	100

Site Details

Firle, Church Lane, Ashington, PULBOROUGH, RH20 3JX

Historical Mapping Legends

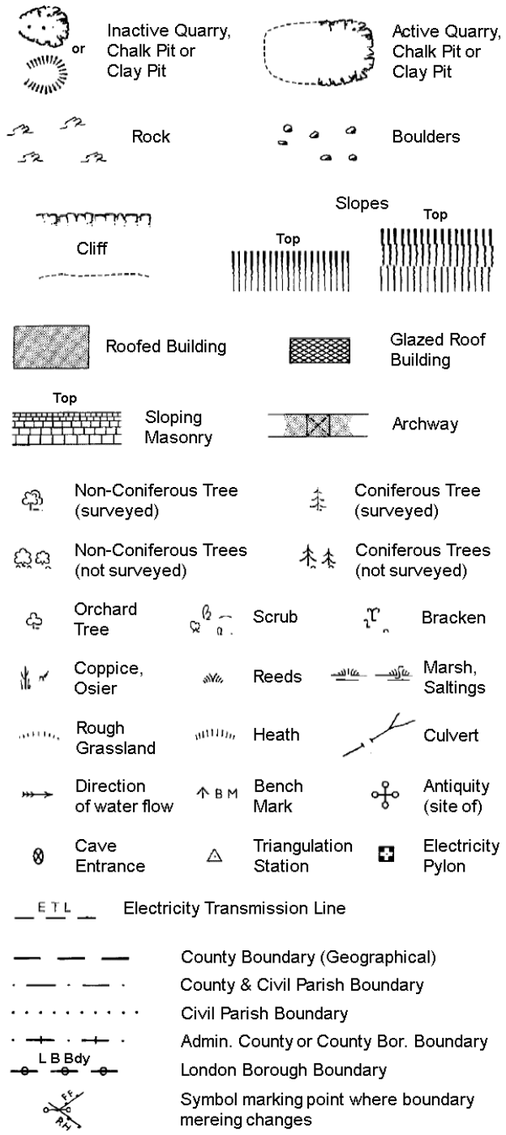
Ordnance Survey County Series and Ordnance Survey Plan 1:2,500



County Boundary (Geographical)
County & Civil Parish Boundary
Administrative County & Civil Parish Boundary
Co. Boro. Bdy. County Borough Boundary (England)
Co. Burgh Bdy. County Burgh Boundary (Scotland)

B P B S	Boundary Post or Stone	P.C.B	Police Call Box
B.R.	Bridle Road	P	Pump
E.P	Electricity Pylon	S.P	Signal Post
F.B.	Foot Bridge	St.	Sluice
F.P.	Foot Path	Sp.	Spring
G.P	Guide Post or Board	T.C.B	Telephone Call Box
M.S	Mile Stone	Tr.	Trough
M.P M.R	Mooring Post or Ring	W	Well

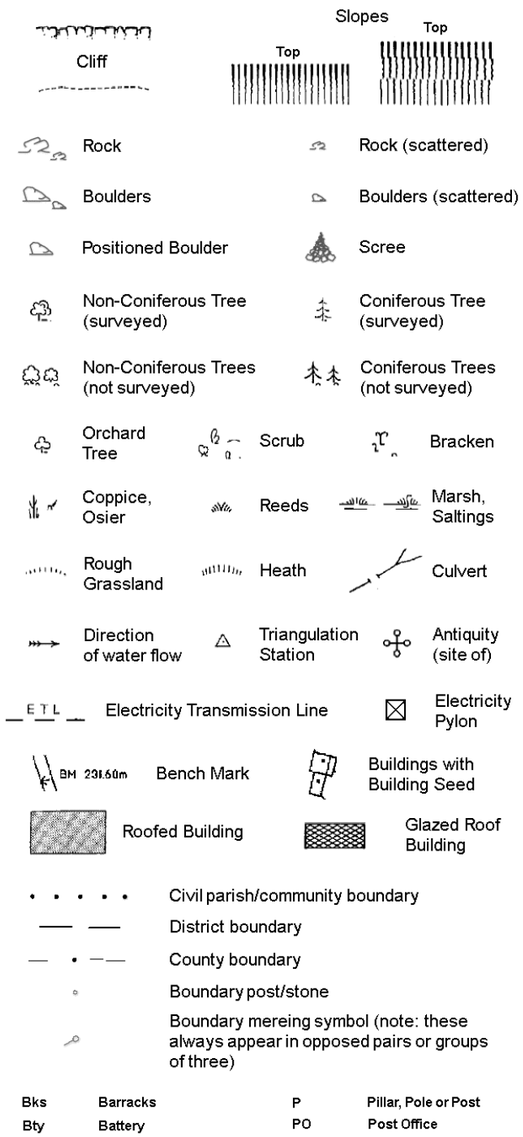
Ordnance Survey Plan, Additional SIMs and Supply of Unpublished Survey Information 1:2,500 and 1:1,250



County Boundary (Geographical)
County & Civil Parish Boundary
Civil Parish Boundary
Admin. County or County Bor. Boundary
L B Bdy London Borough Boundary
Symbol marking point where boundary mereing changes

BH	Beer House	P	Pillar, Pole or Post
BP, BS	Boundary Post or Stone	PO	Post Office
Cn, C	Capstan, Crane	PC	Public Convenience
Chy	Chimney	PH	Public House
D Fn	Drinking Fountain	Pp	Pump
El P	Electricity Pillar or Post	SB, S Br	Signal Box or Bridge
FAP	Fire Alarm Pillar	SP, SL	Signal Post or Light
FB	Foot Bridge	Spr	Spring
GP	Guide Post	Tk	Tank or Track
H	Hydrant or Hydraulic	TCB	Telephone Call Box
LC	Level Crossing	TCP	Telephone Call Post
MH	Manhole	Tr	Trough
MP	Mile Post or Mooring Post	Wr Pt, Wr T	Water Point, Water Tap
MS	Mile Stone	W	Well
NTL	Normal Tidal Limit	Wd Pp	Wind Pump

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



Civil parish/community boundary
District boundary
County boundary
Boundary post/stone
Boundary mereing symbol (note: these always appear in opposed pairs or groups of three)

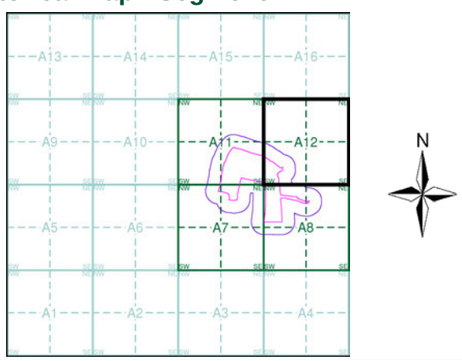
Bks	Barracks	P	Pillar, Pole or Post
Bty	Battery	PO	Post Office
Cemy	Cemetery	PC	Public Convenience
Chy	Chimney	Pp	Pump
Cis	Cistern	Ppg Sta	Pumping Station
Dismtd Rly	Dismantled Railway	PW	Place of Worship
El Gen Sta	Electricity Generating Station	Sewage Ppg Sta	Sewage Pumping Station
El P	Electricity Pole, Pillar	SB, S Br	Signal Box or Bridge
El Sub Sta	Electricity Sub Station	SP, SL	Signal Post or Light
FB	Filter Bed	Spr	Spring
Fn / D Fn	Fountain / Drinking Ftn.	Tk	Tank or Track
Gas Gov	Gas Valve Compound	Tr	Trough
GVC	Gas Governer	Wd Pp	Wind Pump
GP	Guide Post	Wr Pt, Wr T	Water Point, Water Tap
MH	Manhole	Wks	Works (building or area)
MP, MS	Mile Post or Mile Stone	W	Well

RSK

Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Sussex	1:2,500	1875 - 1879	2
Sussex	1:2,500	1897	3
Sussex	1:2,500	1911	4
Sussex	1:2,500	1937 - 1939	5
Ordnance Survey Plan	1:2,500	1974	6
Additional SIMs	1:2,500	1992	7
Large-Scale National Grid Data	1:2,500	1993	8
Large-Scale National Grid Data	1:2,500	1995	9
Historical Aerial Photography	1:2,500	1999	10

Historical Map - Segment A12



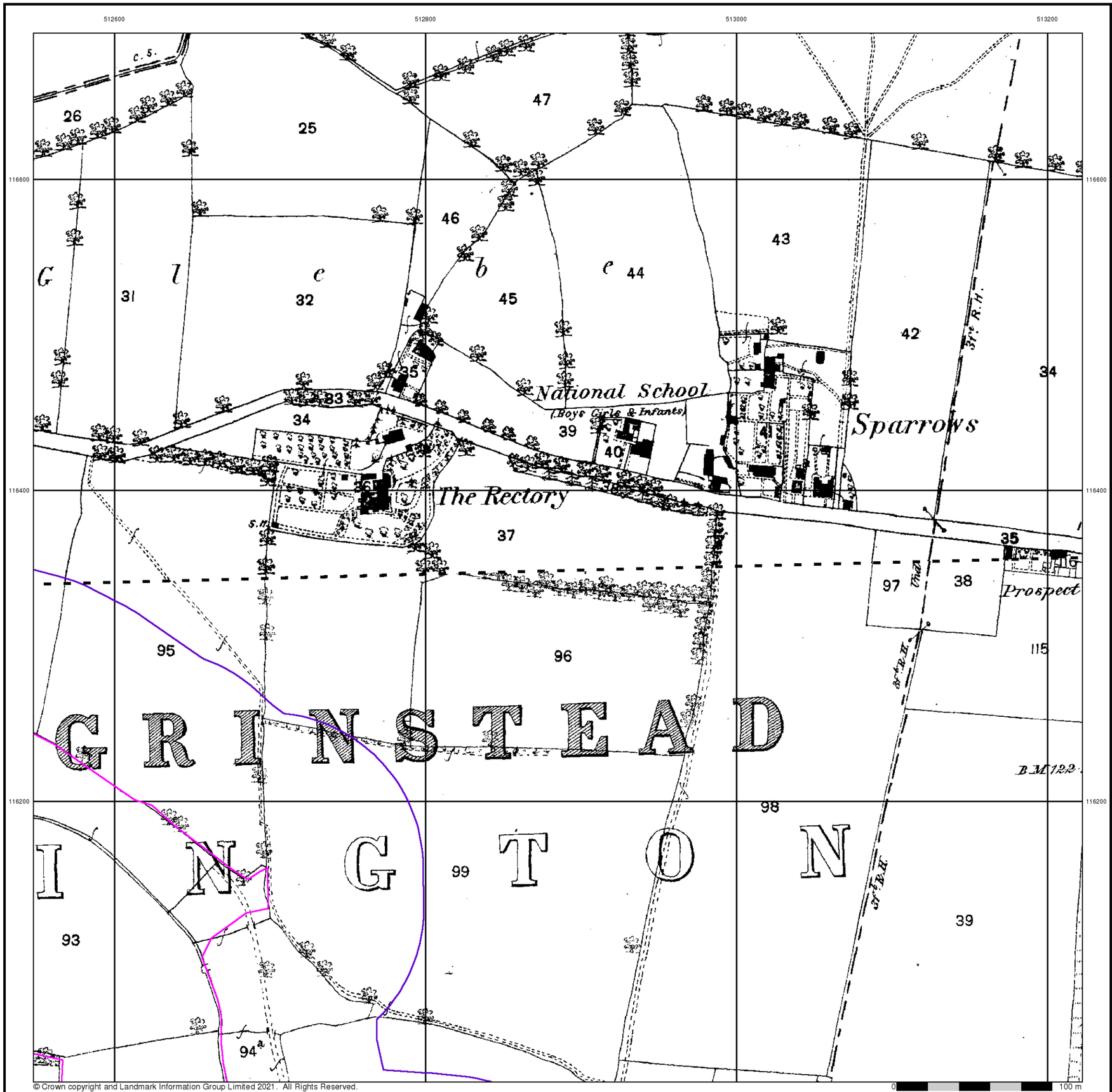
Order Details

Order Number:	287518451_1_1
Customer Ref:	52368
National Grid Reference:	512310, 116030
Slice:	A
Site Area (Ha):	15.35
Search Buffer (m):	100

Site Details

Firle, Church Lane, Ashington, PULBOROUGH, RH20 3JX

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



RSK

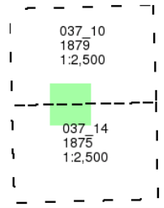
Sussex

Published 1875 - 1879

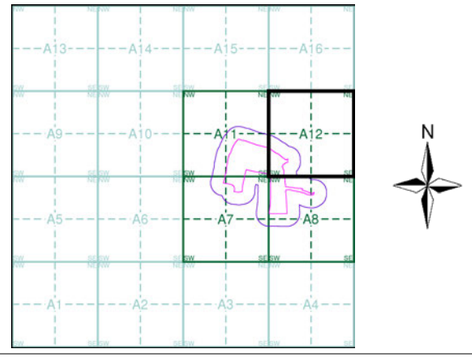
Source map scale - 1:2,500

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

Map Name(s) and Date(s)



Historical Map - Segment A12



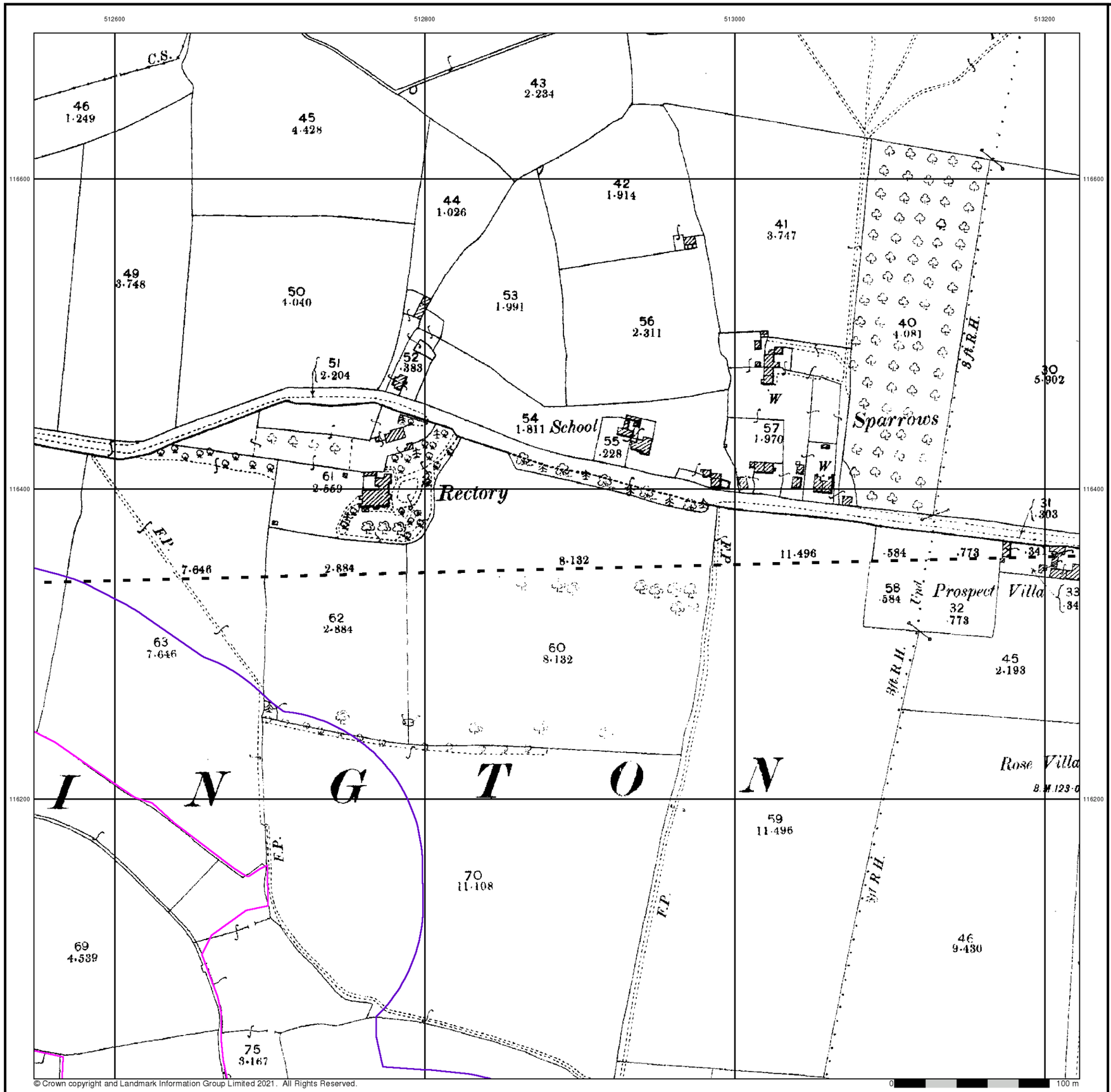
Order Details

Order Number:	287518451_1_1
Customer Ref:	52368
National Grid Reference:	512310, 116030
Slice:	A
Site Area (Ha):	15.35
Search Buffer (m):	100

Site Details

Firle, Church Lane, Ashington, PULBOROUGH, RH20 3JX

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



© Crown copyright and Landmark Information Group Limited 2021. All Rights Reserved.

RSK

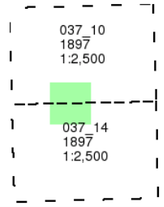
Sussex

Published 1897

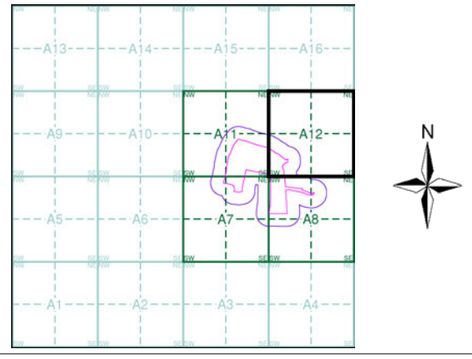
Source map scale - 1:2,500

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

Map Name(s) and Date(s)



Historical Map - Segment A12



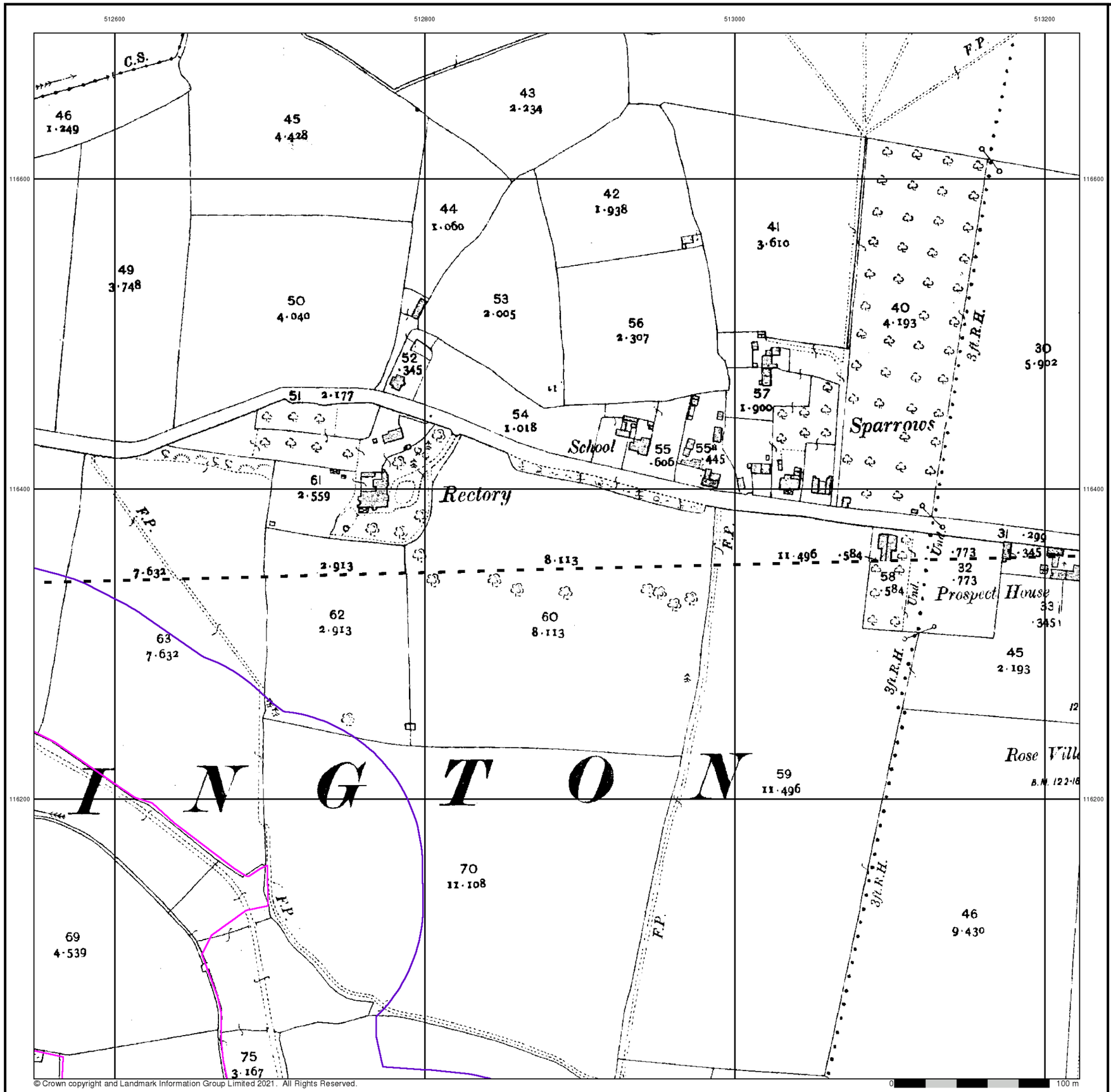
Order Details

Order Number:	287518451_1_1
Customer Ref:	52368
National Grid Reference:	512310, 116030
Slice:	A
Site Area (Ha):	15.35
Search Buffer (m):	100

Site Details

Firle, Church Lane, Ashington, PULBOROUGH, RH20 3JX

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



RSK

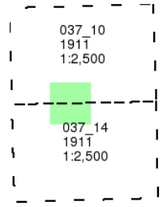
Sussex

Published 1911

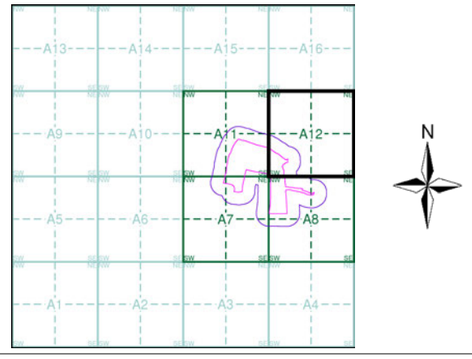
Source map scale - 1:2,500

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

Map Name(s) and Date(s)



Historical Map - Segment A12



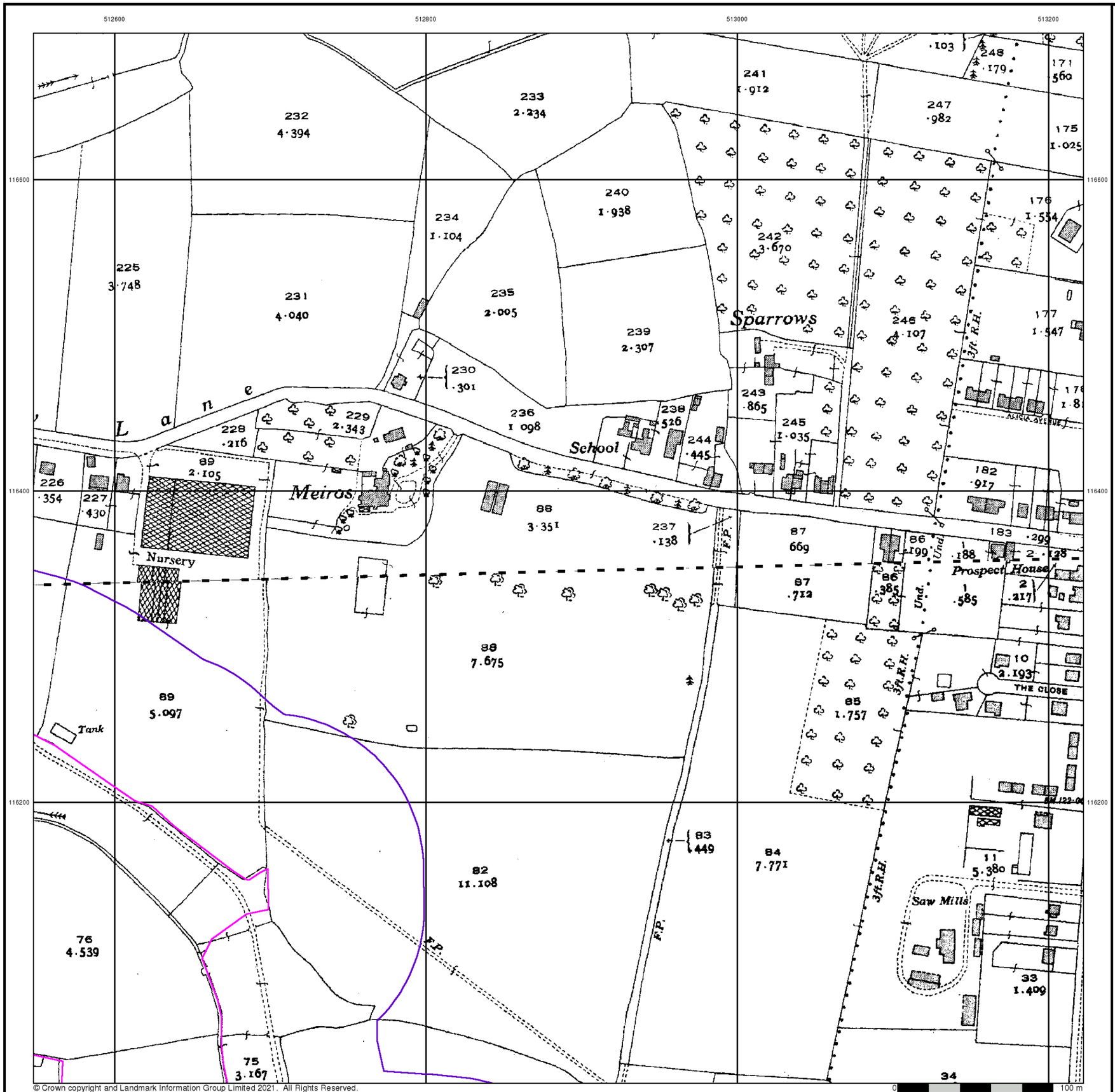
Order Details

Order Number:	287518451_1_1
Customer Ref:	52368
National Grid Reference:	512310, 116030
Slice:	A
Site Area (Ha):	15.35
Search Buffer (m):	100

Site Details

Firle, Church Lane, Ashington, PULBOROUGH, RH20 3JX

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



© Crown copyright and Landmark Information Group Limited 2021. All Rights Reserved.

RSK

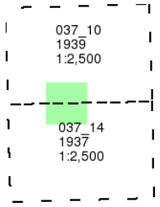
Sussex

Published 1937 - 1939

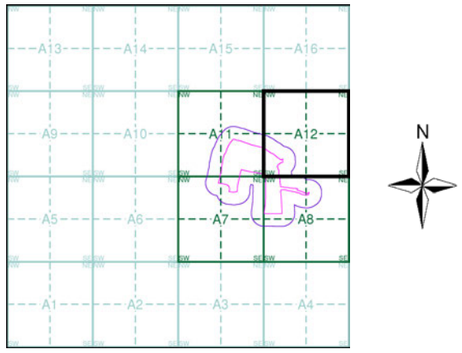
Source map scale - 1:2,500

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

Map Name(s) and Date(s)



Historical Map - Segment A12



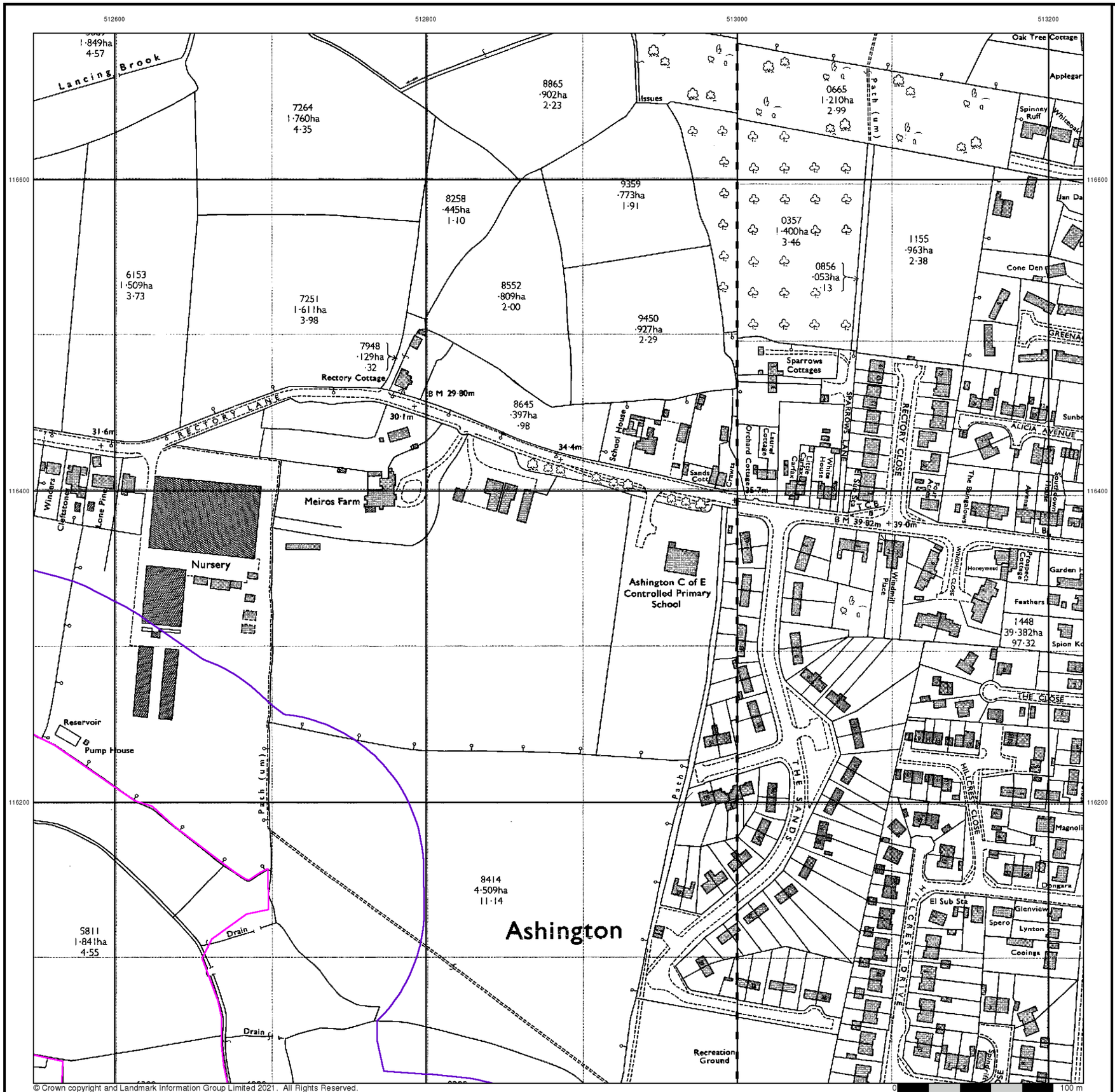
Order Details

Order Number:	287518451_1_1
Customer Ref:	52368
National Grid Reference:	512310, 116030
Slice:	A
Site Area (Ha):	15.35
Search Buffer (m):	100

Site Details

Firle, Church Lane, Ashington, PULBOROUGH, RH20 3JX

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



© Crown copyright and Landmark Information Group Limited 2021. All Rights Reserved.

RSK

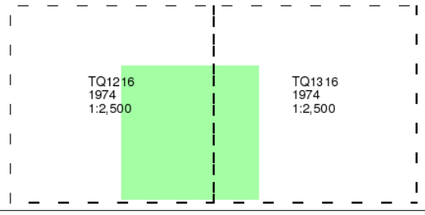
Ordnance Survey Plan

Published 1974

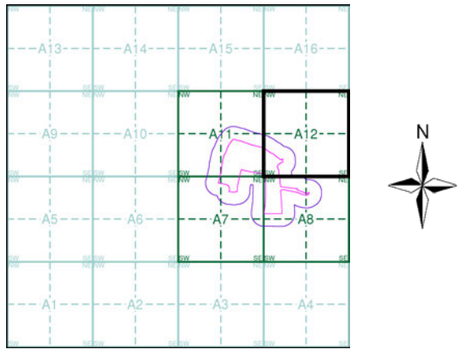
Source map scale - 1:2,500

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

Map Name(s) and Date(s)



Historical Map - Segment A12



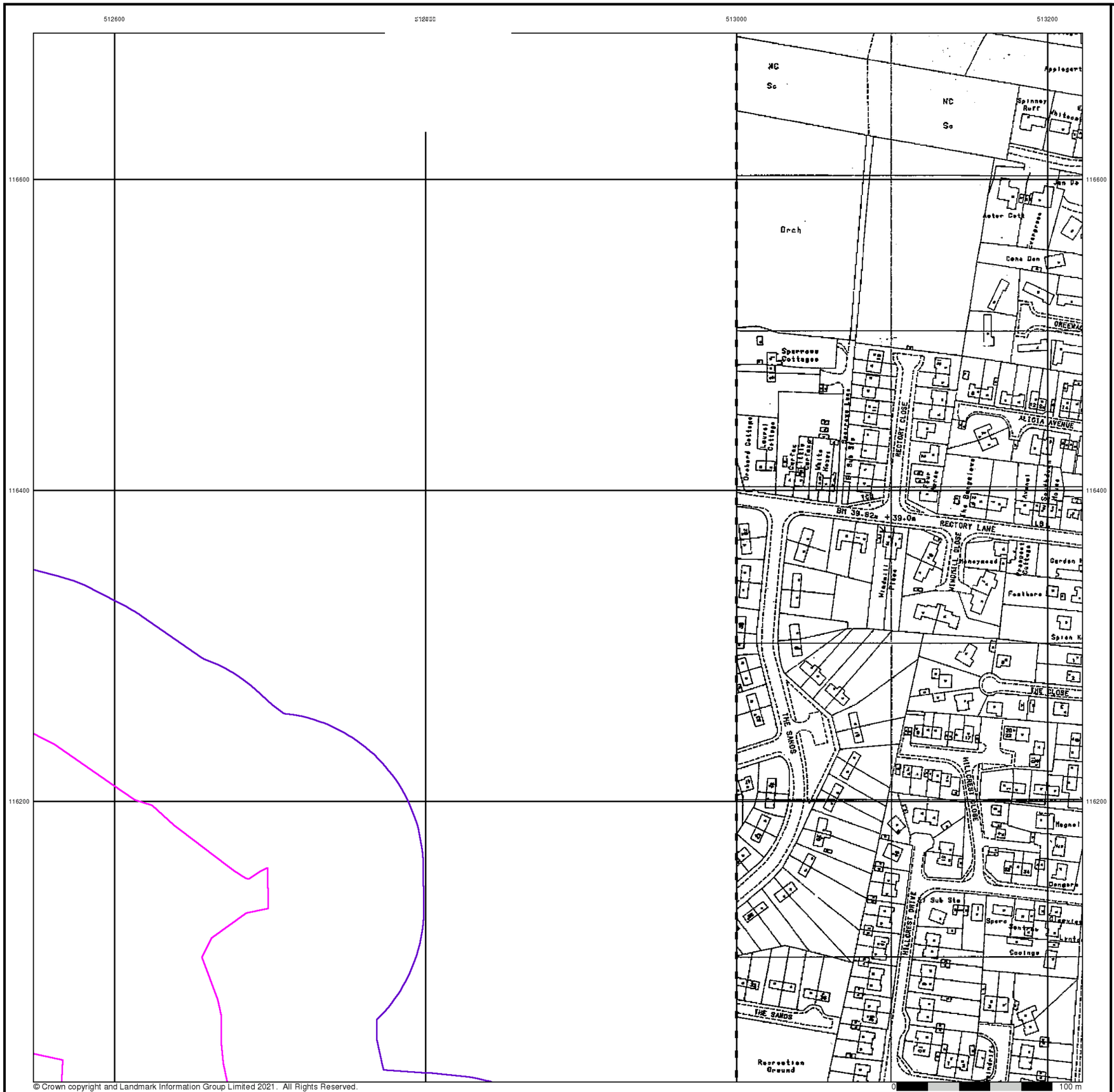
Order Details

Order Number:	287518451_1_1
Customer Ref:	52368
National Grid Reference:	512310, 116030
Slice:	A
Site Area (Ha):	15.35
Search Buffer (m):	100

Site Details

Firle, Church Lane, Ashington, PULBOROUGH, RH20 3JX

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



© Crown copyright and Landmark Information Group Limited 2021. All Rights Reserved.

RSK

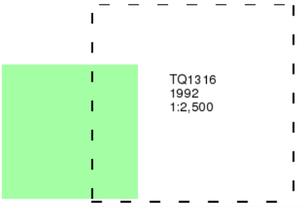
Additional SIMs

Published 1992

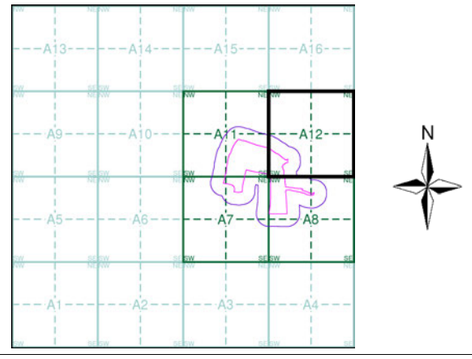
Source map scale - 1:2,500

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

Map Name(s) and Date(s)



Historical Map - Segment A12



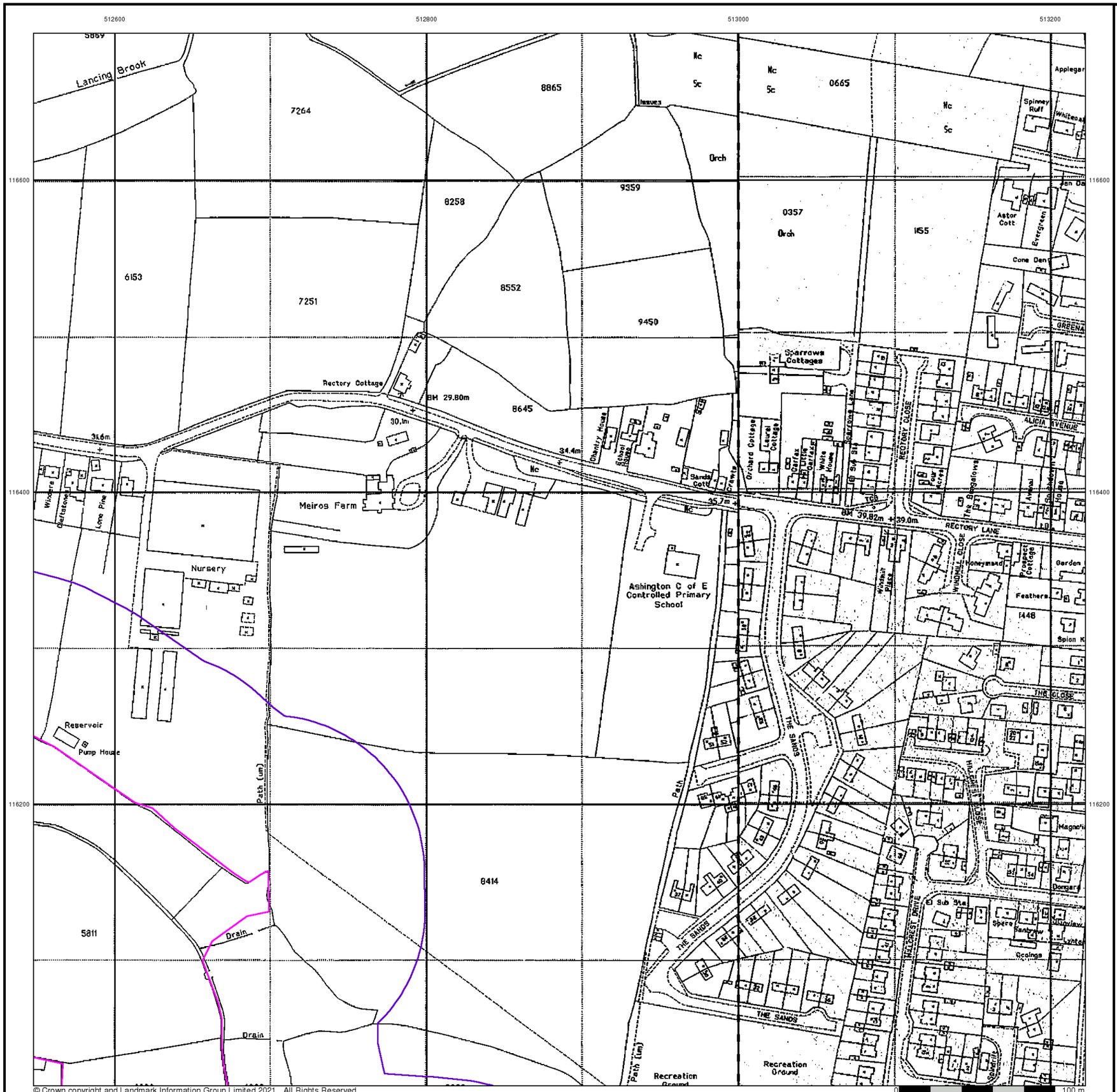
Order Details

Order Number:	287518451_1_1
Customer Ref:	52368
National Grid Reference:	512310, 116030
Slice:	A
Site Area (Ha):	15.35
Search Buffer (m):	100

Site Details

Firle, Church Lane, Ashington, PULBOROUGH, RH20 3JX

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



© Crown copyright and Landmark Information Group Limited 2021. All Rights Reserved.

RSK

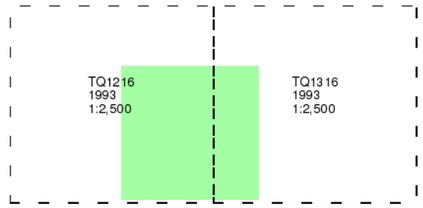
Large-Scale National Grid Data

Published 1993

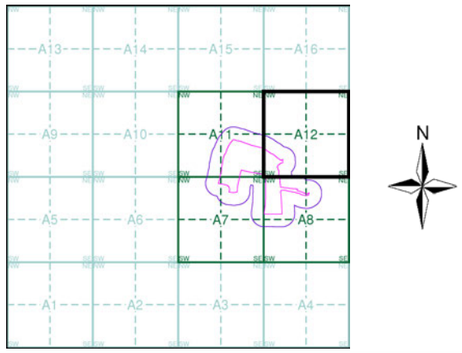
Source map scale - 1:2,500

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

Map Name(s) and Date(s)



Historical Map - Segment A12



Order Details

Order Number:	287518451_1_1
Customer Ref:	52368
National Grid Reference:	512310, 116030
Slice:	A
Site Area (Ha):	15.35
Search Buffer (m):	100

Site Details

Firle, Church Lane, Ashington, PULBOROUGH, RH20 3JX

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

© Crown copyright and Landmark Information Group Limited 2021. All Rights Reserved.

RSK

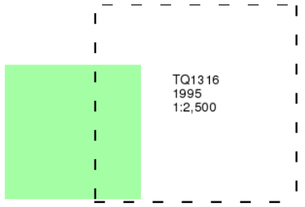
Large-Scale National Grid Data

Published 1995

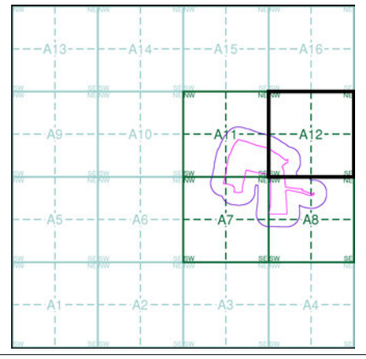
Source map scale - 1:2,500

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

Map Name(s) and Date(s)



Historical Map - Segment A12



Order Details

Order Number:	287518451_1_1
Customer Ref:	52368
National Grid Reference:	512310, 116030
Slice:	A
Site Area (Ha):	15.35
Search Buffer (m):	100

Site Details

Firle, Church Lane, Ashington, PULBOROUGH, RH20 3JX

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

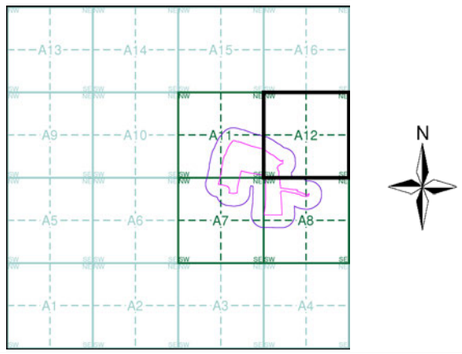
RSK

Historical Aerial Photography

Published 1999

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

Historical Aerial Photography - Segment A12



Order Details

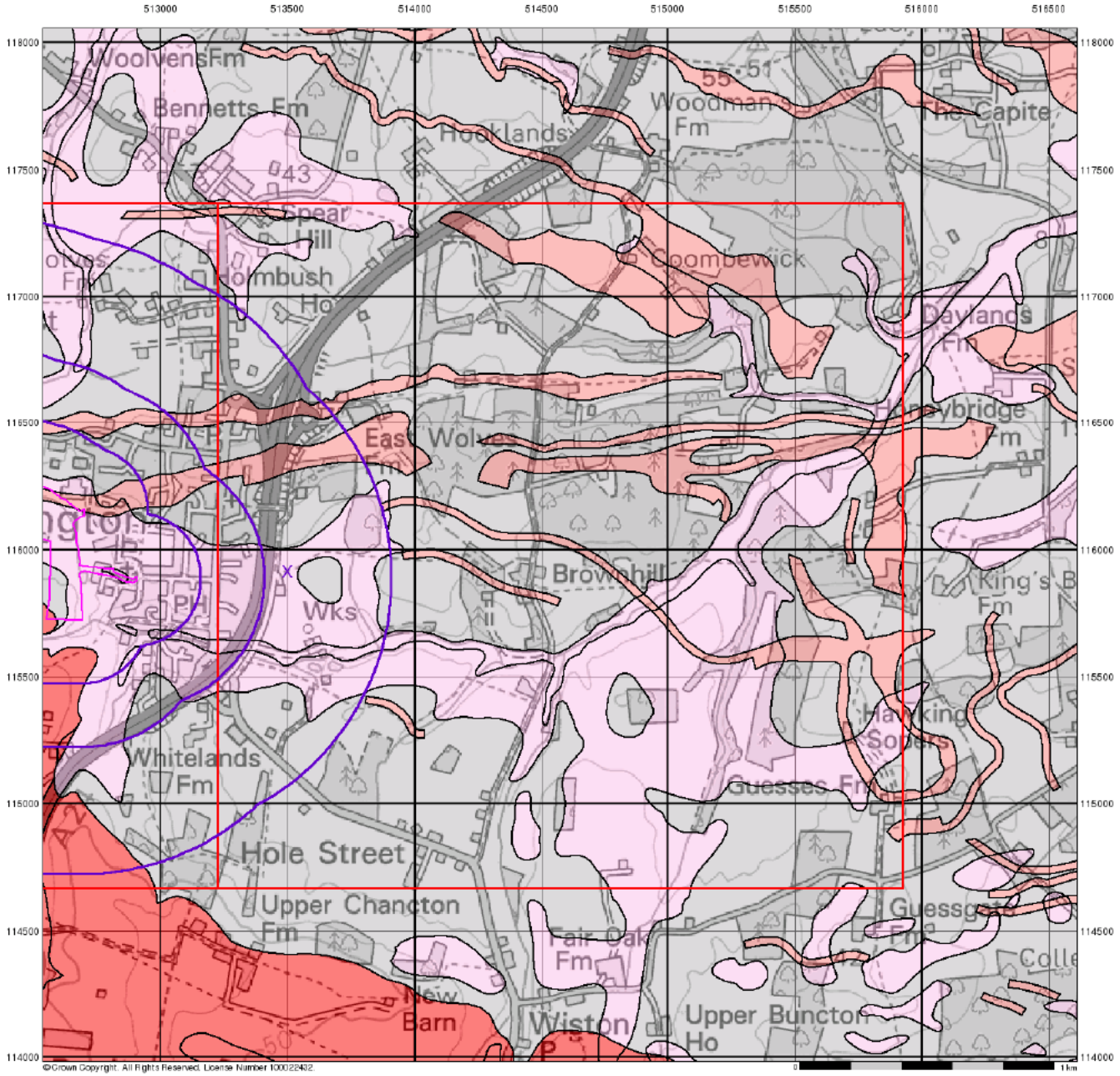
Order Number:	287518451_1_1
Customer Ref:	52368
National Grid Reference:	512310, 116030
Slice:	A
Site Area (Ha):	15.35
Search Buffer (m):	100

Site Details

Firle, Church Lane, Ashington, PULBOROUGH, RH20 3JX

Landmark INFORMATION GROUP

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



Groundwater Vulnerability

General

Specified Site | Specified Buffer(s) | Bearing Reference Point | Slice | Map ID

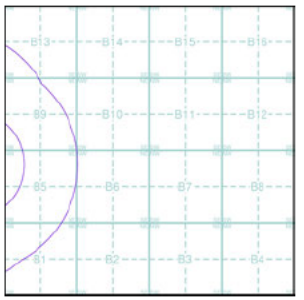
Agency and Hydrological

Bedrock Aquifers	Superficial Aquifers
High Vulnerability, Principal Aquifer	High Vulnerability, Principal Aquifer
High Vulnerability, Secondary Aquifer	High Vulnerability, Secondary Aquifer
Medium Vulnerability, Principal Aquifer	Medium Vulnerability, Principal Aquifer
Medium Vulnerability, Secondary Aquifer	Medium Vulnerability, Secondary Aquifer
Low Vulnerability, Principal Aquifer	Low Vulnerability, Principal Aquifer
Low Vulnerability, Secondary Aquifer	Low Vulnerability, Secondary Aquifer

Unproductive Aquifer

Soluble Rock

Site Sensitivity Context Map - Slice B



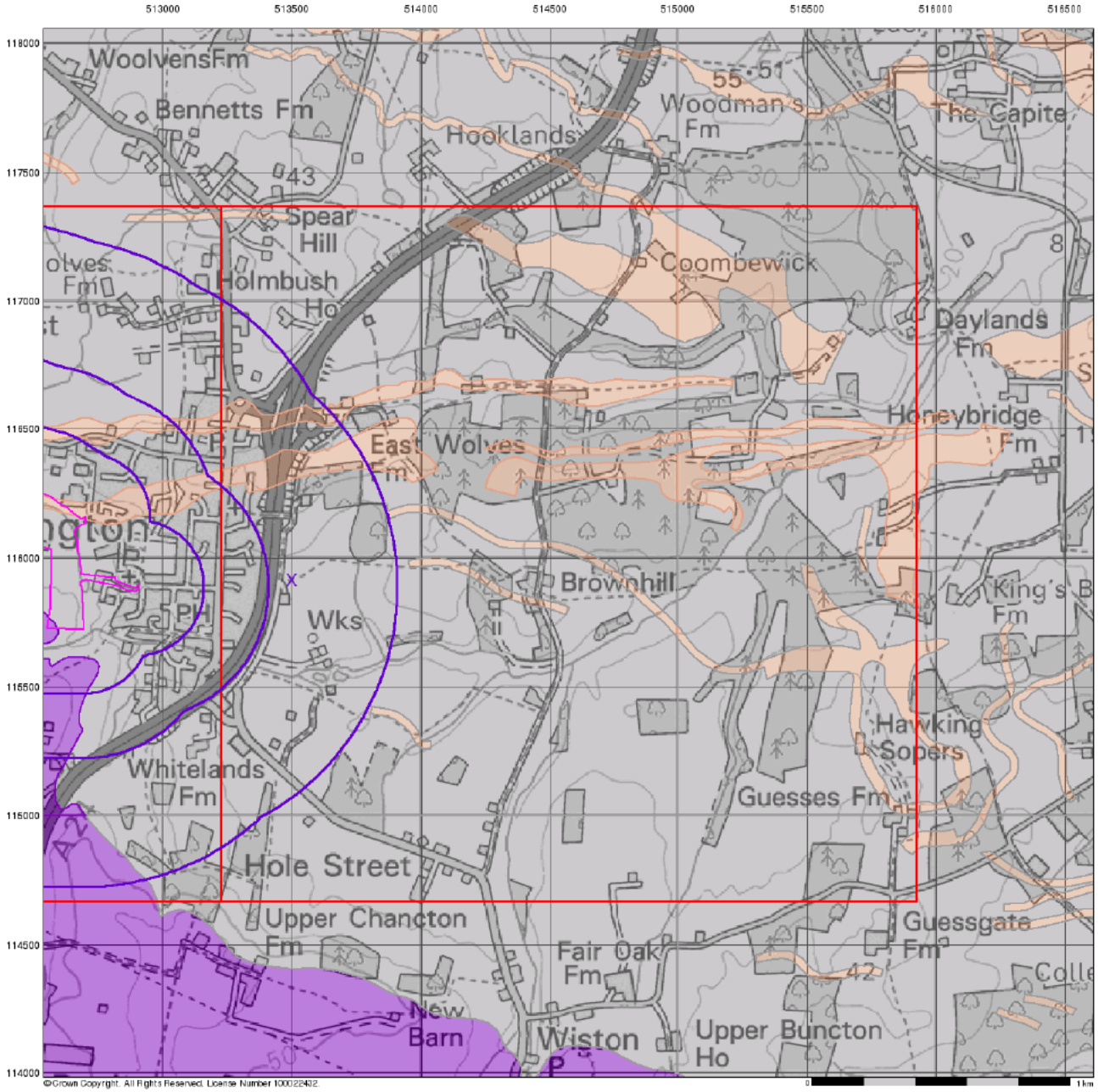
Order Details

Order Number:	287518451_1_1
Customer Ref:	52368
National Grid Reference:	513500, 115920
Slice:	B
Site Area (Ha):	15.35
Search Buffer (m):	1000

Site Details

Firle, Church Lane, Ashington, PULBOROUGH, RH20 3JX

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



Bedrock Aquifer Designation

General

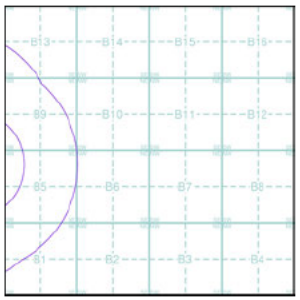
Specified Site | Specified Buffer(s) | Bearing Reference Point | Slice | Map ID

Agency and Hydrological

Geological Classes

- Principal Aquifer
- Secondary A Aquifer
- Secondary B Aquifer
- Secondary Undifferentiated
- Unproductive Strata
- Unknown
- Unknown (Lakes and Landslip)

Site Sensitivity Context Map - Slice B

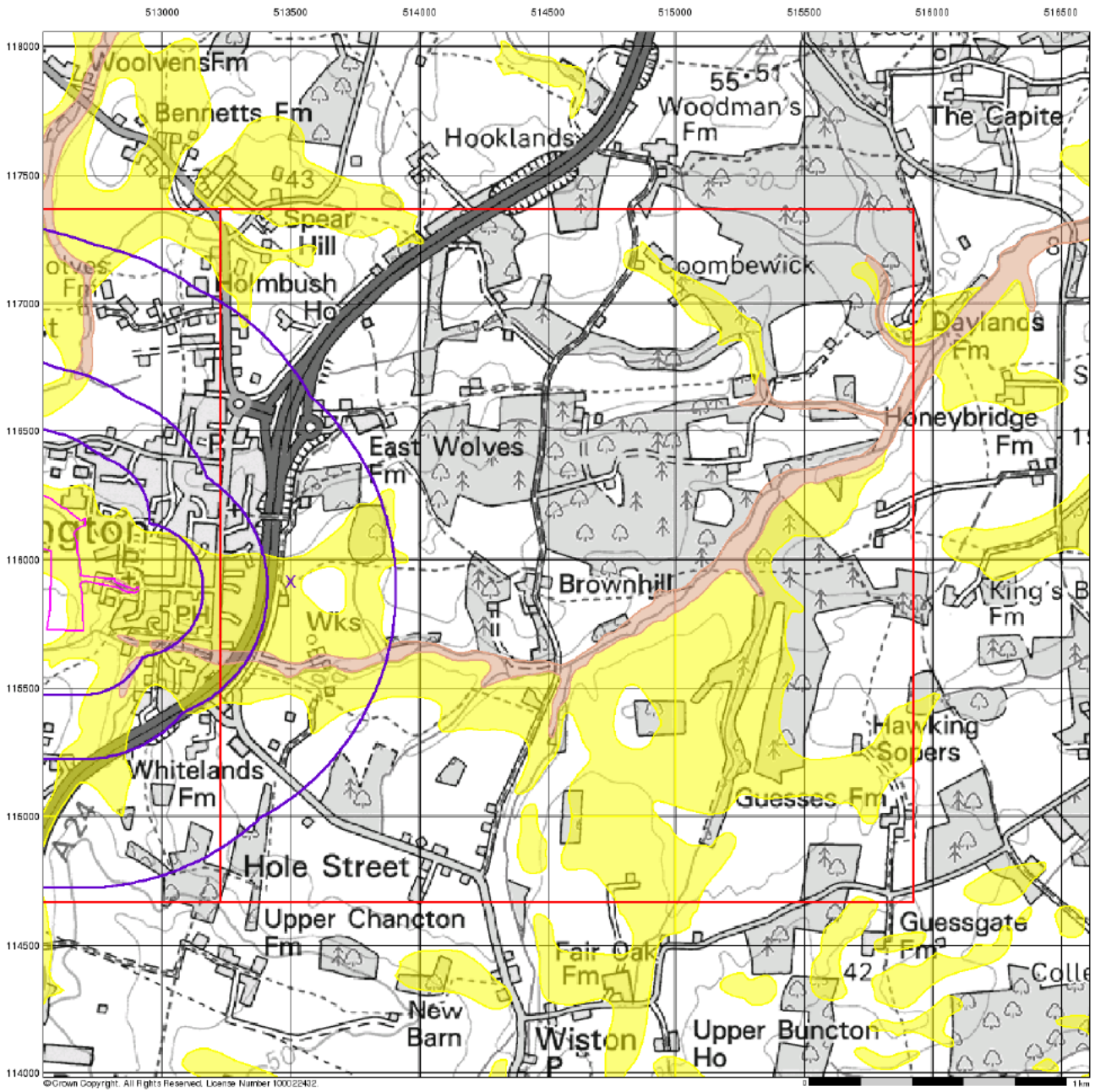


Order Details

Order Number:	287518451_1_1
Customer Ref:	52368
National Grid Reference:	513500, 115920
Slice:	B
Site Area (Ha):	15.35
Search Buffer (m):	1000

Site Details

Firle, Church Lane, Ashington, PULBOROUGH, RH20 3JX



RSK

Superficial Aquifer Designation

General

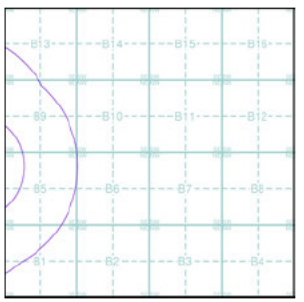
Specified Site | Specified Buffer(s) | Bearing Reference Point
Slice | Map ID

Agency and Hydrological

Geological Classes

- Principal Aquifer
- Secondary A Aquifer
- Secondary B Aquifer
- Secondary Undifferentiated
- Unproductive Strata
- Unknown
- Unknown (Lakes and Landslip)

Site Sensitivity Context Map - Slice B

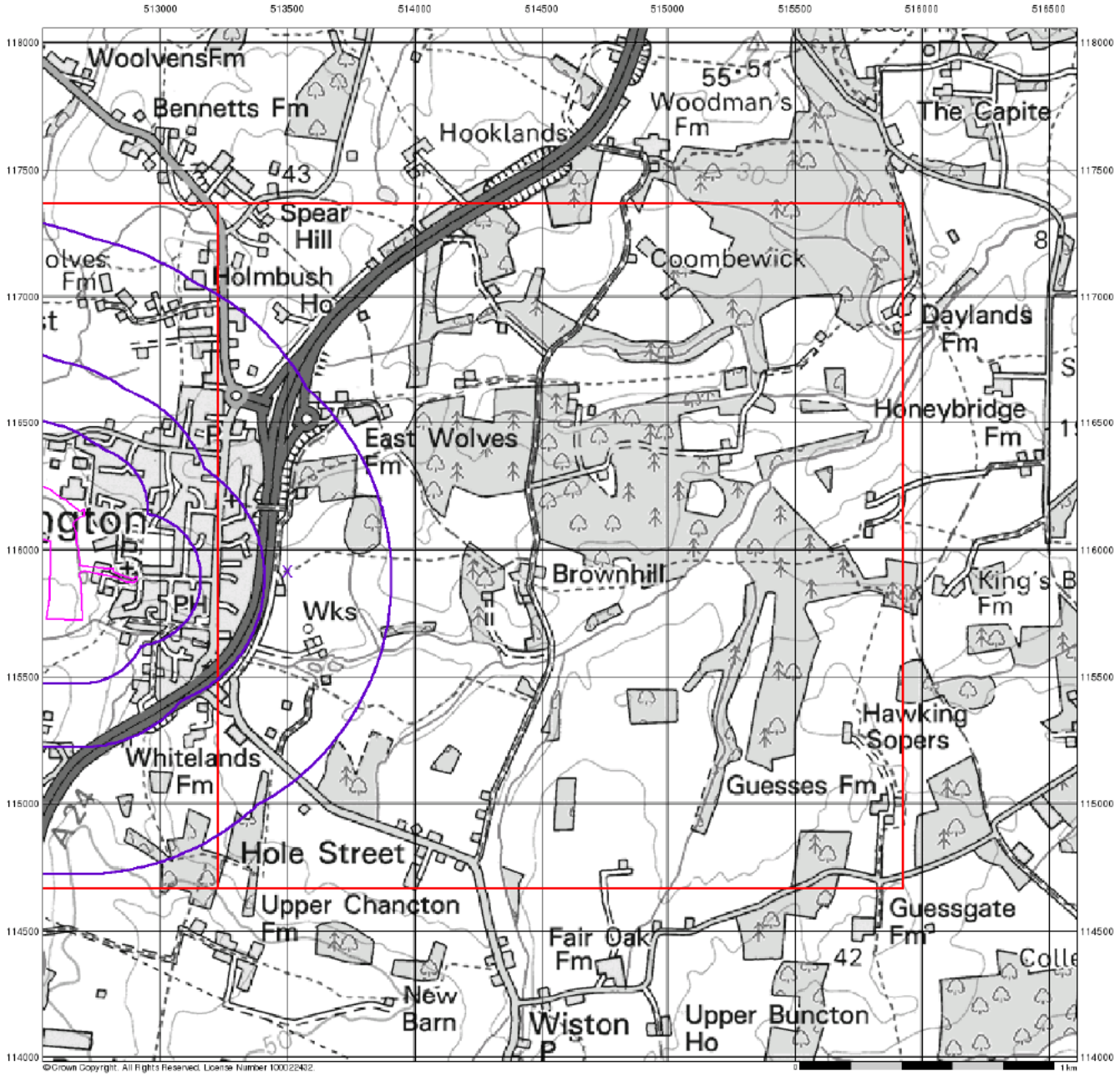


Order Details

Order Number:	287518451_1_1
Customer Ref:	52368
National Grid Reference:	513500, 115920
Slice:	B
Site Area (Ha):	15.35
Search Buffer (m):	1000

Site Details

Firle, Church Lane, Ashington, PULBOROUGH, RH20 3JX



RSK

Source Protection Zones

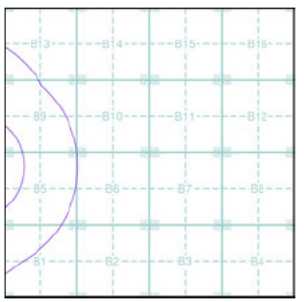
General

Specified Site | Specified Buffer(s) | Bearing Reference Point
Slice | Map ID

Agency and Hydrological

- Inner zone (Zone 1)
- Inner zone - subsurface activity only (Zone 1c)
- Outer zone (Zone 2)
- Outer zone - subsurface activity only (Zone 2c)
- Total catchment (Zone 3)
- Total catchment - subsurface activity only (Zone 3c)
- Special interest (Zone 4)

Site Sensitivity Context Map - Slice B

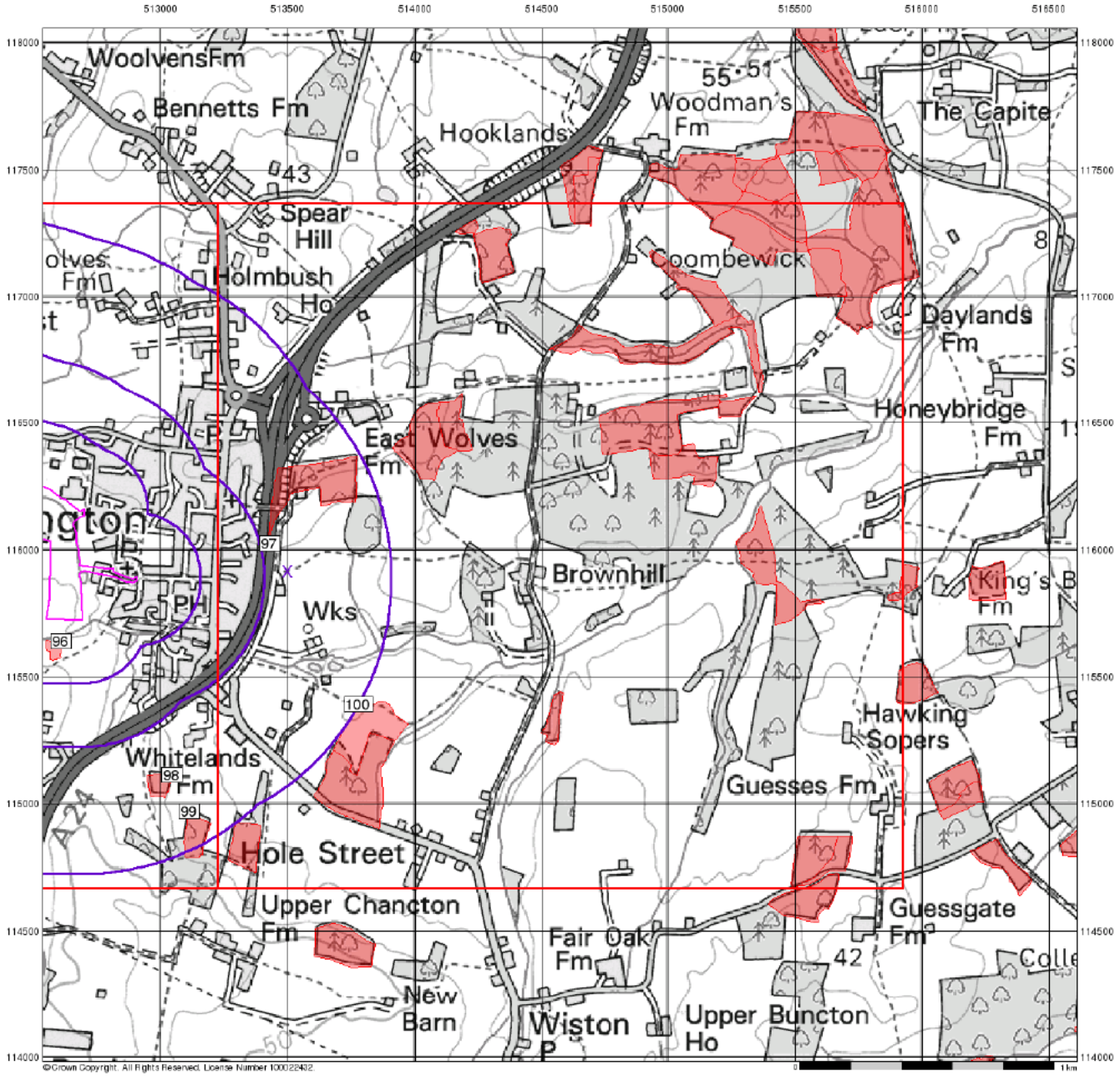


Order Details

Order Number:	287518451_1_1
Customer Ref:	52368
National Grid Reference:	513500, 115920
Slice:	B
Site Area (Ha):	15.35
Search Buffer (m):	1000

Site Details

Firle, Church Lane, Ashington, PULBOROUGH, RH20 3JX



RSK

Sensitive Land Uses

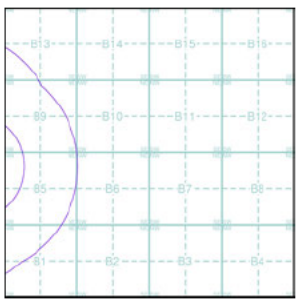
General

Specified Site | Specified Buffer(s) | Bearing Reference Point
Slice | Map ID

Sensitive Land Uses

- Ancient Woodland
- Area of Adopted Green Belt
- Area of Unadopted Green Belt
- Area of Outstanding Natural Beauty
- Environmentally Sensitive Area
- Forest Park
- Local Nature Reserve
- Marine Nature Reserve
- National Nature Reserve
- National Park
- Nitrate Sensitive Area
- Nitrate Vulnerable Zone
- Ramsar Site
- Site of Special Scientific Interest
- Special Area of Conservation
- Special Protection Area
- World Heritage Sites

Site Sensitivity Context Map - Slice B

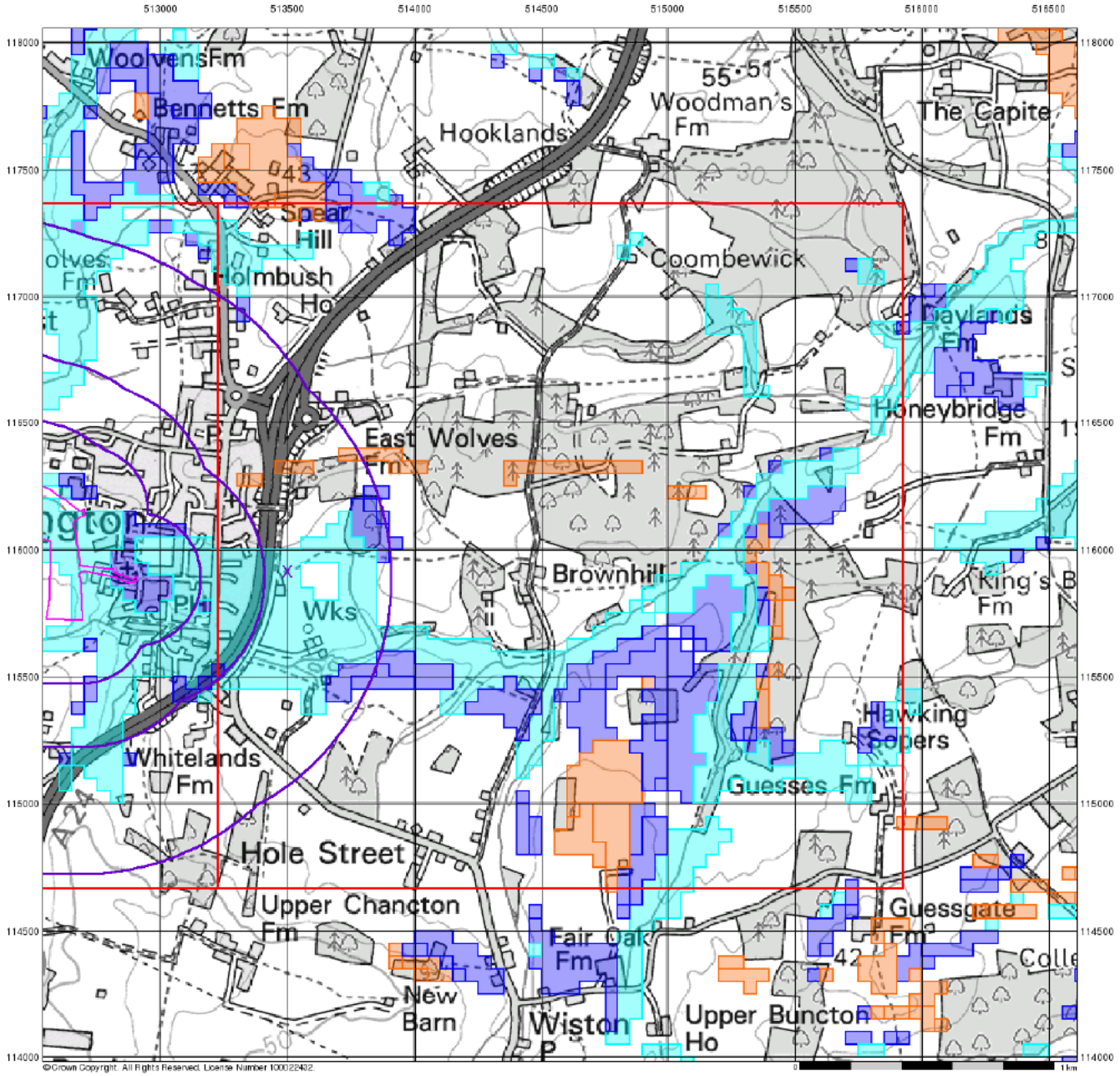


Order Details

Order Number:	287518451_1_1
Customer Ref:	52368
National Grid Reference:	513500, 115920
Slice:	B
Site Area (Ha):	15.35
Search Buffer (m):	1000

Site Details

Firle, Church Lane, Ashington, PULBOROUGH, RH20 3JX



RSK

BGS Flood GFS Data

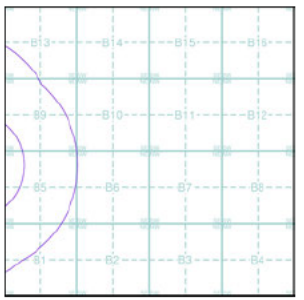
General

Specified Site | Specified Buffer(s) | Bearing Reference Point | Slice

Agency and Hydrological (Flood)

- Limited Potential for Groundwater Flooding to Occur
- Potential for Groundwater Flooding of Property Situated Below Ground Level
- Potential for Groundwater Flooding to Occur at Surface

Site Sensitivity Context Map - Slice B



Order Details

Order Number:	287518451_1_1
Customer Ref:	52368
National Grid Reference:	513500, 115920
Slice:	B
Site Area (Ha):	15.35
Search Buffer (m):	1000

Site Details

Firle, Church Lane, Ashington, PULBOROUGH, RH20 3JX

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

Envirocheck® Report:

Datasheet

Order Details:

Order Number:
287518451_1_1

Customer Reference:
52368

National Grid Reference:
513500, 115920

Slice:
B

Site Area (Ha):
15.35

Search Buffer (m):
1000

Site Details:

Firle, Church Lane
Ashington
PULBOROUGH
RH20 3JX

Client Details:

Miss S Gower
RSK Environment Ltd
18 Frogmore Road
Hemel Hempstead
Hertfordshire
HP3 9RT

Contents

Report Section	Page Number
Summary	-
Agency & Hydrological	1
Waste	19
Hazardous Substances	-
Geological	21
Industrial Land Use	23
Sensitive Land Use	25
Data Currency	26
Data Suppliers	31
Useful Contacts	32

Introduction

The Environment Act 1995 has made site sensitivity a key issue, as the legislation pays as much attention to the pathways by which contamination could spread, and to the vulnerable targets of contamination, as it does the potential sources of contamination.
For this reason, Landmark's Site Sensitivity maps and Datasheet(s) place great emphasis on statutory data provided by the Environment Agency/Natural Resources Wales and the Scottish Environment Protection Agency; it also incorporates data from Natural England (and the Scottish and Welsh equivalents) and Local Authorities; and highlights hydrogeological features required by environmental and geotechnical consultants. It does not include any information concerning past uses of land. The datasheet is produced by querying the Landmark database to a distance defined by the client from a site boundary provided by the client.
In this datasheet the National Grid References (NGRs) are rounded to the nearest 10m in accordance with Landmark's agreements with a number of Data Suppliers.

Copyright Notice

© Landmark Information Group Limited 2021. The Copyright on the information and data and its format as contained in this Envirocheck® Report ("Report") is the property of Landmark Information Group Limited ("Landmark") and several other Data Providers, including (but not limited to) Ordnance Survey, British Geological Survey, the Environment Agency/Natural Resources Wales and Natural England, and must not be reproduced in whole or in part by photocopying or any other method. The Report is supplied under Landmark's Terms and Conditions accepted by the Customer.
A copy of Landmark's Terms and Conditions can be found with the Index Map for this report. Additional copies of the Report may be obtained from Landmark, subject to Landmark's charges in force from time to time. The Copyright, design rights and any other intellectual rights shall remain the exclusive property of Landmark and /or other Data providers, whose Copyright material has been included in this Report.
© Environment Agency & United Kingdom Research and Innovation 2021. © Natural Resources Wales & United Kingdom Research and Innovation 2021.

Natural England Copyright Notice

Site of Special Scientific Interest, National Nature Reserve, Ramsar, Special Protection Area, Special Conservation Area, Marine Nature Reserve data (derived from Ordnance Survey 1:10000 raster) is provided by, and used with the permission of, Natural England who retain the copyright and Intellectual Property Rights for the data.

Scottish Natural Heritage Copyright

Contains SNH information licensed under the Open Government Licence v3 0.

Ove Arup Copyright Notice

The Mining Instability data was obtained on licence from Ove Arup & Partners Limited (for further information, contact mining review@arup com). No reproduction or further use of such Data is to be made without the prior written consent of Ove Arup & Partners Limited. The supplied Mining Instability data is derived from publicly available records and other third party sources and neither Ove Arup & Partners nor Landmark warrant the accuracy or completeness of such information or data.

Stantec Copyright Notice

The cavity data presented has been extracted from the PBA (now Stantec UK Ltd) enhanced version of the original DEFRA national cavity databases. Stantec UK Ltd retain the copyright & intellectual property rights in the data. Whilst all reasonable efforts are made to check that the information contained in the cavity databases is accurate we do not warrant that the data is complete or error free. The information is based upon our own researches and those collated from a number of external sources and is continually being augmented and updated by Stantec UK Ltd. In no event shall Stantec UK Ltd or Landmark be liable for any loss or damage including, without limitation, indirect or consequential loss or damage arising from the use of this data.

Radon Potential dataset Copyright Notice

Information supplied from a joint dataset compiled by The British Geological Survey and Public Health England.

Natural Resources Wales Copyright Notice

Contains Natural Resources Wales information © Natural Resources Wales and Database Right. All rights Reserved. Contains Ordnance Survey Data. Ordnance Survey Licence number 100019741. Crown Copyright and Database Right. Contains Natural Resources Wales information © Natural Resources Wales and Database Right. All rights Reserved. Some features of this information are based on digital spatial data licensed from the Centre for Ecology & Hydrology © NERC (CEH). Defra, Met Office and DARD Rivers Agency © Crown copyright. © Cranfield University. © James Hutton Institute. Contains OS data © Crown copyright and database right 2021. Land & Property Services © Crown copyright and database right.

Report Version v53.0

Summary

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Agency & Hydrological					
BGS Groundwater Flooding Susceptibility	pg 1	Yes	Yes	Yes	n/a
Contaminated Land Register Entries and Notices					
Discharge Consents	pg 1			1	25
Prosecutions Relating to Controlled Waters			n/a	n/a	n/a
Enforcement and Prohibition Notices					
Integrated Pollution Controls					
Integrated Pollution Prevention And Control					
Local Authority Integrated Pollution Prevention And Control					
Local Authority Pollution Prevention and Controls					
Local Authority Pollution Prevention and Control Enforcements					
Nearest Surface Water Feature	pg 8			Yes	
Pollution Incidents to Controlled Waters	pg 8				7
Prosecutions Relating to Authorised Processes					
Registered Radioactive Substances					
River Quality	pg 9				1
River Quality Biology Sampling Points					
River Quality Chemistry Sampling Points					
Substantiated Pollution Incident Register					
Water Abstractions	pg 9				1
Water Industry Act Referrals					
Groundwater Vulnerability Map	pg 10	Yes	n/a	n/a	n/a
Groundwater Vulnerability - Soluble Rock Risk			n/a	n/a	n/a
Groundwater Vulnerability - Local Information			n/a	n/a	n/a
Bedrock Aquifer Designations	pg 11	Yes	n/a	n/a	n/a
Superficial Aquifer Designations	pg 11	Yes	n/a	n/a	n/a
Source Protection Zones					
Extreme Flooding from Rivers or Sea without Defences	pg 11		Yes	n/a	n/a
Flooding from Rivers or Sea without Defences	pg 11		Yes	n/a	n/a
Areas Benefiting from Flood Defences				n/a	n/a
Flood Water Storage Areas				n/a	n/a
Flood Defences				n/a	n/a
OS Water Network Lines	pg 12		1	14	46

Summary

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Waste					
BGS Recorded Landfill Sites					
Historical Landfill Sites	pg 19			1	1
Integrated Pollution Control Registered Waste Sites					
Licensed Waste Management Facilities (Landfill Boundaries)					
Licensed Waste Management Facilities (Locations)					
Local Authority Landfill Coverage	pg 19	2	n/a	n/a	n/a
Local Authority Recorded Landfill Sites	pg 19				3
Potentially Infilled Land (Non-Water)					
Potentially Infilled Land (Water)	pg 19			1	
Registered Landfill Sites	pg 20				2
Registered Waste Transfer Sites					
Registered Waste Treatment or Disposal Sites					
Hazardous Substances					
Control of Major Accident Hazards Sites (COMAH)					
Explosive Sites					
Notification of Installations Handling Hazardous Substances (NIHHS)					
Planning Hazardous Substance Consents					
Planning Hazardous Substance Enforcements					

Summary

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Geological					
BGS 1:625,000 Solid Geology	pg 21	Yes	n/a	n/a	n/a
BGS Estimated Soil Chemistry	pg 21	Yes			Yes
BGS Recorded Mineral Sites					
BGS Urban Soil Chemistry					
BGS Urban Soil Chemistry Averages					
CBSCB Compensation District			n/a	n/a	n/a
Coal Mining Affected Areas			n/a	n/a	n/a
Mining Instability			n/a	n/a	n/a
Man-Made Mining Cavities					
Natural Cavities					
Non Coal Mining Areas of Great Britain	pg 21	Yes	Yes	n/a	n/a
Potential for Collapsible Ground Stability Hazards	pg 21	Yes		n/a	n/a
Potential for Compressible Ground Stability Hazards	pg 21		Yes	n/a	n/a
Potential for Ground Dissolution Stability Hazards				n/a	n/a
Potential for Landslide Ground Stability Hazards	pg 22	Yes		n/a	n/a
Potential for Running Sand Ground Stability Hazards	pg 22	Yes	Yes	n/a	n/a
Potential for Shrinking or Swelling Clay Ground Stability Hazards	pg 22	Yes		n/a	n/a
Radon Potential - Radon Affected Areas			n/a	n/a	n/a
Radon Potential - Radon Protection Measures			n/a	n/a	n/a
Industrial Land Use					
Contemporary Trade Directory Entries	pg 23			3	5
Fuel Station Entries	pg 23				1
Points of Interest - Commercial Services	pg 23			2	3
Points of Interest - Education and Health					
Points of Interest - Manufacturing and Production	pg 24				4
Points of Interest - Public Infrastructure	pg 24				1
Points of Interest - Recreational and Environmental	pg 24			2	
Gas Pipelines					
Underground Electrical Cables					

Summary

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Sensitive Land Use					
Ancient Woodland	pg 25		1		4
Areas of Adopted Green Belt					
Areas of Unadopted Green Belt					
Areas of Outstanding Natural Beauty					
Environmentally Sensitive Areas					
Forest Parks					
Local Nature Reserves					
Marine Nature Reserves					
National Nature Reserves					
National Parks					
Nitrate Sensitive Areas					
Nitrate Vulnerable Zones					
Ramsar Sites					
Sites of Special Scientific Interest					
Special Areas of Conservation					
Special Protection Areas					
World Heritage Sites					

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	(W)	0	1	512600 116250
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	(W)	0	1	513100 116050
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	(W)	0	1	512650 116200
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	(NW)	0	1	512700 116650
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	B5NW (SW)	0	1	513500 115916
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	(W)	20	1	512750 116200
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	(W)	75	1	512750 115650
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	(SW)	225	1	512750 115500
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	(W)	257	1	513200 115800
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	(SW)	325	1	512700 115400
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	(SW)	403	1	513100 115500
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	B5SW (SW)	441	1	513250 115550
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	(SW)	450	1	513200 115500
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	(SW)	493	1	513200 115450
1	**Discharge Consents** Operator: J. Maguire & Sons Property Type: CONSTRUCTION OF BUILDINGS Location: Residential Development, @ To Telephone Exchange, On A24 Road , Ashington West Sussex Authority: Environment Agency, Southern Region Catchment Area: Not Supplied Reference: N02025 Permit Version: 1 Effective Date: 11th April 1979 Issued Date: 11th April 1979 Revocation Date: 1st July 1991 Discharge Type: Discharge Of Other Matter-Surface Water Discharge Environment: Freshwater Stream/River Receiving Water: Freshwater River **Status: Pre National Rivers Authority Legislation where issue date < 01/09/1989** Positional Accuracy: Located by supplier to within 10m	B5NW (W)	413	2	513310 115980

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
2	**Discharge Consents** Operator: Mr L Harris Property Type: SPORT, AMUSEMENT+RECREATION/GOLF CLUB/GYM/THEME PK/SPA Location: Kensett Stables, Hole Street, Ashington, West Sussex Authority: Environment Agency, Southern Region Catchment Area: Not Supplied Reference: P09014 Permit Version: 1 Effective Date: 21st February 2000 Issued Date: 21st February 2000 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge Environment: Freshwater Stream/River Receiving Water: Freshwater River **Status: Pre National Rivers Authority Legislation where issue date < 01/09/1989** Positional Accuracy: Located by supplier to within 10m	B5SW (SW)	620	2	513260 115370
3	**Discharge Consents** Operator: Southern Water Services Ltd (S) Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Location: Ashington S.T.W., Ashington, West Sussex Authority: Environment Agency, Southern Region Catchment Area: Old-River Adur 60 Reference: W00366 Permit Version: 1 Effective Date: 10th July 1980 Issued Date: 10th July 1980 Revocation Date: 23rd September 2003 Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: Freshwater Stream Or River **Status: Revoked (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 10m	B5SE (S)	765	2	513610 115580
3	**Discharge Consents** Operator: Southern Water Services Ltd (S) Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Location: Ashington S.T.W., Ashington, West Sussex Authority: Environment Agency, Southern Region Catchment Area: Old-River Adur 60 Reference: W00366 Permit Version: 1 Effective Date: 10th July 1980 Issued Date: 10th July 1980 Revocation Date: 23rd September 2003 Discharge Type: Sewage Discharges - Final/Treated Effluent - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: Freshwater Stream Or River **Status: Revoked (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 10m	B5SE (S)	765	2	513610 115580
3	**Discharge Consents** Operator: Southern Water Services Ltd (S) Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Location: Ashington Stw'S Authority: Environment Agency, Southern Region Catchment Area: Not Given Reference: S02621 Permit Version: 1 Effective Date: 8th November 1968 Issued Date: 8th November 1968 Revocation Date: 23rd September 2003 Discharge Type: Public Sewage: Storm Sewage Overflow Discharge Environment: Freshwater Stream/River Receiving Water: Freshwater River **Status: Revoked (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 100m	B5SE (S)	765	2	513610 115580

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
3	**Discharge Consents** Operator: Southern Water Services Ltd (S) Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Location: Ashington Wwtw, London Road Ashington Wwtw, London Road, Ashington, West Sussex, Rh20 3de Authority: Environment Agency, Southern Region Catchment Area: Adur Reference: A01183 Permit Version: 5 Effective Date: 29th November 2013 Issued Date: 29th November 2013 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: Honeybridge Str.Trib. R.Adur **Status: Varied under EPR 2010** Positional Accuracy: Located by supplier to within 10m	B5SE (S)	769	2	513610 115570
3	**Discharge Consents** Operator: Southern Water Services Ltd (S) Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Location: Ashington Wwtw, London Road Ashington Wwtw, London Road, Ashington, West Sussex, Rh20 3de Authority: Environment Agency, Southern Region Catchment Area: Adur Reference: A01183 Permit Version: 5 Effective Date: 29th November 2013 Issued Date: 29th November 2013 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: Honeybridge Str.Trib. R.Adur **Status: Varied under EPR 2010** Positional Accuracy: Located by supplier to within 10m	B5SE (S)	769	2	513610 115570
3	**Discharge Consents** Operator: Southern Water Services Ltd (S) Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Location: Ashington Wwtw, London Road Ashington Wwtw, London Road, Ashington, West Sussex, Rh20 3de Authority: Environment Agency, Southern Region Catchment Area: Adur Reference: A01183 Permit Version: 5 Effective Date: 29th November 2013 Issued Date: 29th November 2013 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Pumping Station - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: Honeybridge Str.Trib. R.Adur **Status: Varied under EPR 2010** Positional Accuracy: Located by supplier to within 10m	B5SE (S)	769	2	513610 115570
3	**Discharge Consents** Operator: Southern Water Services Ltd (S) Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Location: Ashington Wwtw, London Road Ashington Wwtw, London Road, Ashington, West Sussex, Rh20 3de Authority: Environment Agency, Southern Region Catchment Area: Adur Reference: A01183 Permit Version: 3 Effective Date: 22nd March 2010 Issued Date: 22nd March 2010 Revocation Date: 21st December 2012 Discharge Type: Sewage Discharges - Final/Treated Effluent - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: Honeybridge Str.Trib. R.Adur **Status: New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 10m	B5SE (S)	769	2	513610 115570

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
3	**Discharge Consents** Operator: Southern Water Services Ltd (S) Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Location: Ashington Wwtw, London Road Ashington Wwtw, London Road, Ashington, West Sussex, Rh20 3de Authority: Environment Agency, Southern Region Catchment Area: Adur Reference: A01183 Permit Version: 4 Effective Date: 22nd December 2012 Issued Date: 22nd March 2010 Revocation Date: 28th November 2013 Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: Honeybridge Str.Trib. R.Adur **Status:** **New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 10m	B5SE (S)	769	2	513610 115570
3	**Discharge Consents** Operator: Southern Water Services Ltd (S) Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Location: Ashington Wwtw, London Road Ashington Wwtw, London Road, Ashington, West Sussex, Rh20 3de Authority: Environment Agency, Southern Region Catchment Area: Adur Reference: A01183 Permit Version: 4 Effective Date: 22nd December 2012 Issued Date: 22nd March 2010 Revocation Date: 28th November 2013 Discharge Type: Sewage Discharges - Pumping Station - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: Honeybridge Str.Trib. R.Adur **Status:** **New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 10m	B5SE (S)	769	2	513610 115570
3	**Discharge Consents** Operator: Southern Water Services Ltd (S) Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Location: Ashington Wwtw, London Road Ashington Wwtw, London Road, Ashington, West Sussex, Rh20 3de Authority: Environment Agency, Southern Region Catchment Area: Adur Reference: A01183 Permit Version: 4 Effective Date: 22nd December 2012 Issued Date: 22nd March 2010 Revocation Date: 28th November 2013 Discharge Type: Sewage Discharges - Final/Treated Effluent - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: Honeybridge Str.Trib. R.Adur **Status:** **New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 10m	B5SE (S)	769	2	513610 115570
3	**Discharge Consents** Operator: Southern Water Services Ltd (S) Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Location: Ashington Wwtw, London Road Ashington Wwtw, London Road, Ashington, West Sussex, Rh20 3de Authority: Environment Agency, Southern Region Catchment Area: Adur Reference: A01183 Permit Version: 3 Effective Date: 22nd March 2010 Issued Date: 22nd March 2010 Revocation Date: 21st December 2012 Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: Honeybridge Str.Trib. R.Adur **Status:** **New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 10m	B5SE (S)	769	2	513610 115570

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
3	**Discharge Consents** Operator: Southern Water Services Ltd (S) Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Location: Ashington Wwtw, London Road Ashington Wwtw, London Road, Ashington, West Sussex, Rh20 3de Authority: Environment Agency, Southern Region Catchment Area: Adur Reference: A01183 Permit Version: 3 Effective Date: 22nd March 2010 Issued Date: 22nd March 2010 Revocation Date: 21st December 2012 Discharge Type: Sewage Discharges - Pumping Station - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: Honeybridge Str.Trib. R.Adur **Status: New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 10m	B5SE (S)	769	2	513610 115570
3	**Discharge Consents** Operator: Southern Water Services Ltd (S) Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Location: Ashington Wwtw, London Road Ashington Wwtw, London Road, Ashington, West Sussex, Rh20 3de Authority: Environment Agency, Southern Region Catchment Area: Adur Reference: A01183 Permit Version: 2 Effective Date: 1st April 2009 Issued Date: 14th October 2008 Revocation Date: 21st March 2010 Discharge Type: Sewage Discharges - Final/Treated Effluent - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: Honeybridge Str.Trib. R.Adur **Status: New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 10m	B5SE (S)	769	2	513610 115570
3	**Discharge Consents** Operator: Southern Water Services Ltd (S) Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Location: Ashington Wwtw, London Road Ashington Wwtw, London Road, Ashington, West Sussex, Rh20 3de Authority: Environment Agency, Southern Region Catchment Area: Adur Reference: A01183 Permit Version: 2 Effective Date: 1st April 2009 Issued Date: 14th October 2008 Revocation Date: 21st March 2010 Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: Honeybridge Str.Trib. R.Adur **Status: New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 10m	B5SE (S)	769	2	513610 115570
3	**Discharge Consents** Operator: Southern Water Services Ltd (S) Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Location: Ashington Wwtw, London Road Ashington Wwtw, London Road, Ashington, West Sussex, Rh20 3de Authority: Environment Agency, Southern Region Catchment Area: Adur Reference: A01183 Permit Version: 2 Effective Date: 1st April 2009 Issued Date: 14th October 2008 Revocation Date: 21st March 2010 Discharge Type: Sewage Discharges - Unspecified - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: Honeybridge Str.Trib. R.Adur **Status: New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 10m	B5SE (S)	769	2	513610 115570

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
3	**Discharge Consents** Operator: Southern Water Services Ltd (S) Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Location: Ashington Wwtw, London Road Ashington Wwtw, London Road, Ashington, West Sussex, Rh20 3de Authority: Environment Agency, Southern Region Catchment Area: Adur Reference: A01183 Permit Version: 1 Effective Date: 1st October 2003 Issued Date: 19th March 2003 Revocation Date: 31st March 2009 Discharge Type: Sewage Discharges - Final/Treated Effluent - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: Honeybridge Str.Trib. R.Adur **Status:** **New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 10m	B5SE (S)	769	2	513610 115570
3	**Discharge Consents** Operator: Southern Water Services Ltd (S) Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Location: Ashington Wwtw, London Road Ashington Wwtw, London Road, Ashington, West Sussex, Rh20 3de Authority: Environment Agency, Southern Region Catchment Area: Adur Reference: A01183 Permit Version: 1 Effective Date: 1st October 2003 Issued Date: 19th March 2003 Revocation Date: 31st March 2009 Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: Honeybridge Str.Trib. R.Adur **Status:** **New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 10m	B5SE (S)	769	2	513610 115570
3	**Discharge Consents** Operator: Southern Water Services Ltd (S) Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Location: Ashington Wwtw, London Road Ashington Wwtw, London Road, Ashington, West Sussex, Rh20 3de Authority: Environment Agency, Southern Region Catchment Area: Adur Reference: A01183 Permit Version: 1 Effective Date: 1st October 2003 Issued Date: 19th March 2003 Revocation Date: 31st March 2009 Discharge Type: Sewage Discharges - Unspecified - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: Honeybridge Str.Trib. R.Adur **Status:** **New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 10m	B5SE (S)	769	2	513610 115570
3	**Discharge Consents** Operator: Southern Water Services Ltd (S) Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Location: Ashington Stw'S Authority: Environment Agency, Southern Region Catchment Area: Not Supplied Reference: S02621 Permit Version: 1 Effective Date: 8th November 1968 Issued Date: 8th November 1968 Revocation Date: 23rd September 2003 Discharge Type: Sewage Discharges - Final/Treated Effluent - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: Freshwater River **Status:** **Revoked (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 10m	B5SE (S)	775	2	513620 115580

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
4	**Discharge Consents** Operator: Mr & Mrs K E Jones Property Type: DOMESTIC PROPERTY (SINGLE) (INCL FARM HOUSE) Location: Yew Tree Cottage, Billingshurst Road, Ashington, Pulborough, West Sussex Authority: Environment Agency, Southern Region Catchment Area: Not Supplied Reference: P06786 Permit Version: 1 Effective Date: 18th June 1997 Issued Date: 18th June 1997 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge Environment: Freshwater Stream/River Receiving Water: Freshwater River **Status: New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 10m	B13SW (N)	831	2	513280 116750
5	**Discharge Consents** Operator: Mrs Ursula Touche Will Trust Property Type: DOMESTIC PROPERTY (SINGLE) (INCL FARM HOUSE) Location: Little Martins & Martins Farm, Old London Road, Ashington, West Sussex Authority: Environment Agency, Southern Region Catchment Area: Not Supplied Reference: P07429 Permit Version: 1 Effective Date: 20th November 1998 Issued Date: 20th November 1998 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge Environment: Freshwater Stream/River Receiving Water: Freshwater River **Status: New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 10m	B13SW (N)	854	2	513340 116720
6	**Discharge Consents** Operator: Mr N R Whitford Property Type: DOMESTIC PROPERTY (SINGLE) (INCL FARM HOUSE) Location: Foxes, Billingshurst Road, Ashington, West Sussex Authority: Environment Agency, Southern Region Catchment Area: Not Given Reference: P04854 Permit Version: 1 Effective Date: 15th June 1993 Issued Date: 15th June 1993 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge Environment: Land/Soakaway Receiving Water: Into Land **Status: Post National Rivers Authority Legislation where issue date > 31/08/1989** Positional Accuracy: Located by supplier to within 100m	B13SW (N)	881	2	513300 116800
7	**Discharge Consents** Operator: Mr Tr Harris Property Type: DOMESTIC PROPERTY (SINGLE) (INCL FARM HOUSE) Location: Oast House Barn, Billingshurst Road, Ashington, West Sussex Authority: Environment Agency, Southern Region Catchment Area: Not Supplied Reference: P07075 Permit Version: 1 Effective Date: 22nd January 1998 Issued Date: 22nd January 1998 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge Environment: Freshwater Stream/River Receiving Water: Freshwater River **Status: New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 10m	B13SW (N)	921	2	513280 116870

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
7	**Discharge Consents** Operator: T.Rider Esq. Property Type: Undefined Or Other Location: Oast House Barn, Ashington, West Sussex Authority: Environment Agency, Southern Region Catchment Area: Not Given Reference: P02525 Permit Version: 1 Effective Date: 31st August 1989 Issued Date: 31st August 1989 Revocation Date: 31st March 1997 Discharge Type: Non Water Company (Private) Sewage Discharge Environment: Freshwater Stream/River Receiving Water: Freshwater River **Status: Lapsed (under Environment Act 1995, Schedule 23)** Positional Accuracy: Located by supplier to within 100m	B13SW (N)	921	2	513280 116870
	Nearest Surface Water Feature	B5NW (W)	382	-	513310 115857
8	**Pollution Incidents to Controlled Waters** Property Type: Agricultural Location: Broadbridge Stream, ASHINGTON Authority: Environment Agency, Southern Region Pollutant: Organic Wastes: Cattle slurry Note: Run Off Of Irrigated Farm Effluent; Other Farming Incident Date: 12th March 1995 Incident Reference: 1241 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Organic Farm Waste Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	B5NW (SW)	501	2	513400 115800
8	**Pollution Incidents to Controlled Waters** Property Type: Paper Industry Location: Broadbridge Farm, ASHINGTON Authority: Environment Agency, Southern Region Pollutant: Organic Wastes: Cattle slurry Note: Watercourse Near Broadbridge Farm Very Murky; Dissolved Oxygen 17-18% Incident Date: 10th September 1998 Incident Reference: 2743 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Inadequate Design/Capacity Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	B5NW (SW)	502	2	513400 115795
9	**Pollution Incidents to Controlled Waters** Property Type: Water Company Sewage: Sewage Treatment Works Location: Billingshurst Road, ASHINGTON Authority: Environment Agency, Southern Region Pollutant: Crude Sewage Note: Sewage In Ditch Incident Date: 3rd July 1998 Incident Reference: 2654 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Overfilling During Delivery Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	B9NW (N)	748	2	513300 116600
10	**Pollution Incidents to Controlled Waters** Property Type: Dairy Cattle Location: Honybridge Stream, Downstream Sewage Treatment Works, ASHINGTON Authority: Environment Agency, Southern Region Pollutant: Organic Wastes: Yard Washings Note: Dirty Brown Water Incident Date: 31st December 1997 Incident Reference: 2357 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Not Given Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	B5SE (SE)	833	2	513690 115600

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
10	**Pollution Incidents to Controlled Waters** Property Type: Agricultural Location: Malthouse Farm, Tributary Of Honeybridge Stream, ASHINGTON Authority: Environment Agency, Southern Region Pollutant: Oils - Vegetable Oil Note: Alleged Pollution From Fish Farming Operation; Fish Farms Incident Date: 23rd May 1995 Incident Reference: 1319 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Oils/Related Products Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	B5SE (SE)	842	2	513700 115600
11	**Pollution Incidents to Controlled Waters** Property Type: Road Location: Ditch Tributary To West Adur River Authority: Environment Agency, Southern Region Pollutant: Miscellaneous - Inert Suspended Solids Note: Red Coloured Groundwater Discharge Incident Date: 10th September 1993 Incident Reference: 711 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Miscellaneous/Other Pollution Type Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	B13SW (N)	966	2	513500 116695
11	**Pollution Incidents to Controlled Waters** Property Type: Road Location: Ditch To Tributary Of River Adur Authority: Environment Agency, Southern Region Pollutant: Miscellaneous - Inert Suspended Solids Note: Red Groundwater Discharge Incident Date: 14th September 1993 Incident Reference: 716 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Miscellaneous/Other Pollution Type Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	B13SW (N)	969	2	513500 116700
	River Quality Name: Honeybridge Strm GQA Grade: River Quality A Reach: Adur West Conf - Ashington Stw Estimated Distance (km): 5.5 Flow Rate: Flow less than 0.31 cumecs Flow Type: River Year: 2000	B5SE (S)	617	2	513564 115387
12	**Water Abstractions** Operator: Anton Taylor Licence Number: 23/064 Permit Version: Not Supplied Location: Ashington Trout Farm, Hole St Ashington Authority: Environment Agency, Southern Region Abstraction: Fish Farming Abstraction Type: Not Supplied Source: Surface Daily Rate (m3): 3500 Yearly Rate (m3): 1277500 Details: Honeybridge Stream; Tributary Adur Authorised Start: Not Supplied Authorised End: Not Supplied Permit Start Date: Not Supplied Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	B5SW (S)	715	2	513530 115530

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Groundwater Vulnerability Map Combined Classification: Principle Bedrock Aquifer - High Vulnerability Combined Vulnerability: High Combined Aquifer: Productive Bedrock Aquifer, No Superficial Aquifer Pollutant Speed: Intermediate Bedrock Flow: Well Connected Fractures Dilution: 300-550 mm/year Baseflow Index: 40-70% Superficial Patchiness: <90% Superficial Thickness: <3m Superficial Recharge: No Data	(W)	0	3	512594 115717
	Groundwater Vulnerability Map Combined Classification: Secondary Superficial Aquifer - Medium Vulnerability Combined Vulnerability: Medium Combined Aquifer: Unproductive Bedrock Aquifer, Productive Superficial Aquifer Pollutant Speed: Low Bedrock Flow: Well Connected Fractures Dilution: 300-550 mm/year Baseflow Index: 40-70% Superficial Patchiness: <90% Superficial Thickness: <3m Superficial Recharge: No Data	(W)	0	3	512742 116212
	Groundwater Vulnerability Map Combined Classification: Secondary Superficial Aquifer - Medium Vulnerability Combined Vulnerability: Medium Combined Aquifer: Unproductive Bedrock Aquifer, Productive Superficial Aquifer Pollutant Speed: Low Bedrock Flow: Well Connected Fractures Dilution: 300-550 mm/year Baseflow Index: 40-70% Superficial Patchiness: <90% Superficial Thickness: <3m Superficial Recharge: No Data	(W)	0	3	513000 116000
	Groundwater Vulnerability Map Combined Classification: Secondary Bedrock Aquifer - High Vulnerability Combined Vulnerability: High Combined Aquifer: Productive Bedrock Aquifer, Productive Superficial Aquifer Pollutant Speed: Low Bedrock Flow: Well Connected Fractures Dilution: 300-550 mm/year Baseflow Index: 40-70% Superficial Patchiness: <90% Superficial Thickness: <3m Superficial Recharge: No Data	(W)	0	3	512881 116154

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Groundwater Vulnerability Map Combined Classification: Secondary Superficial Aquifer - Medium Vulnerability Combined Vulnerability: Medium Combined Aquifer: Unproductive Bedrock Aquifer, Productive Superficial Aquifer Pollutant Speed: Intermediate Bedrock Flow: Well Connected Fractures Dilution: 300-550 mm/year Baseflow Index: 40-70% Superficial Patchiness: <90% Superficial Thickness: <3m Superficial Recharge: No Data	(W)	0	3	513000 115916
	Groundwater Vulnerability Map Combined Classification: Secondary Superficial Aquifer - Medium Vulnerability Combined Vulnerability: Medium Combined Aquifer: Unproductive Bedrock Aquifer, Productive Superficial Aquifer Pollutant Speed: Intermediate Bedrock Flow: Well Connected Fractures Dilution: 300-550 mm/year Baseflow Index: 40-70% Superficial Patchiness: <90% Superficial Thickness: <3m Superficial Recharge: No Data	(W)	0	3	512872 115886
	Groundwater Vulnerability Map Combined Classification: Unproductive Aquifer (may have productive aquifer beneath) Combined Vulnerability: Unproductive Combined Aquifer: Unproductive Bedrock Aquifer, No Superficial Aquifer Pollutant Speed: Intermediate Bedrock Flow: Well Connected Fractures Dilution: 300-550 mm/year Baseflow Index: 40-70% Superficial Patchiness: <90% Superficial Thickness: <3m Superficial Recharge: No Data	(W)	0	3	512635 115866
	Groundwater Vulnerability - Soluble Rock Risk None				
	Bedrock Aquifer Designations Aquifer Designation: Principal Aquifer	(SW)	0	3	512750 115588
	Bedrock Aquifer Designations Aquifer Designation: Secondary Aquifer - A	B9SW (N)	0	3	513399 116265
	Bedrock Aquifer Designations Aquifer Designation: Unproductive Strata	B5NW (SW)	0	3	513500 115916
	Superficial Aquifer Designations Aquifer Designation: Secondary Aquifer - Undifferentiated	B5NW (SW)	0	3	513500 115916
	Superficial Aquifer Designations Aquifer Designation: Secondary Aquifer - A	(W)	0	3	512872 115886
	Extreme Flooding from Rivers or Sea without Defences Type: Extent of Extreme Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial Models Boundary Accuracy: As Supplied	B5SE (S)	194	2	513590 115610
	Flooding from Rivers or Sea without Defences Type: Extent of Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial Models Boundary Accuracy: As Supplied	B5SE (S)	194	2	513590 115600

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Areas Benefiting from Flood Defences None				
	Flood Water Storage Areas None				
	Flood Defences None				
13	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 233.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	(SW)	247	4	513218 115599
14	**OS Water Network Lines** Watercourse Form: Lake Watercourse Length: 12.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	B5NW (W)	395	4	513310 115857
15	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 10.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	B5NW (W)	406	4	513320 115856
16	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 45.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	B5NW (W)	407	4	513312 115935
17	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 140.1 Watercourse Level: Not Supplied Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	B5NW (SW)	407	4	513443 115884
18	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 45.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	B5NW (W)	411	4	513308 115978
19	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 2.3 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	B5NW (W)	411	4	513309 115976
20	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 2.6 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	B5NW (W)	416	4	513323 115856

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
21	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 19.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	B5NW (W)	419	4	513342 115850
22	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 28.3 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	B9SW (NW)	420	4	513305 116023
23	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 23.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	B5NW (SW)	423	4	513296 115706
24	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 96.9 Watercourse Level: Not Supplied Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	B9SW (NW)	427	4	513303 116051
25	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 83.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	B5NW (SW)	438	4	513422 115826
26	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 84.7 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	B5SW (SW)	439	4	513315 115584
27	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 64.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	B9SW (NW)	454	4	513284 116146
28	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 253.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	B5SW (S)	505	4	513423 115572
29	**OS Water Network Lines** Watercourse Form: Lake Watercourse Length: 11.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	B5NW (SW)	520	4	513432 115823

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
30	**OS Water Network Lines** Watercourse Form: Lake Watercourse Length: 1.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	B5NW (SW)	530	4	513433 115823
31	**OS Water Network Lines** Watercourse Form: Lake Watercourse Length: 2.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	B5NW (SW)	530	4	513434 115825
32	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 48.8 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	B5NW (SW)	531	4	513455 115813
33	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 50.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	B5NW (SW)	531	4	513456 115870
34	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 21.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	B5NW (SW)	537	4	513459 115869
35	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 49.7 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	B5NW (SW)	554	4	513463 115866
36	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 76.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	B5NW (S)	578	4	513478 115803
37	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 91.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	B5NW (S)	595	4	513499 115840
38	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 6.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	B5NW (S)	647	4	513543 115768

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
39	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 231.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	B5NW (S)	651	4	513549 115766
40	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 4.4 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	B5NW (S)	651	4	513546 115769
41	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 161.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	B5SE (S)	716	4	513581 115576
42	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 10.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 2	B5SW (S)	717	4	513539 115544
43	**OS Water Network Lines** Watercourse Form: Lake Watercourse Length: 126.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 2	B5SE (S)	727	4	513598 115559
44	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 6.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	B5SE (S)	820	4	513619 115474
45	**OS Water Network Lines** Watercourse Form: Lake Watercourse Length: 33.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	B5SE (S)	821	4	513645 115493
46	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 139.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	B5SE (S)	822	4	513616 115465
47	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 3.0 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	B5SE (S)	822	4	513617 115468

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
48	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 41.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	B5SE (SE)	828	4	513683 115593
49	**OS Water Network Lines** Watercourse Form: Lake Watercourse Length: 45.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	B5SE (SE)	831	4	513668 115550
50	**OS Water Network Lines** Watercourse Form: Lake Watercourse Length: 30.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	B5SE (SE)	831	4	513668 115550
51	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 13.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	B5SE (S)	833	4	513652 115504
52	**OS Water Network Lines** Watercourse Form: Lake Watercourse Length: 10.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	B5SE (S)	835	4	513658 115512
53	**OS Water Network Lines** Watercourse Form: Lake Watercourse Length: 105.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	B5SE (S)	837	4	513658 115512
54	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 183.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	B5NE (E)	856	4	513761 115898
55	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 8.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	B5SE (SE)	858	4	513703 115558
56	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 2.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	B5SE (SE)	860	4	513704 115560

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
57	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 415.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	B5SE (SE)	860	4	513716 115568
58	**OS Water Network Lines** Watercourse Form: Lake Watercourse Length: 3.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	B5NE (E)	867	4	513769 115975
59	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 218.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	B1NE (S)	869	4	513591 115329
60	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 5.4 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	B5NE (SE)	874	4	513775 115796
61	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 3.8 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	B1NE (S)	876	4	513591 115333
62	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 187.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	B5NE (SE)	876	4	513776 115791
63	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 54.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	B1NW (S)	893	4	513444 115167
64	**OS Water Network Lines** Watercourse Form: Lake Watercourse Length: 5.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	B1NW (S)	896	4	513406 115135
65	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 6.1 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	B1NW (S)	897	4	513448 115163

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
66	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 3.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	B1NW (S)	903	4	513452 115159
67	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 5.6 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	B1NW (S)	905	4	513459 115162
68	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 53.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	B9NW (N)	918	4	513469 116656
69	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 106.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	B9NW (N)	969	4	513512 116682
70	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 4.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	B13SW (N)	972	4	513255 116956
71	**OS Water Network Lines** Watercourse Form: Lake Watercourse Length: 20.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	B5SE (SE)	980	4	513848 115610
72	**OS Water Network Lines** Watercourse Form: Lake Watercourse Length: 7.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	B5SE (SE)	990	4	513862 115626
73	**OS Water Network Lines** Watercourse Form: Lake Watercourse Length: 71.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Adur and Teville Primacy: 1	B5SE (SE)	995	4	513866 115620

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
74	**Historical Landfill Sites** Licence Holder: Not Supplied Location: Ashington, Sussex Name: Broadbridge Farm Operator Location: Not Supplied Boundary Accuracy: As Supplied Provider Reference: EAHLD19995 First Input Date: Not Supplied Last Input Date: Not Supplied Specified Waste Type: Deposited Waste included Inert Waste EA Waste Ref: 0 Regis Ref: Not Supplied WRC Ref: Not Supplied BGS Ref: Not Supplied Other Ref: WD27/303	B5SW (S)	451	2	513436 115670
75	**Historical Landfill Sites** Licence Holder: Not Supplied Location: Ashington, Sussex Name: East Wolves Farm Operator Location: Not Supplied Boundary Accuracy: As Supplied Provider Reference: EAHLD20016 First Input Date: 31st December 1985 Last Input Date: 31st December 1985 Specified Waste Type: Deposited Waste included Inert Waste EA Waste Ref: 0 Regis Ref: Not Supplied WRC Ref: 3800/8222 BGS Ref: Not Supplied Other Ref: WD27/020	B9NE (N)	860	2	513620 116373
	Local Authority Landfill Coverage Name: Horsham District Council - Has supplied landfill data		0	5	513500 115916
	Local Authority Landfill Coverage Name: West Sussex County Council - Has supplied landfill data		0	6	513500 115916
76	**Local Authority Recorded Landfill Sites** Location: Broadbridge Farm, Ashington Reference: 27/303 Authority: Horsham District Council, Environmental Health Department **Last Reported Status:** **Not Supplied** Types of Waste: Inert Date of Closure: Not Supplied Positional Accuracy: Located by supplier to within 100m Boundary Quality: Not Applicable	B5SW (S)	568	5	513400 115600
77	**Local Authority Recorded Landfill Sites** Location: Broadbridge Farm, East Of New A24 Ashington By-Pass, Ashington Reference: AS/34/93 Authority: West Sussex County Council, Environment & Development **Last Reported Status:** **Unknown** Types of Waste: Not Supplied Date of Closure: Not Supplied Positional Accuracy: Located by supplier to within 100m Boundary Quality: Not Applicable	B5SW (S)	657	6	513500 115600
78	**Local Authority Recorded Landfill Sites** Location: East Wolves Farm, Ashington Reference: AS/10/94 Authority: West Sussex County Council, Environment & Development **Last Reported Status:** **Not Supplied** Types of Waste: Spoil From Roadworks Date of Closure: Not Supplied Positional Accuracy: Located by supplier to within 100m Boundary Quality: Not Applicable	B9NE (N)	922	6	513600 116500
79	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1961	B5NW (W)	425	-	513330 115911

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
80	**Registered Landfill Sites** Licence Holder: M Daly Contractors Ltd Licence Reference: WSX/L1/0081 Site Location: Broadridge Farm, Ashington, Pulborough, West Sussex Licence Easting: 513500 Licence Northing: 115600 Operator Location: Little Knox Farm, Capstone Road, GILLINGHAM, Kent, ME7 3JF Authority: Environment Agency - Southern Region, Sussex Area Site Category: Landfill Max Input Rate: Small (Equal to or greater than 10,000 and less than 25,000 tonnes per year) Waste Source Restrictions: Waste produced/controlled by licence holder Status: Licence has completion certificateSurrendered Dated: 1st March 1994 Preceded By Licence: Not Given Superseded By Licence: Not Given Positional Accuracy: Manually positioned to the road within the address or location Boundary Accuracy: Not Applicable Authorised Waste: Clay, Top/Subsoils Max.Total Deposit Permitted Prohibited Waste: Hazardous Wastes Waste N.O.S.	B5SW (S)	657	2	513500 115600
81	**Registered Landfill Sites** Licence Holder: M Daly Contractors Ltd Licence Reference: WSX/L1/0099 Site Location: East Wolves Farm, East Of A24, Ashington, Pulborough, West Sussex Licence Easting: 513650 Licence Northing: 116450 Operator Location: Little Knox Farm, Capstone Road, GILLINGHAM, Kent, ME7 3JF Authority: Environment Agency - Southern Region, Sussex Area Site Category: Landfill Max Input Rate: Medium (Equal to or greater than 25,000 and less than 75,000 tonnes per year) Waste Source Restrictions: Waste produced/controlled by licence holder Status: Licence lapsed/cancelled/defunct/not applicable/surrenderedCancelled Dated: 1st June 1994 Preceded By Licence: Not Given Superseded By Licence: Not Given Positional Accuracy: Manually positioned to the address or location Boundary Accuracy: Not Applicable Authorised Waste: Clay, Top/Subsoils Max.Waste Permitted By Licence Prohibited Waste: Hazardous Materials Waste N.O.S.	B9NE (N)	929	2	513650 116450

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS 1:625,000 Solid Geology Description: Wealden Group	B5NW (SW)	0	1	513500 115916
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic Concentration: 15 - 25 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 15 - 30 mg/kg	B5NW (N)	0	1	513494 116004
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic Concentration: <15 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 15 - 30 mg/kg	B5NW (SW)	0	1	513500 115916
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic Concentration: <15 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 15 - 30 mg/kg	B13SW (N)	775	1	513322 116907
	BGS Measured Urban Soil Chemistry No data available				
	BGS Urban Soil Chemistry Averages No data available				
	Coal Mining Affected Areas In an area that might not be affected by coal mining				
	Non Coal Mining Areas of Great Britain Risk: Highly Unlikely Source: British Geological Survey, National Geoscience Information Service	B5NW (SW)	0	1	513500 115916
	Non Coal Mining Areas of Great Britain Risk: Highly Unlikely Source: British Geological Survey, National Geoscience Information Service	B9SW (N)	0	1	513399 116265
	Non Coal Mining Areas of Great Britain Risk: Highly Unlikely Source: British Geological Survey, National Geoscience Information Service	B9NW (N)	181	1	513404 116492
	Potential for Collapsible Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	B5NW (SW)	0	1	513500 115916
	Potential for Collapsible Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	B5SW (S)	200	1	513409 115638
	Potential for Compressible Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	B5NW (SW)	0	1	513500 115916
	Potential for Compressible Ground Stability Hazards Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service	B5SW (S)	200	1	513409 115638
	Potential for Ground Dissolution Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	B5NW (SW)	0	1	513500 115916

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Potential for Landslide Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	B5NW (SW)	0	1	513500 115916
	Potential for Running Sand Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	B5NW (SW)	0	1	513500 115916
	Potential for Running Sand Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	B5NW (N)	37	1	513494 116004
	Potential for Running Sand Ground Stability Hazards Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	B5SW (S)	200	1	513409 115638
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	B5NW (SW)	0	1	513500 115916
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	B9SW (N)	61	1	513399 116265
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	B9NW (N)	187	1	513404 116492
	Radon Potential - Radon Affected Areas Affected Area: The property is in a Lower probability radon area (less than 1% of homes are estimated to be at or above the Action Level). Source: British Geological Survey, National Geoscience Information Service	B5NW (SW)	0	1	513500 115916
	Radon Potential - Radon Protection Measures Protection Measure: No radon protective measures are necessary in the construction of new dwellings or extensions Source: British Geological Survey, National Geoscience Information Service	B5NW (SW)	0	1	513500 115916

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
82	**Contemporary Trade Directory Entries** Name: Acs Location: Hoots House, London Road, Ashington, Pulborough, West Sussex, RH20 3DD Classification: Salvage Dealers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	B5SW (SW)	374	-	513223 115681
83	**Contemporary Trade Directory Entries** Name: Hometyre Ashington - Mobile Tyre Service Location: London Road, Ashington, Pulborough, West Sussex, RH20 3DD Classification: Tyre Dealers **Status: Active** Positional Accuracy: Automatically positioned to the address	B9SW (NW)	378	-	513256 116036
84	**Contemporary Trade Directory Entries** Name: I A Mackinnon Location: Blue Bird Cottage, London Road, Ashington, Pulborough, West Sussex, RH20 3JR Classification: Garage Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	B9SW (NW)	446	-	513250 116178
85	**Contemporary Trade Directory Entries** Name: Hitek Location: Penmaen House, London Road, Ashington, Pulborough, RH20 3JR Classification: Testing, Inspection & Calibration Equipment Manufacturers **Status: Active** Positional Accuracy: Automatically positioned to the address	B9SW (NW)	572	-	513262 116341
85	**Contemporary Trade Directory Entries** Name: Jarltech Europe G M B H Location: PENMAEN HOUSE, LONDON ROAD, ASHINGTON, PULBOROUGH, RH20 3JR Classification: Cash Registers & Check-Out Equipment **Status: Active** Positional Accuracy: Automatically positioned to the address	B9SW (NW)	572	-	513262 116341
86	**Contemporary Trade Directory Entries** Name: Ashington Automobile Company Location: London Road, Ashington, Pulborough, RH20 3JR Classification: Car Dealers **Status: Active** Positional Accuracy: Automatically positioned to the address	B9NW (NW)	621	-	513271 116397
86	**Contemporary Trade Directory Entries** Name: Ashington Automobile Co Location: London Road, Ashington, Pulborough, West Sussex, RH20 3JR Classification: Car Dealers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	B9NW (NW)	621	-	513277 116393
87	**Contemporary Trade Directory Entries** Name: B P Service Station Location: M and S At, Petrol Filling Station, London Road, Ashington, RH20 3AT Classification: Petrol Filling Stations **Status: Active** Positional Accuracy: Automatically positioned to the address	B9NW (N)	837	-	513409 116598
88	**Fuel Station Entries** Name: Ashington Sf Connect Location: London Road A24, Ashington , Pulborough, West Sussex, RH20 3AT Brand: Bp Premises Type: Service Area **Status: Open** Positional Accuracy: Manually positioned to the address or location	B9NW (N)	837	-	513409 116599
89	**Points of Interest - Commercial Services** Name: I A Mackinnon Location: Blue Bird Cottage, London Road, Ashington, Pulborough, RH20 3JR Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	B9SW (NW)	446	7	513250 116178
89	**Points of Interest - Commercial Services** Name: Blue Bird Garage Location: London Road, Ashington, Pulborough, RH20 3JR Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	B9SW (NW)	447	7	513270 116153

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
90	**Points of Interest - Commercial Services** Name: Ashtington Automobile Company Location: London Road, Ashington, Pulborough, RH20 3JR Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	B9NW (NW)	621	7	513277 116393
90	**Points of Interest - Commercial Services** Name: Ashington Automobile Company Location: London Road, Ashington, Pulborough, RH20 3JR Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	B9NW (NW)	621	7	513276 116392
91	**Points of Interest - Commercial Services** Name: B P Car Wash Location: London Road, Ashington, Pulborough, RH20 3AT Category: Personal, Consumer and other Services Class Code: Vehicle Cleaning Services Positional Accuracy: Positioned to address or location	B9NW (N)	872	7	513457 116587
92	**Points of Interest - Manufacturing and Production** Name: Works Location: RH20 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	B5SW (S)	664	7	513520 115627
92	**Points of Interest - Manufacturing and Production** Name: Works Location: RH20 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	B5SW (S)	665	7	513520 115626
92	**Points of Interest - Manufacturing and Production** Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	B5SW (S)	668	7	513524 115627
93	**Points of Interest - Manufacturing and Production** Name: Solar Panels Location: RH20 Category: Industrial Features Class Code: Energy Production Positional Accuracy: Positioned to an adjacent address or location	B9SE (N)	750	7	513596 116186
94	**Points of Interest - Public Infrastructure** Name: BP Service Station Location: London Road, Ashington, Pulborough, RH20 3AT Category: Road And Rail Class Code: Petrol and Fuel Stations Positional Accuracy: Positioned to address or location	B9NW (N)	837	7	513409 116599
95	**Points of Interest - Recreational and Environmental** Name: Playground Location: Not Supplied Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	B5NW (W)	444	7	513349 115913
95	**Points of Interest - Recreational and Environmental** Name: Playground Location: Turnpike Way, RH20 Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to address or location	B5NW (W)	444	7	513349 115919

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
96	**Ancient Woodland** Name: Not Supplied Reference: 1478394 Area(m²): 3802.04 Type: Ancient and Semi-Natural Woodland	(W)	79	8	512607 115640
97	**Ancient Woodland** Name: America Wood Reference: 1478903 Area(m²): 47148.24 Type: Ancient and Semi-Natural Woodland	B9SW (NW)	537	8	513427 116024
98	**Ancient Woodland** Name: Not Supplied Reference: 1478395 Area(m²): 6913.94 Type: Ancient and Semi-Natural Woodland	(SW)	662	8	513045 115112
99	**Ancient Woodland** Name: Not Supplied Reference: 1478121 Area(m²): 12700.76 Type: Ancient and Semi-Natural Woodland	(S)	863	8	513110 114970
100	**Ancient Woodland** Name: Not Supplied Reference: 1478899 Area(m²): 37048.13 Type: Plantation on Ancient Woodland	B5SE (SE)	998	8	513776 115392

Agency & Hydrological	Version	Update Cycle
Contaminated Land Register Entries and Notices		
Horsham District Council - Environmental Health Department	February 2015	Annual Rolling Update
Environment Agency - Head Office	June 2020	Annually
Discharge Consents		
Environment Agency - Southern Region	July 2021	Quarterly
Enforcement and Prohibition Notices		
Environment Agency - Southern Region	March 2013	
Integrated Pollution Controls		
Environment Agency - Southern Region	January 2009	
Integrated Pollution Prevention And Control		
Environment Agency - South East Region - Solent & South Downs Area	July 2021	Quarterly
Environment Agency - Southern Region	July 2021	Quarterly
Local Authority Integrated Pollution Prevention And Control		
Horsham District Council - Environmental Health Department	June 2015	Variable
Local Authority Pollution Prevention and Controls		
Horsham District Council - Environmental Health Department	June 2015	Annual Rolling Update
Local Authority Pollution Prevention and Control Enforcements		
Horsham District Council - Environmental Health Department	June 2015	Variable
Nearest Surface Water Feature		
Ordnance Survey	August 2021	
Pollution Incidents to Controlled Waters		
Environment Agency - Southern Region	December 1999	
Prosecutions Relating to Authorised Processes		
Environment Agency - Southern Region	July 2015	
Prosecutions Relating to Controlled Waters		
Environment Agency - Southern Region	March 2013	
Registered Radioactive Substances		
Environment Agency - Southern Region	June 2016	Annually
River Quality		
Environment Agency - Head Office	November 2001	Not Applicable
River Quality Biology Sampling Points		
Environment Agency - Head Office	April 2012	Annually
River Quality Chemistry Sampling Points		
Environment Agency - Head Office	April 2012	Annually
Substantiated Pollution Incident Register		
Environment Agency - South East Region - Solent & South Downs Area	July 2021	Quarterly
Environment Agency - Southern Region - Solent and South Downs	July 2021	Quarterly
Environment Agency - Southern Region - Sussex Area	July 2021	Quarterly
Water Abstractions		
Environment Agency - Southern Region	July 2021	Quarterly
Water Industry Act Referrals		
Environment Agency - Southern Region	October 2017	Quarterly
Groundwater Vulnerability Map		
Environment Agency - Head Office	June 2018	As notified
Bedrock Aquifer Designations		
Environment Agency - Head Office	January 2018	Annually
Superficial Aquifer Designations		
Environment Agency - Head Office	January 2018	Annually
Source Protection Zones		
Environment Agency - Head Office	May 2021	Bi-Annually

Agency & Hydrological	Version	Update Cycle
Extreme Flooding from Rivers or Sea without Defences Environment Agency - Head Office	September 2021	Quarterly
Flooding from Rivers or Sea without Defences Environment Agency - Head Office	September 2021	Quarterly
Areas Benefiting from Flood Defences Environment Agency - Head Office	September 2021	Quarterly
Flood Water Storage Areas Environment Agency - Head Office	September 2021	Quarterly
Flood Defences Environment Agency - Head Office	September 2021	Quarterly
OS Water Network Lines Ordnance Survey	July 2021	Quarterly
Surface Water 1 in 30 year Flood Extent Environment Agency - Head Office	May 2018	Annually
Surface Water 1 in 100 year Flood Extent Environment Agency - Head Office	May 2018	Annually
Surface Water 1 in 1000 year Flood Extent Environment Agency - Head Office	May 2018	Annually
Surface Water Suitability Environment Agency - Head Office	February 2016	Annually
BGS Groundwater Flooding Susceptibility British Geological Survey - National Geoscience Information Service	May 2013	Annually

Waste	Version	Update Cycle
BGS Recorded Landfill Sites		
British Geological Survey - National Geoscience Information Service	November 2002	Not Applicable
Historical Landfill Sites		
Environment Agency - Head Office	May 2021	Quarterly
Integrated Pollution Control Registered Waste Sites		
Environment Agency - Southern Region	January 2009	Not Applicable
Licensed Waste Management Facilities (Landfill Boundaries)		
Environment Agency - South East Region - Solent & South Downs Area	July 2021	Quarterly
Environment Agency - Southern Region - Solent and South Downs	July 2021	Quarterly
Environment Agency - Southern Region - Sussex Area	July 2021	Quarterly
Licensed Waste Management Facilities (Locations)		
Environment Agency - South East Region - Solent & South Downs Area	July 2021	Quarterly
Environment Agency - Southern Region - Solent and South Downs	July 2021	Quarterly
Environment Agency - Southern Region - Sussex Area	July 2021	Quarterly
Local Authority Landfill Coverage		
Horsham District Council - Environmental Health Department	February 2003	Not Applicable
West Sussex County Council - Environment & Development	February 2003	Not Applicable
Local Authority Recorded Landfill Sites		
Horsham District Council - Environmental Health Department	October 2018	
West Sussex County Council - Environment & Development	October 2018	
Potentially Infilled Land (Non-Water)		
Landmark Information Group Limited	December 1999	Not Applicable
Potentially Infilled Land (Water)		
Landmark Information Group Limited	December 1999	
Registered Landfill Sites		
Environment Agency - Southern Region - Solent and South Downs	March 2006	Not Applicable
Environment Agency - Southern Region - Sussex Area	March 2006	Not Applicable
Registered Waste Transfer Sites		
Environment Agency - Southern Region - Solent and South Downs	April 2018	
Environment Agency - Southern Region - Sussex Area	April 2018	
Registered Waste Treatment or Disposal Sites		
Environment Agency - Southern Region - Solent and South Downs	June 2015	
Environment Agency - Southern Region - Sussex Area	June 2015	
Hazardous Substances	**Version**	**Update Cycle**
Control of Major Accident Hazards Sites (COMAH)		
Health and Safety Executive	April 2018	Bi-Annually
Explosive Sites		
Health and Safety Executive	March 2017	Annually
Notification of Installations Handling Hazardous Substances (NIHHS)		
Health and Safety Executive	August 2001	
Planning Hazardous Substance Enforcements		
Horsham District Council - Planning Department	August 2015	Variable
West Sussex County Council - Environment & Development	October 2006	Annual Rolling Update
Planning Hazardous Substance Consents		
Horsham District Council - Planning Department	August 2015	Variable
West Sussex County Council - Environment & Development	October 2006	Annual Rolling Update

Geological	Version	Update Cycle
BGS 1:625,000 Solid Geology British Geological Survey - National Geoscience Information Service	January 2009	Not Applicable
BGS Estimated Soil Chemistry British Geological Survey - National Geoscience Information Service	December 2015	Annually
BGS Recorded Mineral Sites British Geological Survey - National Geoscience Information Service	November 2021	Bi-Annually
CBSCB Compensation District Cheshire Brine Subsidence Compensation Board (CBSCB)	August 2011	As notified
Coal Mining Affected Areas The Coal Authority - Property Searches	March 2014	Annual Rolling Update
Mining Instability Ove Arup & Partners	June 1998	Not Applicable
Non Coal Mining Areas of Great Britain British Geological Survey - National Geoscience Information Service	May 2015	Not Applicable
Potential for Collapsible Ground Stability Hazards British Geological Survey - National Geoscience Information Service	April 2020	Annually
Potential for Compressible Ground Stability Hazards British Geological Survey - National Geoscience Information Service	January 2019	Annually
Potential for Ground Dissolution Stability Hazards British Geological Survey - National Geoscience Information Service	January 2019	Annually
Potential for Landslide Ground Stability Hazards British Geological Survey - National Geoscience Information Service	January 2019	Annually
Potential for Running Sand Ground Stability Hazards British Geological Survey - National Geoscience Information Service	January 2019	Annually
Potential for Shrinking or Swelling Clay Ground Stability Hazards British Geological Survey - National Geoscience Information Service	January 2019	Annually
Radon Potential - Radon Affected Areas British Geological Survey - National Geoscience Information Service	July 2011	Annually
Radon Potential - Radon Protection Measures British Geological Survey - National Geoscience Information Service	July 2011	Annually
Industrial Land Use	**Version**	**Update Cycle**
Contemporary Trade Directory Entries Thomson Directories	July 2021	Quarterly
Fuel Station Entries Catalist Ltd - Experian	August 2021	Quarterly
Gas Pipelines National Grid	October 2021	Annually
Points of Interest - Commercial Services PointX	September 2021	Quarterly
Points of Interest - Education and Health PointX	September 2021	Quarterly
Points of Interest - Manufacturing and Production PointX	September 2021	Quarterly
Points of Interest - Public Infrastructure PointX	September 2021	Quarterly
Points of Interest - Recreational and Environmental PointX	September 2021	Quarterly
Underground Electrical Cables National Grid	May 2021	Annually

Sensitive Land Use	Version	Update Cycle
Ancient Woodland		
Natural England	February 2021	Bi-Annually
Areas of Adopted Green Belt		
Horsham District Council - Planning Department	October 2020	Quarterly
South Downs National Park	October 2020	Quarterly
Areas of Unadopted Green Belt		
Horsham District Council - Planning Department	October 2020	Quarterly
South Downs National Park	October 2020	Quarterly
Areas of Outstanding Natural Beauty		
Natural England	January 2021	Bi-Annually
Environmentally Sensitive Areas		
Natural England	January 2017	
Forest Parks		
Forestry Commission	April 1997	Not Applicable
Local Nature Reserves		
Natural England	February 2021	Bi-Annually
Marine Nature Reserves		
Natural England	July 2019	Bi-Annually
National Nature Reserves		
Natural England	January 2021	Bi-Annually
National Parks		
Natural England	February 2018	Bi-Annually
Nitrate Sensitive Areas		
Natural England	April 2016	Not Applicable
Nitrate Vulnerable Zones		
Department for Environment, Food and Rural Affairs (DEFRA - formerly FRCA)	April 2016	
Environment Agency - Head Office	June 2017	Bi-Annually
Ramsar Sites		
Natural England	August 2020	Bi-Annually
Sites of Special Scientific Interest		
Natural England	February 2021	Bi-Annually
Special Areas of Conservation		
Natural England	July 2020	Bi-Annually
Special Protection Areas		
Natural England	February 2021	Bi-Annually

Data Suppliers

A selection of organisations who provide data within this report

Data Supplier	Data Supplier Logo
Ordnance Survey	
Environment Agency	
Scottish Environment Protection Agency	
The Coal Authority	
British Geological Survey	
Centre for Ecology and Hydrology	
Natural Resources Wales	
Scottish Natural Heritage	
Natural England	
Public Health England	
Ove Arup	
Stantec UK Ltd	

Useful Contacts

Contact	Name and Address	Contact Details
1	**British Geological Survey - Enquiry Service** British Geological Survey, Environmental Science Centre, Keyworth, Nottingham, Nottinghamshire, NG12 5GG	Telephone: 0115 936 3143 Fax: 0115 936 3276 Email: enquiries@bgs.ac.uk Website: www.bgs.ac.uk
2	**Environment Agency - National Customer Contact Centre (NCCC)** PO Box 544, Templeborough, Rotherham, S60 1BY	Telephone: 03708 506 506 Email: enquiries@environment-agency.gov.uk
3	**Environment Agency - Head Office** Rio House, Waterside Drive, Aztec West, Almondsbury, Bristol, Avon, BS32 4UD	Telephone: 01454 624400 Fax: 01454 624409
4	**Ordnance Survey** Adanac Drive, Southampton, Hampshire, SO16 0AS	Telephone: 03456 05 05 05 Email: customerservices@ordnancesurvey.co.uk Website: www.ordnancesurvey.gov.uk
5	**Horsham District Council - Environmental Health Department** Park House, North Street, Horsham, Sussex, RH12 1RL	Telephone: 01403 215100 Fax: 01403 732790 Website: www.horsham.gov.uk
6	**West Sussex County Council - Environment & Development** County Hall, Tower hall, Chichester, West Sussex, PO19 1RH	Telephone: 01243 777100 Website: www.westsussex.gov.uk
7	**PointX** 7 Abbey Court, Eagle Way, Sowton, Exeter, Devon, EX2 7HY	Website: www.pointx.co.uk
8	**Natural England** County Hall, Spetchley Road, Worcester, WR5 2NP	Telephone: 0300 060 3900 Email: enquiries@naturalengland.org.uk Website: www.naturalengland.org.uk
-	**Public Health England - Radon Survey, Centre for Radiation, Chemical and Environmental Hazards** Chilton, Didcot, Oxfordshire, OX11 0RQ	Telephone: 01235 822622 Fax: 01235 833891 Email: radon@phe.gov.uk Website: www.ukradon.org
-	**Landmark Information Group Limited** Imperium, Imperial Way, Reading, Berkshire, RG2 0TD	Telephone: 0844 844 9952 Fax: 0844 844 9951 Email: customerservices@landmarkinfo.co.uk Website: www.landmarkinfo.co.uk

Please note that the Environment Agency / Natural Resources Wales / SEPA have a charging policy in place for enquiries.

Geology 1:50,000 Maps Legends

Artificial Ground and Landslip

Map Colour	Lex Code	Rock Name	Rock Type	Min and Max Age
	SLIP	Landslide Deposit	Clay	Not Supplied - Quaternary

Superficial Geology

Map Colour	Lex Code	Rock Name	Rock Type	Min and Max Age
	ALV	Alluvium	Clay, Silt, Sand and Gravel	Not Supplied - Holocene
	HEAD	Head	Clay, Silt, Sand and Gravel	Not Supplied - Quaternary

Bedrock and Faults

Map Colour	Lex Code	Rock Name	Rock Type	Min and Max Age
	AC	Atherfield Clay Formation	Mudstone	Not Supplied - Aptian
	LGS	Lower Greensand Group	Sandstone, Silty	Not Supplied - Aptian
	WC	Weald Clay Formation	Sandstone	Not Supplied - Hauterivian
	WC	Weald Clay Formation	Mudstone	Not Supplied - Hauterivian
	WC	Weald Clay Formation	Limestone	Not Supplied - Hauterivian
		Faults		

RSK

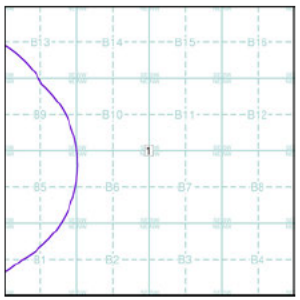
Geology 1:50,000 Maps

This report contains geological map extracts taken from the BGS Digital Geological map of Great Britain at 1 50,000 scale and is designed for users carrying out preliminary site assessments who require geological maps for the area around the site. This mapping may be more up to date than previously published paper maps.
The various geological layers - artificial and landslip deposits, superficial geology and solid (bedrock) geology are displayed in separate maps, but superimposed on the final 'Combined Surface Geology' map. All map legends feature on this page. Not all layers have complete nationwide coverage, so availability of data for relevant map sheets is indicated below.

Geology 1:50,000 Maps Coverage

Map ID:	1
Map Sheet No:	318
Map Name:	Brighton and Wo
Map Date:	2006
Bedrock Geology:	Available
Superficial Geology:	Available
Artificial Geology:	Available
Faults:	Not Supplied
Landslip:	Available
Rock Segments:	Not Supplied

Geology 1:50,000 Maps - Slice B

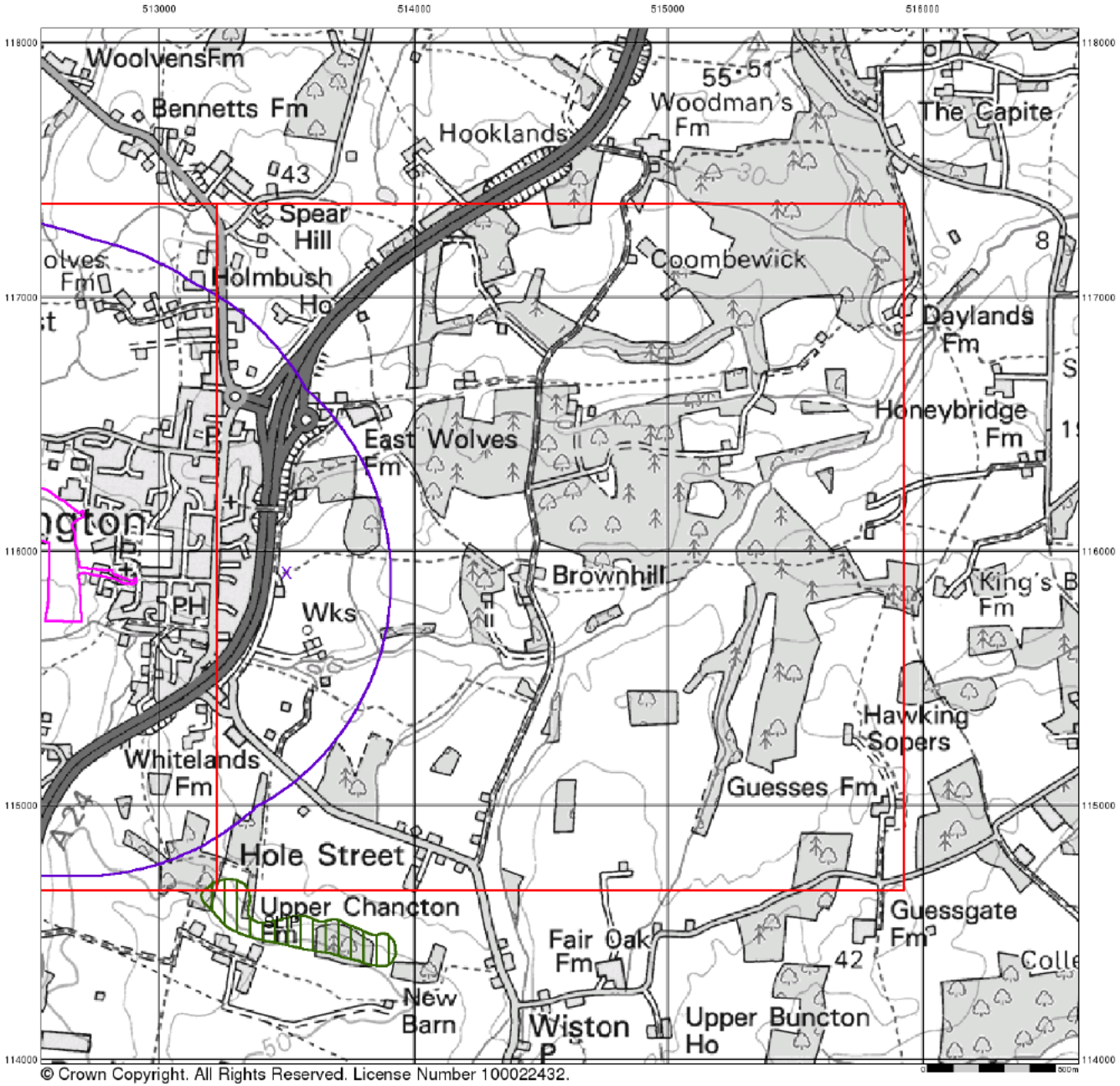


Order Details:

Order Number:	287518451_1_1
Customer Reference:	52368
National Grid Reference:	513500, 115920
Slice:	B
Site Area (Ha):	15 35
Search Buffer (m):	1000

Site Details:

Firle, Church Lane, Ashington, PULBOROUGH, RH20 3JX



© Crown Copyright. All Rights Reserved. License Number 100022432.

Artificial Ground and Landslip

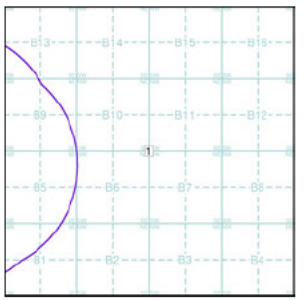
Artificial ground is a term used by BGS for those areas where the ground surface has been significantly modified by human activity. Information about previously developed ground is especially important, as it is often associated with potentially contaminated material, unpredictable engineering conditions and unstable ground.

Artificial ground includes:

- Made ground - man-made deposits such as embankments and spoil heaps on the natural ground surface.
- Worked ground - areas where the ground has been cut away such as quarries and road cuttings.
- Infilled ground - areas where the ground has been cut away then wholly or partially backfilled.
- Landscaped ground - areas where the surface has been reshaped.
- Disturbed ground - areas of ill-defined shallow or near surface mineral workings where it is impracticable to map made and worked ground separately.

Mass movement (landslip) deposits on BGS geological maps are primarily superficial deposits that have moved down slope under gravity to form landslips. These affect bedrock, other superficial deposits and artificial ground. The dataset also includes foundered strata, where the ground has collapsed due to subsidence.

Artificial Ground and Landslip Map - Slice B



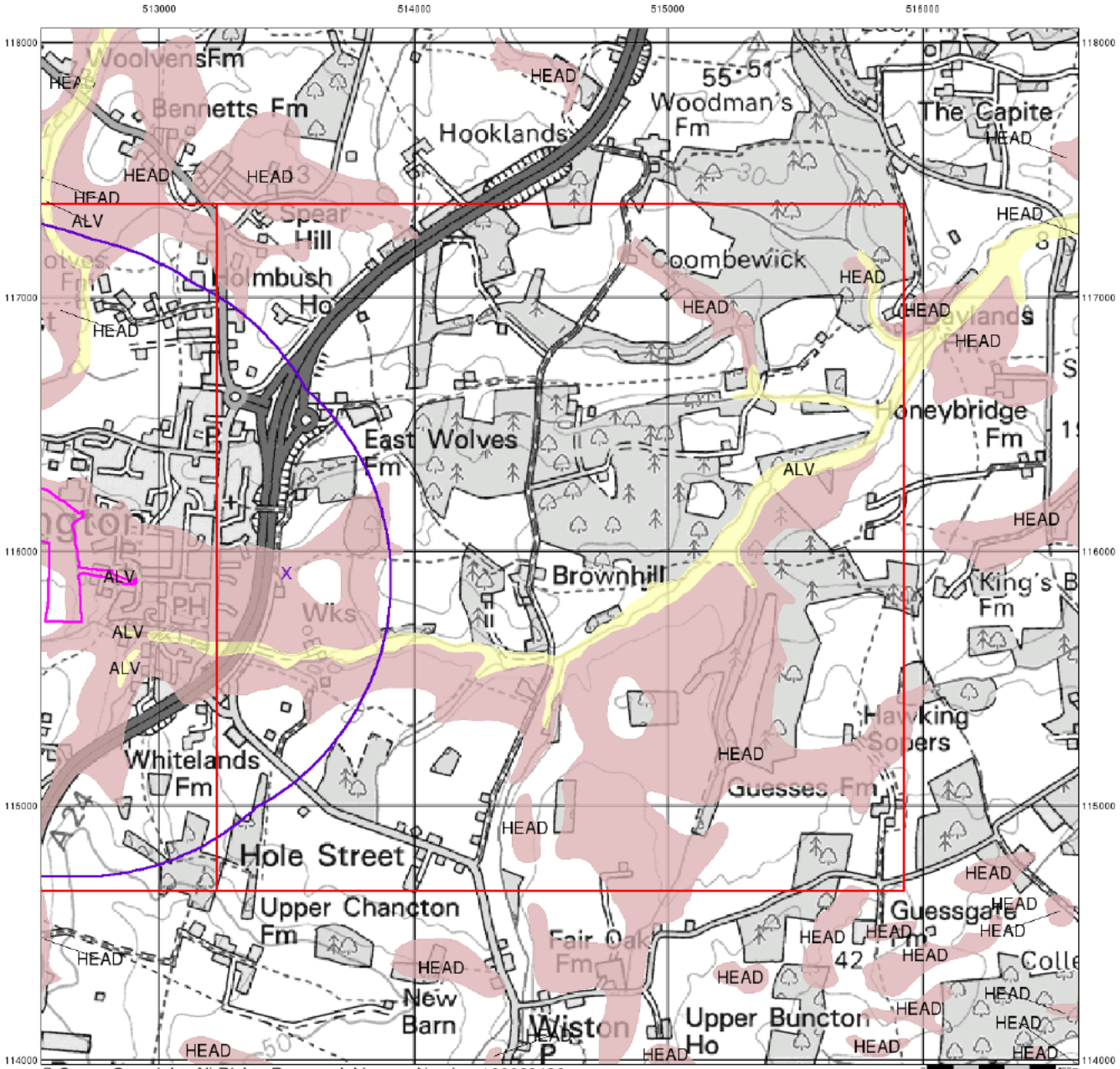
Order Details:

Order Number:	287518451_1_1
Customer Reference:	52368
National Grid Reference:	513500, 115920
Slice:	B
Site Area (Ha):	15.35
Search Buffer (m):	1000

Site Details:

Firle, Church Lane, Ashington, PULBOROUGH, RH20 3JX

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



© Crown Copyright. All Rights Reserved. License Number 100022432.

RSK

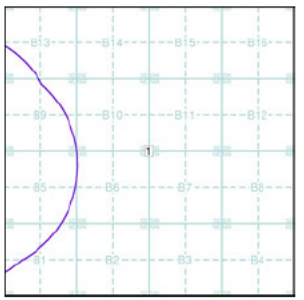
Superficial Geology

Superficial Deposits are the youngest geological deposits formed during the most recent period of geological time, the Quaternary, which extends back about 1 8 million years from the present.

They rest on older deposits or rocks referred to as Bedrock. This dataset contains Superficial deposits that are of natural origin and 'in place'. Other superficial strata may be held in the Mass Movement dataset where they have been moved, or in the Artificial Ground dataset where they are of man-made origin.

Most of these Superficial deposits are unconsolidated sediments such as gravel, sand, silt and clay, and onshore they form relatively thin, often discontinuous patches or larger spreads.

Superficial Geology Map - Slice B



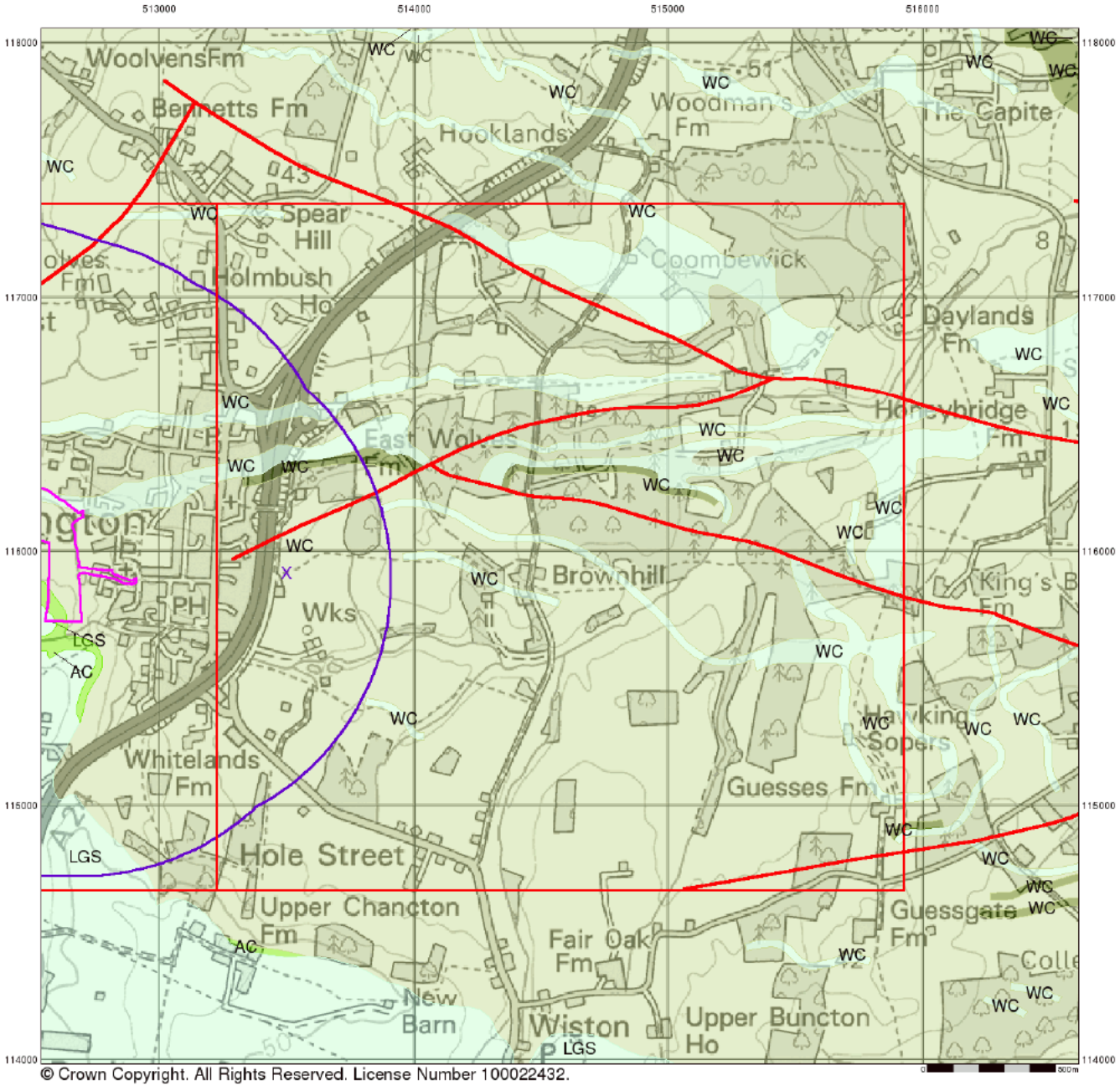
Order Details:

Order Number:	287518451_1_1
Customer Reference:	52368
National Grid Reference:	513500, 115920
Slice:	B
Site Area (Ha):	15 35
Search Buffer (m):	1000

Site Details:

Firle, Church Lane, Ashington, PULBOROUGH, RH20 3JX

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



© Crown Copyright. All Rights Reserved. License Number 100022432.

Bedrock and Faults

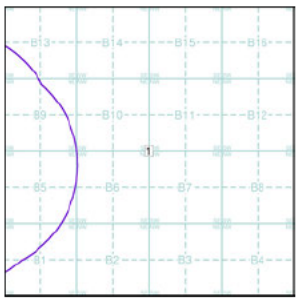
Bedrock geology is a term used for the main mass of rocks forming the Earth and are present everywhere, whether exposed at the surface in outcrops or concealed beneath superficial deposits or water.

The bedrock has formed over vast lengths of geological time ranging from ancient and highly altered rocks of the Proterozoic, some 2500 million years ago, or older, up to the relatively young Pliocene, 1.8 million years ago.

The bedrock geology includes many lithologies, often classified into three types based on origin: igneous, metamorphic and sedimentary.

The BGS Faults and Rock Segments dataset includes geological faults (e g. normal, thrust), and thin beds mapped as lines (e g. coal seam, gypsum bed). Some of these are linked to other particular 1:50,000 Geology datasets, for example, coal seams are part of the bedrock sequence, most faults and mineral veins primarily affect the bedrock but cut across the strata and post date its deposition.

Bedrock and Faults Map - Slice B



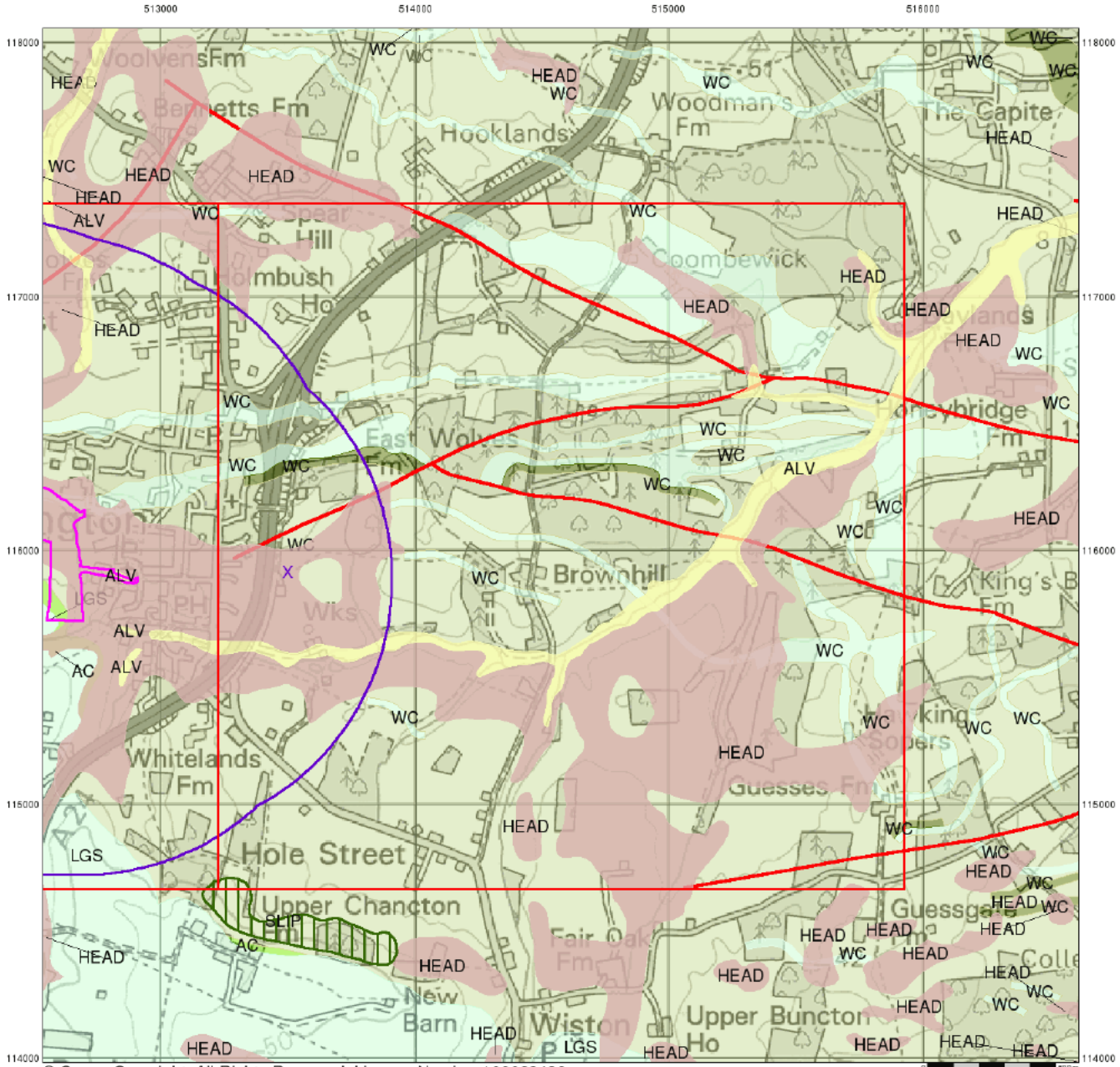
Order Details:

Order Number:	287518451_1_1
Customer Reference:	52368
National Grid Reference:	513500, 115920
Slice:	B
Site Area (Ha):	15.35
Search Buffer (m):	1000

Site Details:

Firle, Church Lane, Ashington, PULBOROUGH, RH20 3JX

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



© Crown Copyright. All Rights Reserved. License Number 100022432.

Combined Surface Geology

The Combined Surface Geology map combines all the previous maps into one combined geological overview of your site.

Please consult the legends to the previous maps to interpret the Combined "Surface Geology" map.

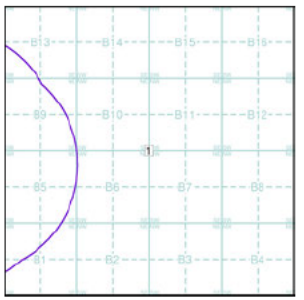
Additional Information

More information on 1:50,000 Geological mapping and explanations of rock classifications can be found on the BGS website. Using the LEX Codes in this report, further descriptions of rock types can be obtained by interrogating the 'BGS Lexicon of Named Rock Units'. This database can be accessed by following the 'Information and Data' link on the BGS website.

Contact

British Geological Survey
Kingsley Dunham Centre
Keyworth
Nottingham
NG12 5GG
Telephone: 0115 936 3143
Fax: 0115 936 3276
email: enquiries@bgs ac.uk
website: www.bgs ac.uk

Combined Geology Map - Slice B



Order Details:

Order Number:	287518451_1_1
Customer Reference:	52368
National Grid Reference:	513500, 115920
Slice:	B
Site Area (Ha):	15.35
Search Buffer (m):	1000

Site Details:

Firle, Church Lane, Ashington, PULBOROUGH, RH20 3JX

Historical Mapping Legends

Ordnance Survey County Series 1:10,560

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

Ordnance Survey Plan 1:10,000

Chalk Pit, Clay Pit or Quarry
Gravel Pit
Sand Pit
Disused Pit or Quarry
Refuse or Slag Heap
Lake, Loch or Pond
Dunes
Boulders
Coniferous Trees
Non-Coniferous Trees
Orchard
Scrub
Coppice
Bracken
Heath
Rough Grassland
Marsh
Reeds
Saltings
Building
Direction of Flow of Water
Shingle
Sand
Glasshouse
Pylon
Electricity Transmission Line
Pole
Sloping Masonry
Cutting
Embankment
Standard Gauge Multiple Track
Road Under
Road Over
Level Crossing
Foot Bridge
Standard Gauge Single Track
Siding, Tramway or Mineral Line
Narrow Gauge
Geographical County
Administrative County, County Borough or County of City
Municipal Borough, Urban or Rural District, Burgh or District Council
Borough, Burgh or County Constituency
Shown only when not coincident with other boundaries
Civil Parish
Shown alternately when coincidence of boundaries occurs

BP, BS	Boundary Post or Stone	Pol Sta	Police Station
Ch	Church	PO	Post Office
CH	Club House	PC	Public Convenience
F E Sta	Fire Engine Station	PH	Public House
FB	Foot Bridge	SB	Signal Box
Fn	Fountain	Spr	Spring
GP	Guide Post	TCB	Telephone Call Box
MP	Mile Post	TCP	Telephone Call Post
MS	Mile Stone	W	Well

1:10,000 Raster Mapping

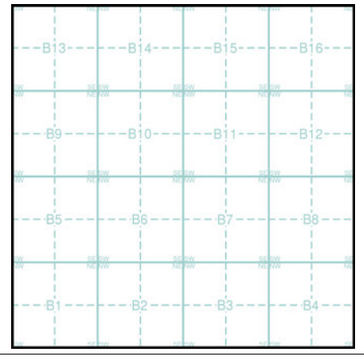
Gravel Pit
Refuse tip or slag heap
Rock
Rock (scattered)
Boulders
Boulders (scattered)
Shingle
Mud
Sand
Sand Pit
Slopes
Top of cliff
General detail
Underground detail
Overhead detail
Narrow gauge railway
Multi-track railway
Single track railway
County boundary (England only)
Civil, parish or community boundary
District, Unitary, Metropolitan, London Borough boundary
Constituency boundary
Area of wooded vegetation
Non-coniferous trees
Non-coniferous trees (scattered)
Coniferous trees
Coniferous trees (scattered)
Positioned tree
Orchard
Coppice or Osiers
Rough Grassland
Heath
Scrub
Marsh, Salt Marsh or Reeds
Water feature
Flow arrows
MHW(S) Mean high water (springs)
MLW(S) Mean low water (springs)
Telephone line (where shown)
Electricity transmission line (with poles)
BM 123.45 m Bench mark (where shown)
Triangulation station
Point feature (e.g. Guide Post or Mile Stone)
Pylon, flare stack or lighting tower
Site of (antiquity)
Glasshouse
General Building
Important Building

RSK

Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Sussex	1:10,560	1879	2
Sussex	1:10,560	1898	3
Sussex	1:10,560	1913 - 1914	4
Sussex	1:10,560	1914	5
Historical Aerial Photography	1:10,560	1947 - 1948	6
Sussex	1:10,560	1952	7
Ordnance Survey Plan	1:10,000	1961	8
Ordnance Survey Plan	1:10,000	1971 - 1977	9
Ordnance Survey Plan	1:10,000	1982	10
Ordnance Survey Plan	1:10,000	1993	11
10K Raster Mapping	1:10,000	2000	12
10K Raster Mapping	1:10,000	2006	13
VectorMap Local	1:10,000	2021	14

Historical Map - Slice B



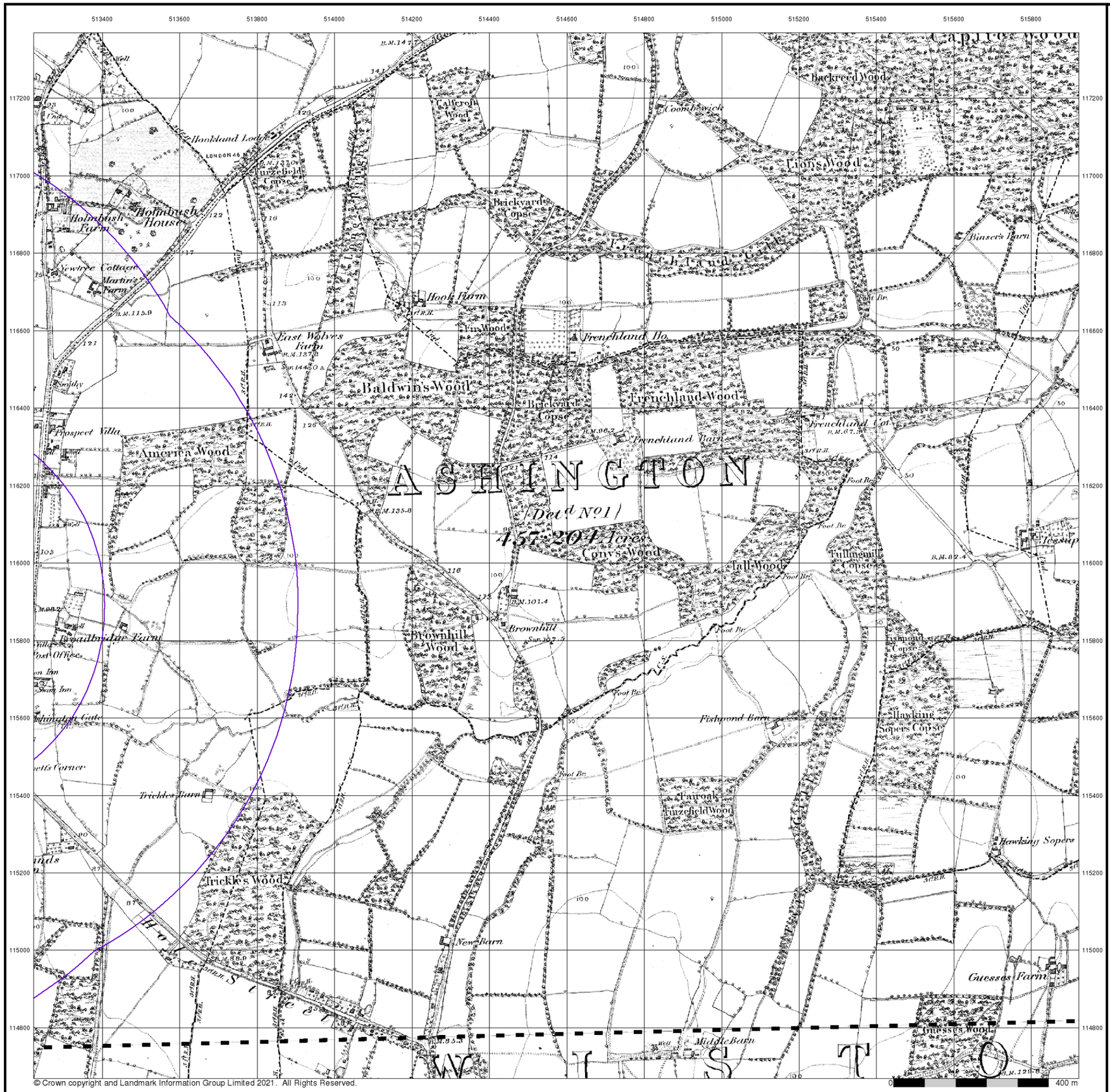
Order Details

Order Number: 287518451_1_1
Customer Ref: 52368
National Grid Reference: 513500, 115920
Slice: B
Site Area (Ha): 15.35
Search Buffer (m): 1000

Site Details

Firle, Church Lane, Ashington, PULBOROUGH, RH20 3JX

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



© Crown copyright and Landmark Information Group Limited 2021. All Rights Reserved.

RSK

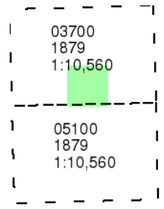
Sussex

Published 1879

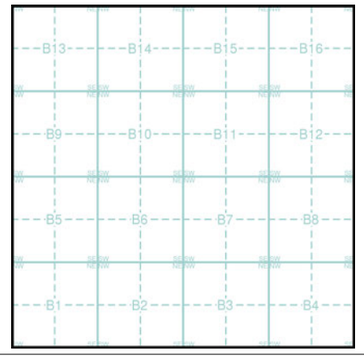
Source map scale - 1:10,560

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

Map Name(s) and Date(s)



Historical Map - Slice B



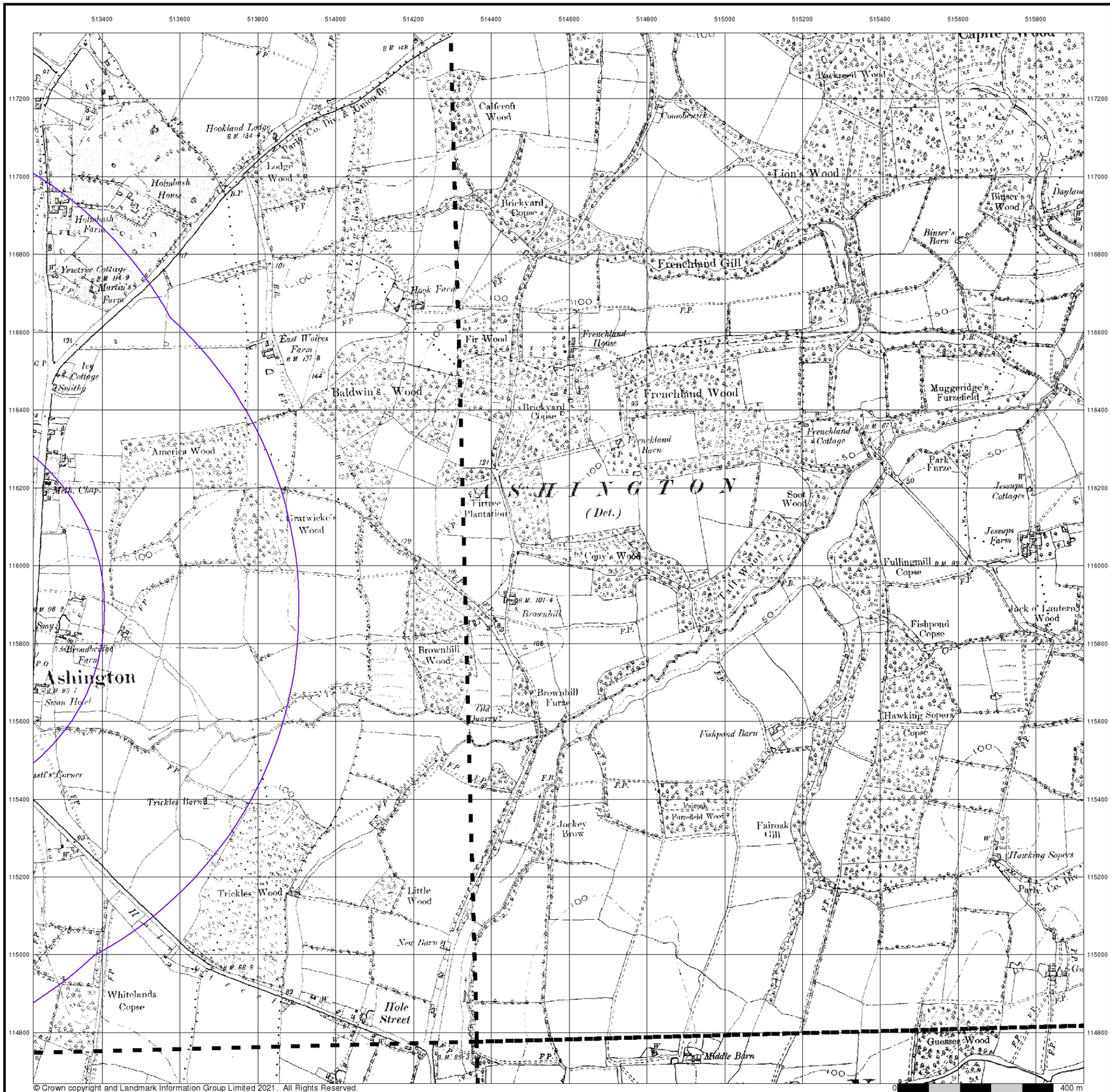
Order Details

Order Number:	287518451_1_1
Customer Ref:	52368
National Grid Reference:	513500, 115920
Slice:	B
Site Area (Ha):	15.35
Search Buffer (m):	1000

Site Details

Firle, Church Lane, Ashington, PULBOROUGH, RH20 3JX

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



© Crown copyright and Landmark Information Group Limited 2021. All Rights Reserved.

RSK

Sussex

Published 1898

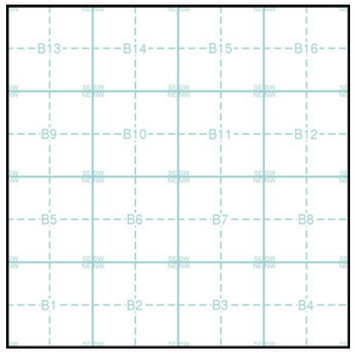
Source map scale - 1:10,560

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

Map Name(s) and Date(s)

037SW 1898 1:10,560	037SE 1898 1:10,560
051NW 1898 1:10,560	051NE 1898 1:10,560

Historical Map - Slice B



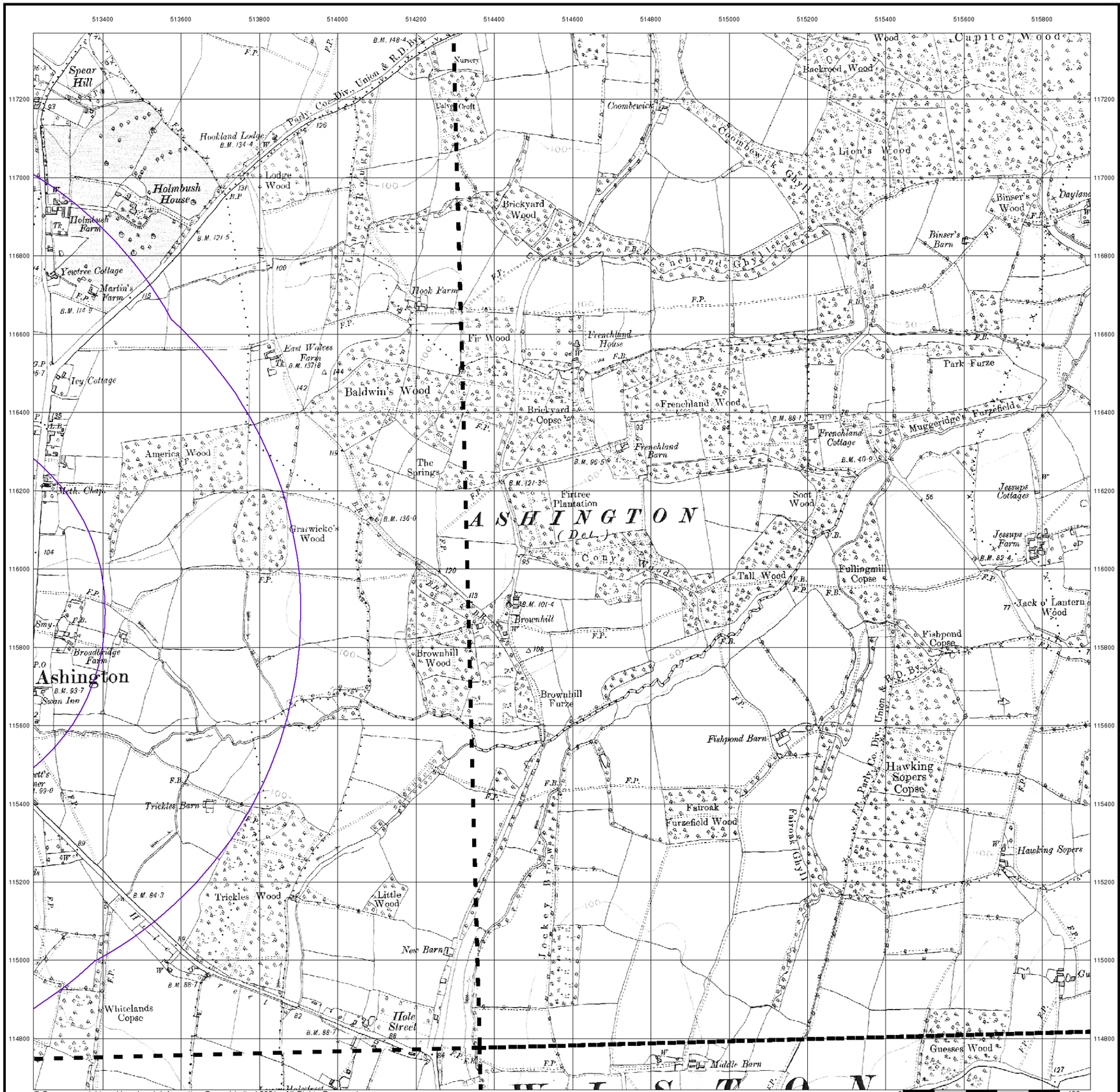
Order Details

Order Number:	287518451_1_1
Customer Ref:	52368
National Grid Reference:	513500, 115920
Slice:	B
Site Area (Ha):	15.35
Search Buffer (m):	1000

Site Details

Firle, Church Lane, Ashington, PULBOROUGH, RH20 3JX

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



RSK

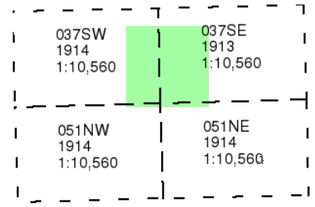
Sussex

Published 1913 - 1914

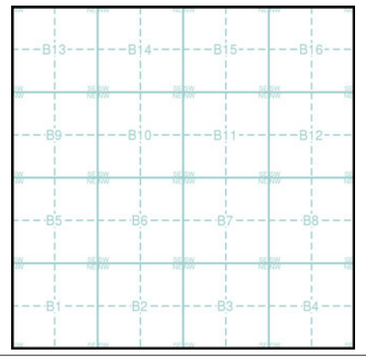
Source map scale - 1:10,560

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

Map Name(s) and Date(s)



Historical Map - Slice B



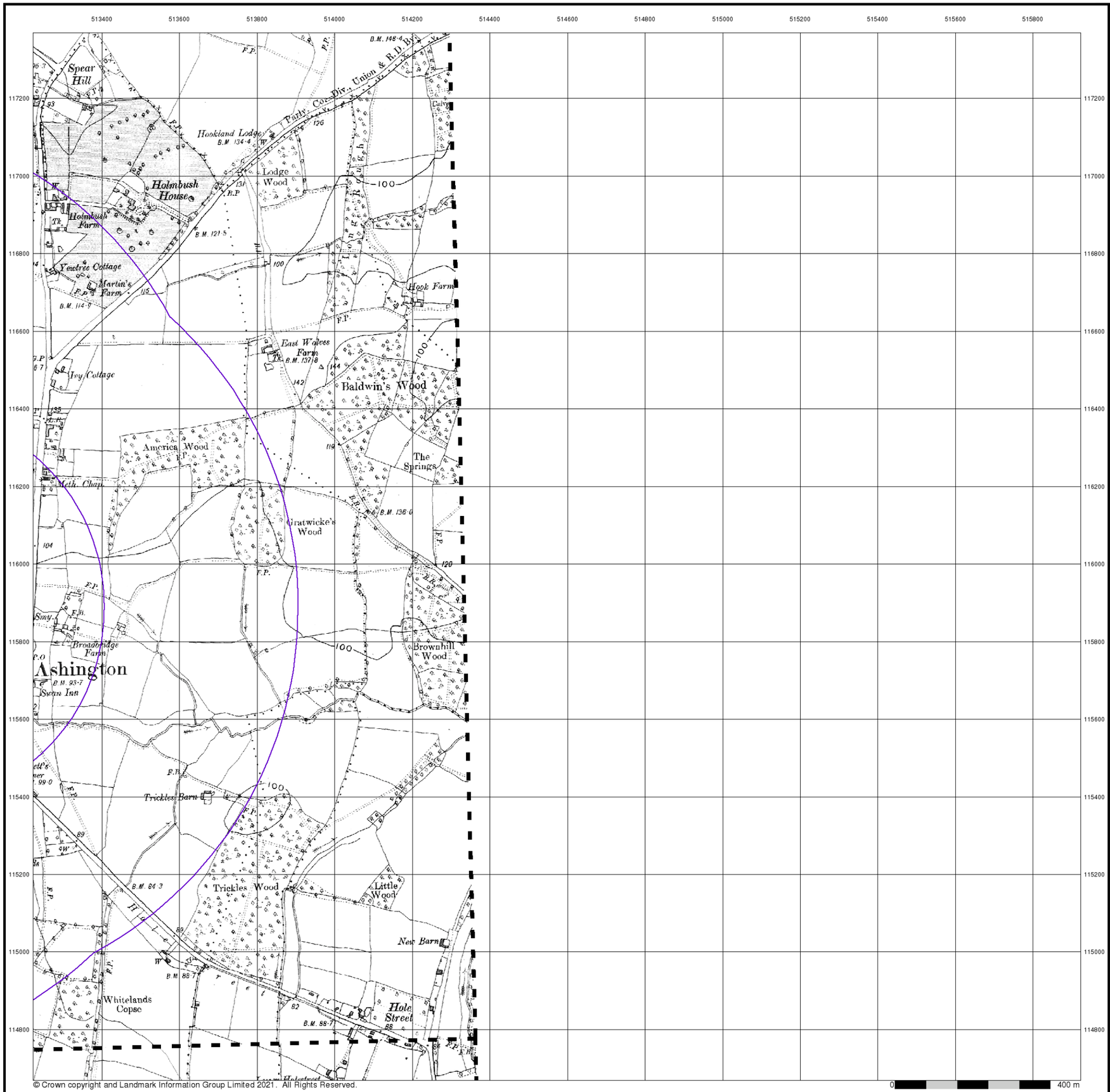
Order Details

Order Number:	287518451_1_1
Customer Ref:	52368
National Grid Reference:	513500, 115920
Slice:	B
Site Area (Ha):	15.35
Search Buffer (m):	1000

Site Details

Firle, Church Lane, Ashington, PULBOROUGH, RH20 3JX

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



© Crown copyright and Landmark Information Group Limited 2021. All Rights Reserved.

RSK

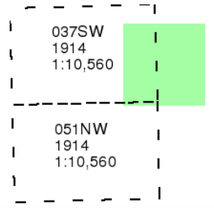
Sussex

Published 1914

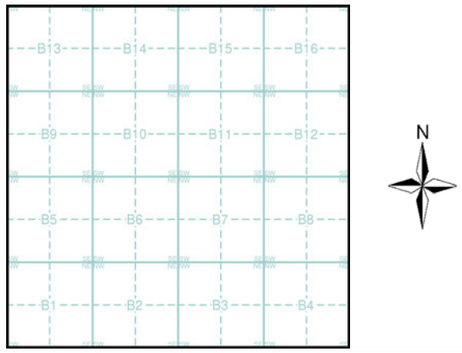
Source map scale - 1:10,560

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

Map Name(s) and Date(s)



Historical Map - Slice B



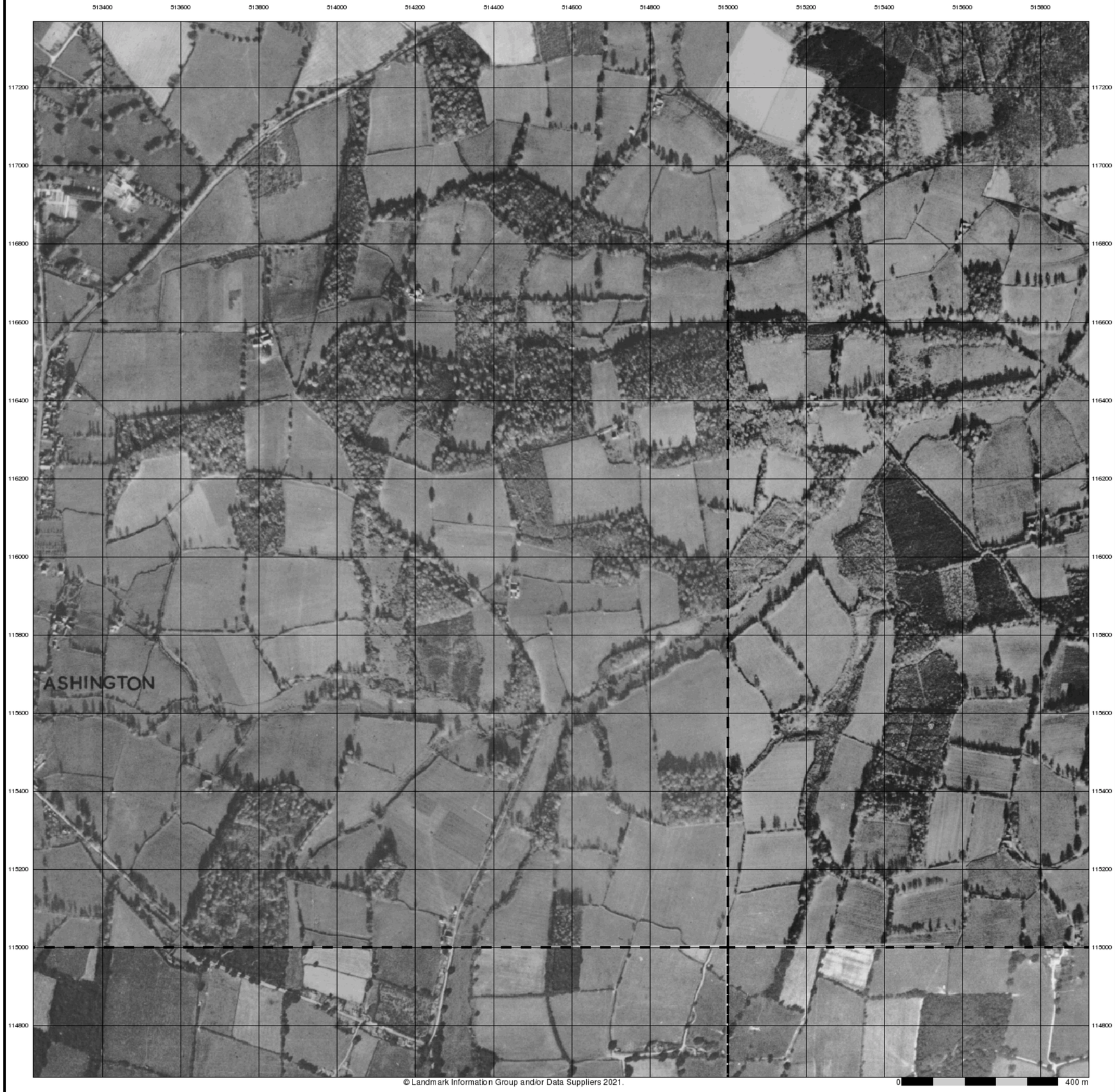
Order Details

Order Number:	287518451_1_1
Customer Ref:	52368
National Grid Reference:	513500, 115920
Slice:	B
Site Area (Ha):	15.35
Search Buffer (m):	1000

Site Details

Firle, Church Lane, Ashington, PULBOROUGH, RH20 3JX

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



RSK

Historical Aerial Photography

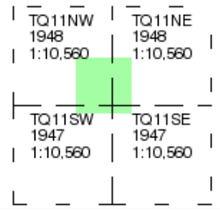
Published 1947 - 1948

Source map scale - 1:10,560

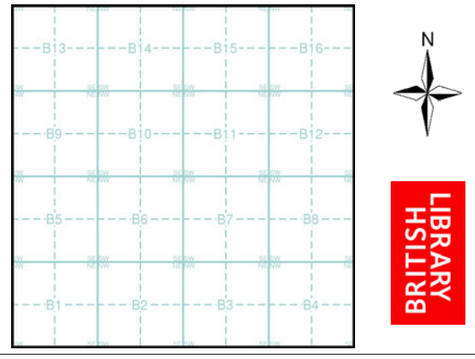
The Historical Aerial Photos were produced by the Ordnance Survey at a scale of 1:1,250 and 1:10,560 from Air Force photography. They were produced between 1944 and 1951 as an interim measure, pending preparation of conventional mapping, due to post war resource shortages. New security measures in the 1950's meant that every photograph was re-checked for potentially unsafe information with security sites replaced by fake fields or clouds. The original editions were withdrawn and only later made available after a period of fifty years although due to the accuracy of the editing, without viewing both revisions it is not easy to spot the edits. Where available Landmark have included both revisions.

© Landmark Information Group and/or Data Suppliers 2010.

Map Name(s) and Date(s)



Historical Aerial Photography - Slice B



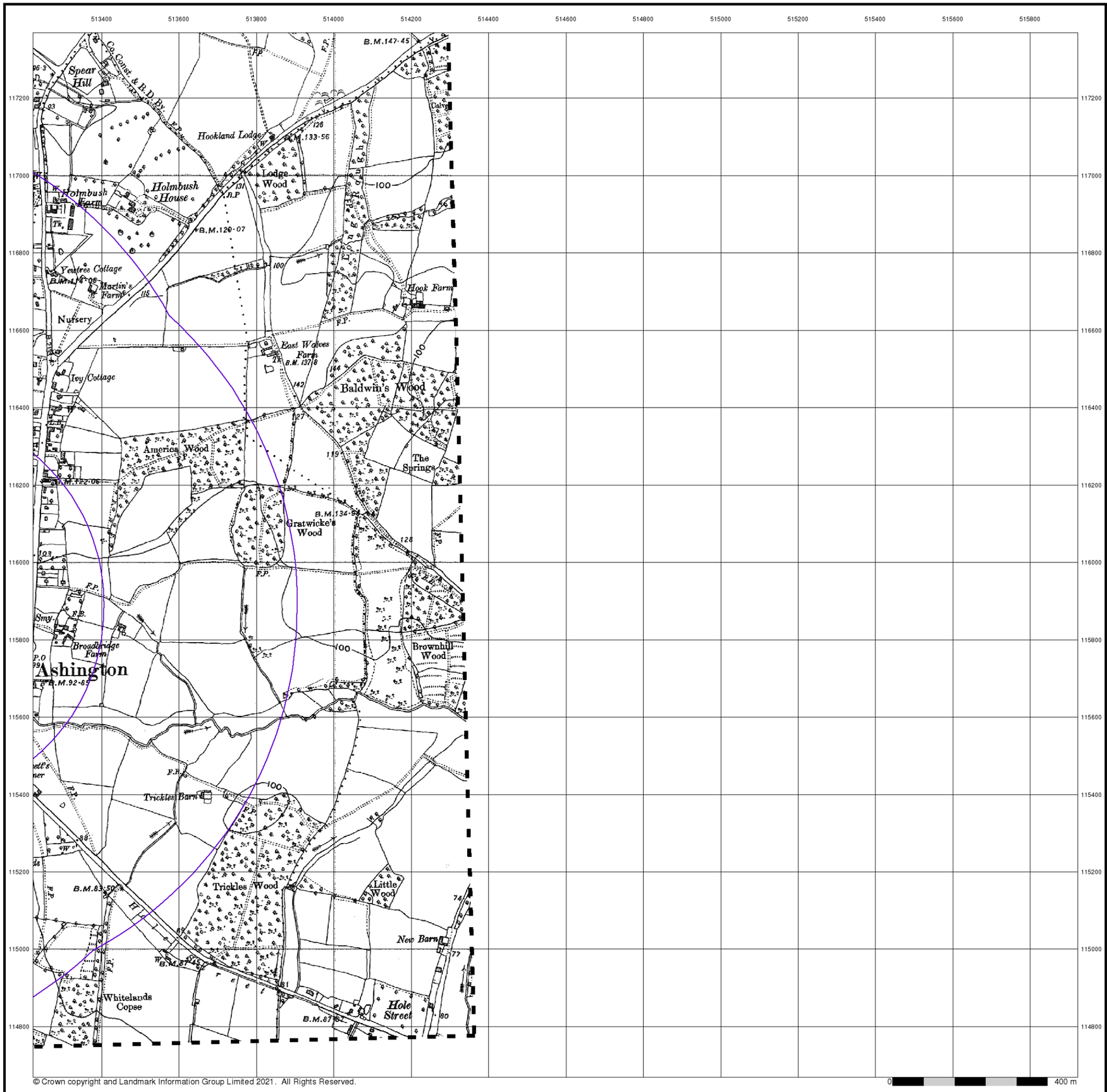
Order Details

Order Number:	287518451_1_1
Customer Ref:	52368
National Grid Reference:	513500, 115920
Slice:	B
Site Area (Ha):	15.35
Search Buffer (m):	1000

Site Details

Firle, Church Lane, Ashington, PULBOROUGH, RH20 3JX

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



© Crown copyright and Landmark Information Group Limited 2021. All Rights Reserved.

RSK

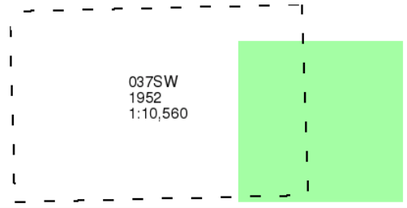
Sussex

Published 1952

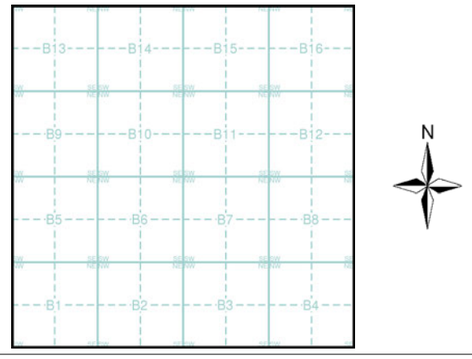
Source map scale - 1:10,560

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

Map Name(s) and Date(s)



Historical Map - Slice B



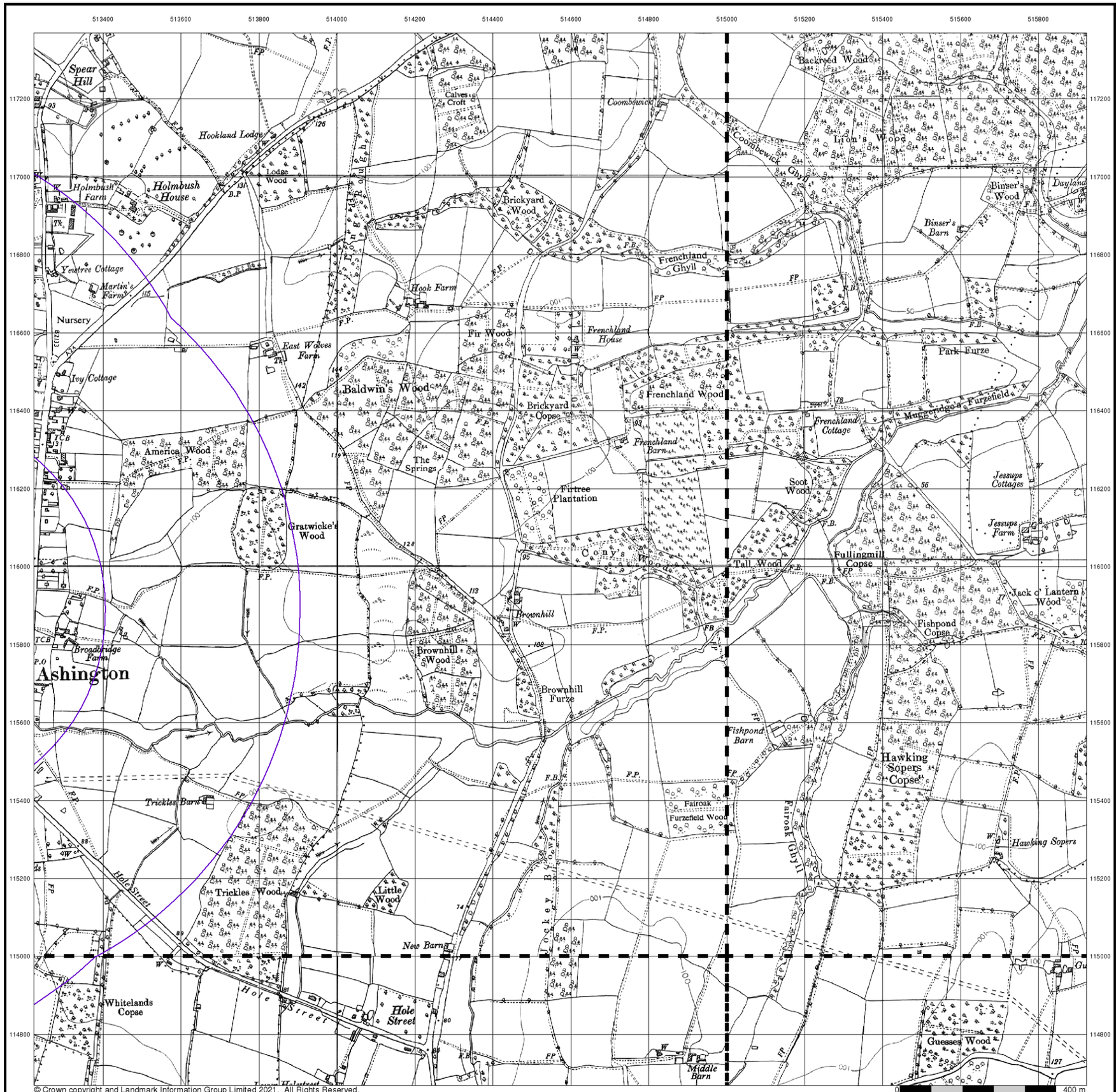
Order Details

Order Number:	287518451_1_1
Customer Ref:	52368
National Grid Reference:	513500, 115920
Slice:	B
Site Area (Ha):	15.35
Search Buffer (m):	1000

Site Details

Firle, Church Lane, Ashington, PULBOROUGH, RH20 3JX

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



© Crown copyright and Landmark Information Group Limited 2021. All Rights Reserved.

RSK

Ordnance Survey Plan

Published 1961

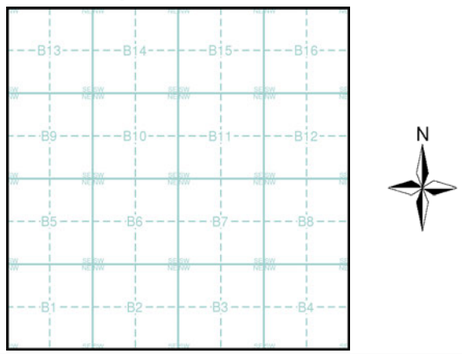
Source map scale - 1:10,000

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

Map Name(s) and Date(s)

TQ11NW 1961 1:10,560	TQ11NE 1961 1:10,560
TQ11SW 1961 1:10,560	TQ11SE 1961 1:10,560

Historical Map - Slice B



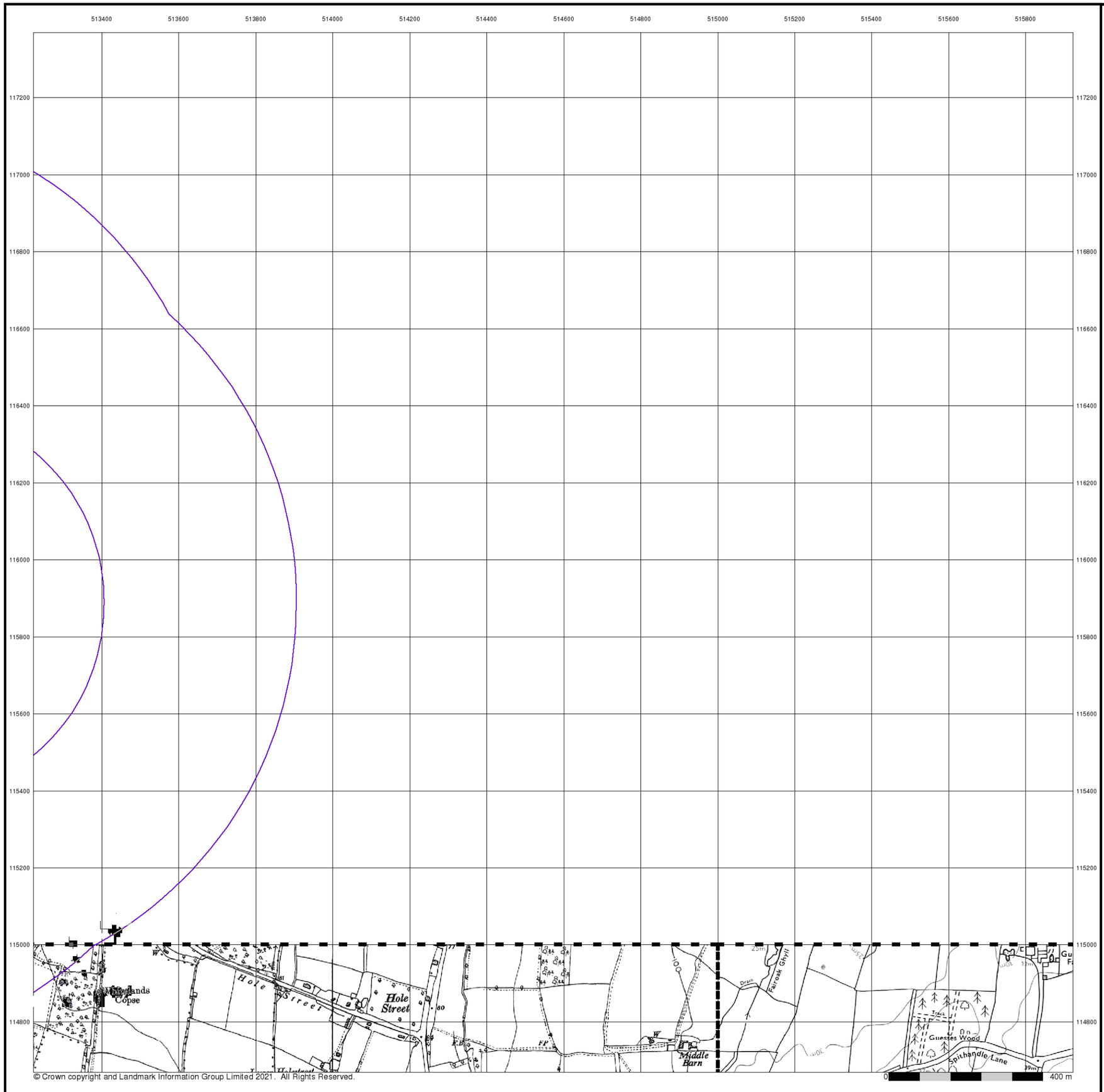
Order Details

Order Number:	287518451_1_1
Customer Ref:	52368
National Grid Reference:	513500, 115920
Slice:	B
Site Area (Ha):	15.35
Search Buffer (m):	1000

Site Details

Firle, Church Lane, Ashington, PULBOROUGH, RH20 3JX

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



© Crown copyright and Landmark Information Group Limited 2021. All Rights Reserved.

RSK

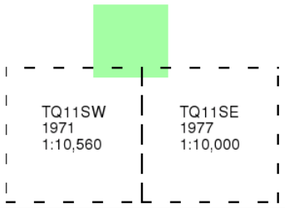
Ordnance Survey Plan

Published 1971 - 1977

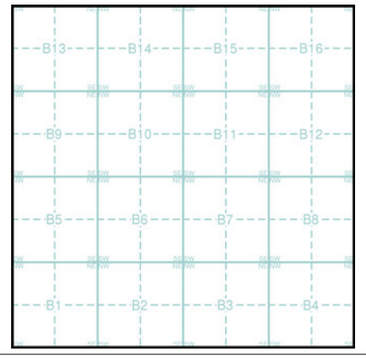
Source map scale - 1:10,000

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

Map Name(s) and Date(s)



Historical Map - Slice B



Order Details

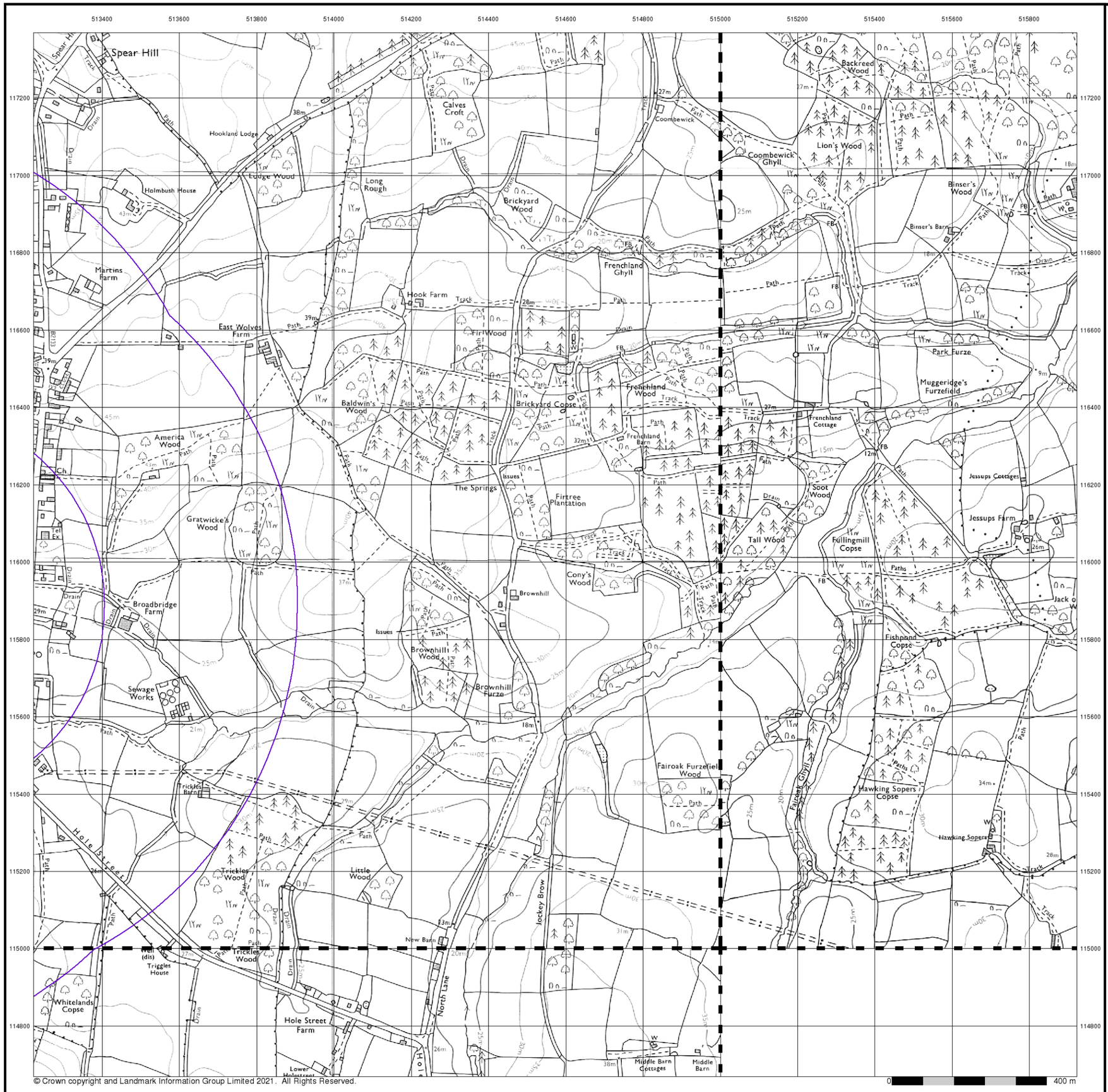
Order Number:	287518451_1_1
Customer Ref:	52368
National Grid Reference:	513500, 115920
Slice:	B
Site Area (Ha):	15.35
Search Buffer (m):	1000

Site Details

Firle, Church Lane, Ashington, PULBOROUGH, RH20 3JX

Landmark INFORMATION GROUP

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



© Crown copyright and Landmark Information Group Limited 2021. All Rights Reserved.

RSK

Ordnance Survey Plan

Published 1982

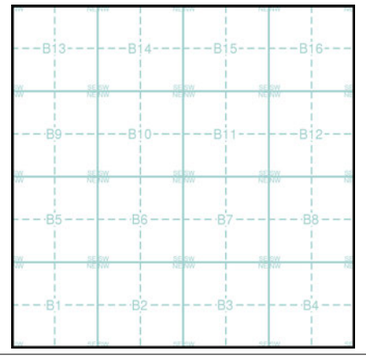
Source map scale - 1:10,000

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

Map Name(s) and Date(s)

TQ11NW 1982 1:10,000	TQ11NE 1982 1:10,000
TQ11SW 1982 1:10,000	

Historical Map - Slice B



Order Details

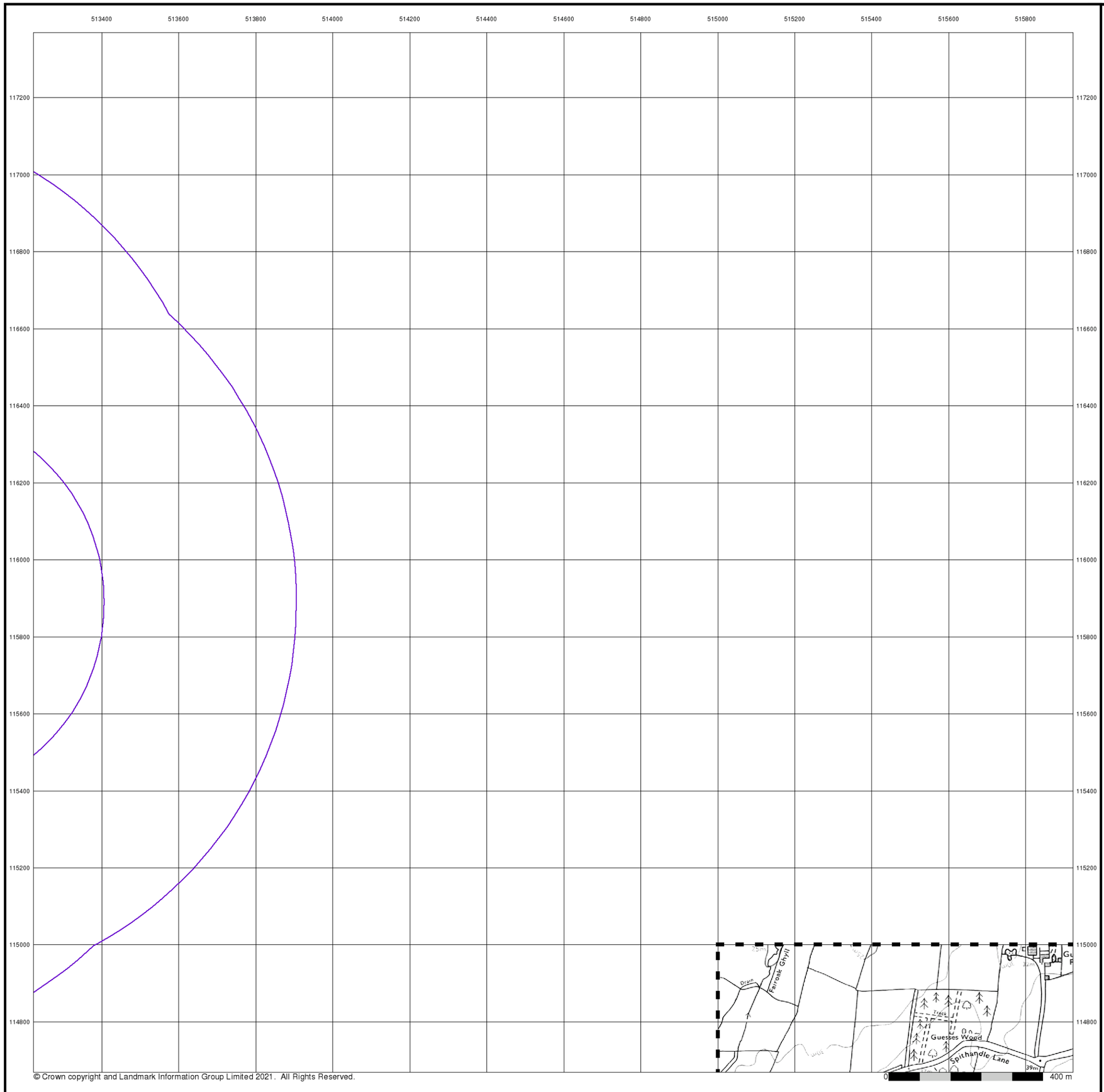
Order Number:	287518451_1_1
Customer Ref:	52368
National Grid Reference:	513500, 115920
Slice:	B
Site Area (Ha):	15.35
Search Buffer (m):	1000

Site Details

Firle, Church Lane, Ashington, PULBOROUGH, RH20 3JX

Landmark INFORMATION GROUP

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



© Crown copyright and Landmark Information Group Limited 2021. All Rights Reserved.

RSK

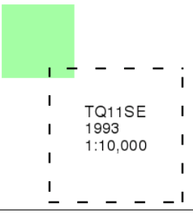
Ordnance Survey Plan

Published 1993

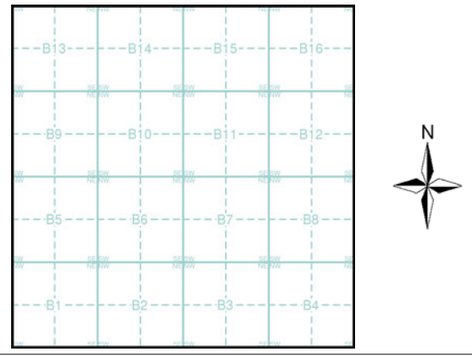
Source map scale - 1:10,000

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

Map Name(s) and Date(s)



Historical Map - Slice B



Order Details

Order Number:	287518451_1_1
Customer Ref:	52368
National Grid Reference:	513500, 115920
Slice:	B
Site Area (Ha):	15.35
Search Buffer (m):	1000

Site Details

Firle, Church Lane, Ashington, PULBOROUGH, RH20 3JX

Landmark INFORMATION GROUP

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

© Crown copyright. All Rights Reserved. Licence Number 100022432.

RSK

10k Raster Mapping

Published 2000

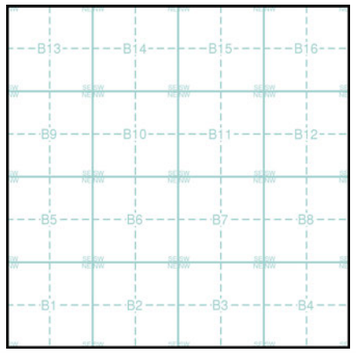
Source map scale - 1:10,000

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

Map Name(s) and Date(s)

TQ11NW 2000 1:10,000	TQ11NE 2000 1:10,000
TQ11SW 2000 1:10,000	TQ11SE 2000 1:10,000

Historical Map - Slice B



Order Details

Order Number:	287518451_1_1
Customer Ref:	52368
National Grid Reference:	513500, 115920
Slice:	B
Site Area (Ha):	15.35
Search Buffer (m):	1000

Site Details

Firle, Church Lane, Ashington, PULBOROUGH, RH20 3JX

Landmark INFORMATION GROUP

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

© Crown copyright. All Rights Reserved. Licence Number 100022432.

RSK

10k Raster Mapping

Published 2006

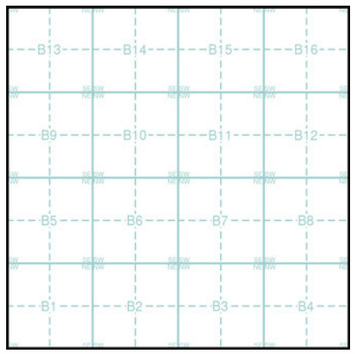
Source map scale - 1:10,000

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

Map Name(s) and Date(s)

TQ11NW 2006 1:10,000	TQ11NE 2006 1:10,000
TQ11SW 2006 1:10,000	TQ11SE 2006 1:10,000

Historical Map - Slice B



Order Details

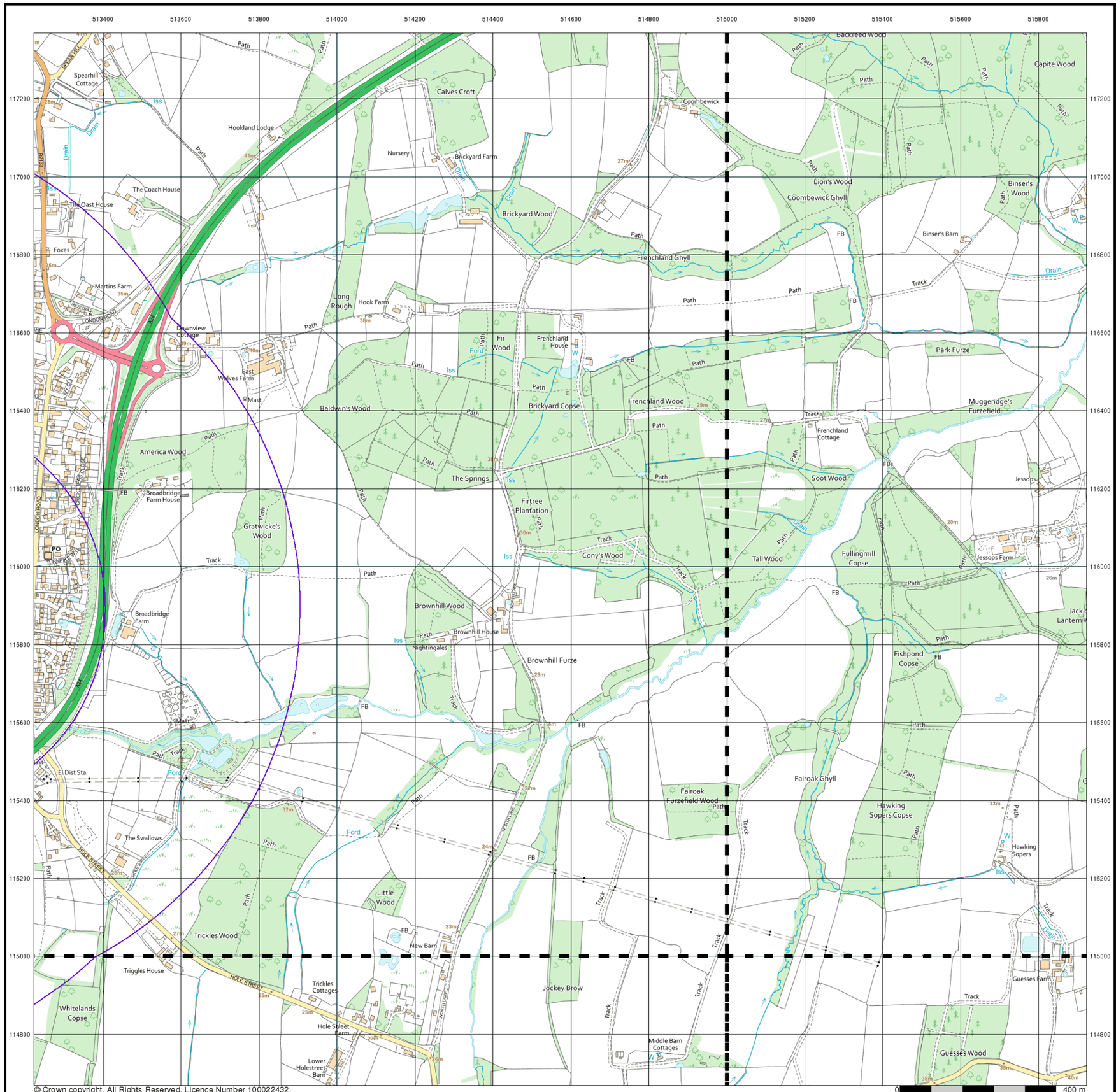
Order Number:	287518451_1_1
Customer Ref:	52368
National Grid Reference:	513500, 115920
Slice:	B
Site Area (Ha):	15.35
Search Buffer (m):	1000

Site Details

Firle, Church Lane, Ashington, PULBOROUGH, RH20 3JX

Landmark INFORMATION GROUP

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



© Crown copyright. All Rights Reserved. Licence Number 100022432.

RSK

VectorMap Local

Published 2021

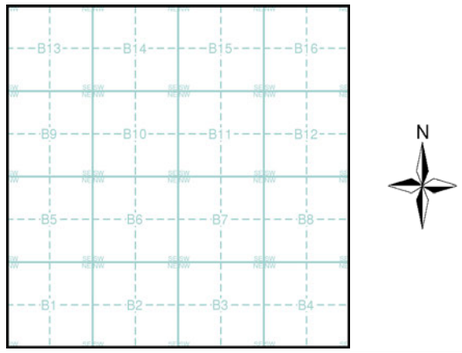
Source map scale - 1:10,000

VectorMap Local (Raster) is Ordnance Survey's highest detailed 'backdrop' mapping product. These maps are produced from OS's VectorMap Local, a simple vector dataset at a nominal scale of 1:10,000, covering the whole of Great Britain, that has been designed for creating graphical mapping. OS VectorMap Local is derived from large-scale information surveyed at 1:1250 scale (covering major towns and cities),1:2500 scale (smaller towns, villages and developed rural areas), and 1:10 000 scale (mountain, moorland and river estuary areas).

Map Name(s) and Date(s)

TQ11NW 2021 Variable	TQ11NE 2021 Variable
TQ11SW 2021 Variable	TQ11SE 2021 Variable

Historical Map - Slice B



Order Details

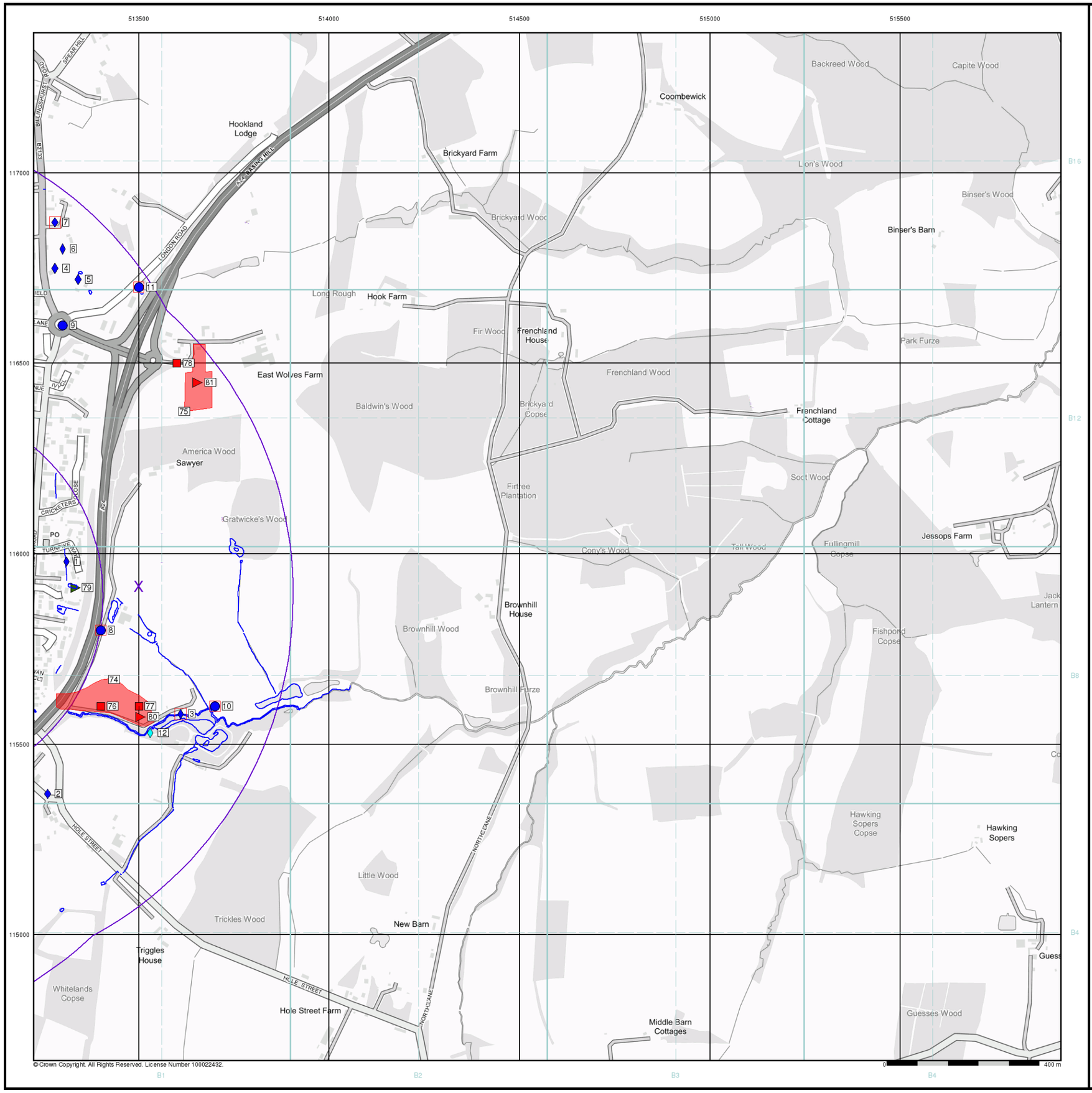
Order Number:	287518451_1_1
Customer Ref:	52368
National Grid Reference:	513500, 115920
Slice:	B
Site Area (Ha):	15.35
Search Buffer (m):	1000

Site Details

Firle, Church Lane, Ashington, PULBOROUGH, RH20 3JX

Landmark INFORMATION GROUP

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



© Crown Copyright. All Rights Reserved. License Number 100022432.

0 400 m

RSK

General

Specified Site
Specified Buffer(s)
Bearing Reference Point
Map ID
Several of Type at Location

Agency and Hydrological

- Contaminated Land Register Entry or Notice (Location)
- Contaminated Land Register Entry or Notice
- Discharge Consent
- Enforcement or Prohibition Notice
- Integrated Pollution Control
- Integrated Pollution Prevention Control
- Local Authority Integrated Pollution Prevention and Control
- Local Authority Pollution Prevention and Control
- Local Authority Pollution Prevention and Control Enforcement
- Pollution Incident to Controlled Waters
- Prosecution Relating to Authorised Processes
- Prosecution Relating to Controlled Waters
- Registered Radioactive Substance
- River Network or Water Feature
- River Quality Sampling Point
- Substantiated Pollution Incident Register
- Water Abstraction
- Water Industry Act Referral

Hazardous Substances

- COMAH Site
- Explosive Site
- NIHHS Site
- Planning Hazardous Substance Consent
- Planning Hazardous Substance Enforcement

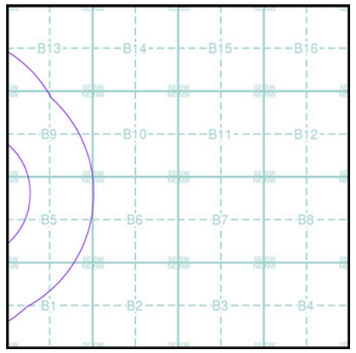
Geological

- BGS Recorded Mineral Site

Waste

- BGS Recorded Landfill Site (Location)
- BGS Recorded Landfill Site
- EA Historic Landfill (Buffered Point)
- EA Historic Landfill (Polygon)
- Integrated Pollution Control Registered Waste Site
- Licensed Waste Management Facility (Landfill Boundary)
- Licensed Waste Management Facility (Location)
- Local Authority Recorded Landfill Site (Location)
- Local Authority Recorded Landfill Site
- Potentially Infilled Land (Non-water)
- Potentially Infilled Land (Non-water)
- Potentially Infilled Land (Non-water)
- Potentially Infilled Land (Water)
- Potentially Infilled Land (Water)
- Potentially Infilled Land (Water)
- Registered Landfill Site
- Registered Landfill Site (Location)
- Registered Landfill Site (Point Buffered to 100m)
- Registered Landfill Site (Point Buffered to 250m)
- Registered Waste Transfer Site (Location)
- Registered Waste Transfer Site
- Registered Waste Treatment or Disposal Site (Location)
- Registered Waste Treatment or Disposal Site

Site Sensitivity Map - Slice B



N

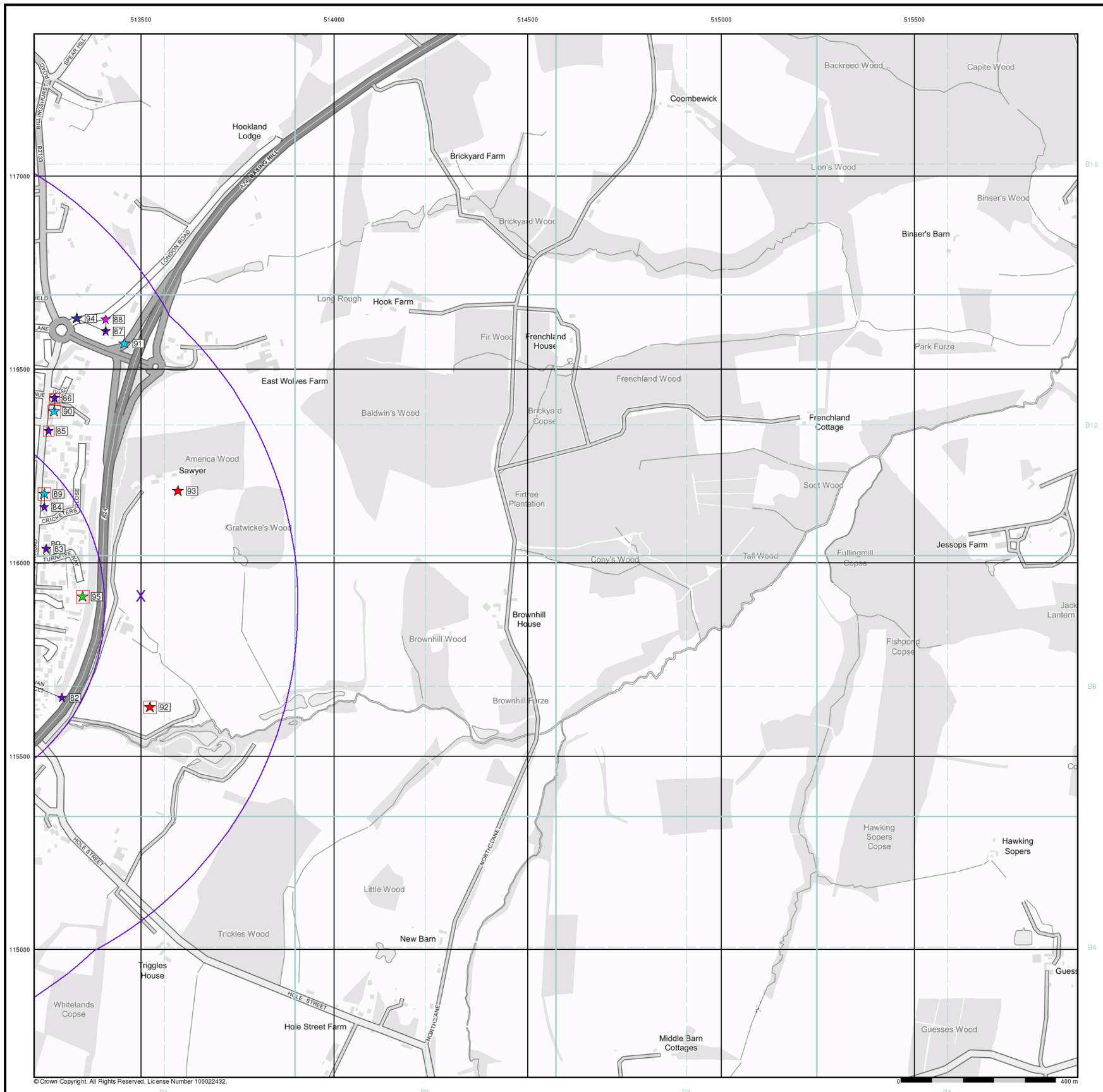
Order Details

Order Number:	287518451_1_1
Customer Ref:	52368
National Grid Reference:	513500, 115920
Slice:	B
Site Area (Ha):	15.35
Search Buffer (m):	1000

Site Details

Firle, Church Lane, Ashington, PULBOROUGH, RH20 3JX

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



RSK

Industrial Land Use Map

General

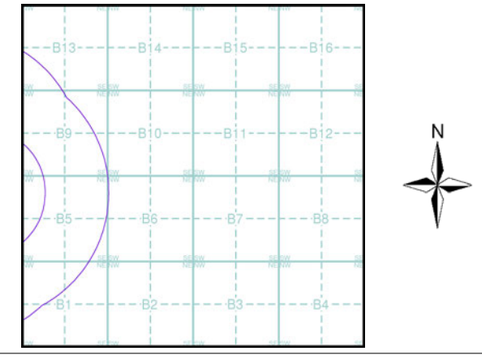
Specified Site | Specified Buffer(s) | Bearing Reference Point

Slice | Map ID

Industrial Land Use

- Contemporary Trade Directory Entry
- Fuel Station Entry
- Gas Pipeline
- Points of Interest - Commercial Services
- Points of Interest - Education and Health
- Points of Interest - Manufacturing and Production
- Points of Interest - Public Infrastructure
- Points of Interest - Recreational and Environmental
- Underground Electrical Cables

Industrial Land Use Map - Slice B



Order Details

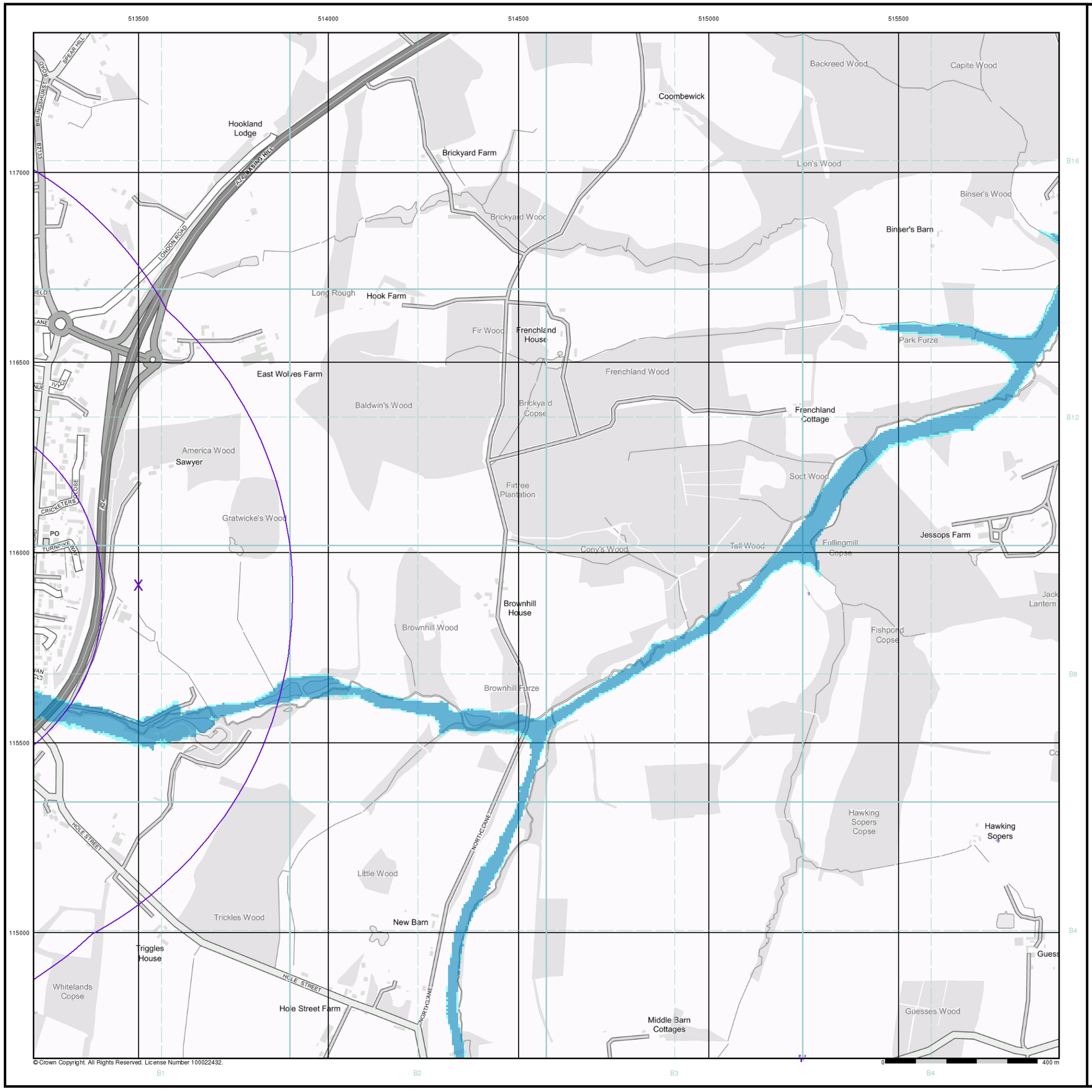
Order Number:	287518451_1_1
Customer Ref:	52368
National Grid Reference:	513500, 115920
Slice:	B
Site Area (Ha):	15.35
Search Buffer (m):	1000

Site Details

Firle, Church Lane, Ashington, PULBOROUGH, RH20 3JX

Landmark INFORMATION GROUP

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



© Crown Copyright. All Rights Reserved. License Number 100022432.

0 400 m

RSK

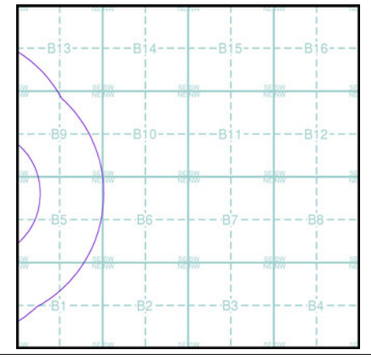
General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point

Agency and Hydrological (Flood)

- Extreme Flooding from Rivers or Sea without Defences (Zone 2)
- Flooding from Rivers or Sea without Defences (Zone 3)
- Area Benefiting from Flood Defence
- Flood Water Storage Areas
- Flood Defence

Flood Map - Slice B



N

Order Details

Order Number:	287518451_1_1
Customer Ref:	52368
National Grid Reference:	513500, 115920
Slice:	B
Site Area (Ha):	15.35
Search Buffer (m):	1000

Site Details

Firle, Church Lane, Ashington, PULBOROUGH, RH20 3JX

Landmark INFORMATION GROUP

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

513500 514000 514500 515000 515500

117000 116500 116000 115500 115000

B16 B12 B8 B4

Backreed Wood
Capite Wood
Coombewick
Hookland Lodge
Brickyard Farm
Lion's Wood
Binser's Wood
Brickyard Wood
Binser's Barn
Long Rough
Hook Farm
Fir Wood
Frenchland House
Park Furze
East Wolves Farm
Frenchland Wood
Baldwin's Wood
Brickyard Copse
Frenchland Cottage
America Wood
Sawyer
Soct Wood
Firtree Plantation
Gratwicke's Wood
Jessops Farm
Cony's Wood
Tall Wood
Fullingmill Copse
Brownhill House
Jack Lantern
Brownhill Wood
Fishpond Copse
Brownhill Furze
Hawking Sopers Copse
Hawking Sopers
Little Wood
Trickles Wood
New Barn
Triggles House
Whitelands Copse
Hole Street Farm
Middle Barn Cottages
Guesses Wood

BILLINGSHURST ROAD
SPEAR HILL
A24 DUAL CARRIAGEWAY
LONDON ROAD
HOLE STREET
NORTH LANE
CRICKETERS CLOSE
TURNPIKE WAY
PO

113 114 115 111 110 108 107 106 103 105 101 104 112 102 109

© Crown Copyright. All Rights Reserved. License Number 100022432.

0 400 m

B1 B2 B3 B4

RSK

General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point
- Map ID
- Several of Type at Location

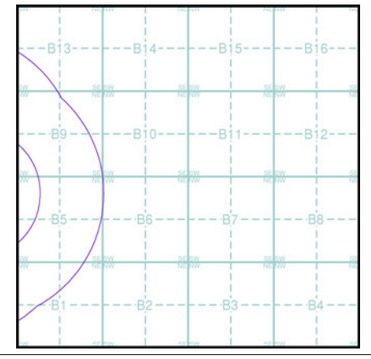
Agency and Hydrological (Boreholes)

- BGS Borehole Depth 0 - 10m
- BGS Borehole Depth 10 - 30m
- BGS Borehole Depth 30m +
- Confidential
- Other

For Borehole information please refer to the Borehole .csv file which accompanied this slice.

A copy of the BGS Borehole Ordering Form is available to download from the Support section of www.envirocheck.co.uk.

Borehole Map - Slice B



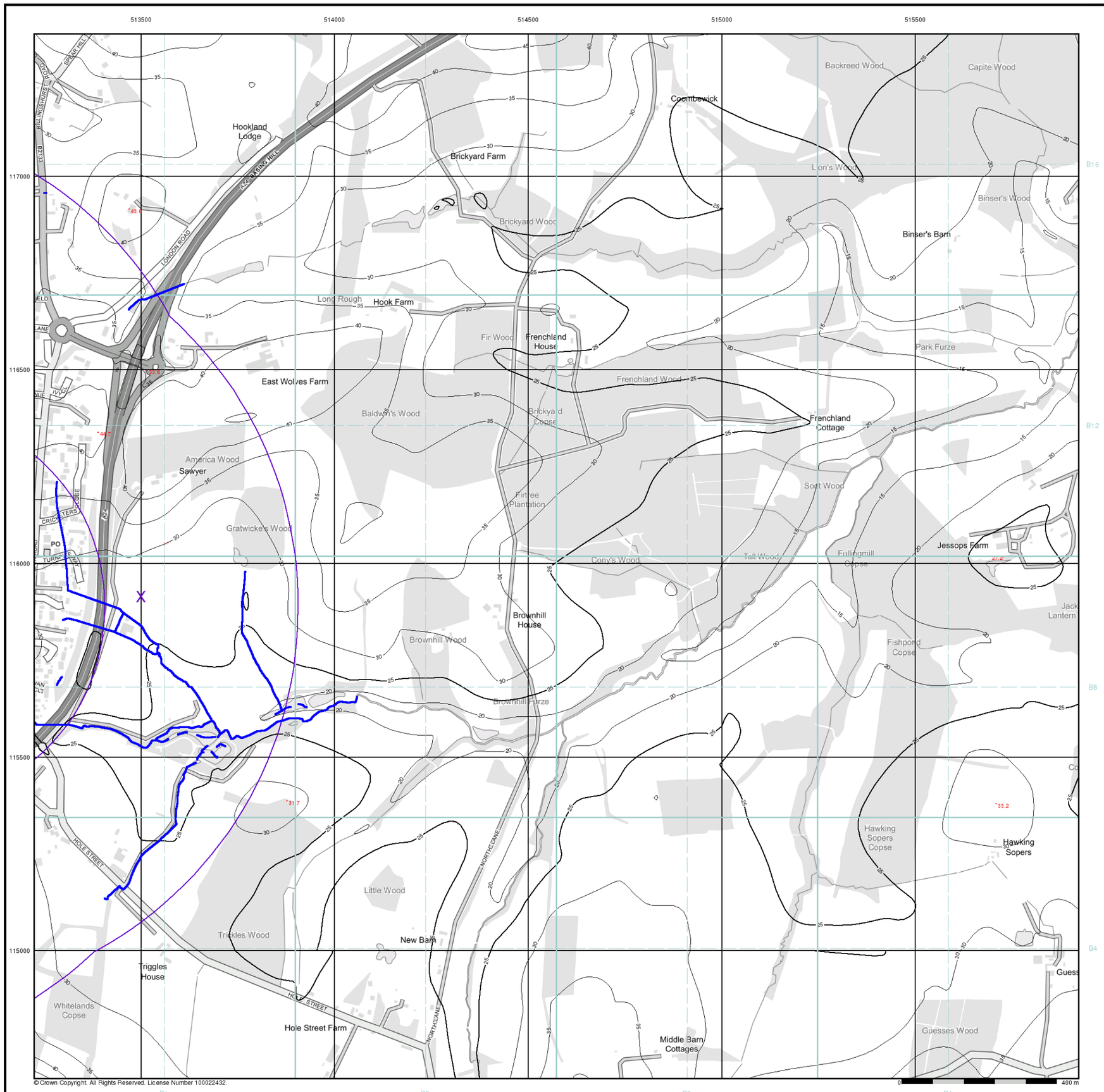
Order Details

Order Number:	287518451_1_1
Customer Ref:	52368
National Grid Reference:	513500, 115920
Slice:	B
Site Area (Ha):	15.35
Search Buffer (m):	1000

Site Details

Firle, Church Lane, Ashington, PULBOROUGH, RH20 3JX

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



RSK

General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point

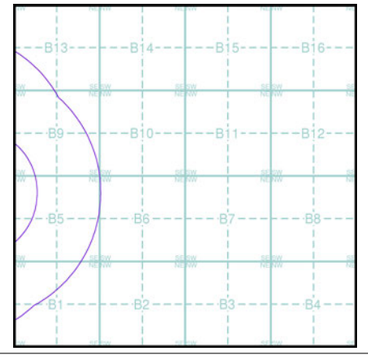
OS Water Network Data

- Canal
- Reservoir
- Foreshore
- Marsh
- Tidal River
- Inland River
- Drain
- Other
- Lake
- Transfer
- Lock Or Flight Of Locks
- Sea

Contours (height in meters)

- Standard Contour
- Master Contour
- Spot Height 167.3
- MLW Mean Low Water
- MHW Mean High Water

OS Water Network Map - Slice B



Order Details

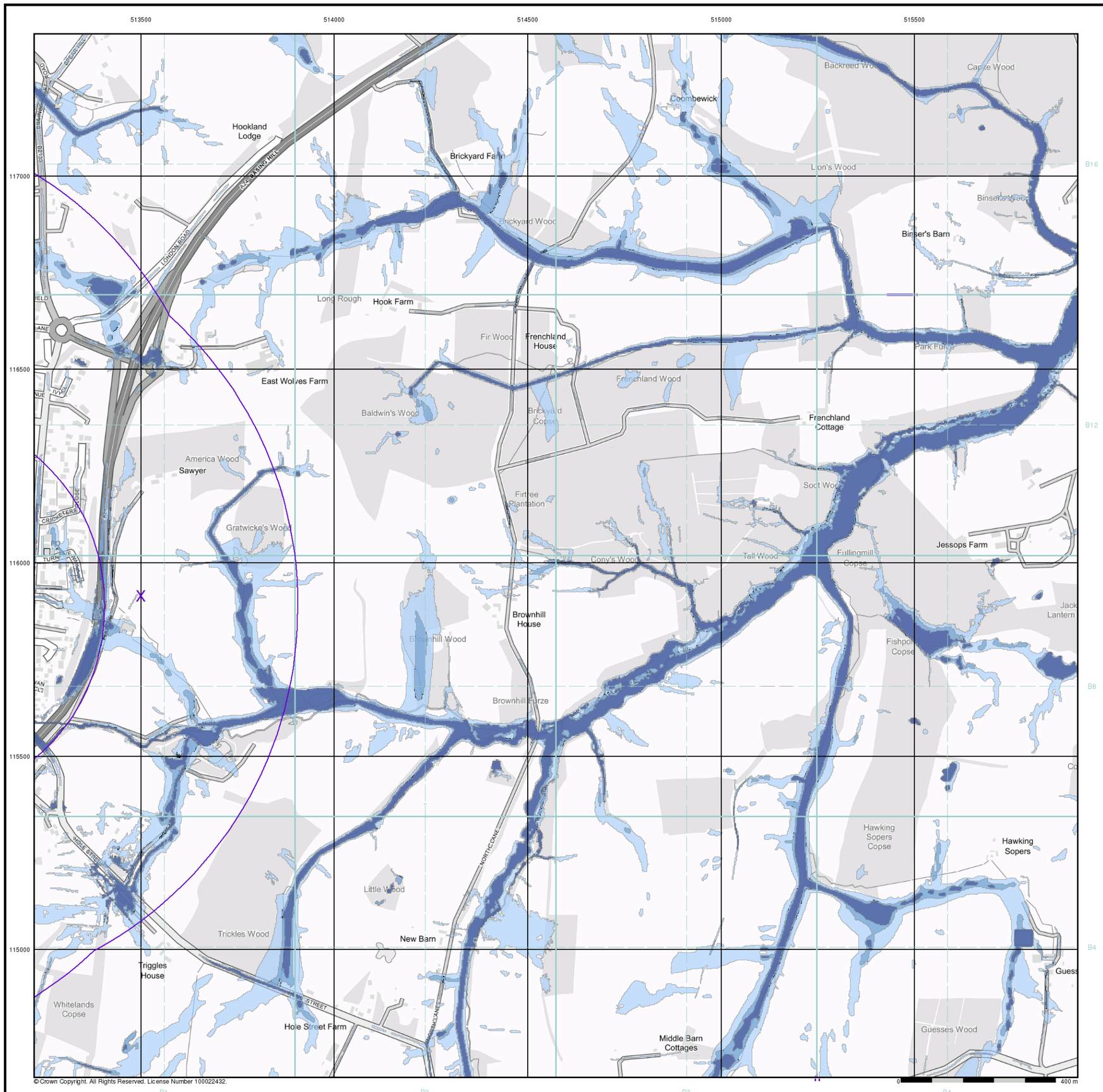
Order Number:	287518451_1_1
Customer Ref:	52368
National Grid Reference:	513500, 115920
Slice:	B
Site Area (Ha):	15.35
Search Buffer (m):	1000

Site Details

Firle, Church Lane, Ashington, PULBOROUGH, RH20 3JX

Landmark INFORMATION GROUP

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



RSK

General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point

Risk of Flooding from Surface Water

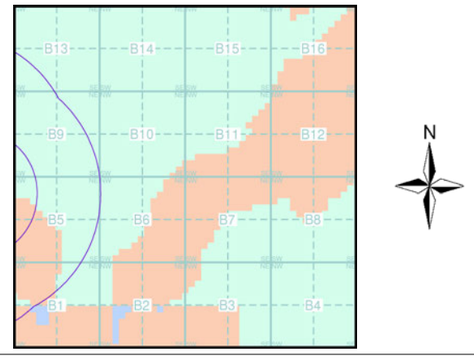
- High - 30 Year Return
- Medium - 100 Year Return
- Low - 1000 Year Return

Suitability

See the suitability map below

- National to county
- County to town
- Town to street
- Street to parcels of land
- Property

EA/NRW Suitability Map - Slice B



Order Details

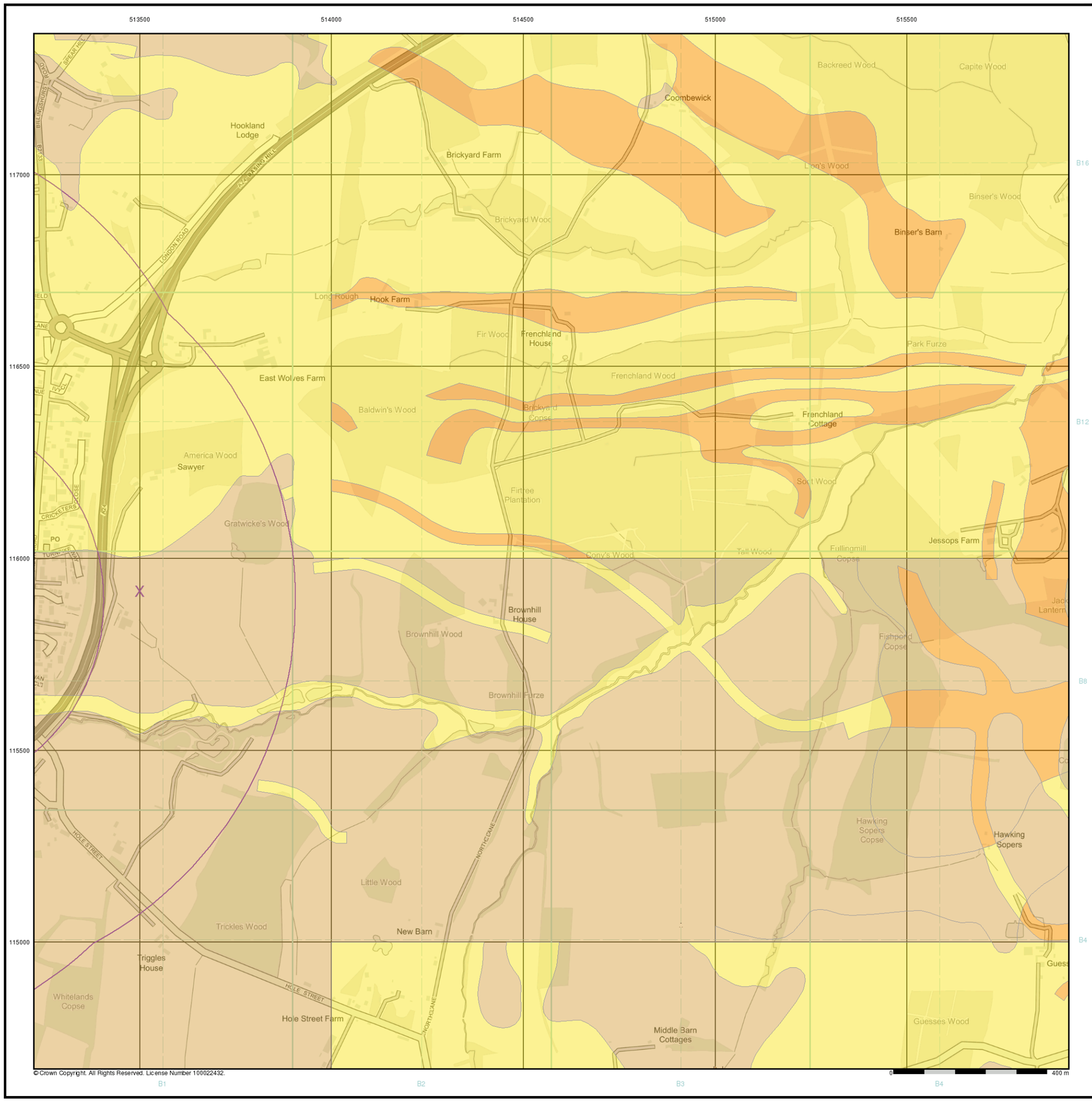
Order Number:	287518451_1_1
Customer Ref:	52368
National Grid Reference:	513500, 115920
Slice:	B
Site Area (Ha):	15.35
Search Buffer (m):	1000

Site Details

Firle, Church Lane, Ashington, PULBOROUGH, RH20 3JX

Landmark INFORMATION GROUP

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



RSK

General

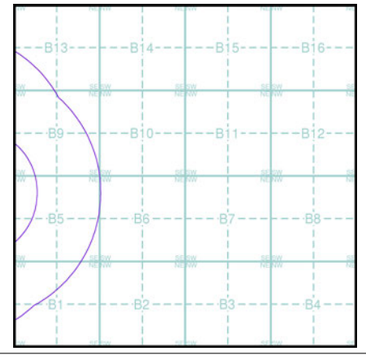
Specified Site | Specified Buffer(s) | X Bearing Reference Point

Estimated Soil Chemistry Arsenic

Arsenic Concentrations mg/kg

- < 15
- 15 - 25
- 25 - 35
- 35 - 45
- 45 - 60
- 60 - 120
- > 120

Estimated Soil Chemistry Arsenic - Slice B



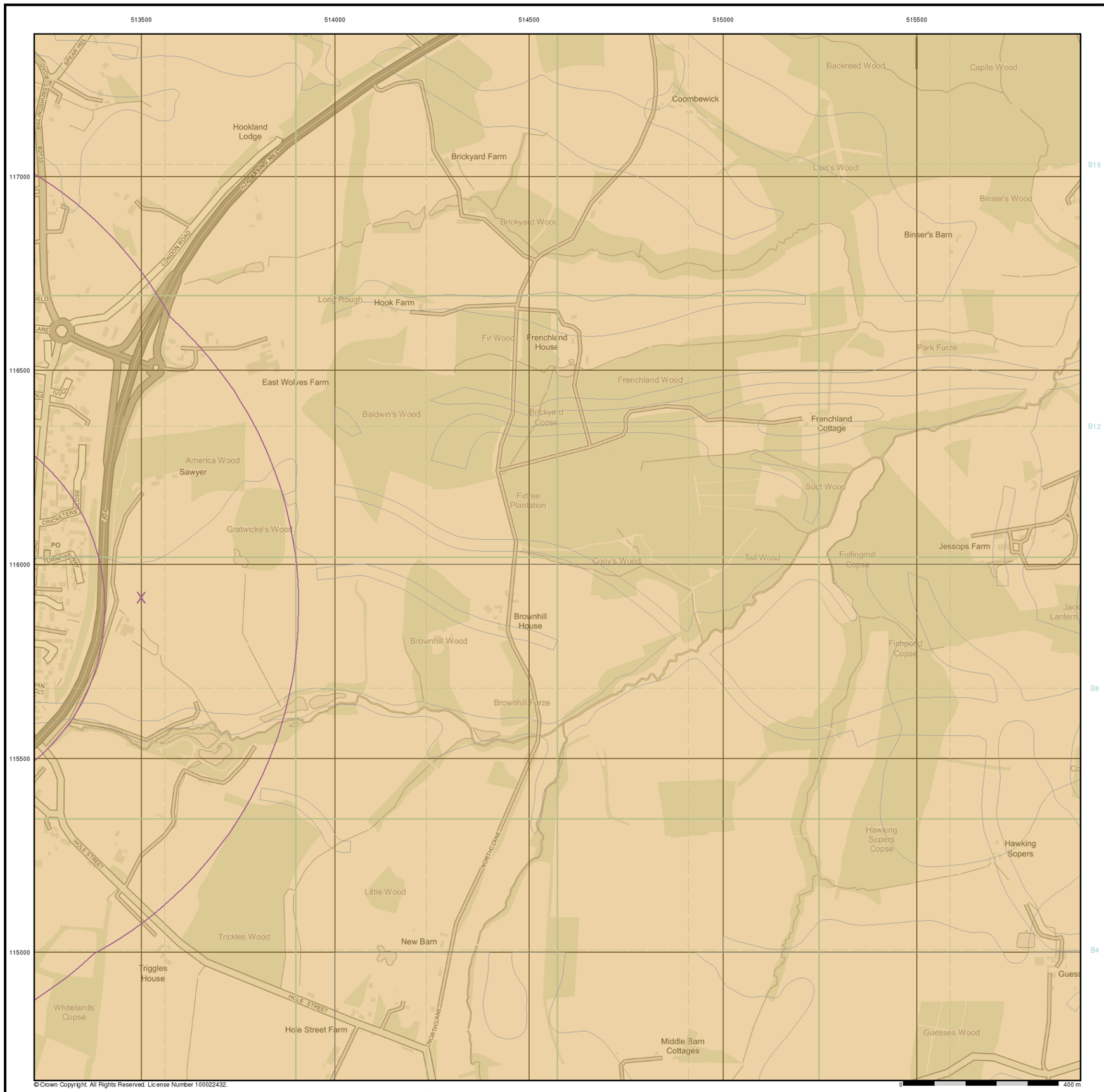
Order Details

Order Details:	287518451_1_1
Customer Ref:	52368
National Grid Reference:	513500, 115920
Slice:	B
Site Area (Ha):	15.35
Search Buffer (m):	1000

Site Details

Firle, Church Lane, Ashington, PULBOROUGH, RH20 3JX

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



General

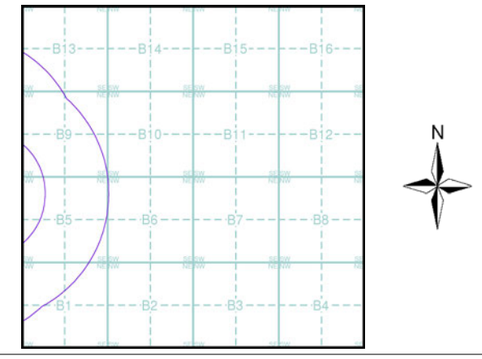
Specified Site | Specified Buffer(s) | X Bearing Reference Point

Estimated Soil Chemistry Cadmium

Cadmium Concentrations mg/kg

- < 1.8
- 1.8 - 2.2
- 2.2 - 3.0
- > 3.0

Estimated Soil Chemistry Cadmium - Slice B



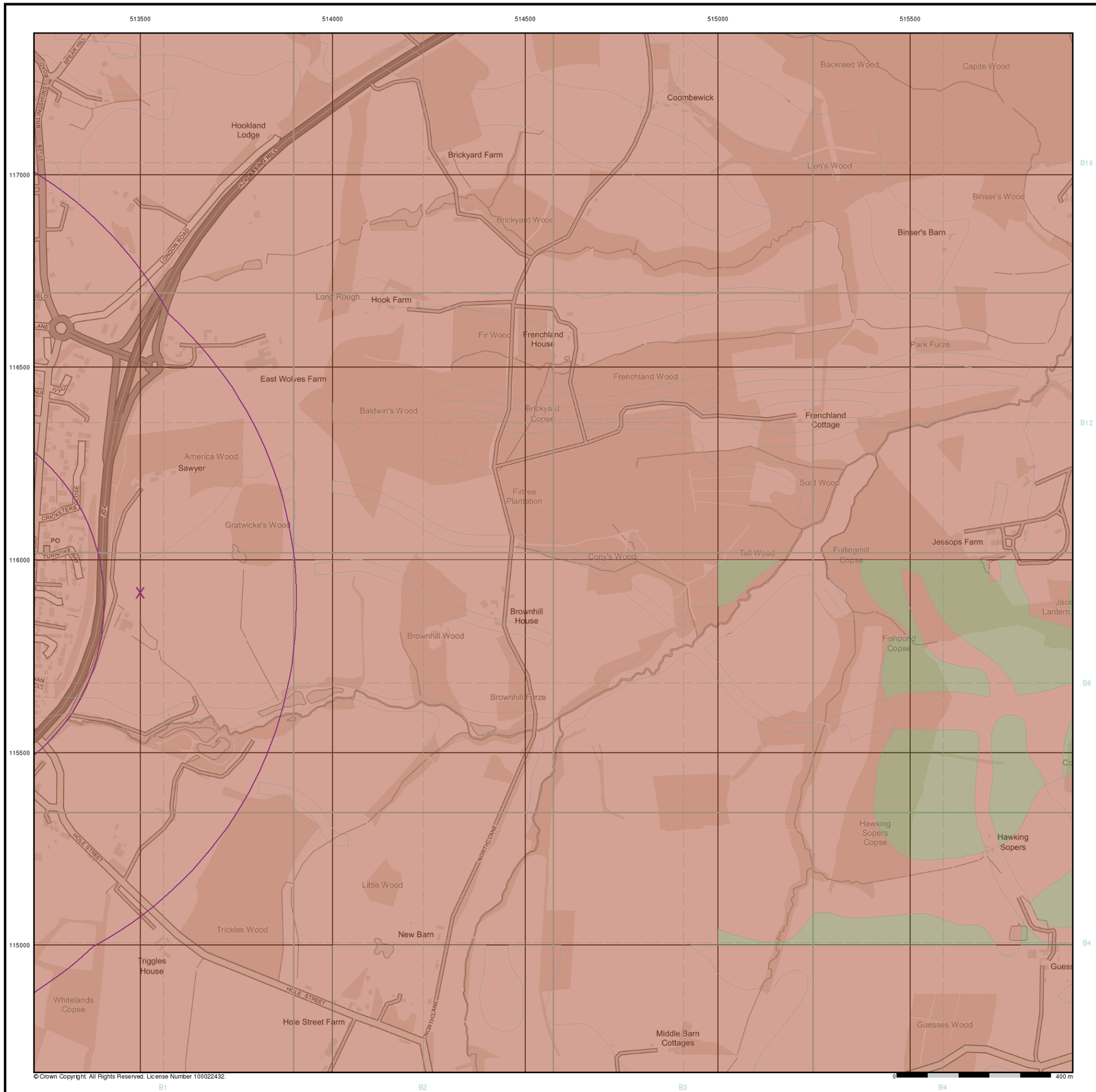
Order Details

Order Details:	287518451_1_1
Customer Ref:	52368
National Grid Reference:	513500, 115920
Slice:	B
Site Area (Ha):	15.35
Search Buffer (m):	1000

Site Details

Firle, Church Lane, Ashington, PULBOROUGH, RH20 3JX

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



General

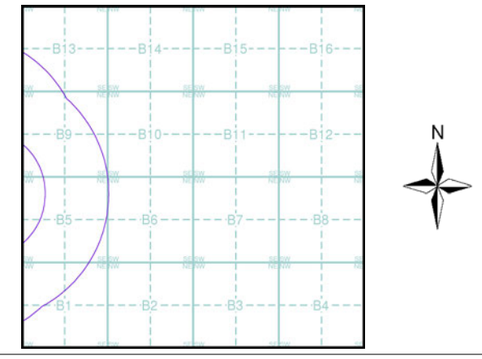
Specified Site | Specified Buffer(s) | X Bearing Reference Point

Estimated Soil Chemistry Chromium

Chromium Concentrations mg/kg

- < 20
- 20 - 40
- 40 - 60
- 60 - 90
- 90 - 120
- 120 - 180
- > 180

Estimated Soil Chemistry Chromium - Slice B

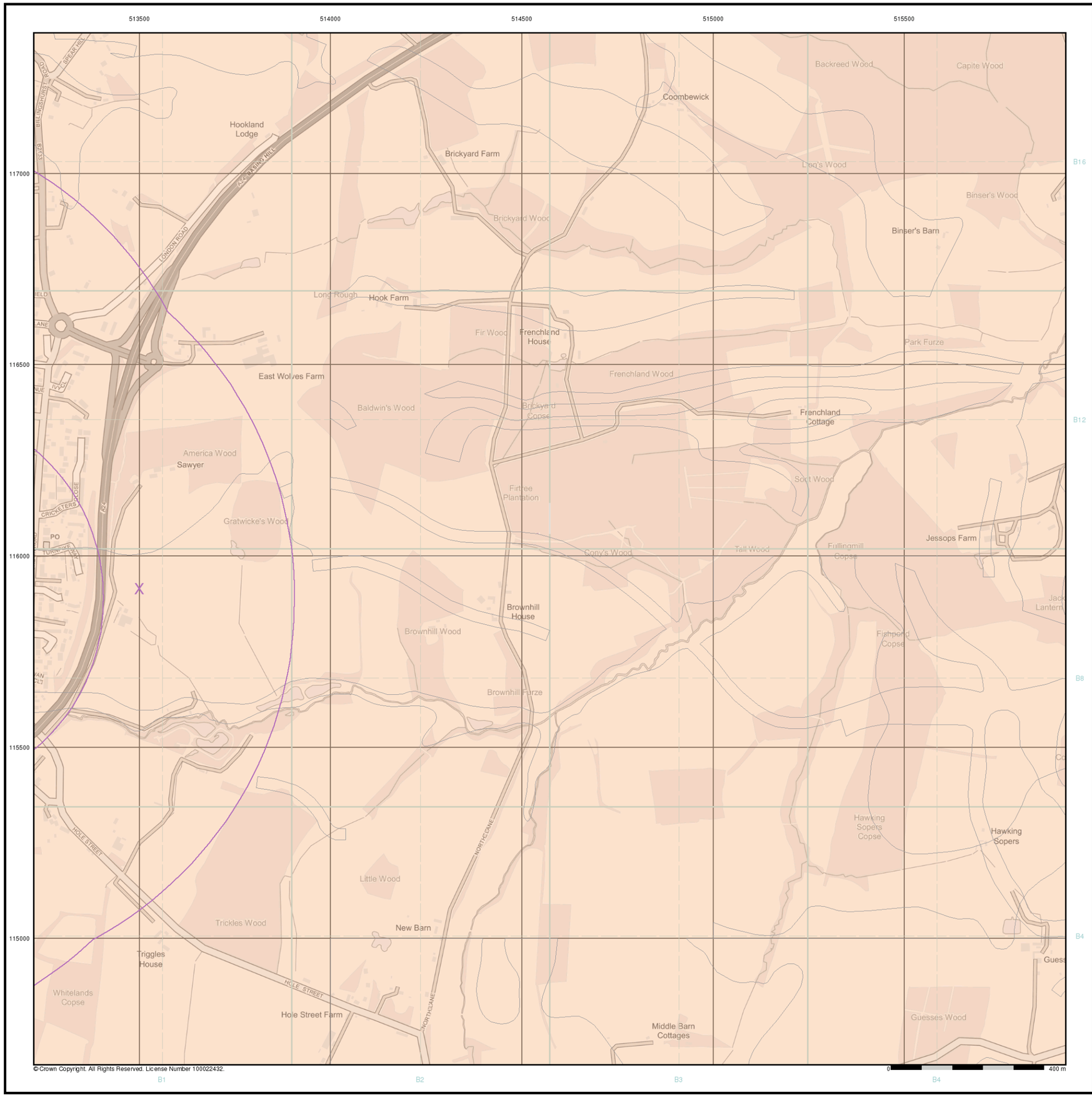


Order Details

Order Details:	287518451_1_1
Customer Ref:	52368
National Grid Reference:	513500, 115920
Slice:	B
Site Area (Ha):	15.35
Search Buffer (m):	1000

Site Details

Firle, Church Lane, Ashington, PULBOROUGH, RH20 3JX



© Crown Copyright. All Rights Reserved. License Number 100022432.

0 400 m

RSK

General

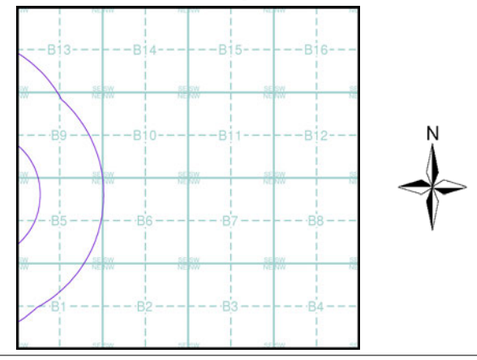
Specified Site | Specified Buffer(s) | X Bearing Reference Point

Estimated Soil Chemistry Lead

Lead Concentrations mg/kg

- <100 mg/kg
- 100 - 200
- 200 - 300
- 300 - 600
- 600 - 1200
- >1200

Estimated Soil Chemistry Lead - Slice B



Order Details

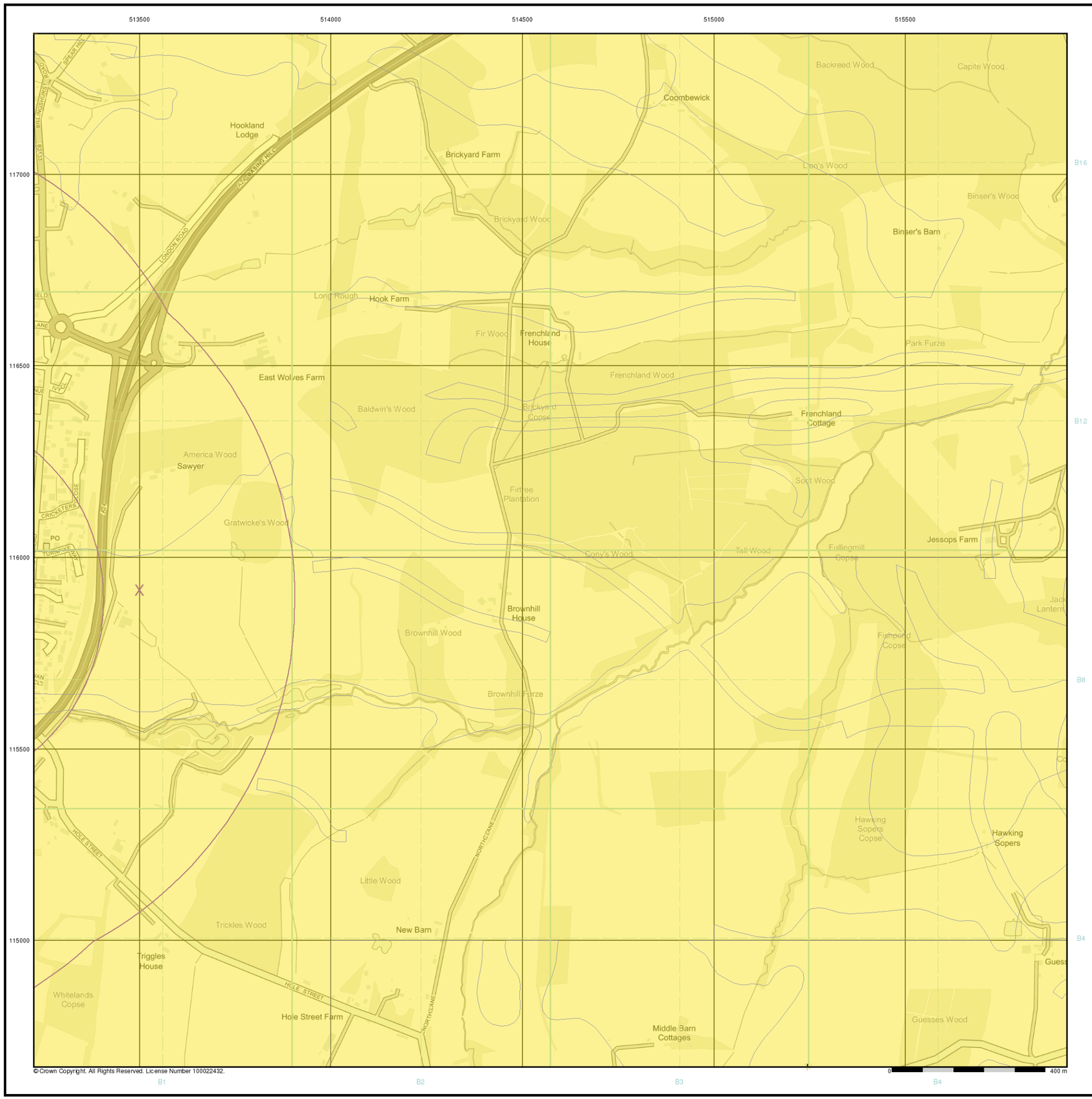
Order Details:	287518451_1_1
Customer Ref:	52368
National Grid Reference:	513500, 115920
Slice:	B
Site Area (Ha):	15.35
Search Buffer (m):	1000

Site Details

Firle, Church Lane, Ashington, PULBOROUGH, RH20 3JX

Landmark INFORMATION GROUP

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



RSK

General

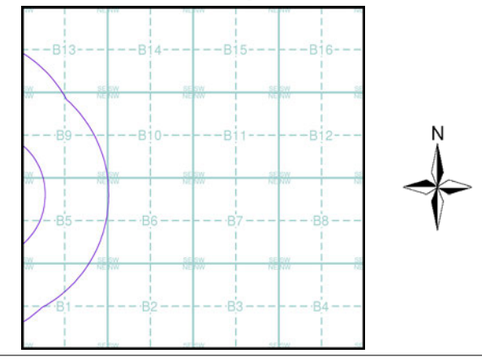
Specified Site | Specified Buffer(s) | X Bearing Reference Point

Estimated Soil Chemistry Nickel

Nickel Concentrations mg/kg

- < 15
- 15 - 30
- 30 - 45
- 45 - 60
- 60 - 80
- 80 - 100
- > 100

Estimated Soil Chemistry Nickel - Slice B



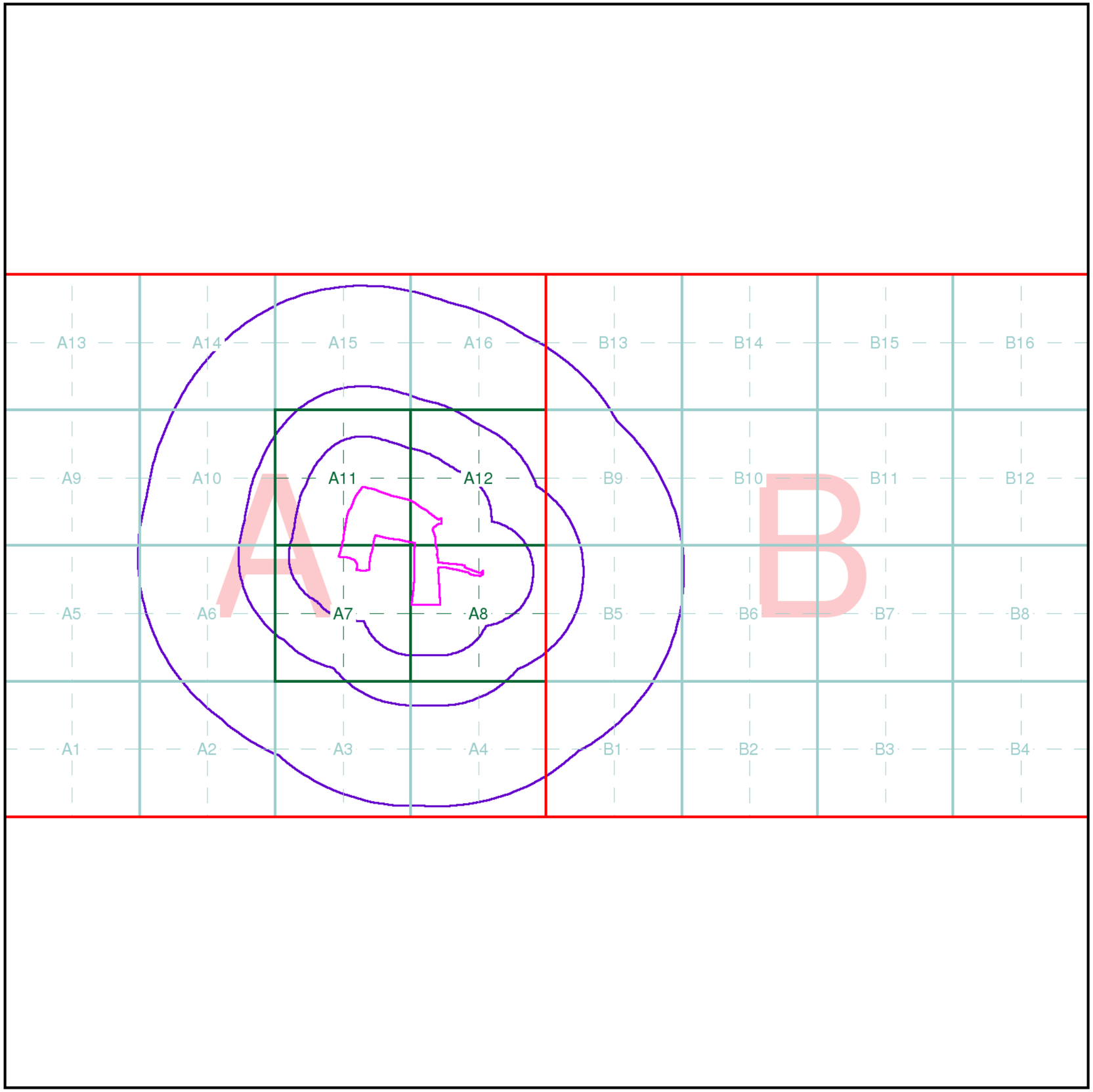
Order Details

Order Details:	287518451_1_1
Customer Ref:	52368
National Grid Reference:	513500, 115920
Slice:	B
Site Area (Ha):	15.35
Search Buffer (m):	1000

Site Details

Firle, Church Lane, Ashington, PULBOROUGH, RH20 3JX

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



Index Map

For ease of identification, your site and buffer have been split into Slices, Segments and Quadrants. These are illustrated on the Index Map opposite and explained further below.

Slice
Each slice represents a 1:10,000 plot area (2.7km x 2.7km) for your site and buffer. A large site and buffer may be made up of several slices (represented by a red outline), that are referenced by letters of the alphabet, starting from the bottom left corner of the slice "grid". This grid does not relate to National Grid lines but is designed to give best fit over the site and buffer.

Segment
A segment represents a 1:2,500 plot area. Segments that have plot files associated with them are shown in dark green, others in light blue. These are numbered from the bottom left hand corner within each slice.

Quadrant
A quadrant is a quarter of a segment. These are labelled as NW, NE, SW, SE and are referenced in the datasheet to allow features to be quickly located on plots. Therefore a feature that has a quadrant reference of A7NW will be in Slice A, Segment 7 and the NW Quadrant.

A selection of organisations who provide data within this report:

Envirocheck reports are compiled from 136 different sources of data.

Client Details

Miss S Gower, RSK Environment Ltd, 18 Frogmore Road, Hemel Hempstead, Hertfordshire, HP3 9RT

Order Details

Order Number:	287518451_1_1
Customer Ref:	52368
National Grid Reference:	512480, 116060
Site Area (Ha):	15.35
Search Buffer (m):	1000

Site Details

Firle, Church Lane, Ashington, PULBOROUGH, RH20 3JX

Full Terms and Conditions can be found on the following link:
http://www.landmarkinfo.co.uk/Terms/Show/515

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

APPENDIX E
SITE RECONNAISSANCE PHOTOGRAPHS

PHOTOGRAPHIC LOG

Photo no. 1	**Date:**
Description: Access into the east of the site from Church Lane. Looking west.	

Photo No. 2	**Date:**
Description: Access into the east of the site from Church Lane. Looking west.	

Photo No. 3	Date:	
Description: Eastern most field, looking north.		

Photo No. 4	Date:	
Description: Drainage ditch / stream along the side of the eastern most field, running from the pond (south) towards the north of the site. Looking north.		

Photo No. 5	Date:	
Description: Off-site farm pond feeding stream which runs along the eastern and northern site boundaries. Looking west towards the southern portion of the site.		

Photo No. 6	Date:	
Description: Northern end of access road into site and triangular shape area, built up from excavation of formerly infilled pond. Looking south.		

Photo No. 7	Date:	
Description: Overview of southernmost field. Looking north east from the south western corner of the field towards the access road and adjacent farmyard.		

Photo No. 8	Date:	
Description: Overview of large central field. Looking north from the triangular shape area next to pond.		

Photo No. 9	Date:	
Description: Overview of large central field, looking south from eastern site boundary. A drainage ditch is present along the hedgerow bounding the field.		

Photo No. 10	Date:	
Description: Overview of large central field, looking south from north eastern site boundary. Overhead services observed. A drainage ditch is present along the treeline bounding the field.		

Photo No. 11	Date:	
Description: Northern end of large central field. Looking west towards the middle field in the northern reaches of site. A drainage ditch is present along the treeline bounding the field.		

Photo No. 12	Date:	
Description: Overview of middle field in the northern reaches of site. Looking south west. A drainage ditch is present along the treeline bounding the field.		

Photo No. 13	Date:	
Description: Overview of middle field in the northern reaches of site. Looking south east. Overhead services observed. A drainage ditch is present along the treeline bounding the field.		

Photo No. 14	Date:	
Description: Overview of western field in the northern reaches of site. Looking south. A drainage ditch is present along the treeline bounding the field.		

Photo No. 15	Date:	
Description: Edge of the westernmost field in the northern reaches of the site. Looking south towards the inaccessible overgrown area in the south west of the site.		

Photo No. 16	Date:	
Description: The stream in the northern reaches of the site which is fed by the surrounding drainage ditches. This stream is a tributary of Lancing Brook.		

APPENDIX F
TECHNICAL BACKGROUND

F1 Desk Study

Aquifer designation and Source protection zones

Principal aquifer: layers of rock or drift deposit that have high intergranular and/or fracture permeability (usually providing a high level of water storage). They may support water supply and/or river base flow on a strategic scale.

Secondary A aquifer: permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers.

Secondary B aquifer: predominantly lower permeability layers that may store and yield limited amounts of groundwater due to localised features such as fissures, thin permeable horizons and weathering.

Secondary undifferentiated aquifer: it has not been possible to attribute either a category A or B to a rock type. In most cases this means that it was previously designated as both a minor and non-aquifer in different locations owing to the variable characteristics.

Unproductive' strata: low permeability with negligible significance for water supply or river base flow.

The EA generally adopts a three-fold classification of source protection zones (SPZ) surround abstractions for public water supply. The Site is situated in an area defined as follows:

- Zone 1 or the 'inner protection zone' is located immediately adjacent to the groundwater source and is based on a 50-day travel time from any point below the water table to the source. It is designed to protect against the effects of human activity and biological/chemical contaminants that may have an immediate effect on the source
- Zone 2 or the 'outer protection zone' is defined by a 400-day travel time from a point below the water table to the source. The travel time is designed to provide delay and attenuation of slowly degrading pollutants
- Zone 3 or the 'total catchment' is the area around the source within which all groundwater recharge is presumed to be discharged at the source.

Preliminary risk assessment methodology

LCRM outlines the framework to be followed for risk assessment in the UK. The framework is designed to be consistent with UK legislation and policies including planning. An outline conceptual model should be formed at the preliminary risk assessment stage that collates all the existing information pertaining to a site in text, tabular or diagrammatic form. The outline conceptual model identifies potentially complete (termed possible) contaminant linkages (contaminant–pathway–receptor) and is used as the basis for the design of the site investigation. The outline conceptual model is updated as further information becomes available, for example as a result of the site investigation.

Production of a conceptual model requires an assessment of risk to be made. Risk is a combination of the likelihood of an event occurring and the magnitude of its consequences. Therefore, both the

likelihood and the consequences of an event must be taken into account when assessing risk. RSK has adopted guidance provided in CIRIA C552 for use in the production of conceptual models.

The likelihood of an event can be classified on a four-point system using the following terms and definitions based on CIRIA C552:

- highly likely: the event appears very likely in the short term and almost inevitable over the long term or there is evidence at the receptor of harm or pollution
- likely: it is probable that an event will occur or circumstances are such that the event is not inevitable, but possible in the short term and likely over the long term
- low likelihood: circumstances are possible under which an event could occur, but it is not certain even in the long term that an event would occur and it is less likely in the short term
- unlikely: circumstances are such that it is improbable the event would occur even in the long term.

The severity can be classified using a similar system also based on CIRIA C552. The terms and definitions relating to severity are:

- severe: short term (acute) risk to human health likely to result in 'significant harm' as defined by the Environment Protection Act 1990, Part IIA. Short-term risk of pollution of sensitive water resources. Catastrophic damage to buildings or property. Short-term risk to an ecosystem or organism forming part of that ecosystem (note definition of ecosystem in 'Draft Circular on Contaminated Land', DETR 2000)
- medium: chronic damage to human health ('significant harm' as defined in 'Draft Circular on Contaminated Land', DETR 2000), pollution of sensitive water resources, significant change in an ecosystem or organism forming part of that ecosystem
- mild: pollution of non-sensitive water resources. Significant damage to crops, buildings, structures and services ('significant harm' as defined in 'Draft Circular on Contaminated Land', DETR 2000). Damage to sensitive buildings, structures or the environment
- minor: harm, not necessarily significant, but that could result in financial loss or expenditure to resolve. Non-permanent human health effects easily prevented by use of personal protective clothing. Easily repairable damage to buildings, structures and services.

Once the probability of an event occurring and its consequences have been classified, a risk category can be assigned according to the table below.

		Consequences			
		Severe	**Medium**	**Mild**	**Minor**
Probability	**Highly likely**	Very high	High	Moderate	Moderate/low
	Likely	High	Moderate	Moderate/low	Low
	Low likelihood	Moderate	Moderate/low	Low	Very low
	Unlikely	Moderate/low	Low	Very low	Very low

Definitions of these risk categories are as follows together with an assessment of the further work that may be required:

- very high: there is a high probability that severe harm could occur or there is evidence that severe harm is currently happening. This risk, if realised, could result in substantial liability; urgent investigation and remediation are likely to be required
- high: harm is likely to occur. Realisation of the risk is likely to present a substantial liability. Urgent investigation is required. Remedial works may be necessary in the short term and are likely over the long term
- moderate: it is possible that harm could arise, but it is unlikely that the harm would be severe and it is more likely that the harm would be relatively mild. Investigation is normally required to clarify the risk and determine the liability. Some remedial works may be required in the longer term
- low: it is possible that harm could occur, but it is likely that if realised this harm would at worst normally be mild
- very low: there is a low possibility that harm could occur and if realised the harm is unlikely to be severe.

F2 Site Investigation Methodology

Ground gas monitoring

An infrared gas meter was used to measure gas flow, concentrations of carbon dioxide (CO_2), methane (CH_4) and oxygen (O_2) in percentage by volume, while hydrogen sulphide (H_2S) and carbon monoxide (CO) were recorded in parts per million. Initial and steady state concentrations were recorded. In addition, during the first monitoring round, all wells were screened with a PID to establish if there are any interferences and cross-sensitivity of other hydrocarbons with the infrared gas meter.

Low flow groundwater sampling

Groundwater samples were retrieved using a United States Environment Protection Agency (USEPA) approved low-flow purging and sampling methodology.

The low-flow method relies on moving groundwater through the well screen at approximately the same rate as it flows through the geological formation. This results in a significant reduction in the volume of water extracted before sampling and significantly reduces the amount of disturbance of the water in the monitoring well during purging and sampling. Drawdown levels in the monitoring well and water quality indicator parameters (pH, temperature, electrical conductivity, redox potential and dissolved oxygen) are monitored during low-flow purging and sampling, with stabilisation indicating that purging is complete and sampling can begin. As the flow rate used for purging, in most cases, is the same or only slightly higher than the flow rate used for sampling, and because purging and sampling are conducted as one continuous operation in the field, the process is referred to as low-flow purging and sampling.

Reuse of suitable materials

The Definition of Waste: Development Industry Code of Practice (CL:AIRE, 2011) (CoP) was developed in consultation with the Environment Agency and development industry to enable the

re-use of materials under certain scenarios and subject to demonstrating that specific criteria are met. The current reuse scenarios covered by the CoP comprise

- reuse on the site of origin (with or without treatment)
- direct transfer of clean and natural soils between sites
- use in the development of land other than the site of origin following treatment at an authorised Hub site (including a fixed soil treatment facility).

The importation of made ground soils (irrespective of contamination status) or crushed demolition materials is not permitted currently under the CoP and requires either a standard rules environmental permit or a U1 waste exemption (see below).

In the context of excavated materials used on-sites undergoing development, four factors are considered to be of particular relevance in determining if the material is a waste or when it ceases to be waste:

- the aim of the Waste Framework Directive is not undermined, i.e. if the use of the material will create an unacceptable risk of pollution of the environment or harm to human health it is likely to be waste
- the material is certain to be used
- the material is suitable for use both chemically and geotechnically
- only the required quantity of material will be used.

The CoP requires the preparation of a materials management plan (MMP) that confirms the above factors will be met. This plan needs to be reviewed by a 'Qualified Person' (QP) who will then issue a declaration form to the EA. As the project progresses, data must be collated and on completion a verification report produced that shows the MMP was followed and describes any changes.

The MMP establishes whether specific materials are classified as waste and how excavated materials will be treated and/or reused in line with the CoP. The MMP is likely to form part of the site waste management plan.

APPENDIX G
EXPLORATORY HOLE RECORDS

STRUCTURAL SOILS LTD

INSITU TESTING REPORT

1774

Report No. 750490R.01(00)

Date	24-November-2021	Contract	Church Lane, Ashington

Client RSK Environment
Address Accounts Payable
Spring Lodge
172 Chester Road
Helsby
WA6 0AR

For the Attention of Rob Dabbs

Order received	09-November-2021	Client Reference	None
Testing Started	23-November-2021	Client Order No.	52368
Testing Completed	23-November-2021	Instruction Type	Written

Tests marked 'Not UKAS Accredited' in this report are not included in the UKAS Accreditation Schedule for our Laboratory.

UKAS Accredited Tests

Not UKAS Accredited Tests

3no. Soakaway tests carried out at locations specified by the client.

The results represent the ground conditions at the specified locations and depths at the time of testing.

Please Note: Remaining samples will be retained for a period of one month from today and will then be disposed of.
Test were undertaken on samples 'as received' unless otherwise stated.
Opinions and interpretations expressed in this report are outside the scope of accreditation for this laboratory.

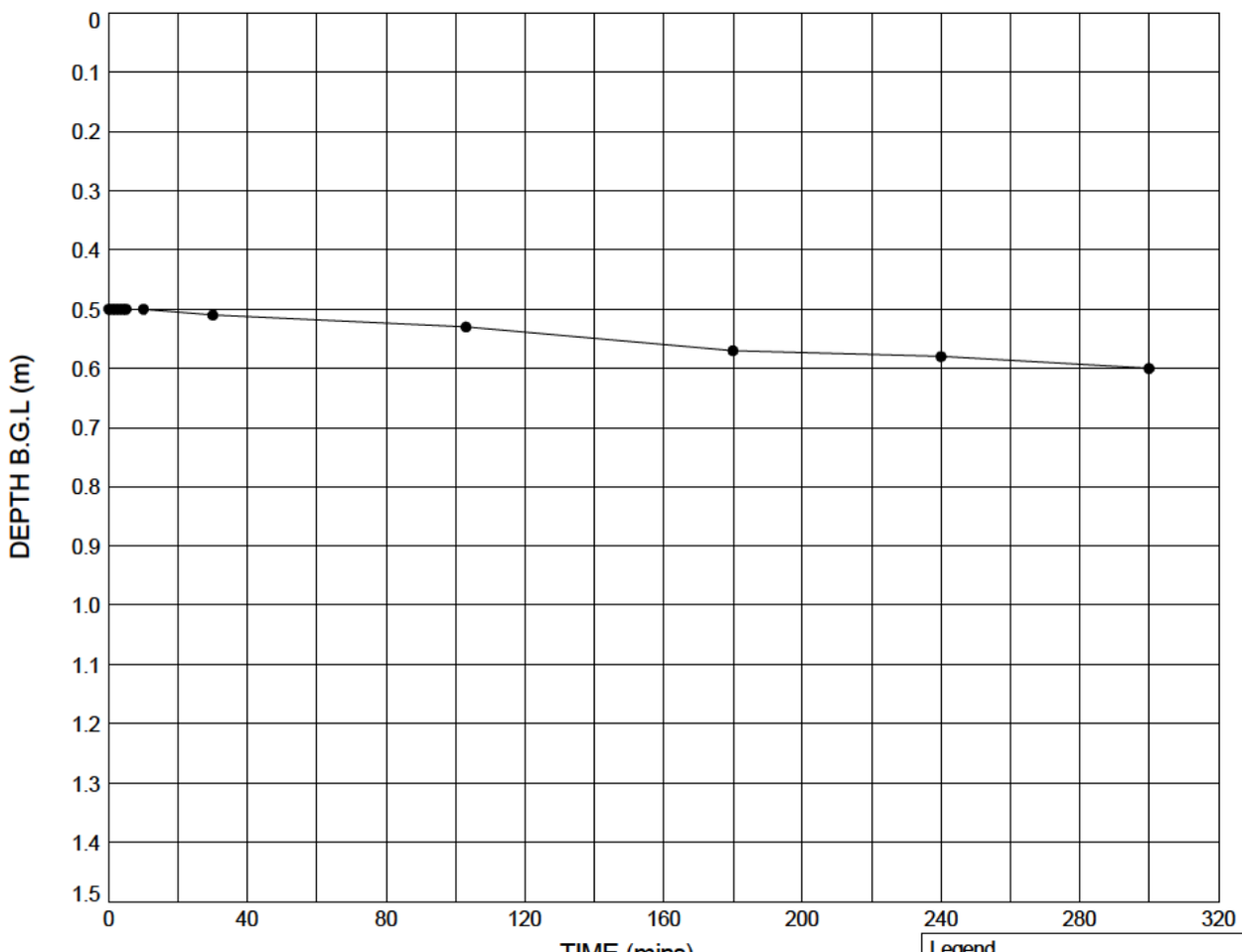
Structural Soils Ltd 1a Princess Street Bedminster Bristol BS3 4AG Tel.0117 9471000. e-mail dimitris.xirouchakis@soils.co.uk

FULL SCALE SOAKAWAY TEST

Non-standard test

Soakaway Test - Position ID : **TP1**

PLOT OF DEPTH OF WATER BELOW GROUND LEVEL AGAINST TIME



Test 1

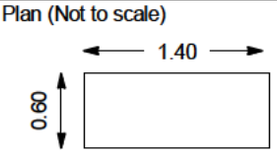
Pit start depth:	=	**1.50**	m
Pit final depth:	=	**1.42**	m
Effective depth, De	=	**0.92**	m
Effective storage volume, V_{p75-25}	=	**0.3864**	m^3
Surface area, a_{p50}	=	**2.6800**	m^2
Time, t_{p75-25}	=	**N/A**	secs
Infiltration rate, f	=	**N/A**	m/s

Notes: Test 1 - Unable to calculate infiltration rate due to insufficient drop in water level.

Legend

● Test 1 (23.11.21)

Plan (Not to scale)



No Bearing Taken

STRUCTURAL SOILS 1a Princess Street Bedminster Bristol BS3 4AG	Compiled By	Date	Checked By	Date
	KFlumacher	**24/11/21**		
	Contract **Church Lane, Ashington**		Contract Ref: **750490**	

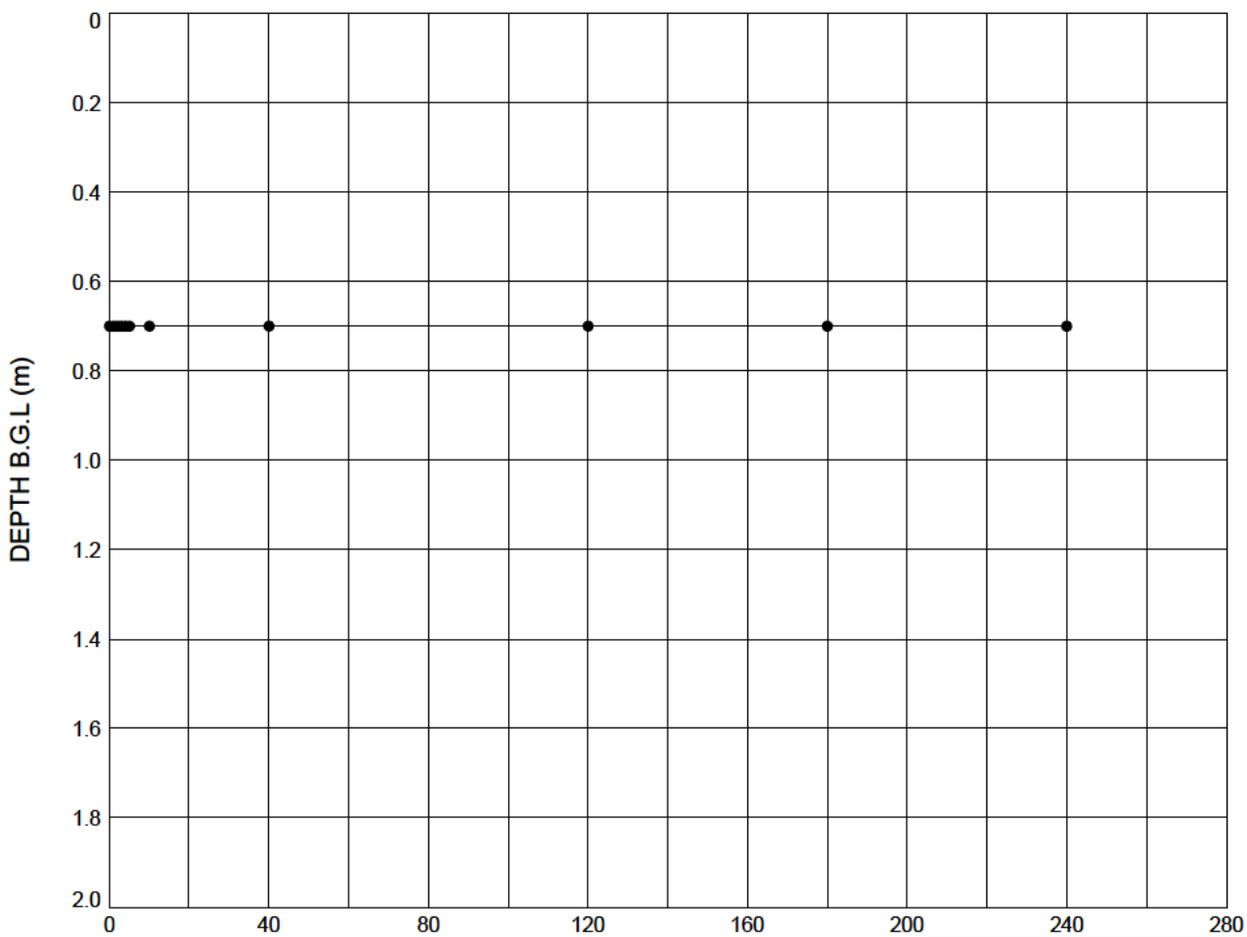
GINT_LIBRARY_V10_01.GLB LibVersion: v8_07_001 PrjVersion: v8_07 | Graph I - TP SOAKAWAY - 2 - FINAL REPORT - A4P | 750490-GINT.GPJ - v10_01. | 24/11/21 - 10:07 | KL2 |

FULL SCALE SOAKAWAY TEST

Non-standard test

Soakaway Test - Position ID : **TP2**

PLOT OF DEPTH OF WATER BELOW GROUND LEVEL AGAINST TIME



Test 1

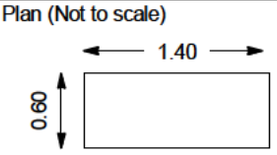
Pit start depth:	=	**1.90**	m
Pit final depth:	=	**1.82**	m
Effective depth, De	=	**1.12**	m
Effective storage volume, V_{p75-25}	=	**0.4704**	m^3
Surface area, a_{p50}	=	**3.0800**	m^2
Time, t_{p75-25}	=	**N/A**	secs
Infiltration rate, f	=	**N/A**	m/s

Notes: Test 1 - Unable to calculate infiltration rate due to insufficient drop in water level.

Legend

● Test 1 (23.11.21)

Plan (Not to scale)



No Bearing Taken

	Compiled By	Date	Checked By	Date
STRUCTURAL SOILS 1a Princess Street Bedminster Bristol BS3 4AG	KFlumacher	**24/11/21**		
	Contract **Church Lane, Ashington**		Contract Ref: **750490**	

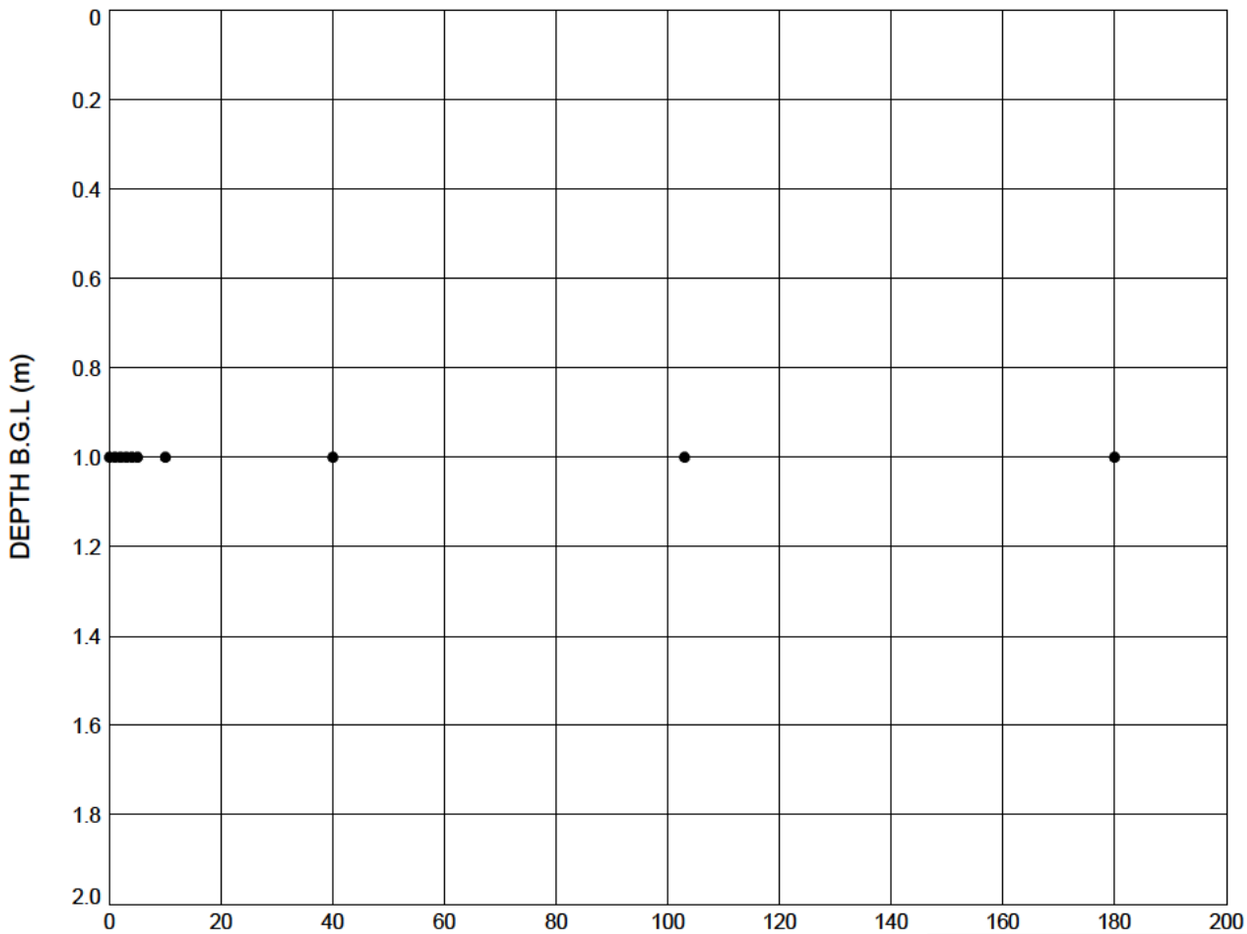
GINT_LIBRARY_V10_01.GLB LibVersion: v8_07_001 PrjVersion: v8_07 | Graph I - TP SOAKAWAY - 2 - FINAL REPORT - A4P | 750490-GINT.GPJ - v10_01. | 24/11/21 - 10:08 | KL2 |

FULL SCALE SOAKAWAY TEST

Non-standard test

Soakaway Test - Position ID : **TP3**

PLOT OF DEPTH OF WATER BELOW GROUND LEVEL AGAINST TIME



Test 1

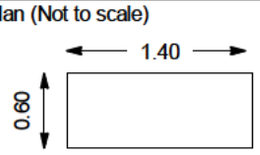
Pit start depth:	=	**2.00**	m
Pit final depth:	=	**2.00**	m
Effective depth, De	=	**1.00**	m
Effective storage volume, V_{p75-25}	=	**0.4200**	m^3
Surface area, a_{p50}	=	**2.8400**	m^2
Time, t_{p75-25}	=	**N/A**	secs
Infiltration rate, f	=	**N/A**	m/s

Notes: Test 1 - Unable to calculate infiltration rate due to insufficient drop in water level.

Legend

● Test 1 (23.11.21)

Plan (Not to scale)



No Bearing Taken

STRUCTURAL SOILS 1a Princess Street Bedminster Bristol BS3 4AG	Compiled By	Date	Checked By	Date
	KFlumacher	**24/11/21**		
	Contract: **Church Lane, Ashington**		Contract Ref: **750490**	

GINT_LIBRARY_V10_01.GLB LibVersion: v8_07_001 PrjVersion: v8_07 | Graph I - TP SOAKAWAY - 2 - FINAL REPORT - A4P | 750490-GINT.GPJ - v10_01. | 24/11/21 - 10:09 | KL2 |

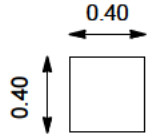
INSPECTION PIT LOG

Contract:	Client:	Trial Pit:
Church Lane, Ashington	**Bellway Homes Limited**	**HP01**

Contract Ref:	Start:	Ground Level (m AOD):	National Grid Co-ordinate:	Sheet:
52368	**01.12.21** End: **01.12.21**	**---**	**---**	**1** of **1**

Samples and In-situ Tests				Water	Backfill	Description of Strata	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results					
						Soft dark brown sandy silty CLAY with frequent fine rootlets.	(0.20) 0.20	
0.40-0.60	1	B				Firm to stiff light brown to orangish brown silty CLAY.	(0.40) 0.60	

Plan (Not to Scale)



General Remarks

All dimensions in metres | Scale: **1:10**

Method Used:	Plant Used:	Logged By:	Checked By:
Inspection pit	**Hand tools**	**JCurnow**	

GINT_LIBRARY_V10_01.GLB LibVersion: v8_07_001 PrjVersion: v8_07 | Log NSPECTION PIT LOG - A4P | 52368-CHURCH-LANE-ASHINGTON.GPJ - v10_01. | 26/01/22 - 15:09 | JC12 |

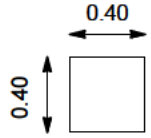
INSPECTION PIT LOG

Contract:	Client:	Trial Pit:
Church Lane, Ashington	**Bellway Homes Limited**	**HP02**

Contract Ref:	Start:	Ground Level (m AOD):	National Grid Co-ordinate:	Sheet:
52368	**01.12.21**	**---**	**---**	**1** of **1**
	End: **01.12.21**			

Samples and In-situ Tests				Water	Backfill	Description of Strata	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results					
						Soft dark brown sandy silty CLAY with frequent fine rootlets.	(0.35) 0.35	
0.40-0.60	1	B				Firm to stiff light brown to orangish brown silty CLAY.	(0.25) 0.60	

Plan (Not to Scale)



General Remarks

All dimensions in metres | Scale: **1:10**

Method Used:	Plant Used:	Logged By:	Checked By:
Inspection pit	**Hand auger**	**JCurnow**	

GINT_LIBRARY_V10_01.GLB LibVersion: v8_07_001 PrjVersion: v8_07 | Log NSPECTION PIT LOG - A4P | 52368-CHURCH-LANE-ASHINGTON.GPJ - v10_01. | 26/01/22 - 15:09 | JC12 |

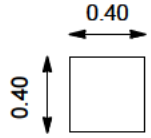
INSPECTION PIT LOG

Contract:	Client:	Trial Pit:
Church Lane, Ashington	Bellway Homes Limited	HP03

Contract Ref:	Start:	Ground Level (m AOD):	National Grid Co-ordinate:	Sheet:
52368	01.12.21	---	---	1 of 1
	End: 01.12.21			

Samples and In-situ Tests				Water	Backfill	Description of Strata	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results					
						Soft dark brown sandy silty CLAY with occasional fine rootlets.	(0.30) 0.30	
0.40-0.60	1	B				Firm light brown to orangish brown silty CLAY.	(0.30) 0.60	

Plan (Not to Scale)



General Remarks

All dimensions in metres | Scale: 1:10

Method Used:	Plant Used:	Logged By:	Checked By:
Inspection pit	Hand tools	JCurnow	

GINT_LIBRARY_V10_01.GLB LibVersion: v8_07_001 PrjVersion: v8_07 | Log INSPECTION PIT LOG - A4P | 52368-CHURCH-LANE-ASHINGTON.GPJ - v10_01. | 26/01/22 - 15:10 | JC12 |

RSK GEOSCIENCES

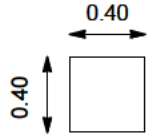
INSPECTION PIT LOG

Contract:	Client:	Trial Pit:
Church Lane, Ashington	**Bellway Homes Limited**	**HP04**

Contract Ref:	Start:	Ground Level (m AOD):	National Grid Co-ordinate:	Sheet:
52368	**01.12.21**	**---**	**---**	**1** of **1**
	End: **01.12.21**			

Samples and In-situ Tests				Water	Backfill	Description of Strata	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results					
						Soft dark brown sandy silty CLAY with frequent fine rootlets.	(0.20) 0.20	
0.40-0.60	1	B				Firm to stiff light brown to orangish brown silty CLAY.	(0.40) 0.60	

Plan (Not to Scale)



General Remarks

All dimensions in metres | Scale: **1:10**

Method Used:	Plant Used:	Logged By:	Checked By:
Inspection pit	**Hand tools**	**JCurnow**	

AGS

GINT_LIBRARY_V10_01.GLB LibVersion: v8_07_001 PrjVersion: v8_07 | Log NSPECTION PIT LOG - A4P | 52368-CHURCH-LANE-ASHINGTON.GPJ - v10_01. | 26/01/22 - 15:10 | JC12 |

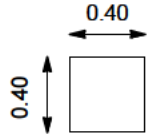
INSPECTION PIT LOG

Contract:	Client:	Trial Pit:
Church Lane, Ashington	**Bellway Homes Limited**	**HP05**

Contract Ref:	Start:	Ground Level (m AOD):	National Grid Co-ordinate:	Sheet:
52368	**01.12.21**	**---**	**---**	**1** of **1**
	End: **01.12.21**			

Samples and In-situ Tests				Water	Backfill	Description of Strata	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results					
						Soft dark brown sandy silty CLAY with occasional fine rootlets.	(0.30) 0.30	
0.50-0.60	1	B				Firm light brown to orangish brown silty CLAY.	(0.30) 0.60	

Plan (Not to Scale)



General Remarks

All dimensions in metres | Scale: **1:10**

Method Used:	Plant Used:	Logged By:	Checked By:
Inspection pit	**Hand tools**	**JCurnow**	

GINT_LIBRARY_V10_01.GLB LibVersion: v8_07_001 PrjVersion: v8_07 | Log NSPECTION PIT LOG - A4P | 52368-CHURCH-LANE-ASHINGTON.GPJ - v10_01. | 26/01/22 - 15:10 | JC12 |

RSK GEOSCIENCES

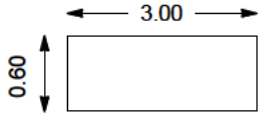
TRIAL PIT LOG

Contract:	Client:	Trial Pit:
Church Lane, Ashington	**Bellway Homes Limited**	**TP01**

Contract Ref:	Start:	Ground Level (m AOD):	National Grid Co-ordinate:	Sheet:
52368	**22.11.21** End: **22.11.21**	**28.44**	**E:512691.7 N:115980.5**	**1** of **1**

Samples and In-situ Tests				Water	Backfill	Description of Strata	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results					
0.00-0.30	1	ES				Brown gravelly silty SAND with frequent glass, porcelain and brick fragments, occasional rootlets and plastic. Sand is fine to coarse. Gravel is subangular to subrounded fine flint and cha k. (MADE GROUND)	(0.30)	
0.00		PID	0 0ppm				0.30	
						Dark brown silty firm to stiff slightly gravelly CLAY with occasional brick fragments. Gravel is fine to coarse subrounded to subangular flint and chalk. (MADE GROUND)	(0.40)	
							0.70	
						Firm light brown mottled reddish brown silty slightly gravelly CLAY with occasional lignite. Gravel is fine to coarse subangular to subrounded flint and cha k. (WEALD CLAY FORMATION)	0.90	
0.90-1.10	1	D				Soft to firm grey mottled orangish brown silty CLAY. (WEALD CLAY FORMATION)		
1.90-2.10	2	D				. . . From 2.00m depth: Becoming firm to stiff friable grey mottled orangish red silty CLAY.	(2.10)	
2.80-3.00	3	D				. . . From 2.80m depth: Becoming very friable (same description otherwise).	3.00	
						Trial pit terminated at 3.00m depth.		

Plan (Not to Scale)



General Remarks

1. Trial pit remained stable during excavation.
2. Trial pit remained dry during excavation.
3. Trial pit backfilled with arisings.

All dimensions in metres | Scale: **1:25**

Method Used:	Plant Used:	Logged By:	Checked By:
Machine dug	**8 Ton Tracked Excavator**	**JCurnow**	

AGS

GINT_L BRARY_V10_01.GLB LibVersion: v8_07_001 PrjVersion: v8_07 | Log TRIAL PIT LOG - A4P | 52368-CHURCH-LANE-ASHINGTON.GPJ - v10_01. | 26/01/22 - 15:06 | JC12 |

RSK GEOSCIENCES

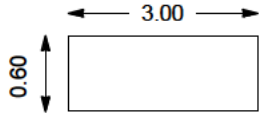
TRIAL PIT LOG

Contract:	Client:	Trial Pit:
Church Lane, Ashington	**Bellway Homes Limited**	**TP02**

Contract Ref:	Start:	Ground Level (m AOD):	National Grid Co-ordinate:	Sheet:
52368	**22.11.21** End: **22.11.21**	**32.07**	**E:512629.6 N:115882.8**	**1** of **1**

Samples and In-situ Tests				Water	Backfill	Description of Strata	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results					
0.00-0.30 0.00	1	ES PID	0 0ppm			Brown gravelly silty SAND with frequent glass and brick fragments, rootlets and rare plastic. Sand is fine to coarse. Gravel is fine to medium subrounded to subangular flint and cha k. (MADE GROUND)	(0.30) 0.30	
						Brown firm to stiff slightly gravelly silty CLAY with occasional brick fragments, whole bricks, plastic, rare wood and cable. Gravel is fine to cobble size subangular to subrounded flint and cha k. (MADE GROUND)	(0.40) 0.70	
0.90-1.10	1	D				Soft to firm light brown mottled grey silty CLAY. (MADE GROUND)	(1.10) 1.80	
1.90-2.10	2	D		≈		Multicolour firm to stiff friable silty CLAY with occasional brick, glass and decayed organics. (MADE GROUND)	(1.20)	
2.50-3.00	3	D					3.00	
						Trial pit terminated at 3.00m depth.		

Plan (Not to Scale)



General Remarks

1. Trial pit remained stable during excavation.
2. Water seepage at 2.00m depth.
3. Trial pit backfilled with arisings.

All dimensions in metres | Scale: **1:25**

Method Used:	Plant Used:	Logged By:	Checked By:
Machine dug	**8 Ton Tracked Excavator**	**JCurnow**	

AGS

GINT_L BRARY_V10_01.GLB LibVersion: v8_07_001 PrjVersion: v8_07 | Log TRIAL PIT LOG - A4P | 52368-CHURCH-LANE-ASHINGTON.GPJ - v10_01. | 26/01/22 - 15:06 | JC12 |

RSK GEOSCIENCES

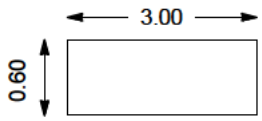
TRIAL PIT LOG

Contract:	Client:	Trial Pit:
Church Lane, Ashington	**Bellway Homes Limited**	**TP03**

Contract Ref:	Start:	Ground Level (m AOD):	National Grid Co-ordinate:	Sheet:
52368	**22.11.21** End: **22.11.21**	**34.72**	**E:512607.5 N:115761.5**	**1** of **1**

Samples and In-situ Tests				Water	Backfill	Description of Strata	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results					
0.00-0.20 0.00	1	ES PID	0 0ppm			Soft light brown mottled reddish brown slightly gravelly sandy silty CLAY with fine rootlets. Sand is fine. Gravel is fine to medium subangular to subrounded flint. (TOPSOIL)	(0.50) 0.50	
						Soft to firm mottled grey and orangish brown silty CLAY with rare brick fragments. (MADE GROUND)	(0.30) 0.80	
1.00-1.20	1	D				Firm to stiff grey mottled orangish brown silty CLAY. (WEALD CLAY FORMATION)	(2.20)	
1.80-2.00	2	D						
2.80-3.00	3	D					3.00	
						Trial pit terminated at 3.00m depth.		

Plan (Not to Scale)



General Remarks

1. Trial pit remained stable during excavation.
2. Trial pit remained dry during excavation.
3. Trial pit backfilled with arisings.

All dimensions in metres | Scale: **1:25**

Method Used:	Plant Used:	Logged By:	Checked By:
Machine dug	**8 Ton Tracked Excavator**	**JCurnow**	

AGS

GINT_L BRARY_V10_01.GLB LibVersion: v8_07_001 PrjVersion: v8_07 | Log TRIAL PIT LOG - A4P | 52368-CHURCH-LANE-ASHINGTON.GPJ - v10_01. | 26/01/22 - 15:06 | JC12 |

RSK GEOSCIENCES

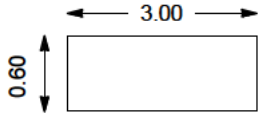
TRIAL PIT LOG

Contract:	Client:	Trial Pit:
Church Lane, Ashington	**Bellway Homes Limited**	**TP04**

Contract Ref:	Start:	Ground Level (m AOD):	National Grid Co-ordinate:	Sheet:
52368	**22.11.21** End: **22.11.21**	**29.01**	**E:512589.5 N:115949.4**	**1** of **1**

Samples and In-situ Tests				Water	Backfill	Description of Strata	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results					
0.00-0.30	1	ES				Soft brown silty slightly sandy slightly gravelly CLAY with occasional fine rootlets. Gravel is subrounded to subangular chalk. Sand is fine. (TOPSOIL)	(0.30)	
0.00		PID	0 0ppm				0.30	
0.40-0.60	1	D				Firm to stiff orangish brown mottled grey silty CLAY with rare brick fragments. (MADE GROUND)	0.50	
						Firm to stiff orangish brown mottled grey silty CLAY. (WEALD CLAY FORMATION)		
						. . . At 1.60m depth: Pocket of gravel - fine to coarse subangular black mudstone.	(2.50)	
2.20-2.40	2	D				. . . From 2.20m depth: Becoming stiff friable grey mottled orangish brown silty CLAY.		
						. . . From 2.60m depth: Becoming extremely friable grey mottled orangish brown silty CLAY.	3.00	
						Trial pit terminated at 3.00m depth.		

Plan (Not to Scale)



General Remarks

1. Trial pit remained stable during excavation.
2. Trial pit remained dry during excavation.
3. Trial pit backfilled with arisings.

All dimensions in metres | Scale: **1:25**

Method Used:	Plant Used:	Logged By:	Checked By:
Machine dug	**8 Ton Tracked Excavator**	**JCurnow**	

AGS

GINT_L BRARY_V10_01.GLB LibVersion: v8_07_001 PrjVersion: v8_07 | Log TRIAL PIT LOG - A4P | 52368-CHURCH-LANE-ASHINGTON.GPJ - v10_01. | 26/01/22 - 15:06 | JC12 |

RSK GEOSCIENCES

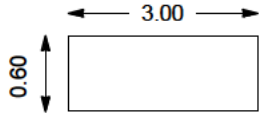
TRIAL PIT LOG

Contract:	Client:	Trial Pit:
Church Lane, Ashington	**Bellway Homes Limited**	**TP05**

Contract Ref:	Start:	Ground Level (m AOD):	National Grid Co-ordinate:	Sheet:
52368	**22.11.21** End: **22.11.21**	**28.25**	**E:512634.6 N:116025.9**	**1** of **1**

Samples and In-situ Tests				Water	Backfill	Description of Strata	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results					
0.00-0.30 0.00	1	ES PID	0 0ppm			Soft brown silty slightly sandy slightly gravelly CLAY with occasional fine rootlets. Sand is fine. Gravel is subrounded to subangular fine chalk. (TOPSOIL)	(0.30) 0.30	
						Firm to stiff orangish brown mottled grey silty CLAY with occasional root to 0.90m. (from nearby tree) (WEALD CLAY FORMATION)		
0.90-1.10	1	D				. . . From 1.10m depth: Becoming friable orangish brown to grey silty CLAY. . . . From 1.30m depth: Becoming extremely friable orangish brown to grey silty CLAY.	(2.60)	
2.00-2.20	2	D						
2.20-2.90	3	D				. . . From 2.60m depth: Becoming weak mudstone in a matrix of hard friable orangish brown mottled grey silty CLAY.	2.90	
						Trial pit terminated at 2.9m depth on mudstone/very hard clay.		

Plan (Not to Scale)



General Remarks

1. Trial pit remained stable during excavation.
2. Trial pit remained dry during excavation.
3. Trial pit backfilled with arisings.

All dimensions in metres | Scale: **1:25**

Method Used:	Plant Used:	Logged By:	Checked By:
Machine dug	**8 Ton Tracked Excavator**	**JCurnow**	

AGS

GINT_LIBRARY_V10_01.GLB LibVersion: v8_07_001 PrjVersion: v8_07 | Log TRIAL PIT LOG - A4P | 52368-CHURCH-LANE-ASHINGTON.GPJ - v10_01. | 26/01/22 - 15:06 | JC12 |

RSK GEOSCIENCES

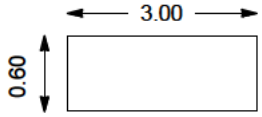
TRIAL PIT LOG

Contract:	Client:	Trial Pit:
Church Lane, Ashington	**Bellway Homes Limited**	**TP06**

Contract Ref:	Start:	Ground Level (m AOD):	National Grid Co-ordinate:	Sheet:
52368	**23.11.21** End: **23.11.21**	**27.84**	**E:512629.4 N:116085.7**	**1** of **1**

Samples and In-situ Tests				Water	Backfill	Description of Strata	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results					
0.00-0.20 0.00	1	ES PID	0 0ppm			Firm brown silty slightly sandy CLAY with occasional rootlets. (TOPSOIL)	0.20	
0.90-1.10 0.90	1	D V	c_u=53			Firm to stiff medium strength orangish brown mottled bluish grey silty CLAY. (WEALD CLAY FORMATION)	(2.20)	
						. . . From 1.40m depth: Becoming soft friable multicolour silty CLAY.		
2.00-2.20	2	D		≈		. . . From 2.20m depth: Becoming extremely friable multicolour silty CLAY.	2.40	
2.40-2.60	3	D				. . . From 2.30m depth: Becoming weak multicolour mudstone on a matrix of extremely friable multicolour silty CLAY.	2.60	
						Medium light brown gravelly SAND. Gravel is fine to coarse subangular to weak siltstone/sandstone. (WEALD CLAY FORMATION)	2.70	
						Bluish grey extremely friable silty CLAY/GRAVEL of bluish grey weak siltstone. Gravel is fine to coarse subangular. (WEALD CLAY FORMATION)		
						Trial pit terminated at 2.70m depth.		

Plan (Not to Scale)



General Remarks

1. Trial pit remained stable during excavation.
2. Water seepage at 2.20m depth.
3. Trial pit backfilled with arisings.

All dimensions in metres | Scale: **1:25**

Method Used:	Plant Used:	Logged By:	Checked By:
Machine dug	**8 Ton Tracked Excavator**	**JCurnow**	

AGS

GINT_LIBRARY_V10_01.GLB LibVersion: v8_07_001 PrjVersion: v8_07 | Log TRIAL PIT LOG - A4P | 52368-CHURCH-LANE-ASHINGTON.GPJ - v10_01. | 26/01/22 - 15:06 | JC12 |

RSK GEOSCIENCES

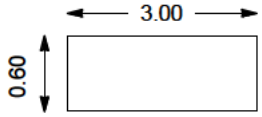
TRIAL PIT LOG

Contract:	Client:	Trial Pit:
Church Lane, Ashington	**Bellway Homes Limited**	**TP07**

Contract Ref:	Start:	Ground Level (m AOD):	National Grid Co-ordinate:	Sheet:
52368	**23.11.21** End: **23.11.21**	**27.26**	**E:512554.8 N:116057.2**	**1** of **1**

Samples and In-situ Tests				Water	Backfill	Description of Strata	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results					
0.00-0.20 0.00	1	ES PID	0 0ppm			Soft brown slightly sandy silty CLAY with frequent rootlets. Sand is fine. (TOPSOIL)	0.20	
0.60		V	c_u=51			Firm to stiff medium strength orangish brown mottled bluish grey silty CLAY. (WEALD CLAY FORMATION)		
0.90-1.10	1	D						
1.00-2.10	2	D						
1.10		V	c_u=53					
						. . . From 1.30m depth: Becoming black mudstone in a matrix of firm orangish brown to bluish grey friable silty CLAY.	(2.80)	
						. . . From 1.80m depth: Becoming extremely friable reddish brown silty CLAY.		
						. . . From 2.20m depth: Becoming firm friable mutlicolour silty CLAY.		
2.80-3.00	3	D					3.00	
						Trial pit terminated at 3.00m depth.		

Plan (Not to Scale)



General Remarks

1. Trial pit remained stable during excavation.
2. Trial pit remained dry during excavation.
3. Trial pit backfilled with arisings.

All dimensions in metres | Scale: **1:25**

Method Used:	Plant Used:	Logged By:	Checked By:
Machine dug	**8 Ton Tracked Excavator**	**JCurnow**	

AGS

GINT_LIBRARY_V10_01.GLB LibVersion: v8_07_001 PrjVersion: v8_07 | Log TRIAL PIT LOG - A4P | 52368-CHURCH-LANE-ASHINGTON.GPJ - v10_01. | 26/01/22 - 15:06 | JC12 |

RSK GEOSCIENCES

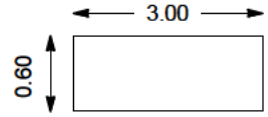
TRIAL PIT LOG

Contract:	Client:	Trial Pit:
Church Lane, Ashington	**Bellway Homes Limited**	**TP08**

Contract Ref:	Start:	Ground Level (m AOD):	National Grid Co-ordinate:	Sheet:
52368	**23.11.21** End: **23.11.21**	**26.54**	**E:512504.8 N:116168.7**	**1** of **1**

Samples and In-situ Tests				Water	Backfill	Description of Strata	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results					
0.00-0.20 0.00	1	ES PID	0 0ppm			Firm dark brown silty CLAY with frequent rootlets. (TOPSOIL)	0.20	
0.80-1.00	1	D				Firm orangish brown slightly gravelly silty CLAY with occasional roots and rootlets. Gravel is subangular medium flints. (WEALD CLAY FORMATION) . . . From 0.70m depth: Becoming firm to stiff orangish brown mottled bluish grey silty CLAY.	(2.80)	
1.80-2.00	2	D				. . . From 1.70m depth: Becoming friable orangish brown mottled bluish grey silty CLAY. . . . From 1.80m depth: Becoming extremely friable orangish brown to bluish grey silty CLAY.		
2.80-3.00	3	D				. . . From 2.30m depth: Becoming weak mudstone in a matrix of extremely friable orangish brown to bluish grey silty CLAY. . . . From 2.50m depth: Becoming multicolour.	3.00	
						Trial pit terminated at 3.00m depth.		

Plan (Not to Scale)



General Remarks

1. Trial pit remained stable during excavation.
2. Trial pit remained dry during excavation.
3. Trial pit backfilled with arisings.

All dimensions in metres | Scale: **1:25**

Method Used:	Plant Used:	Logged By:	Checked By:
Machine dug	**8 Ton Tracked Excavator**	**JCurnow**	

AGS

GINT_LIBRARY_V10_01.GLB LibVersion: v8_07_001 PrjVersion: v8_07 | Log TRIAL PIT LOG - A4P | 52368-CHURCH-LANE-ASHINGTON.GPJ - v10_01. | 26/01/22 - 15:06 | JC12 |

RSK GEOSCIENCES

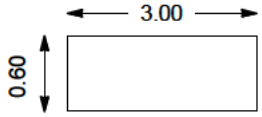
TRIAL PIT LOG

Contract:	Client:	Trial Pit:
Church Lane, Ashington	**Bellway Homes Limited**	**TP09**

Contract Ref:	Start:	Ground Level (m AOD):	National Grid Co-ordinate:	Sheet:
52368	**24.11.21**	**27.34**	**E:512466.8 N:116082.2**	**1** of **1**
	End: **24.11.21**			

Samples and In-situ Tests				Water	Backfill	Description of Strata	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results					
0.00-0.20	1	ES				Soft brown silty CLAY with frequent decayed wood and rootlets. (TOPSOIL)	0.10	
0.00		PID	0 0ppm			Firm light brown slightly gravelly silty CLAY with occasional roots. Gravel is subangular to subrounded fine to medium chalk. (TOPSOIL)	0.30	
0.40-0.60	1	D				Firm to stiff medium strength orangish brown mottled bluish grey silty CLAY with occasional roots. (WEALD CLAY FORMATION)	(1.20)	
0.50		V	c_u=54					
0.90-1.10	2	D						
1.20		V	c_u=52			. . . From 1.20m depth: Becoming stiff reddish brown mottled bluish grey silty CLAY.		
1.40-1.50	3	D					1.50	
						Trial pit terminated at 1.50m depth.		

Plan (Not to Scale)



General Remarks

1. Trial pit remained stable during excavation.
2. Trial pit remained dry during excavation.
3. Trial pit backfilled with arisings.

All dimensions in metres | Scale: **1:25**

Method Used:	Plant Used:	Logged By:	Checked By:
Machine dug	**8 Ton Tracked Excavator**	**JCurnow**	

GINT_LIBRARY_V10_01.GLB LibVersion: v8_07_001 PrjVersion: v8_07 | Log TRIAL PIT LOG - A4P | 52368-CHURCH-LANE-ASHINGTON.GPJ - v10_01. | 26/01/22 - 15:07 | JC12 |

RSK GEOSCIENCES

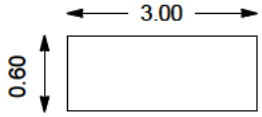
TRIAL PIT LOG

Contract:	Client:	Trial Pit:
Church Lane, Ashington	**Bellway Homes Limited**	**TP10**

Contract Ref:	Start:	Ground Level (m AOD):	National Grid Co-ordinate:	Sheet:
52368	**24.11.21** End: **24.11.21**	**28.35**	**E:512366.5 N:116091.1**	**1** of **1**

Samples and In-situ Tests				Water	Backfill	Description of Strata	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results					
0.00-0.10	1	ES				Soft brown silty CLAY with frequent decayed wood and rootlets. (TOPSOIL)	0.10	
0.00		PID	0 0ppm					
0.20-0.30	1	D				Firm to stiff light brown silty CLAY with frequent roots. (TOPSOIL)	(0.30)	
0.20		PID	0 0ppm				0.40	
0.40-0.60	2	D				Firm to stiff medium strength orangish brown mottled grey silty CLAY with occasional roots. (WEALD CLAY FORMATION)		
0.50		V	c_u=51					
0.90-1.10	3	D				. . . From 0.90m depth: Becoming stiff friable bluish grey mottled reddish brown silty CLAY.		
						. . . From 1.30m depth: Becoming extremely friable reddish brown to grey silty CLAY.	(2.10)	
1.60-1.80	4	D				. . . From 1.60m depth: Becoming weak reddish brown to grey siltstone in a matrix of extremely friable reddish brown to grey silty CLAY.		
						. . . From 1.80m depth: Becoming GRAVEL of weak reddish brown to grey siltstone. Gravel is fine to coarse subangular.		
							2.50	
						Trial pit terminated at 2.50m depth.		

Plan (Not to Scale)



General Remarks

1. Trial pit remained stable during excavation.
2. Trial pit remained dry during excavation.
3. Trial pit backfilled with arisings.

All dimensions in metres | Scale: **1:25**

Method Used:	Plant Used:	Logged By:	Checked By:
Machine dug	**8 Ton Tracked Excavator**	**JCurnow**	

AGS

GINT_LIBRARY_V10_01.GLB LibVersion: v8_07_001 PrjVersion: v8_07 | Log TRIAL PIT LOG - A4P | 52368-CHURCH-LANE-ASHINGTON.GPJ - v10_01. | 26/01/22 - 15:07 | JC12 |

RSK GEOSCIENCES

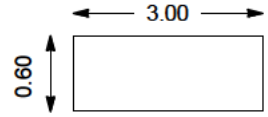
TRIAL PIT LOG

Contract:	Client:	Trial Pit:
Church Lane, Ashington	**Bellway Homes Limited**	**TP11**

Contract Ref:	Start:	Ground Level (m AOD):	National Grid Co-ordinate:	Sheet:
52368	**24.11.21** End: **24.11.21**	**25.79**	**E:512273.0 N:116222.0**	**1** of **1**

Samples and In-situ Tests				Water	Backfill	Description of Strata	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results					
0.00-0.10 0.00	1	ES PID	0 0ppm			Soft brown silty sandy slightly gravelly CLAY with frequent root, rootlets and decayed wood. Sand is fine to medium. Gravel is subangular to subrounded fine chalk and flint. (TOPSOIL)	(0.30) 0.30	
0.40-0.60 0.50	1	D V	c_u=42			Firm to stiff medium strength orangish brown mottled bluish grey silty CLAY with occasional roots and rare lignite. (WEALD CLAY FORMATION)		
0.90-1.10	2	D				. . . From 0.90m depth: Becoming firm friable orangish brown mottled bluish grey silty CLAY.	(2.00)	
1.40-1.60	3	D				. . . From 1.40m depth: Becoming weak multicolour in a matrix of soft multicolour friable silty CLAY. . . . From 1.70m depth: Becoming firm friable orangish brown to bluish grey silty CLAY.	2.30	
				≈		Orangish brown to bluish grey gravelly SAND. Sand is coarse. Gravel is fine to coarse subangular weak siltstone. (WEALD CLAY FORMATION)	2.50	
						Trial pit terminated at 2.50m depth on hard layer of sand and siltstone.		

Plan (Not to Scale)



General Remarks

1. Trial pit remained stable during excavation.
2. Water seepage at 2.40m depth.
3. Trial pit backfilled with arisings.

All dimensions in metres | Scale: **1:25**

Method Used:	Plant Used:	Logged By:	Checked By:
Machine dug	**8 Ton Tracked Excavator**	**JCurnow**	

AGS

GINT_L BRARY_V10_01.GLB LibVersion: v8_07_001 PrjVersion: v8_07 | Log TRIAL PIT LOG - A4P | 52368-CHURCH-LANE-ASHINGTON.GPJ - v10_01. | 26/01/22 - 15:07 | JC12 |

RSK GEOSCIENCES

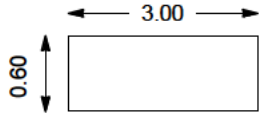
TRIAL PIT LOG

Contract:	Client:	Trial Pit:
Church Lane, Ashington	**Bellway Homes Limited**	**TP12**

Contract Ref:	Start:	Ground Level (m AOD):	National Grid Co-ordinate:	Sheet:
52368	**24.11.21**	**27.25**	**E:512258.8 N:116122.7**	**1** of **1**
	End: **24.11.21**			

Samples and In-situ Tests				Water	Backfill	Description of Strata	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results					
0.00-0.20 0.00	1	ES PID	 0 0ppm			Dark brown silty CLAY with abundant decayed wood, roots and rootlets. (TOPSOIL)	0.20	
						Firm light brown sandy silty CLAY with frequent roots and rootlets. Sand is fine to coarse. (WEALD CLAY FORMATION)	0.40	
0.40-0.60 0.50	1	D V	 c_u=63			Firm to stiff medium strength orangish brown to bluish grey silty CLAY with frequent roots. (WEALD CLAY FORMATION) . . . From 0.70m depth: Becoming firm friable orangish brown mottled bluish grey silty CLAY with rare roots.		
0.90-1.10 1.00	2	D V	 c_u=65			. . . From 0.90m depth: Becoming firm to stiff slightly friable reddish brown mottled bluish grey silty CLAY with rare roots.	(1.40)	
						. . . From 1.30m depth: Becoming extremely friable stiff reddish brown mottled bluish grey silty CLAY.	1.80	
1.90-2.10	3	D				Weak multicolour mudstone in a matrix of extremely friable orangish brown to bluish grey silty CLAY. (WEALD CLAY FORMATION)	(0.70)	
						Trial pit terminated at 2.50m depth on very hard claystone/clay.	2.50	

Plan (Not to Scale)



General Remarks

1. Trial pit remained stable during excavation.
2. Trial pit remained dry during excavation.
3. Trial pit backfilled with arisings.

All dimensions in metres | Scale: **1:25**

Method Used:	Plant Used:	Logged By:	Checked By:
Machine dug	**8 Ton Tracked Excavator**	**JCurnow**	

AGS

GINT_LIBRARY_V10_01.GLB LibVersion: v8_07_001 PrjVersion: v8_07 | Log TRIAL PIT LOG - A4P | 52368-CHURCH-LANE-ASHINGTON.GPJ - v10_01. | 26/01/22 - 15:07 | JC12 |

RSK GEOSCIENCES

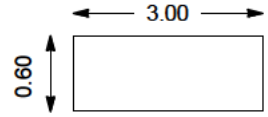
TRIAL PIT LOG

Contract:	Client:	Trial Pit:
Church Lane, Ashington	**Bellway Homes Limited**	**TP13**

Contract Ref:	Start:	Ground Level (m AOD):	National Grid Co-ordinate:	Sheet:
52368	**23.11.21** End: **23.11.21**	**27.25**	**E:512457.5 N:116152.1**	**1** of **1**

Samples and In-situ Tests				Water	Backfill	Description of Strata	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results					
0.00-0.10 0.00	1	ES PID	0 0ppm			Soft dark brown sandy slightly gravelly CLAY with frequent roots and rootlets and decayed organics. Sand is fine to coarse. Gravel is fine to coarse subrounded to subangular flint. (TOPSOIL)	0.20	
0.40-0.60 0.50	1	D V	c_u=28			Soft low strength orangish brown mottled bluish grey silty CLAY with occasional roots and rootlets. (WEALD CLAY FORMATION)		
						. . . From 1.20m depth: Becoming extremely friable orangish brown to bluish grey silty CLAY.		
1.40-1.60	2	D					(2.80)	
						. . . From 2.10m depth: Becoming extremely friable multicolour silty CLAY.		
2.40-2.60	3	D				. . . From 2.40m depth: Becoming weak multicolour mudstone in a matrix of extremely friable multicolour silty CLAY.		
						Trial pit terminated at 3.00m depth.	3.00	

Plan (Not to Scale)



General Remarks

1. Trial pit remained stable during excavation.
2. Trial pit remained dry during excavation.
3. Trial pit backfilled with arisings.

All dimensions in metres | Scale: **1:25**

Method Used:	Plant Used:	Logged By:	Checked By:
Machine dug	**8 Ton Tracked Excavator**	**JCurnow**	

AGS

GINT_LIBRARY_V10_01.GLB LibVersion: v8_07_001 PrjVersion: v8_07 | Log TRIAL PIT LOG - A4P | 52368-CHURCH-LANE-ASHINGTON.GPJ - v10_01. | 26/01/22 - 15:07 | JC12 |

RSK GEOSCIENCES

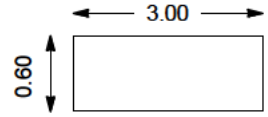
TRIAL PIT LOG

Contract:	Client:	Trial Pit:
Church Lane, Ashington	**Bellway Homes Limited**	**TP14**

Contract Ref:	Start:	Ground Level (m AOD):	National Grid Co-ordinate:	Sheet:
52368	**24.11.21** End: **24.11.21**	**26.83**	**E:512384.6 N:116214.6**	**1** of **1**

Samples and In-situ Tests				Water	Backfill	Description of Strata	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results					
0.00 0.00	1	ES PID	0 0ppm			Soft brown silty CLAY with frequent decayed wood, roots and rootlets. (TOPSOIL)	0.20	
						Firm light brown silty CLAY with frequent roots and lignite. Rare flints. (WEALD CLAY FORMATION)	0.40	
0.50		V	c_u=48			Firm to stiff medium strength multicoloured silty CLAY with pockets of black mudstone gravel and rare roots. (WEALD CLAY FORMATION)	(2.60)	
0.90	1	D						
1.20		V	c_u=68					
						. . . From 1.50m depth: Reddish brown friable silty CLAY.		
						. . . From 1.70m depth: Becoming extremely friable reddish brown silty CLAY.		
1.90	2	D				. . . From 1.80m depth: Becoming stiff bluish grey mottled orangish brown silty CLAY.		
						. . . From 1.90m depth: Band of black mudstone gravel, fine to coarse subangular. From 1.90m depth: Friable stiff bluish grey mottled orangish brown silty CLAY with frequent decayed rootlets.		
						. . . From 2.00m depth: Becoming extremely friable reddish brown to bluish grey silty CLAY.		
						. . . From 2.60m depth: Becoming weak multicolour mudstone in a matrix multicolour silty CLAY.		
						Trial pit terminated at 3.00m depth.	3.00	

Plan (Not to Scale)



General Remarks

1. Trial pit remained stable during excavation.
2. Trial pit remained dry during excavation.
3. Trial pit backfilled with arisings.

All dimensions in metres | Scale: **1:25**

Method Used:	Plant Used:	Logged By:	Checked By:
Machine dug	**8 Ton Tracked Excavator**	**JCurnow**	

AGS

GINT_LIBRARY_V10_01.GLB LibVersion: v8_07_001 PrjVersion: v8_07 | Log TRIAL PIT LOG - A4P | 52368-CHURCH-LANE-ASHINGTON.GPJ - v10_01. | 26/01/22 - 15:07 | JC12 |

RSK GEOSCIENCES

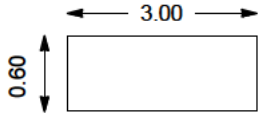
TRIAL PIT LOG

Contract:	Client:	Trial Pit:
Church Lane, Ashington	**Bellway Homes Limited**	**TP15**

Contract Ref:	Start:	Ground Level (m AOD):	National Grid Co-ordinate:	Sheet:
52368	**24.11.21** End: **24.11.21**	**27.98**	**E:512349.3 N:116149.1**	**1** of **1**

Samples and In-situ Tests				Water	Backfill	Description of Strata	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results					
0.00-0.20 0.00	1	ES PID	0 0ppm			Soft dark brown silty CLAY with frequent decayed wood and rootlets. (TOPSOIL)	0.20	
						Firm light brown sandy silty CLAY with frequent roots and rootlets. Sand is fine to coarse. (WEALD CLAY FORMATION)	0.40	
0.40-0.60 0.50	1	D V	c_u=51			Firm to stiff medium strength orangish brown mottled bluish grey silty CLAY with occasional roots. (WEALD CLAY FORMATION)		
						. . . From 0.70m depth: Becoming stiff reddish brown mottled bluish grey silty CLAY.		
0.90-1.10 1.00	2	D V	c_u=63					
						. . . From 1.40m depth: Stiff orangish brown mottled bluish grey silty CLAY with frequent pockets of reddish brown to black mudstone gravel.	(2.60)	
						. . . From 1.70m depth: weak orange grey siltstone in a matrix of extremely friable orangish brown to grey silty CLAY.		
						. . . From 2.60m depth: Gravel of weak reddish brown to grey mudstone. Gravel is fine to coarse, subangular.		
2.90-3.00	3	D					3.00	
						Trial pit terminated at 3.00m depth.		

Plan (Not to Scale)



General Remarks

1. Trial pit remained stable during excavation.
2. Trial pit remained dry during excavation.
3. Trial pit backfilled with arisings.

All dimensions in metres | Scale: **1:25**

Method Used:	Plant Used:	Logged By:	Checked By:
Machine dug	**8 Ton Tracked Excavator**	**JCurnow**	

AGS

GINT_LIBRARY_V10_01.GLB LibVersion: v8_07_001 PrjVersion: v8_07 | Log TRIAL PIT LOG - A4P | 52368-CHURCH-LANE-ASHINGTON.GPJ - v10_01. | 26/01/22 - 15:07 | JC12 |

RSK GEOSCIENCES

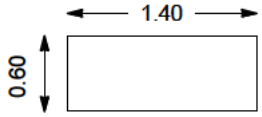
TRIAL PIT LOG

Contract:	Client:	Trial Pit:
Church Lane, Ashington	**Bellway Homes Limited**	**TPS01**

Contract Ref:	Start:	Ground Level (m AOD):	National Grid Co-ordinate:	Sheet:
52368	**23.11.21** End: **23.11.21**	**28.52**	**E:512699.5 N:115954.0**	**1** of **1**

Samples and In-situ Tests				Water	Backfill	Description of Strata	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results					
0.00-0.30 0.00	1	ES PID	0 0ppm			Brown gravelly silty SAND with frequent glass, porcelain, brick fragments and occasional rootlets. Sand is fine to coarse. Gravel is subangular to subrounded fine flint and cha k. (MADE GROUND)	(0.30) 0.30	
0.50-0.60	1	D				Orangish brown mottled grey firm to stiff silty slightly gravelly CLAY with occasional brick fragments. Gravel is fine to coarse subangular to subrounded flint and chalk. (WEALD CLAY FORMATION)	(0.40) 0.70	
0.90-1.10	2	D				Firm orangish brown mottled grey silty CLAY. (WEALD CLAY FORMATION)	(0.80)	
1.40-1.50	3	D		≈		Trial pit terminated at 1.50m depth.	1.50	

Plan (Not to Scale)



General Remarks

1. Trial pit remained stable during excavation.
2. Water seepage at 1.50m depth.
3. Trial pit backfilled with arisings.

All dimensions in metres | Scale: **1:25**

Method Used:	Plant Used:	Logged By:	Checked By:
Machine dug	**8 Ton Tracked Excavator**	**JCurnow**	

AGS

GINT_LIBRARY_V10_01.GLB LibVersion: v8_07_001 PrjVersion: v8_07 | Log TRIAL PIT LOG - A4P | 52368-CHURCH-LANE-ASHINGTON.GPJ - v10_01. | 26/01/22 - 15:07 | JC12 |

RSK GEOSCIENCES

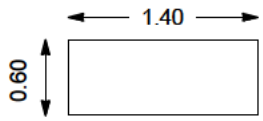
TRIAL PIT LOG

Contract:	Client:	Trial Pit:
Church Lane, Ashington	**Bellway Homes Limited**	**TPS02**

Contract Ref:	Start:	Ground Level (m AOD):	National Grid Co-ordinate:	Sheet:
52368	**23.11.21** End: **23.11.21**	**26.66**	**E:512515.0 N:116093.5**	**1** of **1**

Samples and In-situ Tests				Water	Backfill	Description of Strata	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results					
0.00-0.20 0.00	1	ES PID	0 0ppm			Soft light brown mottled reddish brown slightly gravelly sandy silty CLAY with fine rootlets. Sand is fine. Gravel is fine subangular flint. (TOPSOIL)	(0.30) 0.30	
0.40-0.60	1	D				Soft to firm grey mottled orangish brown silty CLAY with frequent lignite. (WEALD CLAY FORMATION) . . . From 0.90m depth: Stiff bluish grey mottled orangish brown silty CLAY.	(1.60)	
1.40-1.60	2	D				. . . From 1.70m depth: Becoming slightly friable (same description otherwise).	1.90	
						Trial pit terminated at 1.90m depth.		

Plan (Not to Scale)



General Remarks

1. Trial pit remained stable during excavation.
2. Trial pit remained dry during excavation.
3. Trial pit backfilled with arisings.

All dimensions in metres | Scale: **1:25**

Method Used:	Plant Used:	Logged By:	Checked By:
Machine dug	**8 Ton Tracked Excavator**	**JCurnow**	

AGS

GINT_LIBRARY_V10_01.GLB LibVersion: v8_07_001 PrjVersion: v8_07 | Log TRIAL PIT LOG - A4P | 52368-CHURCH-LANE-ASHINGTON.GPJ - v10_01. | 26/01/22 - 15:07 | JC12 |

RSK GEOSCIENCES

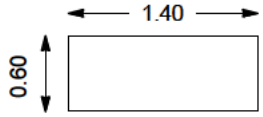
TRIAL PIT LOG

Contract:	Client:	Trial Pit:
Church Lane, Ashington	**Bellway Homes Limited**	**TPS03**

Contract Ref:	Start:	Ground Level (m AOD):	National Grid Co-ordinate:	Sheet:
52368	**23.11.21** End: **23.11.21**	**27.80**	**E:512385.2 N:116151.7**	**1** of **1**

Samples and In-situ Tests				Water	Backfill	Description of Strata	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results					
0.00-0.20 0.00	1	ES PID	0 0ppm			Firm dark brown silty CLAY with frequent rootlets. (TOPSOIL)	(0.40) 0.40	
0.40-0.50	1	D				Firm orangish brown mottled grey silty CLAY with rootlets and roots and rare brick fragments. (MADE GROUND)	0.50	
						Firm orangish brown mottled grey silty CLAY. (WEALD CLAY FORMATION)		
1.20-1.30	2	D				. . . From 1.30m depth: Becoming firm friable orangish brown mottled grey silty CLAY with rare roots.	(1.50)	
						. . . From 1.50m depth:Becoming extremely friable orangish brown mottled grey silty CLAY.		
1.80-2.00	3	D					2.00	
						Trial pit terminated at 2.00m depth.		

Plan (Not to Scale)



General Remarks

1. Trial pit remained stable during excavation.
2. Trial pit remained dry during excavation.
3. Trial pit backfilled with arisings.

All dimensions in metres | Scale: **1:25**

Method Used:	Plant Used:	Logged By:	Checked By:
Machine dug	**8 Ton Tracked Excavator**	**JCurnow**	

AGS

GINT_LIBRARY_V10_01.GLB LibVersion: v8_07_001 PrjVersion: v8_07 | Log TRIAL PIT LOG - A4P | 52368-CHURCH-LANE-ASHINGTON.GPJ - v10_01. | 26/01/22 - 15:07 | JC12 |

RSK GEOSCIENCES

WINDOW SAMPLE LOG

Contract:	Client:	Window Sample:
Church Lane, Ashington	**Bellway Homes Limited**	**WS01**

Contract Ref:	Start:	Ground Level (m AOD):	National Grid Co-ordinate:	Sheet:
52368	**24.11.21** End: **24.11.21**	**33.07**	**E:512630.6 N:115882.8**	**1** of **2**

Progress	Samples / Tests				Water	Backfill & Instrumentation	Description of Strata	Depth (Thickness)	Material Graphic Legend
Window Run	Depth	No	Type	Results					
	0.10-0.20 0 20	1	ES PID	 0.0ppm			MADE GROUND: Grass over soft brown silty sandy gravelly CLAY. Sand is fine to coarse. Gravel is angular to subangular fine to medium flint, brick, wood, glass and clinker. (MADE GROUND)	(0.50) 0.50	
	0.60-0.70 0.60	2	ES PID	 0.0ppm			MADE GROUND: Soft brown silty sandy very gravelly CLAY. Sand is fine to coarse. Gravel is angular to subrounded fine to coarse flint, brick, clinker, ceramic and chalk. (MADE GROUND)	(0.60) 1.10	
	1 00-1.45 1.10-1.20 1 20	1 3	SPT ES PID	N=4 0.4ppm			MADE GROUND: Soft to firm bluish grey sandy gravelly CLAY. Sand is fine to coarse. Gravel is angular to subrounded fine to medium flint, brick, glass, clinker and wood. (MADE GROUND)	(1.00) 2.10	
	2 00-2.45 2 20-2.40 2.50	2 1	SPT D V	N=7 c_u=52/50/44			Firm to stiff medium strength orangish brown grey mottled sandy CLAY. Sand is fine to coarse with frequent black organics (decayed roots). (WEALD CLAY FORMATION)	(0.90) 3.00	
	3 00-3.45 3.30-3.50	3 2	SPT D	N=13 			Very stiff orange grey mottled sandy dessicated CLAY. (WEALD CLAY FORMATION)	(1.60)	
	4 00-4.45	4	SPT	N=23					

Drilling Progress and Water Observations

Date	Time	Borehole Depth (m)	Casing Depth (m)	Borehole Diameter (mm)	Water Depth (m)

General Remarks

1. Inspection pit hand dug to 1.00m depth.
2. No groundwater encountered.
3. Installed to 4.60m - 1.00m plain pipe, 4.00m slotted pipe (0.4m plain pipe above ground level).

All dimensions in metres | Scale: **1:25**

Method Used:	Plant Used:	Drilled By:	Logged By:	Checked By:
Tracked window sampling	**Premier 110**	**GEH**	**JCurnow**	AGS

G NT_L BRARY_V10_01.GLB LibVersion: v8_07_001 PrjVersion: v8_07 | Log W NDOW SAMPLE LOG - A4P | 52368-CHURCH-LANE-ASHINGTON.GPJ - v10_01. | 26/01/22 - 15:04 | JC12 |

RSK GEOSCIENCES

WINDOW SAMPLE LOG

Contract:	Client:	Window Sample:
Church Lane, Ashington	**Bellway Homes Limited**	**WS01**

Contract Ref:	Start:	Ground Level (m AOD):	National Grid Co-ordinate:	Sheet:
52368	**24.11.21** End: **24.11.21**	**33.07**	**E:512630.6 N:115882.8**	**2** of **2**

Progress	Samples / Tests				Water	Backfill & Instru-mentation	Description of Strata	Depth (Thick ness)	Material Graphic Legend
Window Run	Depth	No	Type	Results					
								4.60	
							Window sample hole terminated at 4.60m depth.		

Drilling Progress and Water Observations					
Date	Time	Borehole Depth (m)	Casing Depth (m)	Borehole Diameter (mm)	Water Depth (m)

General Remarks

All dimensions in metres | Scale: **1:25**

Method Used:	Plant Used:	Drilled By:	Logged By:	Checked By:
Tracked window sampling	**Premier 110**	**GEH**	**JCurnow**	AGS

G NT_L BRARY_V10_01.GLB LibVersion: v8_07_001 PrjVersion: v8_07 | Log W NDOW SAMPLE LOG - A4P | 52368-CHURCH-LANE-ASHINGTON.GPJ - v10_01. | 26/01/22 - 15:04 | JC12 |

RSK GEOSCIENCES

WINDOW SAMPLE LOG

Contract:	Client:	Window Sample:
Church Lane, Ashington	**Bellway Homes Limited**	**WS02**

Contract Ref:	Start:	Ground Level (m AOD):	National Grid Co-ordinate:	Sheet:
52368	**24.11.21** End: **24.11.21**	**28.23**	**E:512609.0 N:116019.6**	**1** of **1**

Progress	Samples / Tests				Water	Backfill & Instrumentation	Description of Strata	Depth (Thickness)	Material Graphic Legend
Window Run	Depth	No	Type	Results					
	0.10-0.20 0 20	1	ES PID	0.0ppm			Grass over soft brown slightly gravelly sandy CLAY. Sand is fine to coarse. Gravel is angular to subrounded fine to medium flint and wood. Frequent rootlets. (TOPSOIL)	0.20	
							Soft orangish brown sandy CLAY. Sand is fine to coarse. Frequent rootlets. (WEALD CLAY FORMATION)	0.40 (0.40)	
	0.50-0.60	1	D				Firm orangish brown light grey mottled slightly gravelly angular to subangular fine to coarse flint sandy CLAY. Sand is fine to coarse. Occasional rootlets. (WEALD CLAY FORMATION)	0.80 (0.30)	
	1 00-1.45	1	SPT	N=10			Firm light grey orange mottled sandy CLAY. Sand is fine to coarse. Red weathering at 0.90m. (WEALD CLAY FORMATION)	1.10	
	1.50-1.70 1.50	2	D V	c_u=58/55/54			Firm to stiff medium strength light grey orange mottled sandy CLAY. Sand is fine to coarse. Brown stained. (WEALD CLAY FORMATION)	(1.00)	
	2 00-2.45	2	SPT	N=18				2.10	
	2.50-3.50 2.50	3	D V	c_u=68/67/65			Stiff medium strength dark grey brown mottled sandy CLAY. Sand is fine to coarse. Rare black organics (decayed roots). (WEALD CLAY FORMATION)	(1.35)	
	3 00-3.45	3	SPT	N=42				3.45	
							Window sample hole terminated at 3.45m depth.		

Drilling Progress and Water Observations

Date	Time	Borehole Depth (m)	Casing Depth (m)	Borehole Diameter (mm)	Water Depth (m)

General Remarks

1. Inspection pit hand dug to 1.00m depth.
2. No groundwater encountered.
3. Installed to 3.45m - 1.00m plain pipe, 3.00m slotted (0.45m plain pipe above ground level).

All dimensions in metres | Scale: **1:25**

Method Used:	Plant Used:	Drilled By:	Logged By:	Checked By:
Tracked window sampling	**Premier 110**	**GEH**	**JCurnow**	AGS

G NT_L BRARY_V10_01.GLB LibVersion: v8_07_001 PrjVersion: v8_07 | Log W NDOW SAMPLE LOG - A4P | 52368-CHURCH-LANE-ASHINGTON.GPJ - v10_01. | 26/01/22 - 15:04 | JC12 |

RSK GEOSCIENCES

WINDOW SAMPLE LOG

Contract:	Client:	Window Sample:
Church Lane, Ashington	**Bellway Homes Limited**	**WS03**

Contract Ref:	Start:	Ground Level (m AOD):	National Grid Co-ordinate:	Sheet:
52368	**24.11.21** End: **24.11.21**	**26.88**	**E:512582.1 N:116095.9**	**1** of **1**

Progress	Samples / Tests				Water	Backfill & Instrumentation	Description of Strata	Depth (Thickness)	Material Graphic Legend
Window Run	Depth	No	Type	Results					
	0.10-0.20	1	ES				Grass over soft brown silty sandy gravelly CLAY. Sand is fine to coarse. Gravel is angular fine to medium chalk and wood. Frequent rootlets. (TOPSOIL)	0.20	
	0 20		PID	0.0ppm			Soft orangish brown sandy CLAY. Sand is fine to coarse. Occasional rootlets. (WEALD CLAY FORMATION)	0.40	
	0.50-0.70	1	D				Firm orangish brown grey mottled slightly gravelly sandy CLAY. Sand is fine to coarse. Gravel is angular to subangular fine to medium flint. Frequent black organics (decayed roots). (WEALD CLAY FORMATION)	(0.80)	
	1 00-1.45	1	SPT	N=20				1.20	
							Firm orange light grey mottled very sandy CLAY. Sand is fine to coarse. Frequent black organics. (WEALD CLAY FORMATION)	1.30	
	1.50-1.70	2	D				Orange light grey mottled clayey fine to coarse SAND. (WEALD CLAY FORMATION)	1.50	
	1.80		V	c_u=76/73/72			Stiff medium strength light grey orange mottled sandy CLAY. Sand is fine to coarse. Frequent black organics. (WEALD CLAY FORMATION)	(0.40)	
	2 00-2.45	2	SPT	N=34				1.90	
							Stiff light grey orange mottled very sandy CLAY. Sand is fine to coarse. (WEALD CLAY FORMATION)	2.00	
							Orangish brown clayey fine to coarse SAND. (WEALD CLAY FORMATION)	(0.30)	
	2.50-2.70	3	D				Very stiff high strength dark grey orange mottled sandy CLAY. Sand is fine to coarse. (WEALD CLAY FORMATION)	2.30	
	2.50		V	c_u=87/85/84				(0.85)	
	2.70-3.15	3	SPT	N=35				3.15	
							Window sample hole terminated at 3.15m depth due to refusal.		

Drilling Progress and Water Observations					
Date	Time	Borehole Depth (m)	Casing Depth (m)	Borehole Diameter (mm)	Water Depth (m)

General Remarks

1. Inspection pit hand dug to 1.00m depth.
2. No groundwater encountered.
3. Installed to 2.70m - 1.00m plain pipe, 2.00m slotted (0.30m plain pipe above ground level).

All dimensions in metres | Scale: **1:25**

Method Used:	Plant Used:	Drilled By:	Logged By:	Checked By:
Tracked window sampling	**Premier 110**	**GEH**	**JCurnow**	AGS

G NT_L BRARY_V10_01.GLB LibVersion: v8_07_001 PrjVersion: v8_07 | Log W NDOW SAMPLE LOG - A4P | 52368-CHURCH-LANE-ASHINGTON.GPJ - v10_01. | 26/01/22 - 15:04 | JC12 |

RSK GEOSCIENCES

WINDOW SAMPLE LOG

Contract:	Client:	Window Sample:
Church Lane, Ashington	**Bellway Homes Limited**	**WS04**

Contract Ref:	Start:	Ground Level (m AOD):	National Grid Co-ordinate:	Sheet:
52368	**24.11.21** End: **24.11.21**	**26.88**	**E:512416.1 N:116189.3**	**1** of **1**

Progress	Samples / Tests				Water	Backfill & Instrumentation	Description of Strata	Depth (Thickness)	Material Graphic Legend
Window Run	Depth	No	Type	Results					
	0.10-0.20 0 20	1	ES PID	0.0ppm			Soft brown silty sandy gravelly CLAY. Sand is fine to coarse. Gravel is angular to subangular flint and wood. (TOPSOIL)	0.20	
	0.50-0.70	1	D				Soft orangish brown grey mottled sandy CLAY. Sand is fine to coarse. Occasional rootlets. (WEALD CLAY FORMATION)	(0.50) 0.70	
							Firm light grey orange mottled sandy slightly fissured CLAY. Sand is fine to coarse. Rare rootlets. (WEALD CLAY FORMATION)	(0.30) 1.00	
	1 00-1.45	1	SPT	N=18			Stiff light grey orange mottled sandy CLAY. Sand is fine to coarse. Occasional black organics (decayed roots). (WEALD CLAY FORMATION)	(1.00)	
	1.50-1.70	2	D				. . . Between 1.80m to 2.00m depth: Heavily weathered.	2.00	
	2 00-2.45	2	SPT	N=17			Very stiff bluish grey orange mottled sandy CLAY. Sand is fine to coarse. Frequent black organics (decayed roots) and occasional weathering. (WEALD CLAY FORMATION)		
	2.50-2.70	3	D				. . . Between 2.70m to 3.00m depth: Fractures infilled with fine to coarse orange sand.	(1.45)	
	3 00-3.45	3	SPT	N=50				3.45	
							Window sample hole terminated at 3.45m depth due to refusal.		

Drilling Progress and Water Observations

Date	Time	Borehole Depth (m)	Casing Depth (m)	Borehole Diameter (mm)	Water Depth (m)

General Remarks

1. Inspection pit hand dug to 1.00m depth.
2. No groundwater encountered.
3. Installed to 3.45m - 2.00m plain pipe, 2.00m slotted (0.45m plain pipe above ground level).

All dimensions in metres | Scale: **1:25**

Method Used:	Plant Used:	Drilled By:	Logged By:	Checked By:
Tracked window sampling	**Premier 110**	**GEH**	**JCurnow**	AGS

G NT_L BRARY_V10_01.GLB LibVersion: v8_07_001 PrjVersion: v8_07 | Log W NDOW SAMPLE LOG - A4P | 52368-CHURCH-LANE-ASHINGTON.GPJ - v10_01. | 26/01/22 - 15:04 | JC12 |

RSK GEOSCIENCES

WINDOW SAMPLE LOG

Contract:	Client:	Window Sample:
Church Lane, Ashington	**Bellway Homes Limited**	**WS05**

Contract Ref:	Start:	Ground Level (m AOD):	National Grid Co-ordinate:	Sheet:
52368	**24.11.21** End: **24.11.21**	**27.18**	**E:512294.4 N:116190.4**	**1** of **1**

Progress	Samples / Tests				Water	Backfill & Instrumentation	Description of Strata	Depth (Thickness)	Material Graphic Legend
Window Run	Depth	No	Type	Results					
	0.10-0.20 0 20	1	ES PID	0.0ppm			Soft brown silty sandy gravelly CLAY. Sand is fine to coarse. Gravel is angular to subangular fine to coarse flint and wood. Frequent rootlets. (TOPSOIL)	0.20	
	0.50-0.60	1	D				Soft brown orange grey mottled sandy CLAY. Sand is fine to coarse. Occasional rootlets. (WEALD CLAY FORMATION)	(0.40) 0.60	
	1 00-1.45	1	SPT	N=10			Firm light grey orange mottled sandy CLAY. Sand is fine to coarse. Weathered red at 0.90m. (WEALD CLAY FORMATION)	(0.60) 1.20	
	1.50-1.75 1.50	2	D V	c_u=48/52/46			Stiff medium strength light grey orange mottled sandy CLAY. Sand is fine to coarse. (WEALD CLAY FORMATION)	(0.50) 1.70	
	2 00-2.45	2	SPT	N=19			Very stiff light grey orange mottled sandy fissured CLAY. Occasional black organics (decayed roots). (WEALD CLAY FORMATION)	(0.50) 2.20	
	2.50-2.75 2.50	3	D V	c_u=64/60/59			Very stiff medium strength bluish grey orange mottled slightly sandy CLAY. Frequent black organics (decayed roots). Frequently orange stained after 2.70m. (WEALD CLAY FORMATION)	(1.25) 3.45	
	3 00-3.45	3	SPT	N=36			Window sample hole terminated at 3.45m depth.		

Drilling Progress and Water Observations

Date	Time	Borehole Depth (m)	Casing Depth (m)	Borehole Diameter (mm)	Water Depth (m)

General Remarks

1. Inspection pit hand dug to 1.00m depth.
2. No groundwater encountered.
3. Installed to 3.45m - 1.00m plain pipe, 3.00m slotted (0.45m plain pipe above ground level).

All dimensions in metres | Scale: **1:25**

Method Used:	Plant Used:	Drilled By:	Logged By:	Checked By:
Tracked window sampling	**Premier 110**	**GEH**	**JCurnow**	AGS

G NT_L BRARY_V10_01.GLB LibVersion: v8_07_001 PrjVersion: v8_07 | Log W NDOW SAMPLE LOG - A4P | 52368-CHURCH-LANE-ASHINGTON.GPJ - v10_01. | 26/01/22 - 15:04 | JC12 |

APPENDIX H
GROUND GAS MONITORING DATA AND SITE CONDITIONS

IN-SITU GAS MONITORING RESULTS

	Start Date	End Date	Pressures Previous	Pressures During	Pressures Start	Pressures End	Equipment Used & Remarks
Round 1	01/12/2021	01/12/2021	-	Falling	998	997	Ground: Damp | Wind: Light | Air Temp: 10°C
Round 2	08/12/2021	08/12/2021	-	Rising	992	993	Ground: Wet | Wind: Light | Air Temp: 8°C
Round 3	15/12/2021	15/12/2021	-	Constant	1030	1030	Ground: Wet | Wind: Light | Air Temp: 12°C

Exploratory Position ID	Pipe ref	Pipe diameter (mm)	Monitoring Round	Reported Installation Depth (m)	Measured Installation Depth (mbgl)	Response Zone	Date & Time of Monitoring (elapsed time)	Borehole Pressure (mb)	Atmos Pressure (mb)	Gas Flow (l/hr)	Water Depth (mbgl)	Carbon Dioxide (% / vol)	Methane (% / vol)	Oxygen (% / vol)	Carbon Monoxide (ppm)	Hydrogen Sulphide (ppm)	
WS01	1	50	1	4.60	---	0.60 to 4.00	01/12/2021 10:50:00	-	997	$0.0_{(I)}$	-	-	-	-	-	-	
WS01	1	50	1	---	---	0.60 to 4.00	60 secs	-	-	$0.0_{(SS)}$	-	-	-	-	-	-	
WS01	1	50	1	4.60	---	0.60 to 4.00	01/12/2021 10:52:00	-	-	-	-	1.1	0.0	21.6	2	0	
WS01	1	50	1	---	---	0.60 to 4.00	15 secs	-	-	-	-	1.4	0.0	20.9	2	0	
WS01	1	50	1	---	---	0.60 to 4.00	30 secs	-	-	-	-	1.5	0.0	20.1	2	0	
WS01	1	50	1	---	---	0.60 to 4.00	60 secs	-	-	-	-	3.6	0.0	18.9	2	0	
WS01	1	50	1	---	---	0.60 to 4.00	90 secs	-	-	-	-	6.3	0.0	17.1	2	0	
WS01	1	50	1	---	---	0.60 to 4.00	120 secs	-	-	-	-	6.6	0.0	17.1	2	0	
WS01	1	50	1	---	---	0.60 to 4.00	180 secs	-	-	-	-	6.3	0.0	17.3	1	0	
WS01	1	50	1	---	---	0.60 to 4.00	240 secs	-	-	-	-	5.5	0.0	17.8	1	0	
WS01	1	50	1	---	4.60	0.60 to 4.00	480 secs	-	-	-	2.50	-	-	-	-	-	
WS01	1	50	2	4.60	---	0.60 to 4.00	08/12/2021 10:40:00	-	-	$0.0_{(I)}$	-	-	-	-	-	-	
WS01	1	50	2	---	---	0.60 to 4.00	60 secs	-	-	$0.0_{(SS)}$	-	-	-	-	-	-	
WS01	1	50	2	4.60	---	0.60 to 4.00	08/12/2021 10:42:00	-	-	-	-	0.1	0.0	21.6	1	0	
WS01	1	50	2	---	---	0.60 to 4.00	15 secs	-	-	-	-	0.6	0.0	21.5	1	0	
WS01	1	50	2	---	---	0.60 to 4.00	30 secs	-	-	-	-	0.3	0.0	21.5	1	0	
WS01	1	50	2	---	---	0.60 to 4.00	60 secs	-	-	-	-	0.2	0.0	21.5	1	0	
WS01	1	50	2	---	---	0.60 to 4.00	90 secs	-	-	-	-	0.1	0.0	21.5	1	0	

Key: I = Initial, Min = Minimum, P = Peak, SS = Steady State. Note: LEL = Lower Explosive Limit = 5% v/v.

Compiled By	Date	Checked By	Date	Contract Ref:
[redacted]	17/12/2021			52368
Contract: Church Lane, Ashington				Page: 1 of 7

IN-SITU GAS MONITORING RESULTS

Exploratory Position ID	Pipe ref	Pipe diameter (mm)	Monitoring Round	Reported Installation Depth (m)	Measured Installation Depth (mbgl)	Response Zone	Date & Time of Monitoring (elapsed time)	Borehole Pressure (mb)	Atmos Pressure (mb)	Gas Flow (l/hr)	Water Depth (mbgl)	Carbon Dioxide (% / vol)	Methane (% / vol)	Oxygen (% / vol)	Carbon Monoxide (ppm)	Hydrogen Sulphide (ppm)	
WS01	1	50	2	---	---	0.60 to 4.00	120 secs	-	-	-	-	0.1	0.0	21.5	1	0	
WS01	1	50	2	---	---	0.60 to 4.00	180 secs	-	-	-	-	0.1	0.0	21.5	1	0	
WS01	1	50	2	---	4.60	0.60 to 4.00	360 secs	-	-	-	0.66	-	-	-	-	-	
WS01	1	50	3	4.60	---	0.60 to 4.00	15/12/2021 10:40:00	-	-	$0.4_{(I)}$	-	-	-	-	-	-	
WS01	1	50	3	---	---	0.60 to 4.00	60 secs	-	-	$0.0_{(SS)}$	-	-	-	-	-	-	
WS01	1	50	3	4.60	---	0.60 to 4.00	15/12/2021 10:42:00	-	-	-	-	0.1	0.0	21.1	-	-	
WS01	1	50	3	---	---	0.60 to 4.00	15 secs	-	-	-	-	0.5	0.0	21.0	-	-	
WS01	1	50	3	---	---	0.60 to 4.00	30 secs	-	-	-	-	0.3	0.0	21.1	-	-	
WS01	1	50	3	---	---	0.60 to 4.00	60 secs	-	-	-	-	0.1	0.0	21.1	-	-	
WS01	1	50	3	---	---	0.60 to 4.00	90 secs	-	-	-	-	0.1	0.0	21.1	-	-	
WS01	1	50	3	---	---	0.60 to 4.00	120 secs	-	-	-	-	0.1	0.0	21.1	-	-	
WS01	1	50	3	---	---	0.60 to 4.00	180 secs	-	-	-	-	0.1	0.0	21.1	-	-	
WS01	1	50	3	---	---	0.60 to 4.00	240 secs	-	-	-	-	0.1	0.0	21.1	-	-	
WS01	1	50	3	---	4.60	0.60 to 4.00	420 secs	-	-	-	0.88	-	-	-	-	-	
WS02	1	50	1	3.45	---	0.45 to 3.45	01/12/2021 10:40:00	-	-	$0.0_{(I)}$	-	-	-	-	-	-	
WS02	1	50	1	---	---	0.45 to 3.45	60 secs	-	-	$0.0_{(SS)}$	-	-	-	-	-	-	
WS02	1	50	1	3.45	---	0.45 to 3.45	01/12/2021 10:42:00	-	-	-	-	0.2	0.0	21.6	6	0	
WS02	1	50	1	---	---	0.45 to 3.45	15 secs	-	-	-	-	0.3	0.0	21.4	9	0	
WS02	1	50	1	---	---	0.45 to 3.45	30 secs	-	-	-	-	0.3	0.0	21.3	2	0	
WS02	1	50	1	---	---	0.45 to 3.45	60 secs	-	-	-	-	0.4	0.0	21.3	1	0	
WS02	1	50	1	---	---	0.45 to 3.45	90 secs	-	-	-	-	0.4	0.0	21.3	1	0	
WS02	1	50	1	---	---	0.45 to 3.45	120 secs	-	-	-	-	0.4	0.0	21.3	1	0	
WS02	1	50	1	---	---	0.45 to 3.45	180 secs	-	-	-	-	0.4	0.0	21.3	1	0	
WS02	1	50	1	---	3.41	0.45 to 3.45	360 secs	-	-	-	2.90	-	-	-	-	-	

Key: I = Initial, Min = Minimum, P = Peak, SS = Steady State. Note: LEL = Lower Explosive Limit = 5% v/v.

Compiled By	Date	Checked By	Date	Contract Ref:
[redacted]	17/12/2021			52368
Contract: Church Lane, Ashington				Page: 2 of 7

IN-SITU GAS MONITORING RESULTS

Exploratory Position ID	Pipe ref	Pipe diameter (mm)	Monitoring Round	Reported Installation Depth (m)	Measured Installation Depth (mbgl)	Response Zone	Date & Time of Monitoring (elapsed time)	Borehole Pressure (mb)	Atmos Pressure (mb)	Gas Flow (l/hr)	Water Depth (mbgl)	Carbon Dioxide (% / vol)	Methane (% / vol)	Oxygen (% / vol)	Carbon Monoxide (ppm)	Hydrogen Sulphide (ppm)	
WS02	1	50	2	3.45	---	0.45 to 3.45	08/12/2021 10:30:00	-	-	$0.0_{(I)}$	-	-	-	-	-	-	
WS02	1	50	2	---	---	0.45 to 3.45	60 secs	-	-	$0.0_{(SS)}$	-	-	-	-	-	-	
WS02	1	50	2	3.45	---	0.45 to 3.45	08/12/2021 10:32:00	-	-	-	-	0.1	0.0	21.2	1	0	
WS02	1	50	2	---	---	0.45 to 3.45	15 secs	-	-	-	-	0.2	0.0	21.1	2	0	
WS02	1	50	2	---	---	0.45 to 3.45	30 secs	-	-	-	-	0.3	0.0	21.0	1	0	
WS02	1	50	2	---	3.35	0.45 to 3.45	180 secs	-	-	-	0.00	-	-	-	-	-	
WS02	1	50	3	3.45	---	0.45 to 3.45	15/12/2021 10:30:00	-	-	$0.0_{(I)}$	-	-	-	-	-	-	
WS02	1	50	3	---	---	0.45 to 3.45	60 secs	-	-	$0.0_{(SS)}$	-	-	-	-	-	-	
WS02	1	50	3	3.45	---	0.45 to 3.45	15/12/2021 10:32:00	-	-	-	-	0.1	0.0	21.0	1	-	
WS02	1	50	3	---	---	0.45 to 3.45	15 secs	-	-	-	-	0.1	0.0	21.0	1	-	
WS02	1	50	3	---	3.40	0.45 to 3.45	180 secs	-	-	-	0.09	-	-	-	-	-	
WS03	1	50	1	2.70	---	0.37 to 2.70	01/12/2021 10:30:00	-	998	$0.0_{(I)}$	-	-	-	-	-	-	
WS03	1	50	1	---	---	0.37 to 2.70	60 secs	-	-	$0.0_{(SS)}$	-	-	-	-	-	-	
WS03	1	50	1	2.70	---	0.37 to 2.70	01/12/2021 10:32:00	-	-	-	-	1.2	0.0	20.8	2	0	
WS03	1	50	1	---	---	0.37 to 2.70	15 secs	-	-	-	-	1.2	0.0	20.6	2	0	
WS03	1	50	1	---	---	0.37 to 2.70	30 secs	-	-	-	-	1.2	0.0	20.3	1	0	
WS03	1	50	1	---	---	0.37 to 2.70	60 secs	-	-	-	-	1.2	0.0	20.5	1	0	
WS03	1	50	1	---	---	0.37 to 2.70	90 secs	-	-	-	-	1.2	0.0	20.5	1	0	
WS03	1	50	1	---	---	0.37 to 2.70	120 secs	-	-	-	-	1.2	0.0	20.5	1	0	
WS03	1	50	1	---	---	0.37 to 2.70	180 secs	-	-	-	-	1.2	0.0	20.5	1	0	
WS03	1	50	1	---	2.67	0.37 to 2.70	360 secs	-	-	-	1.15	-	-	-	-	-	
WS03	1	50	2	2.70	---	0.37 to 2.70	08/12/2021 10:20:00	-	-	$0.0_{(I)}$	-	-	-	-	-	-	
WS03	1	50	2	---	---	0.37 to 2.70	60 secs	-	-	$0.0_{(SS)}$	-	-	-	-	-	-	
WS03	1	50	2	2.70	---	0.37 to 2.70	08/12/2021 10:22:00	-	-	-	-	0.1	0.0	21.2	1	0	

Key: I = Initial, Min = Minimum, P = Peak, SS = Steady State. Note: LEL = Lower Explosive Limit = 5% v/v.

Compiled By	Date	Checked By	Date	Contract Ref:
[redacted]	17/12/2021			52368
Contract: Church Lane, Ashington				Page: 3 of 7

IN-SITU GAS MONITORING RESULTS

Exploratory Position ID	Pipe ref	Pipe diameter (mm)	Monitoring Round	Reported Installation Depth (m)	Measured Installation Depth (mbgl)	Response Zone	Date & Time of Monitoring (elapsed time)	Borehole Pressure (mb)	Atmos Pressure (mb)	Gas Flow (l/hr)	Water Depth (mbgl)	Carbon Dioxide (% / vol)	Methane (% / vol)	Oxygen (% / vol)	Carbon Monoxide (ppm)	Hydrogen Sulphide (ppm)	
WS03	1	50	2	---	---	0.37 to 2.70	15 secs	-	-	-	-	0.2	0.0	21.6	2	0	
WS03	1	50	2	---	---	0.37 to 2.70	30 secs	-	-	-	-	0.2	0.0	21.3	1	0	
WS03	1	50	2	---	---	0.37 to 2.70	60 secs	-	-	-	-	0.1	0.0	21.1	1	0	
WS03	1	50	2	---	---	0.37 to 2.70	90 secs	-	-	-	-	0.1	0.0	21.1	1	0	
WS03	1	50	2	---	---	0.37 to 2.70	120 secs	-	-	-	-	0.1	0.0	21.1	1	0	
WS03	1	50	2	---	2.55	0.37 to 2.70	300 secs	-	-	-	0.21	-	-	-	-	-	
WS03	1	50	3	2.70	---	0.37 to 2.70	15/12/2021 10:20:00	-	-	$0.5_{(I)}$	-	-	-	-	-	-	
WS03	1	50	3	---	---	0.37 to 2.70	60 secs	-	-	$0.0_{(SS)}$	-	-	-	-	-	-	
WS03	1	50	3	2.70	---	0.37 to 2.70	15/12/2021 10:22:00	-	-	-	-	0.1	0.0	20.8	1	-	
WS03	1	50	3	---	---	0.37 to 2.70	15 secs	-	-	-	-	0.7	0.0	20.1	1	-	
WS03	1	50	3	---	---	0.37 to 2.70	30 secs	-	-	-	-	0.7	0.0	19.7	1	-	
WS03	1	50	3	---	---	0.37 to 2.70	60 secs	-	-	-	-	0.9	0.0	19.3	1	-	
WS03	1	50	3	---	---	0.37 to 2.70	90 secs	-	-	-	-	1.0	0.0	18.9	1	-	
WS03	1	50	3	---	---	0.37 to 2.70	120 secs	-	-	-	-	1.0	0.0	19.0	1	-	
WS03	1	50	3	---	---	0.37 to 2.70	180 secs	-	-	-	-	0.9	0.0	19.6	1	-	
WS03	1	50	3	---	---	0.37 to 2.70	240 secs	-	-	-	-	0.7	0.0	20.0	1	-	
WS03	1	50	3	---	---	0.37 to 2.70	300 secs	-	-	-	-	0.7	0.0	20.0	1	-	
WS03	1	50	3	---	2.50	0.37 to 2.70	480 secs	-	-	-	0.91	-	-	-	-	-	
WS04	1	50	1	3.45	---	1.45 to 3.45	01/12/2021 10:20:00	-	998	$0.0_{(I)}$	-	-	-	-	-	-	
WS04	1	50	1	---	---	1.45 to 3.45	60 secs	-	-	$0.0_{(SS)}$	-	-	-	-	-	-	
WS04	1	50	1	3.45	---	1.45 to 3.45	01/12/2021 10:22:00	-	-	-	-	1.3	0.0	20.6	10	0	
WS04	1	50	1	---	---	1.45 to 3.45	15 secs	-	-	-	-	1.3	0.0	20.6	8	0	
WS04	1	50	1	---	---	1.45 to 3.45	30 secs	-	-	-	-	1.3	0.0	20.5	3	0	
WS04	1	50	1	---	---	1.45 to 3.45	60 secs	-	-	-	-	1.3	0.0	20.5	2	0	

Key: I = Initial, Min = Minimum, P = Peak, SS = Steady State. Note: LEL = Lower Explosive Limit = 5% v/v.

Compiled By	Date	Checked By	Date	Contract Ref:
[redacted]	17/12/2021			52368
Contract: Church Lane, Ashington				Page: 4 of 7

IN-SITU GAS MONITORING RESULTS

Exploratory Position ID	Pipe ref	Pipe diameter (mm)	Monitoring Round	Reported Installation Depth (m)	Measured Installation Depth (mbgl)	Response Zone	Date & Time of Monitoring (elapsed time)	Borehole Pressure (mb)	Atmos Pressure (mb)	Gas Flow (l/hr)	Water Depth (mbgl)	Carbon Dioxide (% / vol)	Methane (% / vol)	Oxygen (% / vol)	Carbon Monoxide (ppm)	Hydrogen Sulphide (ppm)	
WS04	1	50	1	---	---	1.45 to 3.45	90 secs	-	-	-	-	1.3	0.0	20.5	1	0	
WS04	1	50	1	---	---	1.45 to 3.45	120 secs	-	-	-	-	1.3	0.0	20.5	1	0	
WS04	1	50	1	---	---	1.45 to 3.45	180 secs	-	-	-	-	1.3	0.0	20.5	1	0	
WS04	1	50	1	---	3.50	1.45 to 3.45	360 secs	-	-	-	DRY	-	-	-	-	-	
WS04	1	50	2	3.45	---	1.45 to 3.45	08/12/2021 10:10:00	-	-	$0.0_{(I)}$	-	-	-	-	-	-	
WS04	1	50	2	---	---	1.45 to 3.45	60 secs	-	993	$0.0_{(SS)}$	-	-	-	-	-	-	
WS04	1	50	2	3.45	---	1.45 to 3.45	08/12/2021 10:12:00	-	-	-	-	0.2	0.0	21.4	3	0	
WS04	1	50	2	---	---	1.45 to 3.45	15 secs	-	-	-	-	0.2	0.0	21.1	1	0	
WS04	1	50	2	---	---	1.45 to 3.45	30 secs	-	-	-	-	0.1	0.0	21.1	1	0	
WS04	1	50	2	---	---	1.45 to 3.45	60 secs	-	-	-	-	0.1	0.0	21.1	1	0	
WS04	1	50	2	---	---	1.45 to 3.45	90 secs	-	-	-	-	0.1	0.0	21.0	1	0	
WS04	1	50	2	---	---	1.45 to 3.45	120 secs	-	-	-	-	0.1	0.0	21.0	1	0	
WS04	1	50	2	---	---	1.45 to 3.45	180 secs	-	-	-	-	0.1	0.0	21.0	1	0	
WS04	1	50	2	---	3.50	1.45 to 3.45	360 secs	-	-	-	0.16	-	-	-	-	-	
WS04	1	50	3	3.45	---	1.45 to 3.45	15/12/2021 10:10:00	-	-	$0.6_{(I)}$	-	-	-	-	-	-	
WS04	1	50	3	---	---	1.45 to 3.45	60 secs	-	-	$0.0_{(SS)}$	-	-	-	-	-	-	
WS04	1	50	3	3.45	---	1.45 to 3.45	15/12/2021 10:12:00	-	-	-	-	0.1	0.0	20.8	1	-	
WS04	1	50	3	---	---	1.45 to 3.45	15 secs	-	-	-	-	0.1	0.0	20.8	2	-	
WS04	1	50	3	---	---	1.45 to 3.45	30 secs	-	-	-	-	0.1	0.0	20.8	1	-	
WS04	1	50	3	---	---	1.45 to 3.45	60 secs	-	-	-	-	0.1	0.0	20.8	1	-	
WS04	1	50	3	---	---	1.45 to 3.45	90 secs	-	-	-	-	0.1	0.0	20.8	1	-	
WS04	1	50	3	---	---	1.45 to 3.45	120 secs	-	-	-	-	0.1	0.0	20.8	1	-	
WS04	1	50	3	---	---	1.45 to 3.45	180 secs	-	-	-	-	0.1	0.0	20.8	1	-	
WS04	1	50	3	---	3.50	1.45 to 3.45	360 secs	-	-	-	0.34	-	-	-	-	-	

Key: I = Initial, Min = Minimum, P = Peak, SS = Steady State. Note: LEL = Lower Explosive Limit = 5% v/v.

Compiled By	Date	Checked By	Date	Contract Ref:
[redacted]	17/12/2021			52368
Contract: Church Lane, Ashington				Page: 5 of 7

IN-SITU GAS MONITORING RESULTS

Exploratory Position ID	Pipe ref	Pipe diameter (mm)	Monitoring Round	Reported Installation Depth (m)	Measured Installation Depth (mbgl)	Response Zone	Date & Time of Monitoring (elapsed time)	Borehole Pressure (mb)	Atmos Pressure (mb)	Gas Flow (l/hr)	Water Depth (mbgl)	Carbon Dioxide (% / vol)	Methane (% / vol)	Oxygen (% / vol)	Carbon Monoxide (ppm)	Hydrogen Sulphide (ppm)	
WS05	1	50	1	3.45	---	0.45 to 3.45	01/12/2021 10:10:00	-	998	$0.0_{(I)}$	-	-	-	-	-	-	
WS05	1	50	1	---	---	0.45 to 3.45	60 secs	-	-	$0.0_{(SS)}$	-	-	-	-	-	-	
WS05	1	50	1	3.45	---	0.45 to 3.45	01/12/2021 10:12:00	-	-	-	-	0.2	0.0	21.2	1	0	
WS05	1	50	1	---	---	0.45 to 3.45	15 secs	-	-	-	-	0.2	0.0	21.2	1	0	
WS05	1	50	1	---	---	0.45 to 3.45	30 secs	-	-	-	-	0.2	0.0	21.2	1	0	
WS05	1	50	1	---	---	0.45 to 3.45	60 secs	-	-	-	-	0.2	0.0	21.2	1	0	
WS05	1	50	1	---	---	0.45 to 3.45	90 secs	-	-	-	-	0.2	0.0	21.2	1	0	
WS05	1	50	1	---	---	0.45 to 3.45	120 secs	-	-	-	-	0.2	0.0	21.2	1	0	
WS05	1	50	1	---	---	0.45 to 3.45	180 secs	-	-	-	-	0.2	0.0	21.2	1	0	
WS05	1	50	1	---	3.60	0.45 to 3.45	360 secs	-	-	-	3.50	-	-	-	-	-	
WS05	1	50	2	3.45	---	0.45 to 3.45	08/12/2021 10:00:00	-	992	$0.0_{(I)}$	-	-	-	-	-	-	
WS05	1	50	2	---	---	0.45 to 3.45	60 secs	-	-	$0.0_{(SS)}$	-	-	-	-	-	-	
WS05	1	50	2	3.45	---	0.45 to 3.45	08/12/2021 10:02:00	-	-	-	-	0.2	0.0	21.1	1	0	
WS05	1	50	2	---	---	0.45 to 3.45	15 secs	-	-	-	-	0.1	0.0	21.5	1	0	
WS05	1	50	2	---	---	0.45 to 3.45	30 secs	-	-	-	-	0.1	0.0	21.7	1	0	
WS05	1	50	2	---	---	0.45 to 3.45	60 secs	-	-	-	-	0.1	0.0	21.2	0	0	
WS05	1	50	2	---	---	0.45 to 3.45	90 secs	-	-	-	-	0.1	0.0	21.1	0	0	
WS05	1	50	2	---	---	0.45 to 3.45	120 secs	-	-	-	-	0.1	0.0	21.1	0	0	
WS05	1	50	2	---	---	0.45 to 3.45	180 secs	-	-	-	-	0.1	0.0	21.1	0	0	
WS05	1	50	2	---	3.60	0.45 to 3.45	360 secs	-	-	-	0.34	-	-	-	-	-	
WS05	1	50	3	3.45	---	0.45 to 3.45	15/12/2021 10:00:00	-	-	$0.8_{(I)}$	-	-	-	-	-	-	
WS05	1	50	3	---	---	0.45 to 3.45	60 secs	-	-	$0.0_{(SS)}$	-	0.1	0.0	21.0	1	-	
WS05	1	50	3	3.45	---	0.45 to 3.45	15/12/2021 10:02:00	-	-	-	-	0.1	0.0	21.0	1	-	
WS05	1	50	3	---	---	0.45 to 3.45	15 secs	-	-	-	-	0.1	0.0	21.0	1	-	
WS05	1	50	3	---	---	0.45 to 3.45	30 secs	-	-	-	-	0.1	0.0	21.0	0	-	

Key: I = Initial, Min = Minimum, P = Peak, SS = Steady State. Note: LEL = Lower Explosive Limit = 5% v/v.

Compiled By	Date	Checked By	Date	Contract Ref:
[redacted]	17/12/2021			52368
Contract: Church Lane, Ashington				Page: 6 of 7

IN-SITU GAS MONITORING RESULTS

Exploratory Position ID	Pipe ref	Pipe diameter (mm)	Monitoring Round	Reported Installation Depth (m)	Measured Installation Depth (mbgl)	Response Zone	Date & Time of Monitoring (elapsed time)	Borehole Pressure (mb)	Atmos Pressure (mb)	Gas Flow (l/hr)	Water Depth (mbgl)	Carbon Dioxide (% / vol)	Methane (% / vol)	Oxygen (% / vol)	Carbon Monoxide (ppm)	Hydrogen Sulphide (ppm)	
WS05	1	50	3	---	---	0.45 to 3.45	60 secs	-	-	-	-	0.1	0.0	20.9	1	-	
WS05	1	50	3	---	---	0.45 to 3.45	90 secs	-	-	-	-	0.1	0.0	20.9	0	-	
WS05	1	50	3	---	---	0.45 to 3.45	120 secs	-	-	-	-	0.1	0.0	20.9	0	-	
WS05	1	50	3	---	---	0.45 to 3.45	180 secs	-	-	-	-	0.1	0.0	20.9	0	-	
WS05	1	50	3	---	3.58	0.45 to 3.45	360 secs	-	-	-	0.30	-	-	-	-	-	

Key: I = Initial, Min = Minimum, P = Peak, SS = Steady State. Note: LEL = Lower Explosive Limit = 5% v/v.

Compiled By	Date	Checked By	Date	Contract Ref:
[redacted]	17/12/2021			52368
Contract: Church Lane, Ashington				Page: 7 of 7

APPENDIX I
LABORATORY CERTIFICATES FOR SOIL ANALYSIS

APPENDIX J
LABORATORY CERTIFICATES FOR GEOTECHNICAL ANALYSIS

APPENDIX K
GENERIC ASSESSMENT CRITERIA FOR HUMAN HEALTH

APPENDIX L
GENERIC ASSESSMENT CRITERIA FOR PHYTOTOXIC EFFECTS

APPENDIX M
GENERIC ASSESSMENT CRITERIA POTABLE WATER SUPPLY PIPES

A range of pipe materials is available and careful selection, design and installation is required to ensure that water supply pipes are satisfactorily installed and meet the requirements of the Water Supply (Water Fittings) Regulations 1999 in England and Wales, the Byelaws 2000 in Scotland and the Northern Ireland Water Regulations. The regulations include a requirement to use only suitable materials when laying water pipes and laying water pipes without protection is not permitted at contaminated sites. The water supply company has a statutory duty to enforce the regulations.

Contaminants in the ground can pose a risk to human health by permeating potable water supply pipes. To fulfil their statutory obligation, UK water supply companies require robust evidence from developers to demonstrate either that the ground in which new plastic supply pipes will be laid is free from specific contaminants, or that the proposed remedial strategy will mitigate any existing risk. If these requirements cannot be demonstrated to the satisfaction of the relevant water company, it becomes necessary to specify an alternative pipe material on the whole development or in specific zones.

In 2010, UK Water Industry Research (UKWIR) published *Guidance for the Selection of Water Supply Pipes to be used in Brownfield Sites* (Report Ref. No. 10/WM/03/21). This report reviewed previously published industry guidelines and threshold concentrations adopted by individual water supply companies.

The focus of the UKWIR research project was to develop clear and concise procedures, which provide consistency in the pipe selection decision process. It was intended to provide guidance that can be used to ensure compliance with current regulations and to prevent water supply pipe failing prematurely due to the presence of contamination.

The report concluded that in most circumstances only organic contaminants pose a potential risk to plastic pipe materials and Table 3.1 of the report provides threshold concentrations for polyethylene (PE) and polyvinyl chloride (PVC) pipes for the organic contaminants of concern. The report also makes recommendations for the procedures to be adopted in the design of site investigations and sampling strategies, and the assessment of data, to ensure that the ground through which water supply pipes will be laid is adequately characterised.

Risks to water supply pipes have therefore been assessed against the threshold concentrations for PE and PVC pipe specified in Table 3.1 of Report 10/WM/03/21, which have been adopted as the GAC for this linkage and are reproduced in Table A3 below.

Since water supply pipes are typically laid at a minimum depth of 0.75 m below finished ground levels, sample results from depths between 0.5 m and 1.5 m below finished level are generally considered suitable for assessing risks to water supply. Samples outside these depths can be used, providing the stratum is the same as that in which water supply pipes are likely to be located. The report specifies that sampling should characterise the ground conditions to a minimum of 0.5 m below the proposed depth of the pipe.

It should be noted that the assessment provided in this report is a guide and the method of assessment and recommendations should be checked with the relevant water supply company.

Table Q1: Generic assessment criteria for water supply pipes

		Pipe material	
		GAC (mg/kg)	
	Parameter group	PE	PVC
1	Extended VOC suite by purge and trap or head space and GC-MS with TIC (Not including compounds within group 1a)	0.5	0.125
1a	• BTEX + MTBE	0.1	0.03
2	SVOCs TIC by purge and trap or head space and GC-MS with TIC (aliphatic and aromatic C_5–C_{10}) (Not including compounds within group 2e and 2f)	2	1.4
2e	• Phenols	2	0.4
2f	• Cresols and chlorinated phenols	2	0.04
3	Mineral oil C_{11}–C_{20}	10	Suitable
4	Mineral oil C_{21}–C_{40}	500	Suitable
5	Corrosive (conductivity, redox and pH)	Suitable	Suitable
Specific suite identified as relevant following site investigation			
2a	Ethers	0.5	1
2b	Nitrobenzene	0.5	0.4
2c	Ketones	0.5	0.02
2d	Aldehydes	0.5	0.02
6	Amines	Not suitable	Suitable
Notes: where indicated as 'suitable', the material is considered resistant to permeation or degradation and no threshold concentration has been specified by UKWIR.			

APPENDIX N
WM3 ASSESSMENT

Appendix E

Microdrainage Calcs

ICP SUDS Mean Annual Flood

Input

Return Period (years)	1	Soil	0.300
Area (ha)	6.610	Urban	0.000
SAAR (mm)	853	Region Number	Region 7

Results l/s

QBAR Rural	15.2
QBAR Urban	15.2
Q1 year	12.9
Q1 year	12.9
Q30 years	34.4
Q100 years	48.4

©1982-2020 Innovyze

Appendix F

Drainage Strategy Plan

Summary of Results for 100 year Return Period (+45%)

Storm Event	Max Level (m)	Max Depth (m)	Max Control (l/s)	Max Volume (m³)	Status
15 min Summer	25.536	0.836	15.2	881.4	O K
30 min Summer	25.759	1.059	15.2	1178.9	O K
60 min Summer	25.975	1.275	15.2	1495.1	O K
120 min Summer	26.174	1.474	15.2	1809.8	O K
180 min Summer	26.273	1.573	15.2	1977.0	O K
240 min Summer	26.334	1.634	15.2	2082.5	O K
360 min Summer	26.414	1.714	15.2	2224.7	O K
480 min Summer	26.460	1.760	15.2	2308.5	O K
600 min Summer	26.487	1.787	15.2	2358.9	O K
720 min Summer	26.503	1.803	15.2	2387.7	O K
960 min Summer	26.511	1.811	15.2	2403.7	O K
1440 min Summer	26.483	1.783	15.2	2351.3	O K
2160 min Summer	26.427	1.727	15.2	2247.9	O K
2880 min Summer	26.370	1.670	15.2	2147.1	O K
4320 min Summer	26.262	1.562	15.2	1957.8	O K
5760 min Summer	26.153	1.453	15.2	1775.4	O K
7200 min Summer	26.043	1.343	15.2	1599.6	O K
8640 min Summer	25.920	1.220	15.2	1410.9	O K
10080 min Summer	25.778	1.078	15.2	1205.5	O K
15 min Winter	25.620	0.920	15.2	989.1	O K
30 min Winter	25.861	1.161	15.2	1323.9	O K

Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Discharge Volume (m³)	Time-Peak (mins)
15 min Summer	138.471	0.0	870.4	26
30 min Summer	92.858	0.0	1142.8	41
60 min Summer	59.342	0.0	1526.3	70
120 min Summer	36.542	0.0	1874.5	130
180 min Summer	27.075	0.0	2074.5	190
240 min Summer	21.753	0.0	2207.2	248
360 min Summer	15.996	0.0	2340.3	368
480 min Summer	12.840	0.0	2339.5	486
600 min Summer	10.818	0.0	2322.3	606
720 min Summer	9.400	0.0	2303.1	724
960 min Summer	7.523	0.0	2267.1	962
1440 min Summer	5.486	0.0	2206.7	1318
2160 min Summer	3.992	0.0	3714.6	1676
2880 min Summer	3.181	0.0	3939.4	2072
4320 min Summer	2.306	0.0	4036.3	2900
5760 min Summer	1.834	0.0	4564.4	3744
7200 min Summer	1.536	0.0	4778.0	4544
8640 min Summer	1.329	0.0	4961.3	5368
10080 min Summer	1.176	0.0	5118.5	6056
15 min Winter	138.471	0.0	971.6	26
30 min Winter	92.858	0.0	1223.8	41

©1982-2020 Innovyze

Summary of Results for 100 year Return Period (+45%)

Storm Event	Max Level (m)	Max Depth (m)	Max Control (l/s)	Max Volume (m³)	Status
60 min Winter	26.094	1.394	15.2	1679.9	O K
120 min Winter	26.307	1.607	15.2	2036.3	O K
180 min Winter	26.416	1.716	15.2	2228.6	O K
240 min Winter	26.483	1.783	15.2	2352.0	O K
360 min Winter	26.573	1.873	15.2	2521.6	O K
480 min Winter	26.627	1.927	15.2	2625.9	O K
600 min Winter	26.661	1.961	15.2	2692.7	O K
720 min Winter	26.683	1.983	15.2	2735.2	O K
960 min Winter	26.702	2.002	15.2	2773.5	Flood Risk
1440 min Winter	26.690	1.990	15.2	2748.3	O K
2160 min Winter	26.621	1.921	15.2	2612.7	O K
2880 min Winter	26.554	1.854	15.2	2484.2	O K
4320 min Winter	26.407	1.707	15.2	2213.2	O K
5760 min Winter	26.252	1.552	15.2	1941.1	O K
7200 min Winter	26.089	1.389	15.2	1672.0	O K
8640 min Winter	25.888	1.188	15.2	1363.3	O K
10080 min Winter	25.667	0.967	15.2	1052.6	O K

Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Discharge Volume (m³)	Time-Peak (mins)
60 min Winter	59.342	0.0	1707.7	70
120 min Winter	36.542	0.0	2090.1	128
180 min Winter	27.075	0.0	2289.2	186
240 min Winter	21.753	0.0	2359.6	244
360 min Winter	15.996	0.0	2356.5	362
480 min Winter	12.840	0.0	2339.0	478
600 min Winter	10.818	0.0	2324.2	594
720 min Winter	9.400	0.0	2312.5	708
960 min Winter	7.523	0.0	2297.7	936
1440 min Winter	5.486	0.0	2295.1	1374
2160 min Winter	3.992	0.0	4153.7	1760
2880 min Winter	3.181	0.0	4384.3	2200
4320 min Winter	2.306	0.0	4184.5	3124
5760 min Winter	1.834	0.0	5112.2	4040
7200 min Winter	1.536	0.0	5351.4	4968
8640 min Winter	1.329	0.0	5557.3	5792
10080 min Winter	1.176	0.0	5734.7	6360

©1982-2020 Innovyze

Rainfall Details

Rainfall Model	FSR	Winter Storms	Yes
Return Period (years)	100	Cv (Summer)	0.750
Region	England and Wales	Cv (Winter)	0.840
M5-60 (mm)	20.200	Shortest Storm (mins)	15
Ratio R	0.353	Longest Storm (mins)	10080
Summer Storms	Yes	Climate Change %	+45

Time Area Diagram

Total Area (ha) 3.460

Time From:	(mins) To:	Area (ha)	Time From:	(mins) To:	Area (ha)	Time From:	(mins) To:	Area (ha)
0	4	1.153	4	8	1.153	8	12	1.153

©1982-2020 Innovyze

Model Details

Storage is Online Cover Level (m) 27.000

Tank or Pond Structure

Invert Level (m) 24.700

Depth (m)	Area (m²)	Depth (m)	Area (m²)
0.000	850.0	2.000	2000.0

Hydro-Brake® Optimum Outflow Control

Unit Reference	MD-SHE-0161-1520-2000-1520
Design Head (m)	2.000
Design Flow (l/s)	15.2
Flush-Flo™	Calculated
Objective	Minimise upstream storage
Application	Surface
Sump Available	Yes
Diameter (mm)	161
Invert Level (m)	24.700
Minimum Outlet Pipe Diameter (mm)	225
Suggested Manhole Diameter (mm)	1500

Control Points	Head (m)	Flow (l/s)
Design Point (Calculated)	2.000	15.2
Flush-Flo™	0.587	15.2
Kick-Flo®	1.223	12.0
Mean Flow over Head Range	-	13.3

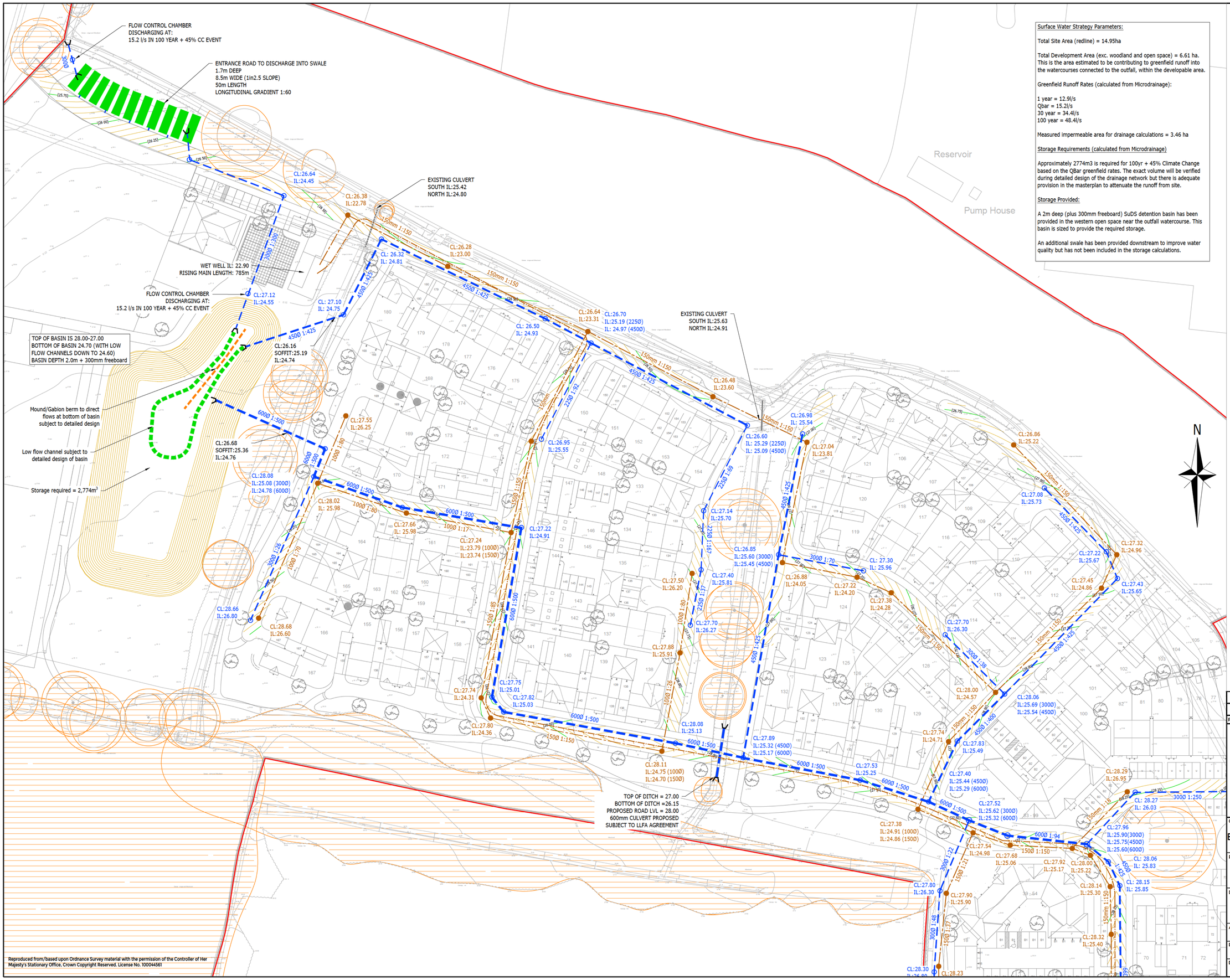
The hydrological calculations have been based on the Head/Discharge relationship for the Hydro-Brake® Optimum as specified. Should another type of control device other than a Hydro-Brake Optimum® be utilised then these storage routing calculations will be invalidated

Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)
0.100	5.8	1.200	12.4	3.000	18.4	7.000	27.7
0.200	12.7	1.400	12.8	3.500	19.8	7.500	28.6
0.300	14.1	1.600	13.7	4.000	21.1	8.000	29.5
0.400	14.8	1.800	14.4	4.500	22.4	8.500	30.4
0.500	15.1	2.000	15.2	5.000	23.5	9.000	31.2
0.600	15.2	2.200	15.9	5.500	24.6	9.500	32.0
0.800	14.9	2.400	16.6	6.000	25.7		
1.000	14.2	2.600	17.2	6.500	26.7		

©1982-2020 Innovyze

Appendix G

SuDS Treatment



Surface Water Strategy Parameters:

Total Site Area (redline) = 14.95ha

Total Development Area (exc. woodland and open space) = 6.61 ha. This is the area estimated to be contributing to greenfield runoff into the watercourses connected to the outfall, within the developable area.

Greenfield Runoff Rates (calculated from Microdrainage):

1 year = 12.9l/s
Qbar = 15.2l/s
30 year = 34.4l/s
100 year = 48.4l/s

Measured impermeable area for drainage calculations = 3.46 ha

Storage Requirements (calculated from Microdrainage)

Approximately 2774m3 is required for 100yr + 45% Climate Change based on the QBar greenfield rates. The exact volume will be verified during detailed design of the drainage network but there is adequate provision in the masterplan to attenuate the runoff from site.

Storage Provided:

A 2m deep (plus 300mm freeboard) SuDS detention basin has been provided in the western open space near the outfall watercourse. This basin is sized to provide the required storage.

An additional swale has been provided downstream to improve water quality but has not been included in the storage calculations.

NOTES:

1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE RELEVANT SPECIFICATION AND ALL OTHER RELATED DRAWINGS ISSUED BY THE ENGINEER.
2. DO NOT SCALE FROM THIS DRAWING. WORK FROM FIGURED DIMENSIONS ONLY.
3. ALL DIMENSIONS SHOWN ON THIS DRAWING ARE IN MILLIMETRES UNLESS OTHERWISE STATED.
4. ALL DIMENSIONS, LEVELS AND SURVEY GRID CO-ORDINATES ARE TO BE CHECKED ON SITE AND THE ENGINEER NOTIFIED IMMEDIATELY OF ANY DISCREPANCIES PRIOR TO THE COMMENCEMENT OF THE WORKS.
5. NO DEVIATION FROM THE DETAILS SHOWN ON THIS DRAWING IS PERMITTED WITHOUT PRIOR PERMISSION FROM THE ENGINEER.
6. THE AVOIDANCE AND PROTECTION OF SERVICES DURING THE WORKS IS THE RESPONSIBILITY OF THE CONTRACTOR.
7. THE CONTRACTOR IS REMINDED OF HIS OBLIGATION TO VERIFY THE ROUTE OF ALL SERVICES ON SITE PRIOR TO THE COMMENCEMENT OF THE WORKS.
8. THE CONTRACTOR SHOULD ALLOW FOR ANY NECESSARY LIAISON WITH THE STATUTORY UTILITIES DURING THE COURSE OF THE WORKS TO AVOID ANY DISRUPTION TO RETAINED SERVICES.
9. THE CONTRACTOR SHOULD NOTE THAT THE SERVICES SHOWN ARE NOT TO BE CONSIDERED EXHAUSTIVE. PRIVATE SERVICES MAY BE PRESENT WITHIN THE LIMIT OF WORKS AND CARE SHOULD BE TAKEN TO LOCATE AND AVOID THESE DURING CONSTRUCTION.
10. ALL INFORMATION IS INDICATIVE AND IS FOR INFORMATION ONLY.

KEY

- PROPOSED ATTENUATION BASIN
- PROPOSED SW DRAINS/SEWER & MANHOLE / INSPECTION CHAMBER
- PROPOSED FW DRAINS/SEWERS & MANHOLE / INSPECTION CHAMBER
- PROPOSED RISING MAIN
- PROPOSED SWALE
- PROPOSED HEADWALL
- EXISTING FW SEWER & MANHOLE (SOUTHERN WATER)
- EXISTING FW RISING MAIN (SOUTHERN WATER)
- ROOT PROTECTION AREA
- PROPOSED MAJOR CONTOUR (100mm)
- PROPOSED MINOR CONTOUR (20mm)

NOT FOR CONSTRUCTION

Rev	Description	Drn	Chk	App	Date
B	ISSUED FOR PLANNING	JM	JM	BB	24-02-23
A	ISSUED AS DRAFT	DAM	JM	BB	26-01-23

ARDENT | CONSULTING ENGINEERS
Third Floor
The Hallmark Building
52-56 Leadenhall Street
London
EC3M 5JE
Tel: 020 7680 4088
Web: www.ardent-ce.co.uk
E-mail: enquir es@ardent-ce.co.uk

Client
BELLWAY HOMES LTD (SOUTH LONDON)

Project Title:
CHURCH LANE - ASHINGTON

Drawing Title:
DRAINAGE STRATEGY
(SHEET 1 OF 2)

A1 Scale	Date	Designed by
1:500	NOV 2022	DAM
Drawn by	Checked by	Approved by
DAM	JM	BB
Drawing Number		Rev
2108611-003		B

Reproduced from/based upon Ordnance Survey material with the permission of the Controller of Her Majesty's Stationary Office, Crown Copyright Reserved. License No. 100044561

File Location y:\ardent projects\2108611 - church ln, ashington (planning)\technical\acad\drawings\2108611-xxx-concept drainage.dwg

Surface Water Strategy Parameters:

Total Site Area (redline) = 14.95ha

Total Development Area (exc. woodland and open space) = 6.61 ha. This is the area estimated to be contributing to greenfield runoff into the watercourses connected to the outfall, within the developable area.

Greenfield Runoff Rates (calculated from Microdrainage):

1 year = 12.9l/s
Qbar = 15.2l/s
30 year = 34.4l/s
100 year = 48.4l/s

Measured impermeable area for drainage calculations = 3.46 ha

Storage Requirements (calculated from Microdrainage)

Approximately 2774m3 is required for 100yr + 45% Climate Change based on the QBar greenfield rates. The exact volume will be verified during detailed design of the drainage network but there is adequate provision in the masterplan to attenuate the runoff from site.

Storage Provided:

A 2m deep (plus 300mm freeboard) SuDS detention basin has been provided in the western open space near the outfall watercourse. This basin is sized to provide the required storage.

An additional swale has been provided downstream to improve water quality but has not been included in the storage calculations.

NOTES:

1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE RELEVANT SPECIFICATION AND ALL OTHER RELATED DRAWINGS ISSUED BY THE ENGINEER.
2. DO NOT SCALE FROM THIS DRAWING. WORK FROM FIGURED DIMENSIONS ONLY.
3. ALL DIMENSIONS SHOWN ON THIS DRAWING ARE IN MILLIMETRES UNLESS OTHERWISE STATED.
4. ALL DIMENSIONS, LEVELS AND SURVEY GRID CO-ORDINATES ARE TO BE CHECKED ON SITE AND THE ENGINEER NOTIFIED IMMEDIATELY OF ANY DISCREPANCIES PRIOR TO THE COMMENCEMENT OF THE WORKS.
5. NO DEVIATION FROM THE DETAILS SHOWN ON THIS DRAWING IS PERMITTED WITHOUT PRIOR PERMISSION FROM THE ENGINEER.
6. THE AVOIDANCE AND PROTECTION OF SERVICES DURING THE WORKS IS THE RESPONSIBILITY OF THE CONTRACTOR.
7. THE CONTRACTOR IS REMINDED OF HIS OBLIGATION TO VERIFY THE ROUTE OF ALL SERVICES ON SITE PRIOR TO THE COMMENCEMENT OF THE WORKS.
8. THE CONTRACTOR SHOULD ALLOW FOR ANY NECESSARY LIAISON WITH THE STATUTORY UTILITIES DURING THE COURSE OF THE WORKS TO AVOID ANY DISRUPTION TO RETAINED SERVICES.
9. THE CONTRACTOR SHOULD NOTE THAT THE SERVICES SHOWN ARE NOT TO BE CONSIDERED EXHAUSTIVE. PRIVATE SERVICES MAY BE PRESENT WITHIN THE LIMIT OF WORKS AND CARE SHOULD BE TAKEN TO LOCATE AND AVOID THESE DURING CONSTRUCTION.
10. ALL INFORMATION IS INDICATIVE AND IS FOR INFORMATION ONLY.

KEY

- PROPOSED ATTENUATION BASIN
- PROPOSED SW DRAINS/SEWER & MANHOLE / INSPECTION CHAMBER
- PROPOSED FW DRAINS/SEWERS & MANHOLE / INSPECTION CHAMBER
- PROPOSED RISING MAIN
- PROPOSED SWALE
- PROPOSED HEADWALL
- EXISTING FW SEWER & MANHOLE (SOUTHERN WATER)
- EXISTING FW RISING MAIN (SOUTHERN WATER)
- ROOT PROTECTION AREA
- PROPOSED MAJOR CONTOUR (100mm)
- PROPOSED MINOR CONTOUR (20mm)

NOT FOR CONSTRUCTION

TOP OF DITCH = 28.00
BED OF DITCH = 26.92
LEVELS TO BE CONFIRMED ON SITE

EXISTING CULVERT TO BE REBUILT/EXTENDED NORTH TO ACCOMMODATE ROAD ALIGNMENT

HIGHWAY DRAINAGE TO DISCHARGE AT RATE OF 1.0 l/s

KERB DRAIN WITH OUTLETS INTO SWALE

ACCESS ROAD TO DISCHARGE INTO SWALES
WIDTH + DEPTH VARIES
20M + 70m LENGTH
LONGITUDINAL GRADIENT 1:70

FOUL TO DISCHARGE INTO PUBLIC SEWER VIA NEW MANHOLE

MH9801
CL 30.35
IL 28.14
FROM RECORDS

RECONFIGURED ACCESS TO MIMIC EXISTING DRAINAGE

CHANNEL/DITCH TO BE RE-BUILT

EXISTING CULVERT TO BE RE-BUILT

Rev	Description	Drn	Chk	App	Date
B	ISSUED FOR PLANNING	JM	JM	BB	24-02-23
A	ISSUED AS DRAFT	DAM	JM	BB	26-01-23

ARDENT | CONSULTING ENGINEERS

Third Floor
The Hallmark Building
52-56 Leadenhall Street
London
EC3M 5JE

Tel: 020 7680 4088
Web: www.ardent-ce.co.uk
E-mail: enquir es@ardent-ce.co.uk

Client: BELLWAY HOMES LTD (SOUTH LONDON)

Project Title: CHURCH LANE - ASHINGTON

Drawing Title: DRAINAGE STRATEGY (SHEET 2 OF 2)

A1 Scale	Date	Designed by
1:500	NOV 2022	DAM
Drawn by	Checked by	Approved by
DAM	JM	BB

Drawing Number: 2108611-004 Rev B

Reproduced from/based upon Ordnance Survey material with the permission of the Controller of Her Majesty's Stationary Office, Crown Copyright Reserved. License No. 100044561

Appendix G

SuDS Treatment

Pollution hazard indices for different land use classifications (land use shaded grey applicable for the development)

Land use	Pollution hazard level	Total suspended solids (TSS)	Metals	Hydrocarbons
Residential roofs	Very low	0.2	0.2	0.05
Other roofs (typically commercial/industrial roofs)	Low	0.3	0.2 (up to 0.8 where there is potential for metals to leach from the roof)	0.05
Individual property driveways, residential car parks, low traffic roads (eg cul de sacs, home zones and general access roads) and non-residential car parking with infrequent change (eg schools, offices) ie < 300 traffic movements/day	Low	0.5	0.4	0.4
Commercial yard and delivery areas, non-residential car parking with frequent change (e.g. hospitals, retail), all roads except low traffic roads and trunk roads/motorways	Medium	0.7	0.6	0.7
Sites with heavy pollution (e.g. haulage yards, lorry parks, highly frequented lorry approaches to industrial estates, waste sites), sites where chemicals and fuels (other than domestic fuel oil) are to be delivered, handled, stored, used or manufactured; industrial sites; trunk roads and motorways	High	0.8	0.8	0.9

Indicative SuDS mitigation indices for discharges to surface waters (SuDS components shaded grey applicable to this development)

	Mitigation indices		
Type of SuDS component	**TSS**	**Metals**	**Hydrocarbons**
Filter strip	0.4	0.4	0.5
Filter drain	0.4	0.4	0.4
Swale	0.5	0.6	0.6
Bio retention system	0.8	0.8	0.8
Permeable pavement	0.7	0.6	0.7
Detention basin	0.5	0.5	0.6
Pond	0.7	0.7	0.5
Wetland	0.8	0.8	0.8
Proprietary treatment systems	These must demonstrate that they can address each of the contaminant types to acceptable levels for frequent events up to approximately the 1 in 1 year return period event, for inflow concentrations relevant to the contributing drainage area.		

Indicative SuDS mitigation indices for discharges to groundwater – N/A

(SuDS components shaded grey applicable to this development)

	Mitigation indices		
Characteristic of the material overlying the proposed infiltration surface, through which the runoff percolates	**TSS**	**Metals**	**Hydro-carbons**
A layer of dense vegetation underlain by a soil with good contaminant attenuation potential of at least 300mm in depth	0.6	0.5	0.6
A soil with good contaminant attenuation potential of at least 300mm in depth	0.4	0.3	0.3
Infiltration trench underlain by a soil with good contaminant attenuation potential of at least 300mm in depth	0.4	0.4	0.4
Constructed permeable paving underlain by a soil with a good contaminant attenuation potential of at least 300mm in depth	0.7	0.6	0.7
Bio retention underlain by a soil with good contaminant attenuation potential of at least 300mm in depth	0.8	0.8	0.8
Proprietary treatment systems	These must demonstrate that they can address each of the contaminant types to acceptable levels for inflow concentrations relevant to the contributing drainage area.		

Indicative SuDS mitigation indices for discharges to surface waters

For surface water discharge from Residential Parking Areas and Low Traffic Roads <300 traffic movements/day			
	Required mitigation indices		
Source	**TSS**	**Metals**	**Hydrocarbons**
Medium	0.7	0.6	0.7
Private Drainage Network			
N/A – see below	-	-	-
Check	+0	+0	+0
Highway Drainage Network			
Basin (mitigation index$_1$)	0.5	0.5	0.6
Swale (mitigation index$_2$)	0.5	0.6	0.6
Total	0.75	0.8	0.9
Check	+0.05	+0.2	+0.2

Total SuDS mitigation index = mitigation index$_1$ + (0.5 x mitigation index$_2$)

Appendix H

Maintenance Plan

Maintenance and Management

The highway network including the pumping station will be offered for adoption and maintained by the local highway authority (or equivalent) under a section 104. The swales, basin and shared private pipework would be maintained by a management company set up by the developer. As construction has not yet commenced, the process of finalising the management company contract has not yet commenced. The developer will ensure that the measures as outlined below form part of the management company contract details, for the ongoing maintenance of all SuDS features on site.

The indicative maintenance requirements for each proposed SuDS component is given below. Taken from CIRIA report C753 "The SuDS Manual".

Drainage Pipes

Maintenance schedule	Required action	Typical frequency
Regular Maintenance	Remove sediment and debris from inspection chambers and hydrobrake chambers	Annually
	Cleaning of gutters and any filters on downpipes	Annually
	Remove any root ingress	As required
Occasional Maintenance	CCTV survey of drains to check alignment, cracking and joint displacement	10 year intervals

Swales/Basins

Maintenance Period	Maintenance Task	Frequency
Regular Maintenance	Remove litter and debris	Monthly, or as required
	Cut the grass – to retain grass height within specified design range	Monthly (during growing season) or as required
	Manage other vegetation and remove nuisance plants	Monthly at start, then as required

	Inspect inlets, outlets and overflows for blockages, and clear if required	Monthly
	Inspect infiltration surfaces for ponding, compaction, silt accumulation, record areas where water is ponding for > 48 hours	Monthly, or when required
	Inspect vegetation coverage	Monthly for 6 months, quarterly for 2 years, then half yearly
	Inspect inlets and facility surface for silt accumulation, establish appropriate silt removal frequencies	Half yearly
Occasional Maintenance	Reseed areas of poor vegetation growth; alter plant types to better suit conditions, if required	As required or if bare soil is exposed over > 10% of the filter strip area
Remedial Actions	Repair erosion or other damage by re-turfing or reseeding	As required
	Relevel uneven surfaces and reinstate design levels	As required
	Scarify and spike topsoil layer to improve infiltration performance, break up silt deposits and prevent compaction of the soil surface	As required
	Remove build-up of sediment on upstream gravel trench, flow spreader or at top of filter strip	As required
	Remove and dispose of oils or petrol residues using safe standard practices	As required