PHASE II GEOTECHNICAL ASSESSMENT PROPOSED RESIDENTIAL DEVELOPMENT THE BANNUTT BRINGSTY

Client: Mr. P. Hunt

Report Number: S1735

June 2021

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REPORT No S1735

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EXECUTIVE SUMMARY

The Site	The development site is located on the A44 Bromyard Road about 1km to the south-west of Bringsty village at approximate National Grid Reference 369130 254580 (Figure 1). The site is about 1.08ha in area and is essentially flat.
	The site comprises a single residential property within a large overgrown garden which contains a number of semi-mature and mature trees. A number of small derelict garden structures are also present along with a small, shallow infilled pond.
History	The site was occupied by orchards until being developed with a single residential property and gardens in the 1970s.
Geology	The site is underlain by weathered Raglan Mudstone formation.
Hydrogeology	The Raglan Mudstone is classified as a Secondary B Aquifer.
Radon Gas Ground	The site is in an Intermediate Probability radon area where between 1% and 3% of properties are above the Radon action level. Radon protection will not be required for the proposed development units.
Investigation	Boreholes : A total of 5no boreholes were sunk at the site on the 27 th April 2021. They were taken to depths of between 2.45m and 4.95m bgl.
	Laboratory Testing : The following list of potential contaminants of concern has been specified for the laboratory testing program on selected soil samples:
	Asbestos, phenols, heavy metals, inorganic chemicals, Speciated Petroleum Hydrocarbons and PAHs.
	Two samples of the cohesive formation taken from the approximate foundation horizon have been tested for Index properties.
	Standpipe Monitoring : Concentrations of methane, carbon dioxide, oxygen, hydrogen sulphide and carbon monoxide gas have been measured within two borehole standpipes on three occasions within the period 14 th May 2021 to the 4 th Junel 2021. Groundwater levels within the standpipes were also measured at each monitoring visit.
	Soakaway Test: A soakaway test was carried out at the site on the 14 th April 2021 in accordance with the recommendations of BRE Digest 365.
Ground Conditions	Raglan Mudstone: The near surface weathered Raglan Mudstone formation was encountered as a soft to firm and firm, red brown, occasionally sandy clay. This graded with depth into a firm and then stiff, red brown, occasionally sandy clay with occasional inclusions of fine to medium gravel. The formation is of Intermediate Plasticity.
	Groundwater : Stabilised groundwater levels were measured in the borehole standpipes at the following depth ranges:

Foundations	Conventional strip footings should be suitable for the proposed development. Such foundations taken a minimum depth below finished grade of 900mm to found within the firm cohesive formation may be designed using an allowable bearing capacity of 120kPa. The cohesive formation present at the approximate foundation horizon is of Intermediate Plasticity and consequently, the recommendations of NHBC Standards Chapter 4.2 should be considered where footings lie within influencing distance of existing, recently felled or recently planted trees.
Ground Floor Slabs	The near surface cohesive formation is of Intermediate plasticity and as such will potentially be susceptible to volume changes in response to variations in natural moisture content. To comply with NHBC Standards therefore, it is recommended that suspended ground floor slabs are adopted for the proposed new residential units.
Surface Water Drainage	Surface water at the site will need to be either directed to a suitable surface water discharge point or, it will need to be directed towards the mains drainage system.
Below Ground Concrete	Measured pH and water soluble sulphate values fall within concrete Class DS-1 as defined in BRE Special Digest 1, 'Concrete in aggressive ground', 2005', with a corresponding ACEC class of AC-1s.
Soil Remedial Measures	Soil remedial measures should not be required at the site.
Gas Membranes	Gas protection measures should not be required for the proposed development units.

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PHASE II GEOTECHNICAL ASSESSMENT PROPOSED RESIDENTIAL DEVELOPMENT THE BANNUTT BRINGSTY

1. INTRODUCTION

SP Associates (SPA) have been appointed by Barnsley Marshall, Consulting Engineers, on behalf of Mr. P. Hunt to carry out a Phase II Geotechnical Assessment at a site known as The Bannutt, Bromyard Road, Bringsty, WR6 5TA. We understand that it is proposed to construct 5no detached residential properties at the site.

The scope of the investigation that forms the basis of this Phase II Geotechnical Assessment is as follows:

- Acquisition of Phase I environmental and land use data;
- Boreholes sunk using a windowless sampler drilling rig;
- Borehole instrumentation comprising gas and groundwater monitoring standpipes;
- Standpipe monitoring for ground gas concentrations and groundwater levels;
- Soakaway testing to BRE 365 Standards:
- Testing of selected soil samples in the laboratory for chemical and geotechnical parameters:
- Analysis of data and reporting.

The investigation was implemented in order to assess the geotechnical and geoenvironmental conditions at the site and to identify potential geotechnical and geoenvironmental issues related to the construction of the proposed new residential properties. This report presents the factual data from the investigation and makes recommendations on foundations, ground floor slab, surface water drainage and pavement design along with issues associated with soil and ground gas contamination.

2. THE SITE

2.1 LOCATION AND SURFACE CONDITIONS

The development site is located on the A44 Bromyard Road about 1km to the south-west of Bringsty village at approximate National Grid Reference 369130 254580 (Figure 1). The site is about 1.08ha in area and is essentially flat.

The site comprises a single residential property within a large overgrown garden which contains a number of semi-mature and mature trees. A number of small derelict garden structures are also present along with a small, shallow infilled pond.

The site is bounded to the north by the A44 Bromyard Road from which it is accessed, and to the south by a few residential properties and gardens. Clater Lodge lies to the west with open, undeveloped land to the east.

2.2 HISTORY

The site's historical land use has been assessed using Ordnance Survey maps dating from 1884 copies of which are enclosed within Appendix A. A summary of the site's history and that of immediately adjacent land is tabulated below:

Date Site Features		Nearby Features of Note
1884	The site comprises wooded land, probably an orchard.	Brockhampton Park and pool lie to the north with orchards and agricultural land in all other directions.
1974	The site had been mostly cleared of trees and a residential property known as Park View had been constructed adjacent to the site's eastern boundary.	The surrounding area comprised orchard and agricultural land with a few scattered residential properties.

In summary, the Ordnance Survey record shows that in the late 1800s the site comprised an orchard which in the early 1970s was developed with a residential property and a garden.

2.3 GEOLOGY

The site is shown on British Geological Survey 1:50,000 scale geological maps as being underlain by the Raglan Mudstone of Silurian age. This formation comprises interbedded siltstones and mudstones which weather near surface to firm to stiff clay.

The geological database for the site indicates that it is free of superficial Drift deposits. .

2.4 HYDROGEOLOGY AND HYDROLOGY

The nearest significant surface water feature is a small stream that rises about 100m to the south of the site.

The Raglan Mudstone is classified by the Environment Agency as a Secondary B Aquifer. These are former non-aquifers and comprise strata that do not possess significantly high primary or secondary values of permeability or transmissivity. They do not usually provide a high level of water storage.

The site does not lie within a Source Protection Zone.

There are no groundwater or surface water abstraction licenses within 250m of the site.

2.5 POTENTIALLY CONTAMINATING ACTIVITIES

The contents of the Sitecheck Data report (Appendix B) is summarised below:

- There are no records relating to Licensed Waste Management Facilities within 250m of the site.
- There are no records of Registered Waste Transfer sites within 250m of the site.
- There are no records relating to Registered Landfill Sites within 250m of the study site.
- There are no records of Local Authority Pollution Prevention and Control Licences within 250m of the site.
- There are no COMAH sites located within 250m of the site.
- There are no Storage of Hazardous Substances consents within 250m of the property.
- There are no records of Integrated Pollution Prevention and Control within 250m of the site.
- There are no records of Prosecutions Relating to Authorised Processes within 250m of the site.
- There are records of one Contemporary Trade Directory entry within 250m of the site. The entry is no longer active.
- There are no records of discharge consents within 250m of the site.
- There are no records of BGS recorded Mineral Sites within 250m of the property.

2.6 FUEL STATION ENTRIES

There are no records of fuel station entries within 250m of the site.

2.7 HISTORICAL TANKS AND ENERGY FACILITIES AND POTENTIALLY CONTAMINATIVE PAST INDUSTRIAL USES

There are no records of historical tanks or potential petroleum storage facilities within 250m of the site.

There are no records of electrical sub-stations within 250m of the site.

2.8 RADON GAS

The site lies in an intermediate probability radon area where between 1% and 3% of homes are estimated to be at or above the action level. No radon protection measures should be required for the proposed new development.

2.9 GROUND STABILITY

The Phase I Assessment indicates that the risks associated with compressible ground, collapsible ground, ground dissolution, landslides, running sand and shrinking or swelling ground are low, very low or no hazard.

3 RISK SUMMARY AND CONCEPTUAL SITE MODELS

The following risk summary is predicated upon the findings of the Phase I site data.

3.1 HUMAN HEALTH RISKS

The land use database for the site has indicated that it has historically comprised orchard land prior to being developed with a single residential property and gardens within the early 1970s. The site is considered to pose a low risk to human health. This risk category has been arrived at on the basis that widespread contamination is not anticipated to be present on site given its land use history.

3.2 GROUND GAS

The site is considered to be at a low level of risk from ground gases due to the apparent absence of localised significant areas of filled ground and the low potential for the presence on site of significant quantities of Made Ground. The risk of gas migration onto the site from any off-site sources is likely to be somewhat mitigated by the presence of cohesive weathered Raglan Mudstone.

3.3 CONTROLLED WATERS

There are no nearby or on site sources of contamination to controlled waters and consequently a very low risk is considered to be appropriate at this stage for controlled waters. The risk has been assigned on the basis that it is not anticipated that widespread contamination is present, the absence of on-site surface water features and the low permeability nature of the weathered mudstone which is a Secondary B aquifer.

3.4 BUILDINGS AND SERVICES

The Phase I data indicates that the site is at a low risk from aggressive contaminants within soil and groundwater that have the potential to attack building materials and services.

3.5 CONCEPTUAL SITE MODEL

The development of a Conceptual Model for the site involves the determination of potential pollutant linkages through the identification of likely sources of contamination from previous and current site uses and the identification of potential receptors such as site users and controlled waters. The site has been utilised as an orchard and then a single residential plot which are land uses that wold not be considered to be potentially contaminating in nature. Consequently, and in accordance with Environment Agency, SEPA and DEFRA guidelines a Conceptual Site Model has not been developed.

4 GROUND INVESTIGATION

4.1 GENERAL

The fieldwork was carried out generally where relevant in accordance with BS5930 (1999) 'Code of Practice for Site Investigations', BS10175 Investigation of Potentially Contaminated Sites, and the Association of Geotechnical and Geo-environmental Specialist Guidelines for Good Practice in Site Investigations (1998).

The exploratory boreholes were positioned so as to coincide with the proposed locations of individual development units.

4.2 WINDOW SAMPLER BOREHOLES

A total of 5no boreholes were sunk across the site on the 27th April 2021 using a window sampler drilling rig. The boreholes were taken to depths of between 2.45m and 4.45m below ground surface where they were terminated within stiff formation. Standard Penetration Tests were carried out at 1m intervals within each borehole with full depth liner soil samples being recovered for soil description and testing requirements.

Borehole locations are shown on Figure 2 with borehole logs enclosed within Appendix C.

4.3 STANDPIPES

Groundwater and gas monitoring standpipes were installed within Boreholes 1 and 6 upon the completion of drilling as detailed below:

Borehole	Depth to Base (m)	Response Zone (m bgl)	Pipe Diameter (mm)	Gas Valve/Lockable Cover
1	4.0	1.0 - 4.0 (firm to stiff clay)	50	Yes
4	3.0	1.0 - 3.0 (firm to stiff clay)	50	Yes

4.4 SOAKAWAY TEST

A soakaway test was carried out at the site on the 14th April 2021 in the location shown on Figure 2. The test was carried out in accordance with the recommendations of BRE Digest 365 by firstly excavating a trial pit to a depth of 1.9m below ground surface. The width and length of the pit were recorded before water was introduced from a bowser to a depth of 0.9m below ground surface. The fall in water levels within the pit were then recorded in accordance with the time increments shown on the test data sheet enclosed within Appendix E.

4.5 LABORATORY TESTING

The Phase I environmental database has indicated that the site has historically been occupied by orchards and then by a residential property and gardens. The risk assessment detailed in Chapter 3 has indicated that the risk to human health at the site is considered to be low; however, there may have been some Made Ground materials imported onto the site as a component of development works and consequently, the following list of potential contaminants of concern has been specified for the laboratory testing program:

Asbestos, phenols, heavy metals, inorganic chemicals, Speciated Petroleum Hydrocarbons ad PAHs.

Selected soil samples from the borehole investigation have been tested in the laboratories of Chemtest for the above range of chemical determinants.

With regard to geotechnical testing, 2no samples of the cohesive formation taken from the approximate foundation horizon have been tested for Index properties in the laboratories of Socotec.

Chemical and Geotechnical test results are enclosed within Appendix D.

4.6 MONITORING

Concentrations of methane, carbon dioxide, oxygen, hydrogen sulphide and carbon monoxide gas have been measured within the borehole standpipes on three occasions within the period 14th May 2021 to the 4th June 2021. Total gas concentrations were taken using a GA2000 Plus meter with atmospheric pressure meter. The rate of gas flow from the standpipes was measured using a flow meter.

Groundwater levels within the standpipes were also measured at each monitoring visit.

The results obtained from the monitoring exercise are summarised on Table 1.

5. GROUND CONDITIONS

The site investigation has confirmed the expected natural geological formation of weathered Raglan Mudstone. Made Ground deposits were absent from the boreholes with the exception of a thin layer of gravelly sand hardcore present at ground surface in Borehole 1.

5.1 RAGLAN MUDSTONE

The near surface weathered Raglan Mudstone formation was encountered as a soft to firm and firm, red brown, occasionally sandy clay. This graded with depth into a firm and then stiff, red brown, occasionally sandy clay with occasional inclusions of fine to medium gravel.

SPT N values achieved within the formation are summarised below:

Depth Below Ground Surface (m)	SPT 'N' Values	SPT 'N' Range	SPT 'N' Mean Value		
1	4, 6, 11, 12, 15,	4 - 15	9		
2	9, 10, 20, 20, 50+	9 - 50+	21		
3	18, 27, 50+, 50+	18 - 50+	36		
4	50+, 50+	50+	50+		

5.2 GEOTECHNICAL PROPERTIES

The results of Index tests carried out on 2no samples of the cohesive formation have resulted in the following Liquid Limit and Plasticity Index values:

Liquid Limit Range (%): 35 - 36

Adjusted Plasticity Index Range (%): 14 - 15

The above values place the near surface natural clay within the Intermediate Plasticity category.

A preliminary assessment of the tested cohesive soil's state of desiccation has been arrived at using the conservative empirical relationship between Natural Moisture Content (NMC) and Liquid Limit (LL) derived by Driscoll which considers that if the NMC is less than 40% the LL then the soil may be desiccated. Index test data for this site are summarised below:

Mean value of two determinations of NMC (%): 20.5

Mean value of two determinations of LL (%): 35.5

Ratio of NMC to LL = 0.58

Based upon the Driscoll relationship, it is not considered that mitigation measures to deal with issues of soil desiccation will be required at the design stage.

5.3 GROUNDWATER

Stabilised groundwater levels were measured in the borehole standpipes at the following depth ranges:

Borehole 1: 0.90 - 0.92 (mbgl)

Borehole 4: 0.87 - 0.89 (mbgl).

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6 GEOTECHNICAL ASSESSMENT

6.1 GENERAL

It is understood that the proposed development will comprise 5no new detached residential properties in the configuration shown on Figure 2. We understand that foundation loads will be within the light to medium category.

The site is characterised by near surface, soft to firm and then firm to stiff, slightly sandy clay of Intermediate plasticity. Groundwater levels lie at about 0.9m below ground surface.

6.2 FOUNDATIONS

The natural near surface firm to stiff clay should be capable of supporting light to medium structural loads whilst maintaining total and differential settlements within accepted tolerances. Conventional strip footings should therefore be suitable for the proposed development. Such foundations taken a minimum depth below finished grade of 900mm to found within the firm cohesive formation may be designed using an allowable bearing capacity of 120kPa.

The cohesive formation present at the approximate foundation horizon is of Intermediate Plasticity and consequently, the recommendations of NHBC Standards Chapter 4.2 should be considered where footings lie within influencing distance of existing, recently felled or recently planted trees.

Foundation excavations should remain stable in the short term and some seepages may be experienced within foundation excavations although these are unlikely to be fast or significant in volume.

6.3 GROUND FLOOR SLABS

The borehole investigation has revealed that the near surface cohesive formation is of Intermediate plasticity and as such will potentially be susceptible to volume changes in response to variations in natural moisture content. To comply with NHBC Standards therefore, it is recommended that suspended ground floor slabs are adopted for the proposed new residential units.

6.4 BELOW GROUND CONCRETE

The results of Soluble Sulphate and pH tests carried out on samples of the formation are summarised below:

No. of Tested Samples	Range of Water Soluble Sulphate Values (g/l)	Range of pH Values	
5	<0.010 - 0.039	7.2 - 8.7	

The measured pH and water soluble sulphate values fall within concrete Class DS-1 as defined in BRE Special Digest 1, 'Concrete in aggressive ground', 2005', with a corresponding ACEC class of AC-1s.

6.5 PAVEMENTS

Soil conditions at likely pavement formation level at the site comprise soft to firm or firm clay and for preliminary design purposes a CBR value of 3% may be adopted for a thin pavement construction.

6.6 SURFACE WATER DRAINAGE

The soakaway test data enclosed within Appendix E illustrates that within a test period of 280 minutes the water within the pit effectively failed to drain and the test did not conform to the requirements of BRE 365. It was not possible therefore to calculate a representative design infiltration rate. Further, the groundwater monitoring exercise carried out in the borehole standpipes encountered stabilised levels at about 0.9m below finished grade and this effectively precludes the adoption of soakaway drains at the site as they cannot be utilised within 1m of the groundwater table.

Surface water at the site will need to be either directed to a suitable surface water discharge point or, it will need to be directed towards the mains drainage system.

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7 ENVIRONMENTAL CONSIDERATIONS

7.1 SOIL CONTAMINATION

7.1.1 GENERAL APPROACH

The UK approach to the assessment of contaminated land is based upon the principles of risk assessment. This is founded upon the 'source – pathway – target' model to establish the presence or potential presence of a pollutant linkage. The overall methodology is based upon a tiered approach to determine risk based remedial targets for soil involving site specific data collection.

Should the adopted criteria be exceeded, then two courses of action are available. Firstly, the pollutant link could be broken by undertaking remedial work such as providing clean soil cover. Alternatively, a more detailed risk assessment can be carried out to determine whether a statistically relevant pollutant link actually exists.

The proposed development is residential in nature and consequently for the purposes of risk assessment, a residential land use with the consumption of home grown produce has been adopted as the default category.

7.1.2 RISK SCREENING

7.1.2.1 HUMAN SITE OCCUPIERS AND CONSTRUCTION WORKERS

In terms of risk to human health, the results of the chemical testing data enclosed within Appendix D have been compared to the Tier 1 final chemical screening criteria for a residential land use with the consumption of home grown produce. A summary of the risk screening exercise is shown on Table 2. Reference to that table shows none of the determinants that constitute the test suite were present at concentrations that were greater than their Tier 1 screening values. The risks to human health at the site from potential contaminants of concern within the near surface formation can therefore be considered to be very low.

7.1.2.2 STRUCTURES AND INFRASTRUCTURE

The maximum measured water-soluble sulphate value for the near surface natural soil is 0.039g/l with a corresponding pH range of 7.2 – 8.7. These represent benign conditions with respect to sulphate and acid attack on buried concrete and based upon the measured values the risk to buried structures at the site is considered to be very low. Concrete Class DS-1 with an ACEC Class of AC-1s is applicable.

None- barrier buried potable water supply pipework can be attacked by acids and they can be penetrated by hydrocarbons and other substances such as phenols which can have the effect of tainting water supplies. The concentrations of these substances at this site are such that the risk to non-barrier pipework is considered to be low; however, the chemical data contained within Appendix D should be forwarded to the chosen potable water supplier for their consideration.

7.1.3 PROPOSED SOIL REMEDIAL MEASURES

The Tier 1 screening exercise has shown that the risk to human health at the site from potential contaminants of concern within the soil is considered to be very low and consequently no specific soil remedial measures are proposed.

However, as is the case with all brownfield sites it is recommended that if any areas of potentially contaminated ground become apparent during the construction phase then they should be brought to the attention of the Engineer for further consideration.

7.2 GROUND GAS

Table 1 shows that methane gas was effectively absent from the borehole standpipes whilst carbon dioxide concentrations were measured at a maximum concentration of 0.2%. Very low gas pressures were detected, whilst flow rates were less than 0.1l/hr.

The ground gas situation has been assessed using the methodology outlined in CIRIA Publication C665 'Assessing risks posed by hazardous ground gases to buildings'. Under that methodology, the site has been assessed as falling within the Characteristic Situation 1 category, where no special precautions are required with respect to carbon dioxide and methane in the ground.

The proposed residential properties will not require radon membranes.

TABLES

Table 1 Proposed Residential Development, The Bannutt, Bringsty

Gas and Groundwater Readings

Gas Readings

Date: 14/05/2021 Atmospheric Pressure: 1004mb

ВН	Gas Flow (l/hr)	Borehole Pressure (mb)	53735	thane ovol)	100000	thane LEL)	Die	oxide (vol)	12,000	tygen 6vol)	A 7-15 (C)	r Gases opm)
				Peak	Steady	Peak	Steady	Peak	Steady	Peak	Steady	H2s
1	< 0.1	0.03	0.2	0.2	<2	<2	0.1	0.1	20.3	20,3	<1	<1
4	< 0.1	0.04	0.2	0.2	<2	<2	0.2	0.2	19.9	19.9	<1	<1

Date: 28/05/2021 Atmospheric Pressure: 1006mb

ВН	Gas Flow (1/hr)	Borehole Pressure (mb)	Methane Methane (%vol) (%LEL)		Carbon Dioxide (%vol)		Oxygen (%vol)		Other Gases (ppm)			
			Peak	Steady	Peak	Steady	Peak	Steady	Peak	Steady	H2s	CO
1	< 0.1	0.03	0.2	0.2	<2	<2	0.2	0.2	19.9	19.9	<1	<1
4	< 0.1	0.02	0.2	0.2	<2	<2	0.2	0.2	19.8	19.8	<1	<1

Date: 04/06/2021 Atmospheric Pressure: 1008mb

ВН	BH	Gas Flow (I/hr)	Flow	12Boreh ole Pressure	(A)	thane ovol)	0,000	thane LEL)	Die	oxide (vol)	1000000	ygen (vol)	100000	r Gases ppm)
	100	(mb)	Peak	Steady	Peak	Steady	Peak	Steady	Peak	Steady	H2s	CO		
1	< 0.1	0.02	0.2	0.2	<2	<2	0.1	0.1	20.0	20.0	<1	<1		
4	< 0.1	0.02	0.2	0.2	<2	<2	0.2	0.2	19.9	19.9	<1	<1		

Groundwater Readings (mbgl)

BH	14/05/2021	28/05/2021	04/06/2021
1	0.92	0.91	0.90
4	0.89	0.89	0.87

Gas and groundwater monitoring undertaken by: P. Cosgrove

Equipment used: GA2000 Plus, Flow pod S/N 419

Table 2
Proposed Residential Development, The Bannutt, Bringsty

Human Health Screening Values for a Residential Land Use with the Consumption of Home Grown Produce versus Measured Values - Soil

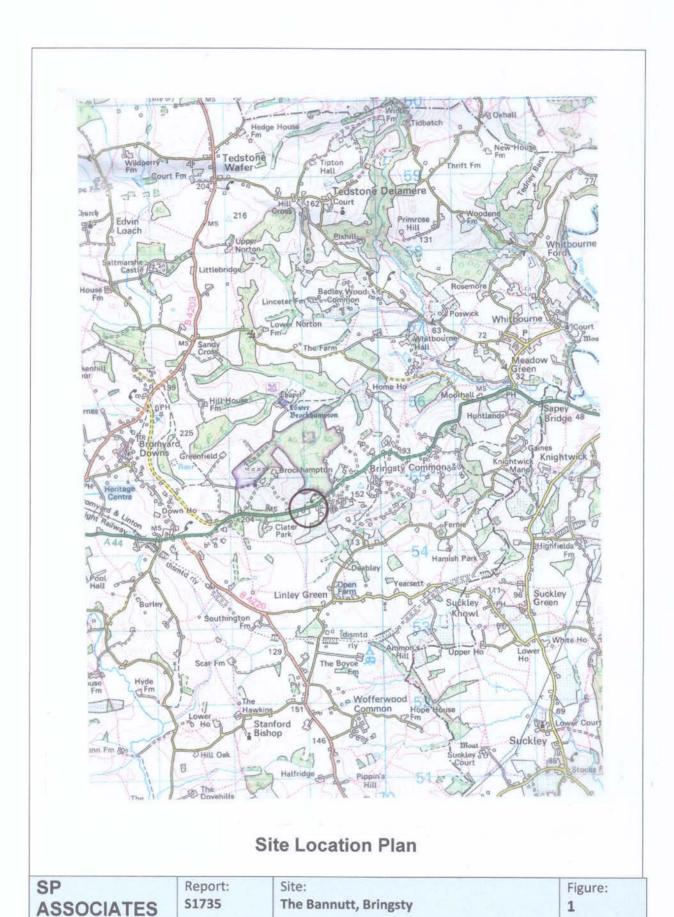
Determinant	Chemical Acceptance Criteria mg/kg	Derivation Tool	Range of Measured Values	No. of Values > Chemical Acceptance Criteria
Asbestos	Presence		None Detected	0
Phenols	55	EA SGV Report	<0.1	0
US EPA Priority PAH	s		este by the Vi	
Acenapthene	510	LQM/CIEH:S4UL	< 0.1	0
Acenapthylene	420	LQM/CIEH:S4UL	< 0.1	0
Anthracene	5400	LQM/CIEH:S4UL	< 0.1	0
Benzo(a)anthracene	11	LQM/CIEH:S4UL	< 0.1	0
Benzo (a)pyrene	5	DEFRA C4SL	< 0.1	0
Benzo (b)flouranthene	3.3	LQM/CIEH:S4UL	< 0.1	0
Benzo (k)flouranthene	93	LQM/CIEH:S4UL	< 0.1	0
Benzo(g,h,i) perylene	340	LQM/CIEH:S4UL	< 0.1	0
Chrysene	22	LQM/CIEH:S4UL	< 0.1	0
Di-	0.32	LQM/CIEH:S4UL	< 0.1	0
benzo(a,h)anthracene		-		
Indeno(1,2,3-	36	LQM/CIEH:S4UL	< 0.1	0
cd)pyrene				
Flouranthene	560	LQM/CIEH:S4UL	< 0.1	0
Flourene	400	LQM/CIEH:S4UL	< 0.1	0
Napthalene	5.6	LQM/CIEH:S4UL	< 0.1	0
Phenanthrene	220	LQM/CIEH:S4UL	< 0.1	0
Pyrene	1200	LQM/CIEH:S4UL	<0.1	0
Heavy Metals			TE HEROLIE	
Arsenic	37	DEFRA C4SL	4.0 - 13	0
Cadmium	26	DEFRA C4SL	< 0.1 - 0.14	0
Chromium	910	LQM/CIEH:S4UL	25 - 71	0
Copper	2400	LQM/CIEH:S4UL	9.5 - 23	0
Lead	200	DEFRA C4SL	10 - 36	0
Mercury	40	LQM/CIEH:S4UL	< 0.10	0
Nickel	180	LQM/CIEH:S4UL	30 - 92	0
Selenium	250	LOM/CIEH:S4UL	<0.2	0
Zinc	3200	LQM/CIEH:S4UL	39 - 83	0

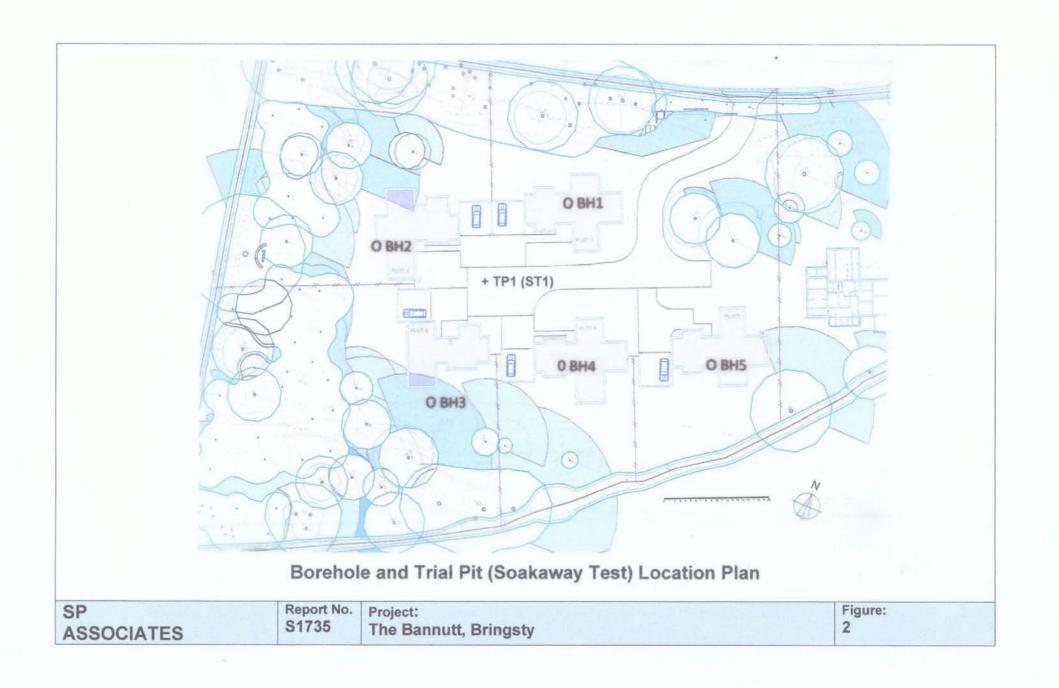
SP Associates S1735

Petroleum Hydrocarb	ons			
TPH Aliphatic C5-6	78	LQM/CIEH:S4UL	<1	0
C6-8	230	LQM/CIEH:S4UL	<1	0
C8-10	65	LQM/CIEH:S4UL	<1	0
C10-12	330	LQM/CIEH:S4UL	<1	0
C12-16	2400	LQM/CIEH:S4UL	<1	0
C16-35	92000	LQM/CIEH:S4UL	<1	0
C35-44	92000	LQM/CIEH:S4UL	<1	0
TPH Aromatic C5-7	140	LQM/CIEH:S4UL	<1	0
C7-8	290	LQM/CIEH:S4UL	<1	0
C8-10	83	LQM/CIEH:S4UL	<1	0
C10-12	180	LQM/CIEH:S4UL	<1	0
C12-16	330	LQM/CIEH:S4UL	<1	0
C16-21	540	LQM/CIEH:S4UL	<1	0
C21-35	1500	LQM/CIEH:S4UL	<1	0
C35-44	1500	LQM/CIEH:S4UL	<1	0

2.5% SOM adopted for SHV calculation Copyright Land Quality Management Ltd, Publication Number S4U:L3458

FIGURES





APPENDIX A

Historical Ordnance Survey Maps

Historical Mapping Legends

Ordnance Survey Plan 1:10,560 Orchard Shingle Mixed Wood Brushwood Fir Furze Rough Pasture Trigonometrical flow of water Site of Antiquities Bench Mark Pump, Guide Post, Well, Spring, Signal Post Boundary Post -285 Surface Level Sketched Instrumental Contour Contour Fenced Minor Roads Main Roads Un-Fenced Raised Road Sunken Road Road over Railway over Railway River Railway over Level Crossing Road Road over Road over River or Canal Stream Road over Stream County Boundary (Geographical) County & Civil Parish Boundary Administrative County & Civil Parish Boundary County Borough Boundary (England) Co Boro Bdy County Burgh Boundary (Scotland) Co. Burgh Bdy Rural District Boundary

Civil Parish Boundary

Ordnance Survey County Series and

Ordnance Survey Plan 1:10,000 Chalk Pit, Clay Pit. Gravel Pit or Quarry Disused Pit Sand Pit or Quarry Refuse or Lake, Loch Slag Heap or Pond Dunes Non-Coniferous O Orchard nn_ Scrub Min Coppice , , , , , Rough ----- Marsh NY/ Reeds ----- Saltings Direction of Flow of Water Building . 9 at a Shingle 223 Glasshouse Pylon Electricity Transmission Sloping Masonry Line Standard Gauge Multiple Track Standard Gauge Level Single Track Siding, Tramway + + + + + Narrow Gauge Geographical County Administrative County, County Borough or County of City Municipal Borough, Urban or Rural District, Burgh or District Council Borough, Burgh or County Constituency Civil Parish Shown atternately when coincidence of boundaries occurs BP. BS Boundary Post or Stone Pol Sta Police Station Ch Church Post Office Club House Public Convenience FESta Fire Engine Station PH Public House FB Foot Bridge SB Signal Box

Fountain

Mile Post

Mile Stone

Gulde Post

GP

MP

MS

Spring

Telephone Call Box

Telephone Call Post

TCB

TCP

1:10,000 Raster Mapping

(EE)	Gravel Pit	(E)	Refuse tip or slag heap
1011	Rock	-, -, -, -, -, -, -, -, -, -, -, -, -, -	Rock (scattered)
	Boulders	· · ·	Boulders (scattered)
2505	Shingle	(WE)	Mud
Sand	Sand	00000	Sand Pit
minn	Slopes	121111111	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
22	Area of wooded vegetation	00	Non-coniferous trees
۵	Non-coniferous trees (scattered)	12 12	Coniferous trees
\$ ±	Coniferous trees (scattered)	۵	Positioned tree
00	Orchard	2 2	Coppice or Osiers
	Rough Grassland	Same and	Heath
On.	Scrub	Alle Alle	Marsh, Salt Marsh or Reeds
Co	Water feature	-	Flow arrows
MHW(B)	Mean high water (springs)	MLW(S)	Mean low water (springs)
	Telephone line (where shown)		Electricity transmission line (with poles)
8M 123-45 m	Bench mark (where shown)	Δ	Triangulation station
*	Point feature (e.g. Guide Post or Mile Stone)	22	Pylon, flare stack or lighting tower
***	Site of (antiquity)		Glasshouse
	General Building		Important Building

Sitecheck Historical Maps

Ordnance Survey mapping included:

Mapping Type	Scale	Date	Pg
Herefordshire	1:2,500	1886	3
Herefordshire	1:10,560	1888 - 1889	- 64
Worcestershire	1:10,560	1892	5
Herefordshire	1:2,500	1904	6
Herefordshire	1:10,560	1905	7
Worcestershire	1:10,560	1905	8
Herefordshire	1:2,500	1928	9
Herefordshire	1:10,560	1931	10
Herefordshire	1:10,560	1953 - 1954	11
Ordnance Survey Plan	1:10,560	1964	12
Ordnance Survey Plan	1:10,560	1973	13
Ordnance Survey Plan	1:2,500	1974	14
Ordnance Survey Plan	1:10,000	1984	15
Large-Scale National Grid Data	1:2,500	1995	16
Large-Scale National Grid Data	1:2,500	1996	17
10K Raster Mapping	1:10,000	2000	18
10K Raster Mapping	1:10,000	2006	19
VectorMap Local	1:10,000	2021	20

Order Details

279802708_2_1 Order Number: Customer Ref: \$1735 National Grid Reference: 369130 254580 Site Area (Ha):

Site Details

The Bannut, Bromyard Road, Bringsty, WORCESTER, WR6

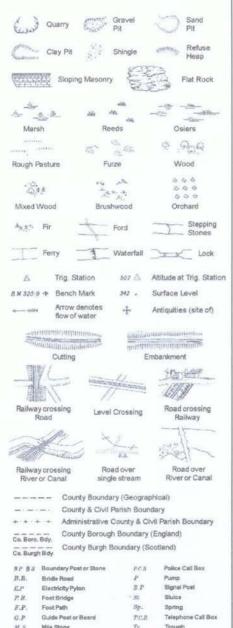
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Historical Mapping Legends

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



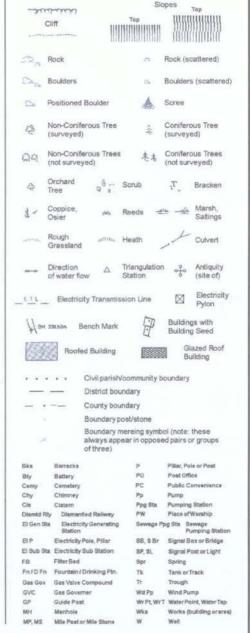
M.P. M.R. Mooring Post or Ring

Well

Ordnance Survey Plan, Additional SIMs and Large-Scale National Grid Data 1:2,500 and Supply of Unpublished Survey Information 1:2,500 and 1:1,250



BP. 88 Boundary Post or Stone PO Post Office Cn, C Capstan, Crans Public Convenience Public House Chy Chimney PH **Drinking Fountain** ELP 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 **Guide Post** Tank or Track TCB Telephone Call Box Hydrant or Hydraulic LC Level Crossing TCP Telephone Call Post Manhola Trough MP Mile Post or Mooring Post WrPt WrT Water Point, Water Tap MS NTL Normal Tidal Limit Wd Pp Wind Pump



Sitecheck Historical Maps

Order Details

Order Number: 279802708 2 1 Customer Ref: \$1735 National Grid Reference: 369130 254580 Site Area (Ha):

Site Details

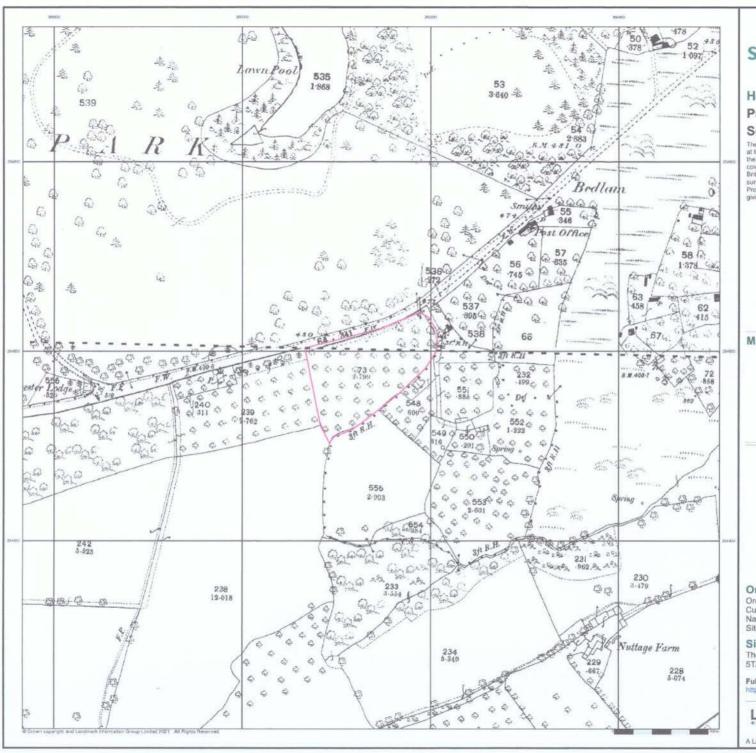
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Herefordshire Published 1886 Source map scale - 1:2,500

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Map Name(s) and Date(s)



Order Details

Order Number: 279802708_2_1 Customer Ref: \$1735 National Grid Reference: 369130_254580 Site Area (Ha): 1.09

Site Details

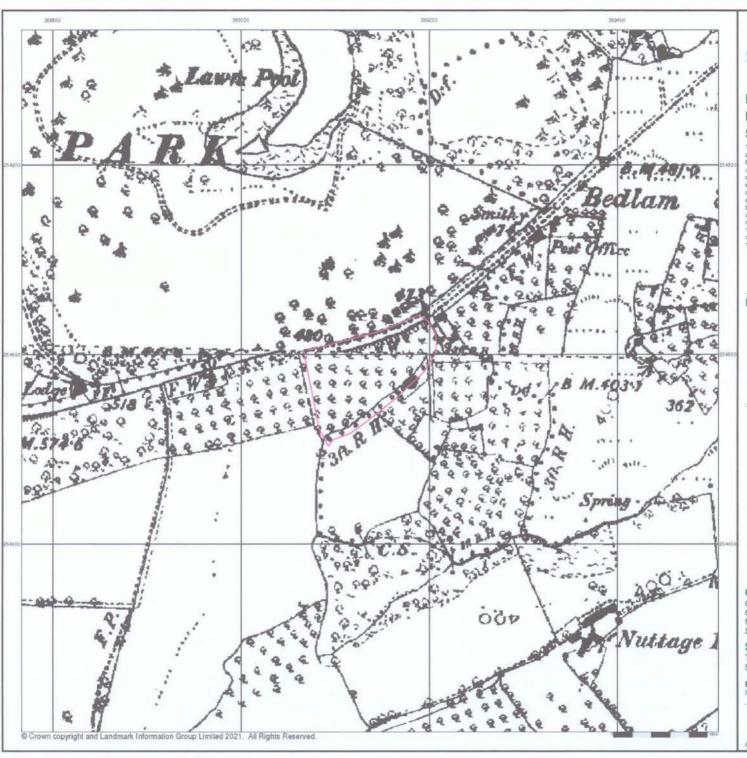
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Herefordshire Published 1888 - 1889 Source map scale - 1:10,560

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 to 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,550 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all 05 maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940's, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic stees removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercotor Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

Map Name(s) and Date(s)



Order Details

Order Number: 279802708_2_1
Customer Ref: \$1735
National Grid Reference: 369130_254580
Site Area (Ha): 1.09

Site Details

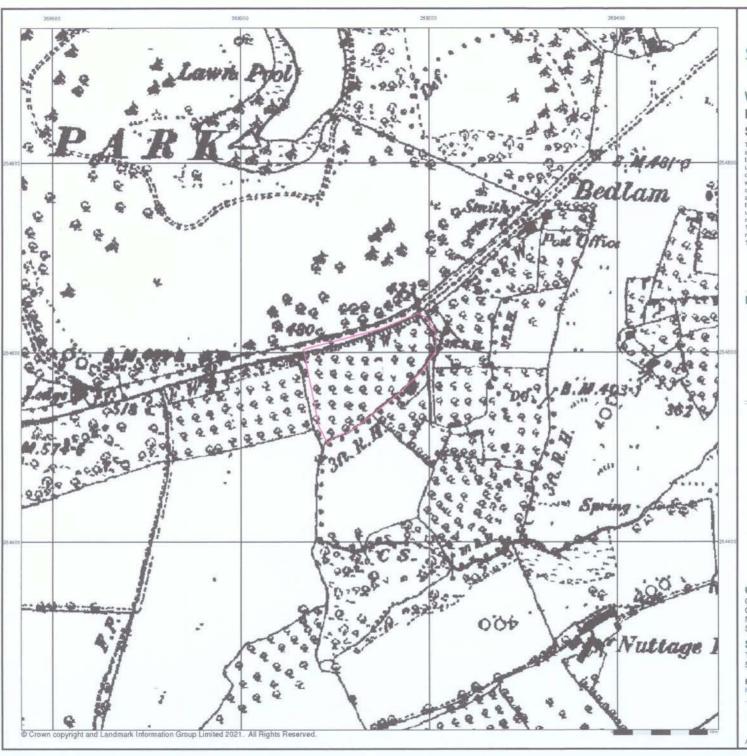
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Worcestershire

Published 1892

Source map scale - 1:10,560

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Sootland in the 1840's, In 1854 to 12,500 acale was adopted for mapping urban areas; these maps were used to update the 1;10,580 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; the late 1940's, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic alter removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new actions appearing every 10 years or an for urban areas.

Map Name(s) and Date(s)



Order Details

Order Number: 279802708_2_1 Customer Ref: 51735 National Grid Reference: 369130_254580 Site Area (Ha): 1.98

Site Details

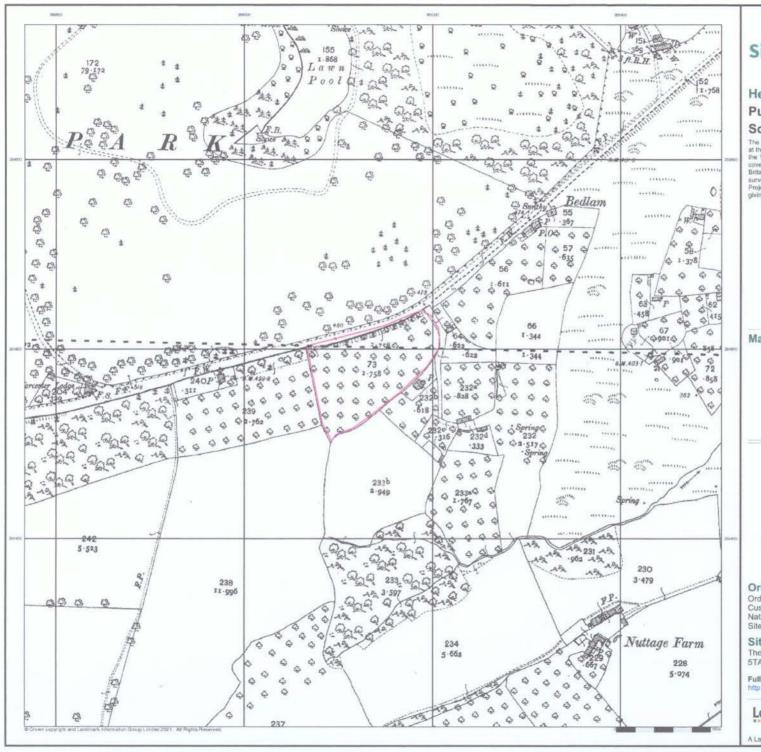
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Herefordshire Published 1904 Source map scale - 1:2,500

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Map Name(s) and Date(s)



Order Details

Order Number: 279802708_2_1 Customer Ref: \$1735 National Grid Reference: 369130_254580 Site Area (Ha): 1.09

Site Details

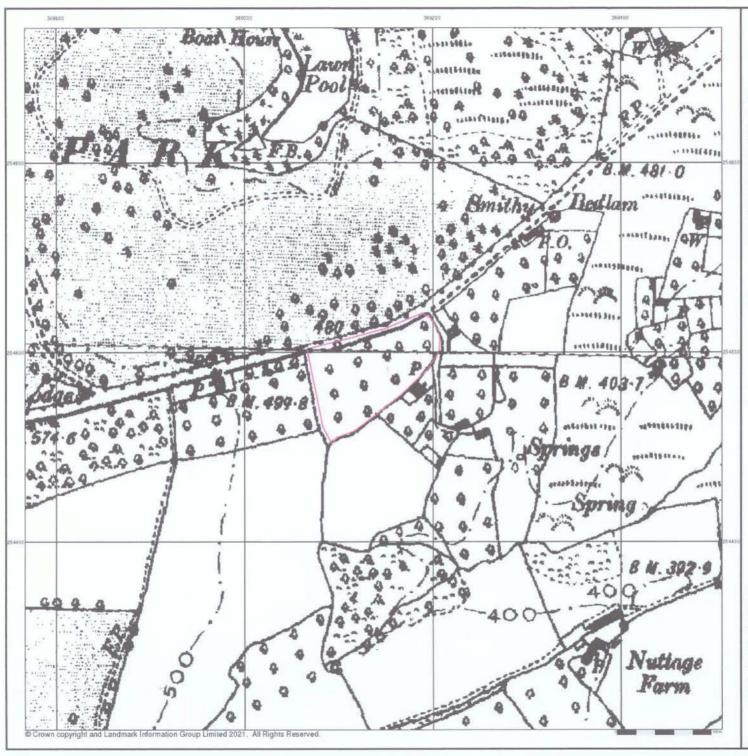
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Herefordshire Published 1905

Source map scale - 1:10,560

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wates 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 orbitying areas. In the late 1940's, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

Map Name(s) and Date(s)



Order Details

Order Number: 279802708_2_1 Customer Ref: \$1735 National Grid Reference: 369130_254580 Site Area (Ha): 1.09

Site Details

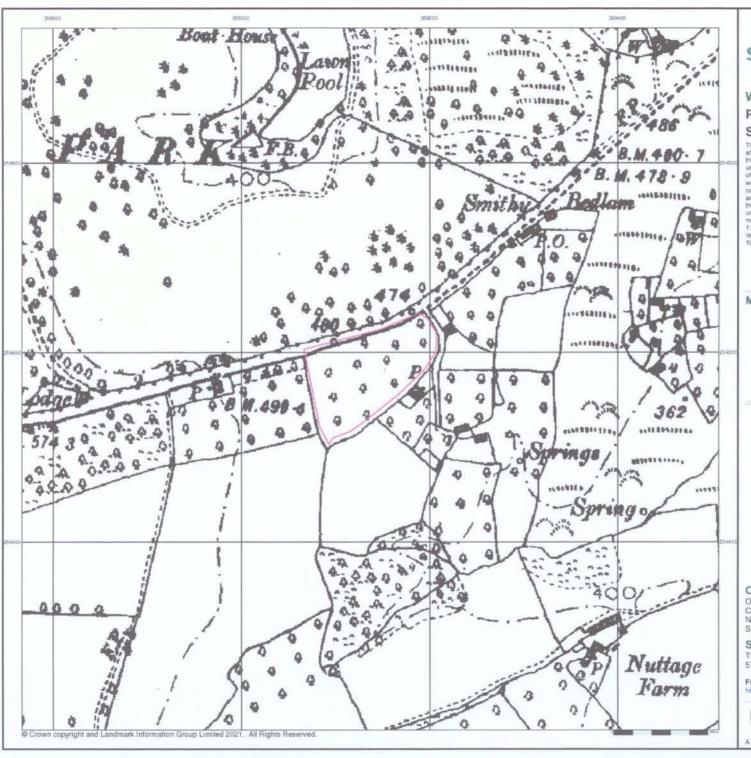
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Worcestershire

Published 1905

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 rounly 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 1:10,660 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

Map Name(s) and Date(s)



Order Details

Order Number: 279802708_2_1 Customer Ref: \$1735 National Grid Reference: 369130_254580 Site Area (Ha): 1.09

Site Details

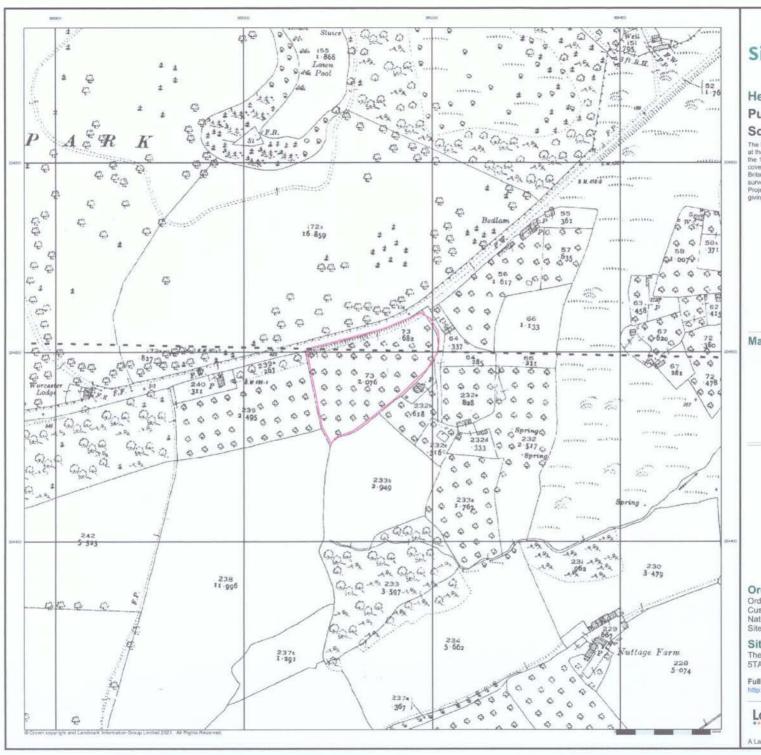
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Herefordshire Published 1928 Source map scale - 1:2,500

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Map Name(s) and Date(s)



Order Details

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Site Details

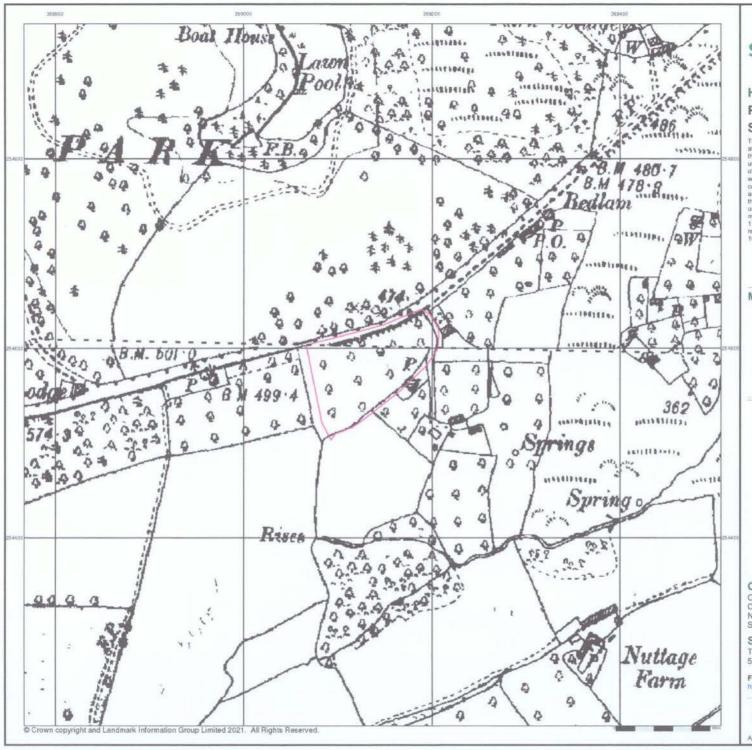
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Herefordshire Published 1931

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 12,500 scale was adopted for mapping urban areas; these maps were used to update the 110,580 maps. The published date given therefore is often some years later than the suneyed date. Before 1958, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inscurracies in outlying areas, in the late 1940's, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas,

Map Name(s) and Date(s)



Order Details

Order Number: 279802708_2_1
Customer Ref: 51735
National Grid Reference: 369130_254580
Site Area (Ha): 1.09

Site Details

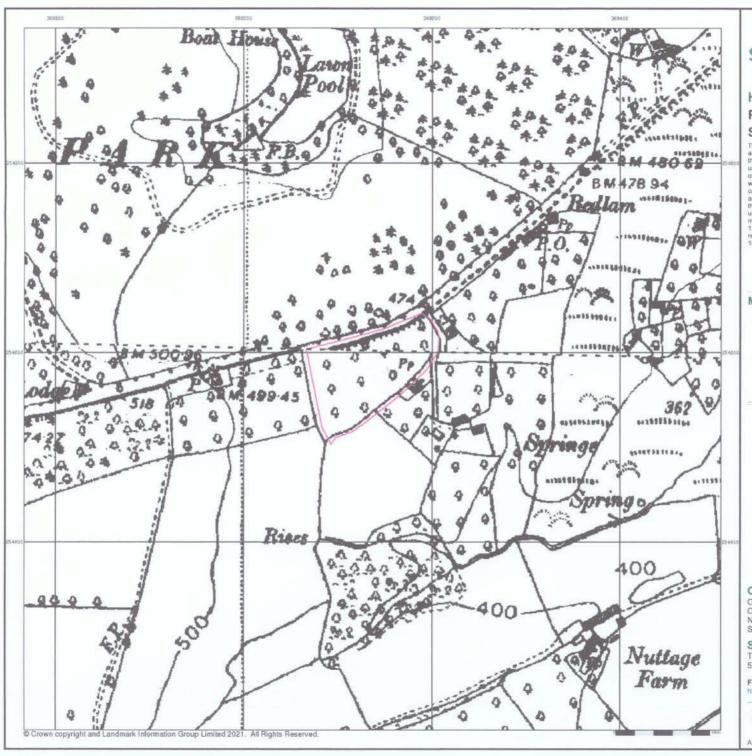
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Herefordshire Published 1953 - 1954 Source map scale - 1:10,560

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Map Name(s) and Date(s)



Order Details

Order Number: 279802708_2_1 Customer Ref: \$1735 National Grid Reference: 369130_254580 Site Area (Ha): 1.09

Site Details

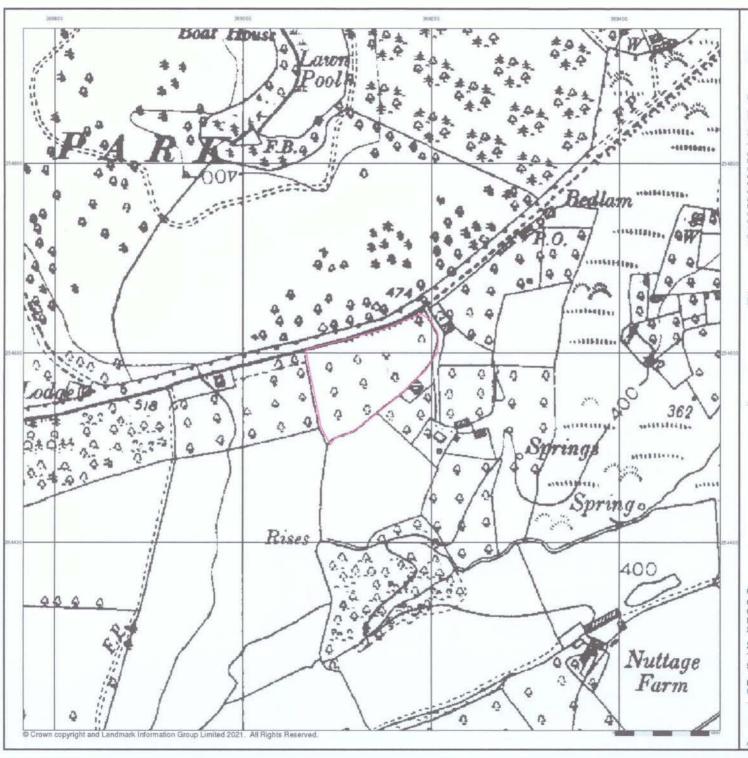
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Ordnance Survey Plan Published 1964

Source map scale - 1:10,560

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Map Name(s) and Date(s)



Order Details

Order Number: 279802708_2_1
Customer Ref: 51735
National Grid Reference: 369130_254580
Site Area (Ha): 1.09

Site Details

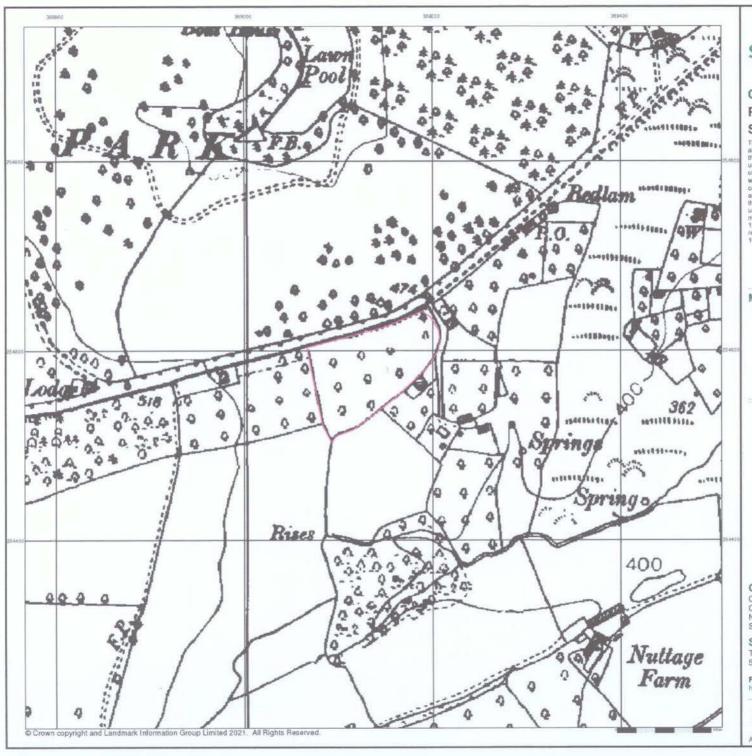
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Ordnance Survey Plan Published 1973

Source map scale - 1:10,560

at the scale adopted for England, Wales and Scotland in the 1840's, In 1854 at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 12,500 scale was adopted for mapping urban areas: these maps were used to update the 1:10,560 maps. The published date given therefore is other some years later than the surveyed date. Before 1936, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940 s. a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

Map Name(s) and Date(s)



Order Details

Order Number: 279802708 2 1 Customer Ref: \$1735 National Grid Reference: 369130_254580

Site Area (Ha): 1.09

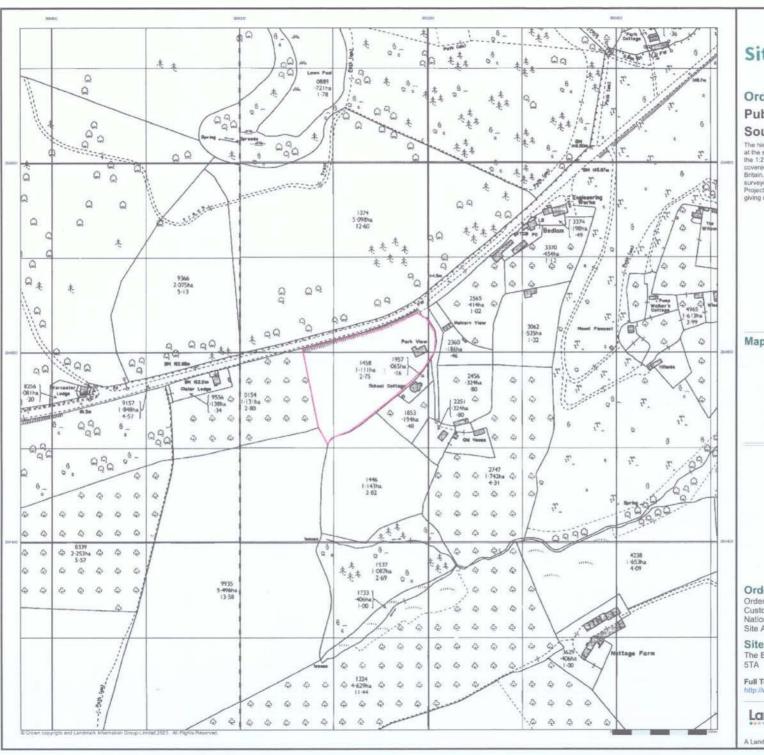
Site Details

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Ordnance Survey Plan Published 1974 Source map scale - 1:2,500

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Map Name(s) and Date(s)



Order Details

Order Number: 279802708_2_1 Customer Ref: \$1735 National Grid Reference: 369130_254580 Site Area (Ha): 1.09

ite Details

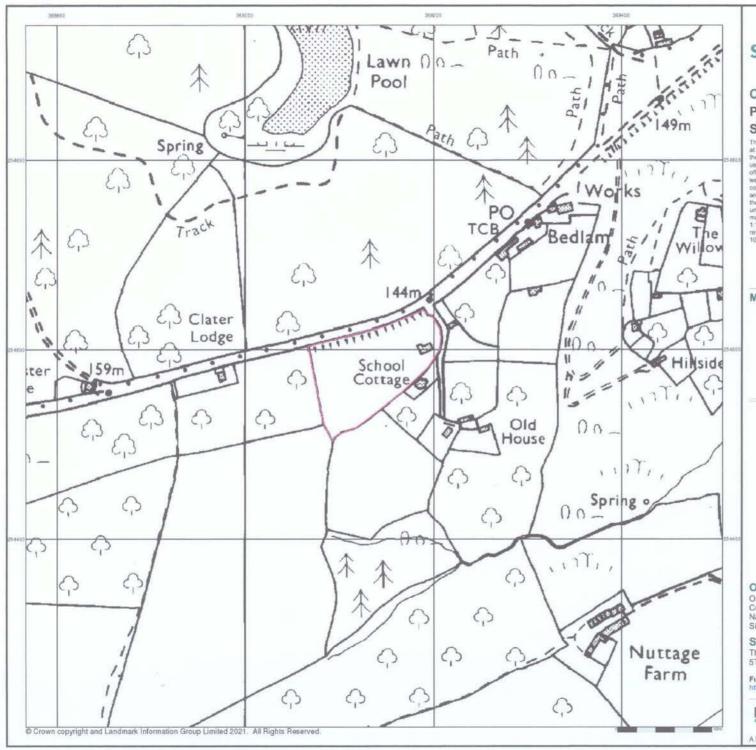
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Ordnance Survey Plan Published 1984

Source map scale - 1:10,000

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Map Name(s) and Date(s)



Order Details

Order Number: 279802708_2_1 Customer Ref: \$1735 National Grid Reference: 369130_254580 Site Area (Ha): 1.09

Site Details

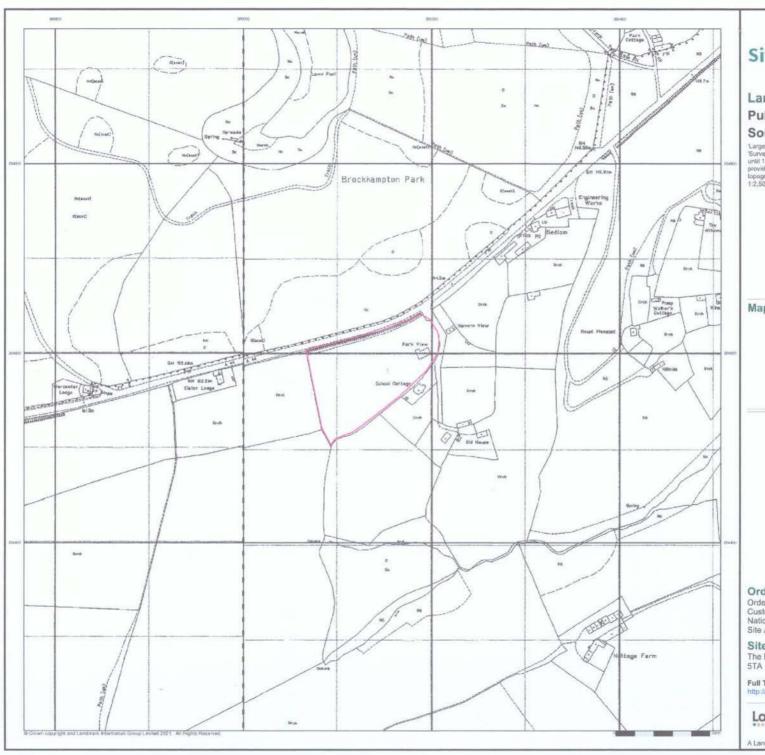
The Bannut, Bromyard Road, Bringsty, WORCESTER, WR6

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Large-Scale National Grid Data Published 1995

Source map scale - 1:2,500

Large Scale National Grid Data' superseded SIM cards (Ordnance Survey's 'Survey of Information on Microfilm') in 1992, and continued to be produced until 1999. These maps were the fore-currence 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 12,2500 and 11,250 scales.

Map Name(s) and Date(s)



Order Details

Order Number: 279802708_2_1
Customer Ref: S1735
National Grid Reference: 369130_254580
Site Area (Ha): 1.09

Site Details

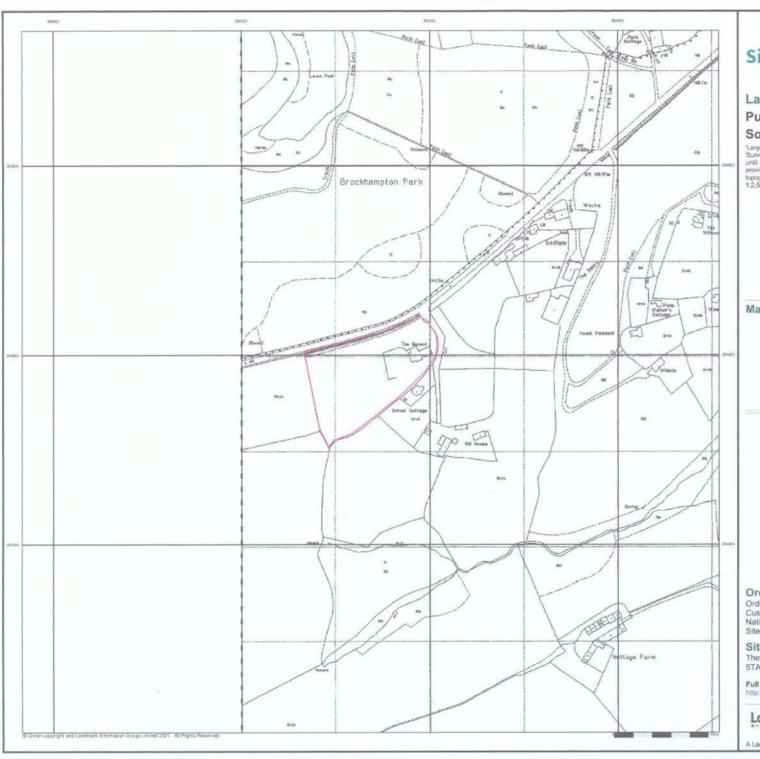
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Large-Scale National Grid Data Published 1996

Source map scale - 1:2,500

Large Scale National Grid Data' superseded SIM cards (Ordnance Survey's Survey of Information on Microffiny' 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 12,2500 and 11,250 scales.

Map Name(s) and Date(s)



Order Details

Order Number: 279802708_2_1
Customer Ref: \$1735
National Grid Reference: 369130_254580
Site Area (Ha): 1.09

Site Details

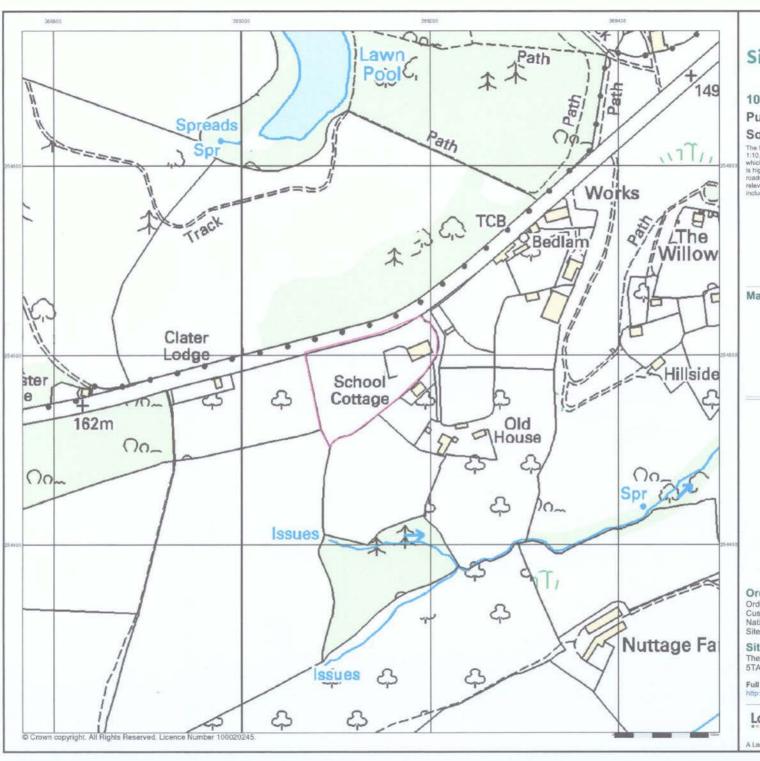
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10K Raster Mapping Published 2000

Source map scale - 1:10,000

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

Map Name(s) and Date(s)



Order Details

Order Number: 279802708 2 1 Customer Ref: S1735 National Grid Reference: 369130_254580 Site Area (Ha):

Site Details

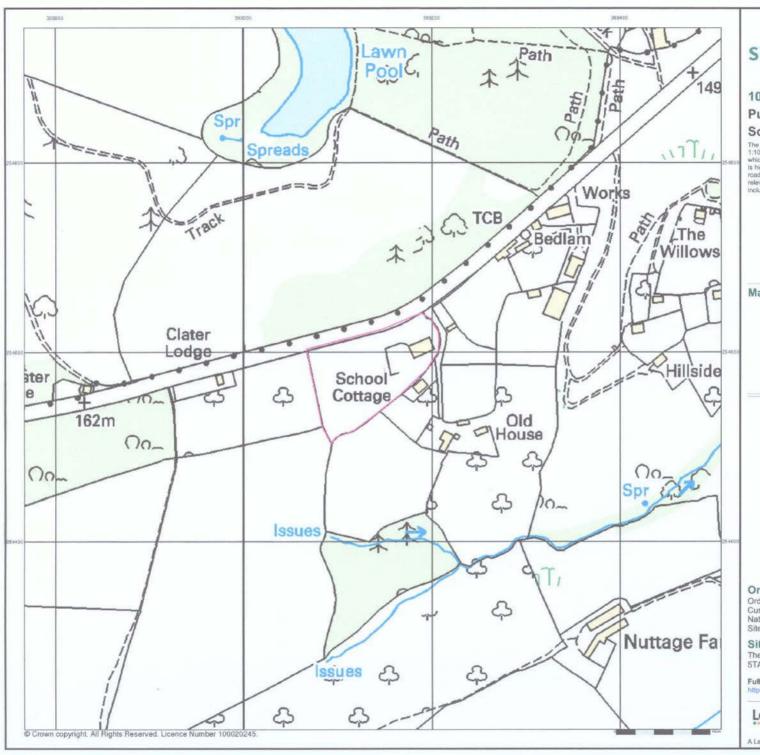
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10K Raster Mapping Published 2006 Source map scale - 1:10,000

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

Map Name(s) and Date(s)



Order Details

Order Number: 279802708_2_1
Customer Ref: \$1735
National Grid Reference: 369130_254580
Site Area (Ha): 1.09

Site Details

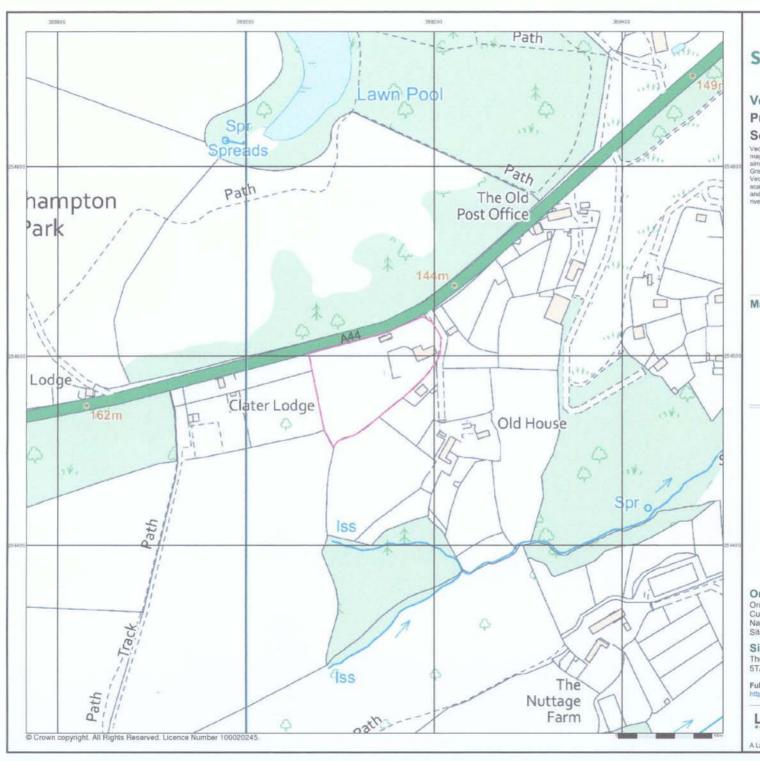
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et: 0844 844 9952 px: 0844 844 9951 veb: www.envirocheck.cu.uk

A Landmark Information Group Service v50.0 03-Jun-2021 Page 19 of 20



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 cale (covering major towns and citles), 1:2500 scale (graniler towns, villages and developed rural areas), and 1:10 000 scale (mountain, moorland and river estuary areas).

Map Name(s) and Date(s)



Order Details

Order Number: 279802708_2_1 Customer Ref: \$1735 National Grid Reference: 369130_254580 Site Area (Ha): 1.09

Site Details

The Bannut, Bromyard Road, Bringsty, WORCESTER, WR6 5TA

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APPENDIX B

Sitecheck Data Report



Sitecheck Data

The Bannut, Bromyard Road, Bringsty, WORCESTER, WR6 5TA

Prepared for:

Mr S Peters Steven Peters Associates 1 Market Place Warwick CV34 4SA

Report Reference: SCD_279802708_1_1

Report Date: 03-JUN-2021

Customer Reference: \$1735

National Grid Reference: 369130 254580

Site Area: 10810 m²





If you have any questions on the contents of this Report please contact Landmark Customer Helpdesk which is open from 9:00am - 5:30pm, Monday - Friday, via one of the following channels:

Telephone: 0844 844 9966 Fax: 0844 844 9980

Email: info@landmarkinfo.co.uk Website: www.sitecheck.co.uk

Useful Contacts

Report Sections and Details	Page
Summary of Site	
This section comprises contaminant, pathway and receptor information found on site. Other factors we the site are also included.	which may affect
Aerial Photo	1
The aerial photo gives an overall view of the area. The smaller large-scale Ordnance Survey map in boundary and search zone buffer at 250m.	cludes the site
Location Map	2
The large-scale Ordnance Survey map includes the site boundary and search zone buffer at 250m. Taerial photo also includes the site boundary.	he smaller
Summary Table	3
This section comprises of a summary table of the information found on site and in its vicinity.	
Current Land Use	7
This section contains a map, which shows current land use features. The following pages detail these identify the Reference Number and direction.	e features and
Historical Land Use	9
This section contains a map, which shows historical land use features. The following pages detail the identify the Reference Number and direction. A table listing all the maps used to source this information.	
Sensitivity	12
This section contains a map, which shows pathway and receptor features. The following pages detail and identify the Reference Number and direction. This section also contains a separate Flood Map a	
Other Factors	15
This section contains information on other factors which may affect the site and its vicinity.	
Useful Information	16
This section contains information which may be of use when interpreting the report.	

All textual information is linked by the 'Contact Ref' to this quick reference list of contacts. These contacts may be able to supply additional information or answer any subsequent query relating to that record.

Other Factors Geological	Page No.	Reference Number (Map ID)
Non Coal Mining Areas of Great Britain		
Hazard Potential: Highly Unlikely, Contact Ref: 1	15	
Radon Potential - Radon Affected Areas		
Affected Areas: The property is in an Intermediate probability radon area (1 to 3% of homes are estimated to be at or above the Action Level)., Source: British Geological Survey, National Geoscience Information Service, Contact Ref: 1	15	
Radon Potential - Radon Protection Measures		
Radon Protection Measures: None, Source: British Geological Survey, National Geoscience Information Service, Contact Ref: 1	15	
Potential for Landslide Ground Stability Hazards		
Hazard Potential: Low, Contact Ref: 1	15	
Potential for Shrinking or Swelling Clay Ground Stability Hazards		
Hazard Potential: Very Low, Contact Ref: 1	15	
Potential for Collapsible Ground Stability Hazards		
Hazard Potential: Very Low, Contact Ref: 1	15	- 4



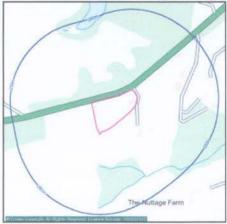
The Bannut, Bromyard Road, Bringsty, WORCESTER, WR6 5TA

Grid Reference 369130, 254580

Report Reference SCD_279802708_1_1

Customer Reference S1735

Size of Site 10810 m²





The Bannut, Bromyard Road, Bringsty, WORCESTER, WR6

Grid Reference 369130, 254580

Report Reference SCD_279802708_1_1

Customer Reference

S1735

Size of Site

10810 m²



Current Land Use	On Site	0-250m
Contaminants	0	1
Waste / Landfill Sites		
BGS Recorded Landfill Sites	0	0
Licensed Waste Management Facilities (Landfill Boundaries)	0	0
Licensed Waste Management Facilities (Locations)	0	0
Local Authority Recorded Landfill Sites	0	0
Registered Landfill Sites	0	0
Registered Waste Transfer Sites	0	0
Registered Waste Treatment or Disposal Sites	0	0
Statutory Authorisations		
Local Authority Pollution Prevention and Controls	0	0
Contaminated Land Register Entries and Notices	0	0
Registered Radioactive Substances	0	0
Discharge Consents		
Discharge Consents	0	0
Water Industry Act Referrals	0	0
Industrial Processes		
Integrated Pollution Controls	0	0
Integrated Pollution Control Registered Waste Sites	0	0
Integrated Pollution Prevention And Control	0	0
Local Authority Integrated Pollution Prevention And Control	0	0
Storage of Hazardous Substances		
Control of Major Accident Hazards Sites (COMAH)	0	0
Explosive Sites	0	0
Notification of Installations Handling Hazardous Substances (NIHHS)	0	0
Planning Hazardous Substance Consents	0	0
Contraventions		
Local Authority Pollution Prevention and Control Enforcements	0	0
Enforcement and Prohibition Notices	0	0
Planning Hazardous Substance Enforcements	0	0
Prosecutions Relating to Authorised Processes	0	0
Prosecutions Relating to Controlled Waters	0	0
Substantiated Pollution Incident Register	0	0

Current Land Use	On Site	0-250m
Contaminants	0	1
Potentially Contaminative Uses		
Contemporary Trade Directory Entries	0	1
Fuel Station Entries	0	0
Miscellaneous		
BGS Recorded Mineral Sites	0	0

Historical Land Use	On Site	0-250m
Contaminants	0	1
Potentially Contaminative Uses		
Historical Tanks And Energy Facilities	0	0
Potentially Contaminative Industrial Uses (Past Land Use)	0	1
Potentially Infilled Land		
Former Marshes	0	0
Potentially Infilled Land (Non-Water)	0	0
Potentially Infilled Land (Water)	0	0

Sensitivity	On Site	0-250m
Pathways and Receptors	0	1
Pathways		
Historical Flood Liabilities	0	0
Extreme Flooding from Rivers or Sea without Defences	0	0
Flooding from Rivers or Sea without Defences	0	0
Areas Benefiting from Flood Defences	0	0
Flood Water Storage Areas	0	0
Flood Defences	0	0

Sensitivity	On Site	0-250m
Pathways and Receptors	0	1
Environmentally Sensitive Receptors		
Areas of Outstanding Natural Beauty	0	0
Environmentally Sensitive Areas	0	0
Local Nature Reserves	0	0
Marine Nature Reserves	0	0
National Nature Reserves	0	0
Nearest Surface Water Feature	0	1
Ramsar Sites	0	0
Sites of Special Scientific Interest	0	0
Source Protection Zones	0	0
Special Areas of Conservation	0	0
Special Protection Areas	0	0
Water Abstractions	0	0
Protected Countryside Areas		
Forest Parks	0	0
National Parks	0	0
National Scenic Areas	0	0

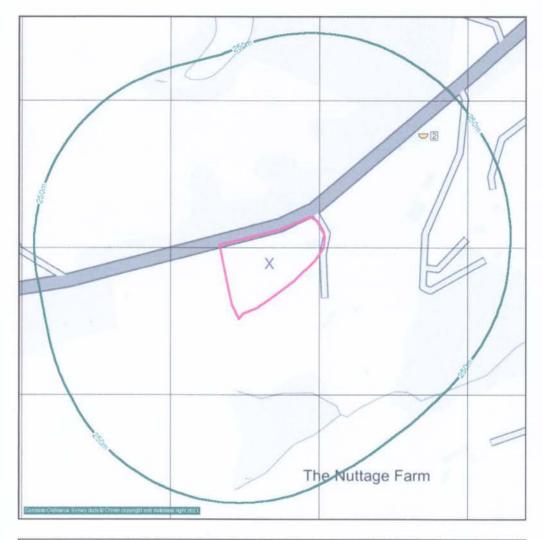
Other Factors	On Site	0-250m
Geological	9	3
Brine Compensation Area	0	n/a
Coal Mining Affected Areas	0	n/a
Mining Instability	0	0
Man-Made Mining Cavities	0	0
Natural Cavities	0	0
Potential for Collapsible Ground Stability Hazards	1	0
Radon Potential - Radon Affected Areas	1	n/a
Radon Potential - Radon Protection Measures	1	n/a
Potential for Compressible Ground Stability Hazards	1	0
Potential for Ground Dissolution Stability Hazards	1	0
Potential for Landslide Ground Stability Hazards	1	1
Potential for Running Sand Ground Stability Hazards	1	0
Potential for Shrinking or Swelling Clay Ground Stability Hazards	1	1
Non Coal Mining Areas of Great Britain	1	1





Contaminants		188	No state
Waste / Landfill Sites	Ref No.	Search Buffer	Direction
Local Authority Landfill Coverage			
Name: Herefordshire Council, - Has not been able to supply Landfill data, Contact Ref: 2	- 1	On Site	NW

Potentially Contaminative Uses	Ref No.	Search Buffer	Direction
Contemporary Trade Directory Entries			
M J & H M Roberts, The Smithy Bungalow, Bromyard Road, Bringsty, Worcester, WR6 5TA, Agricultural Engineers, Status: Inactive, Positional Accuracy: Automatically positioned to the address	1	0-250m	NE



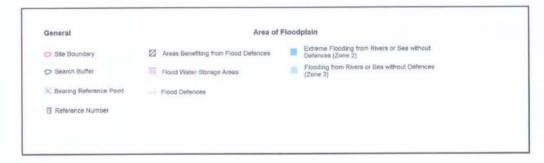


Contaminants			
Potentially Contaminative Uses	Ref No.	Search Buffer	Direction
Potentially Contaminative Industrial Uses (Past Land Use)		My ga	
Factory or works - use not specified, Date of Mapping: 1984	2	0-250m	NE

Map Details		
The following maps have been analysed for His	torical Tanks and Energy Facilities	
1:2,500	Mapsheet	Published
Ordnance Survey Plan	SO6954	1974
The following maps have been analysed for Pot Infilled Land information	tentially Contaminative Uses and Poten	tially
1:10,000	Mapsheet	Published
Ordnance Survey Plan	SO65SE	1984
1:10,560	Mapsheet	Published
Herefordshire	021_NE	1888
Herefordshire	021_SE	1889
Worcestershire	032_NW	1892
Herefordshire	021_NE	1905
Herefordshire	021_SE	1905
Worcestershire	032_NW	1905
Herefordshire	021_NE	1931
Herefordshire	021_SE	1931
Herefordshire	021_SE	1953
Herefordshire	021_NE	1954
Ordnance Survey Plan	SO65SE	1964

Flood Map





Sensitivity Map





Pathways and Receptors		Search Buffer	Direction
Environmentally Sensitive Receptors	Ref No.		
Nearest Surface Water Feature		BET	1987
Distance: 99m		0-250m	S

Other Factors		
Geological	Search Buffer	Direction
Brine Compensation Area		
No		
Coal Mining Affected Areas		
In an area which may not be affected by Coal Mining		
Non Coal Mining Areas of Great Britain		
Hazard Potential: Highly Unlikely Contact Ref: 1	On Site	E
Hazard Potential: Highly Unlikely Contact Ref: 1	0-250m	E
Radon Potential - Radon Affected Areas		
Affected Areas: The property is in an Intermediate probability radon area (1 to 3% of homes are estimated to be at or above the Action Level)., Source: British Geological Survey, National Geoscience Information Service, Contact Ref. 1	On Site	NE
Radon Potential - Radon Protection Measures		
Radon Protection Measures: None, Source: British Geological Survey, National Geoscience Information Service, Contact Ref: 1	On Site	NE
Potential for Collapsible Ground Stability Hazards		
Hazard Potential: Very Low Contact Ref: 1	On Site	NW
Potential for Compressible Ground Stability Hazards		
Hazard Potential: No Hazard, Contact Ref: 1	On Site	NW
Potential for Ground Dissolution Stability Hazards		
Hazard Potential: No Hazard, Contact Ref: 1	On Site	NW
Potential for Landslide Ground Stability Hazards		
Hazard Potential: Low, Contact Ref: 1	On Site	NW
Hazard Potential: Very Low, Contact Ref: 1	0-250m	SW
Potential for Running Sand Ground Stability Hazards		
Hazard Potential: No Hazard Contact Ref: 1	On Site	NW
Potential for Shrinking or Swelling Clay Ground Stability Hazards		
Hazard Potential: Very Low Contact Ref: 1	On Site	NW
Hazard Potential: No Hazard Contact Ref: 1	0-250m	NE

Registered Landfill Sites

At present no complete national data set exists for landfill site boundaries, therefore a point grid reference, provided by the data supplier, is used for some landfill sites. In certain cases the point grid references supplied provide only an approximate position and can vary from the site entrance to the centre of the site. Where the exact position of the site is unclear, Landmark construct either a 100 metre or 250 metre "buffer" around the point to warn of the possible presence of landfill. The size of this "buffer" relates to the positional accuracy that can be attributed to the site. The "buffer" is shown on the map as an orange cross-hatched circle and is referred to in the map legend as Potential Landfill Buffer. Where actual boundaries are available, the landfill site area is shown on the map as a red diagonal hatched polygon and referred to in the map legend as Registered Landfill Site.

Local Authority Recorded Landfill Sites

Local Authority landfill data are sourced from individual local authorities that were able to provide information on sites operating prior to the introduction of the Control of Pollution Act (COPA) in 1974. Appropriate authorities are listed under Local Authority Landfill Coverage with an indication of whether or not they were able to make landfill data available. Details of any records identified are disclosed. You should be aware that if the local authority 'Had landfill data but passed it to the relevant environment agency' it does not necessarily mean that local authority landfill data is included in our other Landfill datasets. In addition if no data has been made available, for all or part of the search area, you should be aware that a negative response under 'Local Authority Recorded Landfill Sites' does not necessarily confirm that no local authority landfills exist.

Flooding

The Sitecheck report flood map plots all flood related features revealed within the search area as supplied by the relevant environment agency. However, to avoid confusion, the text entry in the body of the report only reveals the detail of the nearest feature in each flood data set. This is also reflected in the summary table where only a single entry is included to indicate the search buffer of the nearest occurrence.

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Contact Names and Addresses

1 British Geological Survey Enquiry Service

British Geological Survey Environmental Science Centre Keyworth Nottingham Nottinghamshire NG12 5GG

enquiries@bgs.ac.uk www.bgs.ac.uk Telephone 0115 936 3143 Fax 0115 936 3276

2 Herefordshire Council

Brockington 35 Hafod Road Hereford Herefordshire HR1 1SH

www.herefordshire.gov.uk

Telephone 01432 260000

Other Contacts

Landmark Information Group Limited

Legal and Financial Imperium Imperial Way Reading Berkshire RG2 0TD

info@landmarkinfo.co.uk www.landmarkinfo.co.uk Telephone 0844 844 9966 Fax 0844 844 9980





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Tel: 0844 844 9966 Fax: 0844 844 9980

Email: helpdesk@landmark.co.uk

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TPOs Contact Details:

The Property Ombudsman Scheme Milford House 43-55 Milford Street Salisbury Wiltshire SP1 2BP

Tel: 01722 333306 Fax: 01722 332296 Website: www.tpos.co.uk Email: admin@tpos.co.uk





Consumer Protection

Landmark Complaints Procedure

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- Normally deal with it fully and provide a final response, in writing, within 20 working days of receipt.

- Keep you informed by letter, telephone or e-mail, as you prefer, if we need more time

- Provide a final response, in writing, at the latest within 40 working days of receipt.

- Liaise, at your request, with anyone acting formally on your behalf.

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Customer Relationships Manager Landmark Information Imperium Imperial Way Reading RG2 0TD

Tel: 0844 844 9966

Email: helpdesk@landmark.co.uk

Fax: 0844 844 9980

If you are not satisfied with our final response, or if we exceed the response timescales, you may refer the complaint to The Property Ombudsman Scheme (TPOs):

Tel: 01722 333306

Email: admin@tpos.co.uk

We will co-operate fully with the Ombudsman during an investigation and comply with his final decision.



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"Website" means any website hosted by Us and includes the Content and any Report, service, document, data-set, software or information contained in such websites or derived from them.

1 Basis of Contract

- a. These Terms (including, where applicable, Third Party Content Terms) govern the relationship between Us and You where You use or purchase Services from Us. Where these Terms are not expressly accepted by You, they will be deemed to have been accepted by You, and You agree to be bound by these Terms: (a) when You place any Order, or pay for any Services provided to You by Us; and (b) in respect of Your use of any Website, by accessing and continuing to use any part of this Website. If You do not agree with any of the Terms that apply to Our Websites, then You must not use the Website.
- b. You may be required to register Your details and/or open an account to access or order certain Services. Submission of Your registration and Your use of such Services shall be deemed acceptance of these Terms. You shall ensure that all information provided when submitting your registration is up to date, true, accurate and complete. We reserve the right to suspend or terminate Your access to the Website or block Your ability to place Orders in the event of any breach of this clause 1.b. Each registration is for a single user only. We do not permit You as Subscription Users to share user names and passwords with any other person nor with multiple users on a network. It is Your responsibility to maintain the confidentiality of Your password and those of Subscription Users for whom you are responsible and You are responsible for all activity that occurs under such user names and passwords. We will not be liable where Your password or those of Subscription Users for whom you are responsible are used by someone else. You should notify Us immediately of any unauthorised use of passwords and any breach of security as soon as You become aware of it.
- c. You shall take all reasonable steps to check that the details that You provide in relation to Your Order are complete, accurate and correct and that the Service is provided for the correct location and property type. Neither We nor any Suppliers shall have any liability for errors or omissions in information provided by or on behalf of You or from Your failure to check that the Service relates to the correct location or property.
- d. We may modify these Terms, and may discontinue or revise any or all other aspects of the Services at Our sole discretion, with immediate effect and without prior notice, including without limitation changing the Services available at any given time. Any amendment or variation to these Terms shall be posted on Our Websites. Continued Orders of the Services or continued use of the Website by You shall be deemed an acceptance by You to be bound by any such amendments to the Terms. We will not file or store a copy of these Terms for each interaction or transaction by You via the Website.

- e. These Terms together with the Third Party Content Terms, any Order You make (if applicable), the Fees (if applicable) and delivery details in relation to the Order and Our privacy policy, which is available on the Website, constitute the entire agreement between the parties relating to the supply of Services to You by Us ("Agreement"). You acknowledge that You have not relied on any statement, promise or representation made or given by or on behalf of Us which is not set out in the Agreement or delivery details. Nothing in this clause 1.e shall limit or exclude any liability for fraud.
- f. These Terms shall prevail at all times to the exclusion of all other terms and conditions including any terms and conditions which You may purport to apply even if such other provisions are submitted in a later document or purport to exclude or override these Terms and neither the course of conduct between parties nor trade practice shall act to modify these Terms.

2 Services and Licensed Use

- Subject to clauses 6.d, 6.k and 6.l, We shall use all reasonable skill, care and diligence in the performance of the Services. In performing the Services we shall comply with the standards as developed by the Conveyancing Information Executive (CIE).
- You shall not hold Yourself out or describe Yourself as Our agent or an agent of any of the Suppliers or as having had any of Your activities endorsed by Us.
- c. Where Content is provided as part of an On-Demand Service, We grant You a non-exclusive, non-transferable licence (without rights to sub-license to any third party other than End Users) to access and use the On-Demand Service (and any output of that service) for the purposes of viewing the Content for the duration permitted in any Order (subject to any Terminal limits (if appropriate)).
- d. Where Content are provided in printed form or in an electronic format for printing (including Reports), We grant You a non-exclusive, perpetual non-transferable licence (without rights to sub-license or provide copies or extracts to any third party other than End Users) to use Content in printed form or in an electronic format for printing (including Reports) for Your commercial or non-commercial use, but without any right to copy, modify, extract or re-utilise any information or data within such printed Content other than as expressly set out in this clause 2.d.
- Subject always to these Terms, You may, without further charge, make Reports (other than Envirocheck® Reports) available to:
 - the owner of the whole or part of the Property Site at the date of the Report;
 - any person who purchases or intends to purchase the whole or part of the Property Site;
 - any person who provides or intends to provide funding secured on the whole or part of the Property Site;
 - iv. any person for whom You act in a professional or commercial capacity in relation to the Property Site; and/or
 - any person who acts for You in a professional or commercial capacity in relation to the Property Site;

together the "Beneficiaries".

- f. The Beneficiaries shall be entitled to rely on the Report as if it was addressed to them and any such person shall be entitled to enforce these Terms as if they were named in the Order, provided always that the person to whom the Report is made available accepts these Terms.
- g. You shall ensure that acknowledgements of copyright and database right ownership are included in a conspicuous position in all copies of the Content. You may not delete any of Our or the Suppliers' intellectual property protection notices (including without limitation copyright notices or trade marks) from the Content.
- h. You shall not reverse engineer, separate or otherwise tamper with the Content so that Content can be extracted and used for any purpose outside the scope of the Agreement.

- i. If You are a Company or public body, You agree that the licensed use of Content pursuant to the Agreement always excludes its use by any of Your subsidiaries, holding companies or subsidiaries of such holding companies (as such terms are defined in section 1159 of the Companies Act 2006) or by any government entity associated with You (in each case as applicable). You agree, and shall procure, that any such company or entity shall enter into a separate agreement with Us.
- j. All other uses of the Content other than as permitted by the Agreement are prohibited. If You wish to use the Content in a manner which is not authorised by the Terms, then You must contact Us to seek the necessary consents or licences (which may include further licences from the Suppliers), for which there may be additional Fees.
- You agree to notify Us should You suspect any infringement of Our or any of Our Supplier's Intellectual Property Rights.
- I. You agree that you will not use the Services (including without limitation Our Websites) in any way that may lead to the encouragement, procurement or carrying out if any criminal or unlawful activity or do anything that may cause damage to the Website or our servers, systems or equipment or those of third parties, nor access any users' data or penetrate or circumvent any Website security measures or attempt to do any such acts.

3 Intellectual Property, Confidentiality and Privacy Policy

- a. You acknowledge and agree that all Intellectual Property Rights in Content and Our Websites are and shall continue to be owned by Us or Our Suppliers and nothing in the Agreement shall transfer, assign or grant any rights to You (save for the licence as set out above).
- b. The names, images and logos identifying Us, companies in the Landmark group, our partners or third parties and our/their products and/or services contained in or sold via the Website are proprietary marks and may not be reproduced or otherwise used without express permission.
- c. Subject to any use of the Content in accordance with these Terms, You acknowledge and agree that You shall, and shall procure that any person to whom You provide access to the Content shall, treat as strictly private and confidential the Services, the Content and all information which they obtain from the Services and Content and you agree to use adequate technical and organisational measures to protect the Content from unauthorised use.
- d. Where mapping is provided by Ordnance Survey, You acknowledge and agree that such mapping contained in any Services is protected by Crown Copyright and must not be used for any purpose outside the context of the Services. Where mapping is provided by any other Supplier, You acknowledge and agree that such mapping is the copyright of the Supplier and must not be used for any purpose outside the context of the Services.
- e. With regard to Ordnance Survey mapping (other than OS OpenData™ in respect of which see Third Party Content Terms (OS OpenData)), copying in whole or in part by any means of map prints or run-on copies provided with the Services is not permitted without appropriate licensing from the relevant Supplier. You must be in possession of or obtain a valid Ordnance Survey Paper Map Copying Licence if You wish to make any further copies of any Ordnance Survey maps supplied with or forming part of the Services.

4 Termination

- a. In respect of any Subscription, You may terminate Your Subscription at the end of any given month by providing us with written notice during that month. You will continue to have access to the relevant On-Demand Services for the duration of the month in which the notice is given.
- b. At any time, either party may terminate the Agreement with immediate effect by giving the other party written notice:
 - if the other party is in material breach of the Terms and, if such breach is capable of remedy, that party fails to remedy the breach within 30 days of written notice specifying the breach and requiring it to be remedied;

- iii. the other party has a receiver or administrative receiver or administrator appointed over any part of its undertaking or assets or passes a resolution for winding up (otherwise than for the purpose of a bona fide scheme of solvent amalgamation or reconstruction) or if a court of competent jurisdiction makes an order to that effect or if it become subject to an administration order or enter into a voluntary arrangement with its creditors or shall cease or threaten to cease to carry on business or if they are presented with a bankruptcy petition; or
- iii. if We or a Supplier loses the right to administer Crown copyright and/or Crown database right in respect of the Ordnance Survey Data.
- In the event of the termination or expiry of the Agreement with respect to the Service ordered by You:
 - You shall, subject to clause 4.c.iii, immediately cease to use the affected Service and Content;
 - You shall, subject to clause 4.c.iii, within 30 days of such termination or expiry, destroy all Content relating to the terminated Service in any media which is in Your possession or control and provide, at Our request, a sworn statement by a duly authorised person that You no longer hold such Content;
 - except in the event of termination by Us under clause 4.b, You may retain Content in an archive following expiry of the Agreement for the sole purpose of addressing a complaint or challenge from a regulator or other third party regarding Your use of such Content during the term of the Agreement. Your rights are on condition that: (a) the archive rights do not apply to Content that include third party Intellectual Property Rights (other than Content provided by Ordnance Survey to the extent that the Intellectual Property Rights in such Content are owned by Ordnance Survey); (b) You shall not disclose Content retained under this clause 4.c.iii to any regulator or other third party except strictly to the extent necessary for the relevant purpose of addressing a complaint or challenge from a regulator or other third party and in paper or read-only electronic format only; (c) You must store such Content separately from any other data which You hold; and (d) subject to clause 6.a, We shall have no liability for Your use of it following termination or expiry of the Agreement: and
 - iv. the parties shall have no further obligations or rights under the Agreement (save in respect of any continued use of publicly accessible Websites), without prejudice to those which have accrued to either party prior to termination or expiry save that the "Definitions", clauses 2.f to 2.k (inclusive), this clause 4.c, clauses 5.d, 6, 7, 9, 10 and 11 together with those other clauses the survival of which is necessary for the interpretation or enforcement of the Agreement or which by their nature can be reasonably interpreted as surviving the expiry or termination of the Agreement, shall continue to have effect after such expiry or termination.

5 Payments

- a. Where You do not pay the Fees at the point of purchase You agree that You will pay the Fees at the rates set out in Our or Our Authorised Reseller's invoice within 30 days of the date of each invoice without deduction, counterclaim or set off. Where Your order comprises a number of Services or severable elements within any one or more Services, any failure by Us or an Authorised Reseller to provide an element or elements of the Services shall not prejudice Our or an Authorised Reseller's ability to require prompt payment in respect of the Services delivered to You.
- a.i. If You have purchased a Subscription this shall be payable monthly in arrears.
- VAT shall be due in addition to any Fees. You shall pay any other applicable indirect taxes related to Your use of the Services.
- c. Neither We nor any Authorised Reseller shall be required to notify You in advance of any amendment to the Fees and the placing of any further Order for Services shall be deemed acceptance of any

- revisions to the Fees.
- d. If You fail to pay by the due date any amount due and payable by You under the Agreement, We shall be entitled, but not obliged to, charge You interest on the overdue amount, payable by You immediately on demand, accruing on a daily basis from the due date up to the date of actual payment, after as well as before judgment, at the rate set out in the Late Payment of Commercial Debts (Interest) Act 1998 from time to time and fixed sum compensation under the Late Payment of Commercial Debts Regulations 2002.

5A Subscriptions

- a. If you are accessing the Services under a Subscription you must:
 - ensure that the maximum number of Subscription Users that you authorise to access and use the Services does not exceed the number of Subscriptions purchased from time to time; and
 - ii. not allow any Subscription which has been purchased on a perusername basis to be used by more than one individual Subscription User (unless it has been reassigned in its entirety to another individual Subscription User, in which case the prior Subscription User shall no longer have any right to access or use the Services).
- b. Subscription User's use of the Services must be reasonable and proportionate to enable Us to continue to provide Our services to all of Our customers. If at any time We consider Your use of the Services to be excessive We shall contact You and We reserve the right to restrict Your use to normal limits.
- c. If We consider Your use of the Services to exceed the expected usage levels, based on the number of Subscriptions You have purchased, You shall permit Us to audit Your access and use of the Services in order to establish Your compliance with these Terms.
- d. If any audit referred to in clause 5A.c reveals that any password has been provided to any individual who is not a Subscription User, then we shall be entitled to cancel any such Subscription and/or block the applicable Subscription User account.
- e. If any of the audits referred to in clause 5A.c reveal that You have underpaid Us for any Subscription Fees, then without prejudice to the Our other rights, You shall pay to Us an amount equal to such underpayment within 14 days of the date of the relevant audit.

6. Liability

- a. Nothing in these Terms excludes or limits either party's liability for death or personal injury caused by that party's negligence or wilful default or for fraud, and the remainder of this clause 6 is subject to this provision. If You are a consumer, Your statutory rights (which include, for example, that We will provide the Services to a reasonable standard and within a reasonable time) are not affected by anything in these Terms.
- b. Save as set out in clause 6.a, We shall not be liable to You or to any End User in contract, tort (including negligence) or for breach of statutory duty or in any other way for:
 - any indirect or consequential losses (which includes any loss that could not have been reasonably expected by You and Us at the time of entering into these Terms);
 - loss arising from or in connection with loss of revenues, profits, contracts or business or failure to realise anticipated savings; or
 - iii. loss of goodwill or reputation,
- c. Save as set out in clause 6.a, Our total liability to You and/or any End User in contract or tort (including negligence) or for breach of statutory duty shall not exceed:
 - in respect of any Services other than the Promap® service, an amount of ten million pounds (£10,000,000) in the aggregate; and
 - in respect of our Promap® service, an aggregate amount of £350,000.

- d. The Content that Services are based on is partly derived from third party sources. Therefore, save as set out in clause 6.l in respect of risk assessments and professional opinions, We do not warrant the accuracy or completeness of any information or Content provided, unless We should reasonably have been alerted to any omission, error or inaccuracy in the Content. Such Content is provided specifically from the sources as described by Us and We do not claim that these represent an exhaustive or comprehensive list of all sources that might be consulted. We shall not be liable for any inaccurate statement, opinion or risk rating in a Service which resulted from a reasonable interpretation of the Content
- You acknowledge and agree that neither You nor any End User shall have any claim or recourse against any Supplier of Third Party Content.
- f. You acknowledge and agree that We do not warrant that the online supply of Website, Content or Services or any internet ordering service will be: uninterrupted or error free or provide any particular facilities or functions; free from defects; free from software viruses; free of error from computer malfunction, inaccurate processing; free from corruption of data whilst geo-coding, processing by computer or electronic means or in the course of transmission; or similar, although We will use reasonable endeavours to correct any such issues within a reasonable period of them becoming known (which may be limited to notifying the relevant Supplier). We will not be liable to You or to any other person in the event that all or any part of Our Websites is discontinued, modified or changed in any way. Time shall not be of the essence in providing the Website, Content or Services.
- g. You acknowledge and agree that no physical inspection of the Property Site reported on is carried out as part of any Services offered by Us and We do not warrant that all land uses or features whether past or current will be identified in the Services. The Services do not include any information relating to the actual state or condition of any Property Site nor should they be used or taken to indicate or exclude actual fitness or unfitness of a Property Site for any particular purpose.
- h. You acknowledge and agree that any party, other than You or the Beneficiaries, who relies on a Report does so entirely at its own risk, including, without limitation, any insurers. We accept no responsibility and shall not be liable to any such party for any loss caused as a result of any such reliance upon a Report.
- You acknowledge and agree that We will not be held liable in any way.
 if a Service is used otherwise than as provided for in these Terms and/or in the Report or Service.
- j. You acknowledge and agree that the Services have not been prepared to meet Your or anyone else's individual requirements and it is Your responsibility to ensure that the Services ordered are suitable for Your (or the End User's) intended purpose.
- k. You acknowledge and agree that You shall, on receipt of a Report carry out a reasonable inspection to satisfy Yourself that there are no apparent defects or failures with respect to the description and location of the Property Site and shall promptly inform Us if there are any such defects or failures.
- All liability for any insurance products purchased by You rests solely
 with the insurer. We do not endorse any particular product or insurer
 and no information contained within the Services should be deemed to
 imply otherwise. You acknowledge that:
 - if You Order any such insurance We will deem such as Your consent to forward a copy of the Report to the insurers. Where such policy is purchased, You acknowledge and agree that You are entirely responsible for ensuring that the insurance policy offered is suitable for Your needs and should seek independent advice:
 - all decisions with regard to the offer of insurance policies for any premises will be made solely at the discretion of the insurers and We accept no liability in this regard; and
 - the provision of a Report does not constitute any indication by Us that insurance will be available on the Property Site.

- m. We may provide You with professional opinions or a risk assessment in a Report. You acknowledge and agree that We shall carry out (or procure that third parties carry out) such assessment with reasonable skill and care and that We shall be liable where any such risk assessment is carried out negligently.
- Neither You, nor any End User or any other person may rely on a Service more than 12 months after it was originally provided.
- o. Without limiting Our liability under these Terms for Content that You purchase, while We endeavour to ensure that the information on Our Websites is correct, We make no promise nor do We give any warranty or guarantee regarding the accuracy and completeness of the material on Our Website. We may make changes to the material on Our Websites, or to the products and prices described in it, at any time without notice.
- p. Without limiting Our liability under these Terms for Content that You purchase, the material on Our Website is provided "as is", without any conditions, warranties or other terms of any kind. Accordingly, to the maximum extent permitted by law, We provide you with Our Websites on the basis that all representations, warranties, conditions and other terms (including, without limitation, the conditions implied by law of satisfactory quality, fitness for purpose and the use of reasonable care and skill) which but for this legal notice might have effect in relation to Our Websites are excluded. This does not affect Your statutory rights.
- q. We shall not be, nor shall any authors be, held liable for any damage or loss that You incur arising from errors or omissions in information provided or for technical problems encountered on Websites or any other websites to which links are established. We do not accept any liability for damage to Your computer or for any loss of data that results from Your use of the Websites and We cannot guarantee that any files that You download are free from viruses, contamination or destructive features or for any problems or inadequacies with Your computer, software, email system, internet facilities, or equipment.
- r. Links to other third party websites on Our Websites are provided solely for ease of reference and Your convenience. If You use these links, You leave Our Website. We have not reviewed these third party websites and We do not have any control over, nor are We responsible for, these websites or their content or availability or for the products or services that such third parties may offer. We do not endorse or make any representations about them, or any material found there, or any results that may be obtained from using them. If You decide to access any of the third party websites linked to via Our Websites, You do so entirely at Your own risk. We give no promises or guarantees as to the availability or operation of the links and We shall not be liable for any broken or incorrectly operating link. You are not permitted to create links to Our Websites. Should You wish to link to a Website (whether by way of a hypertext link or framed content), please contact Us. Creation of any link shall be subject to such terms as We may notify from time to time and We reserve the right at any time for any reason to require You to remove or disable any link.
- s. You shall use all reasonable endeavours to ensure that End Users are made aware of and agree to the limitations and exclusions of liability set out in this clause 6.
- 7. Contribution Envirosearch® Residential and Homecheck Professional® Environmental Reports Only
- a. Nothing in this clause 7 shall operate to override or vary the provisions of clause 6. Save where expressly provided and regardless of the result of Reports, this clause 7 shall apply solely to:
 - i. Envirosearch® Residential Reports; and
 - i. Homecheck Professional ® Environmental where Our preferred risk assessment provider certifies that the level of environmental risk identified in the report is not likely to be sufficient for the property to be described as "contaminated land" as defined by section 78(A)2 of Part IIA of the Environmental Protection Act 1990 and where Our preferred risk assessment provider should have identified such risk.
- We are prepared to offer, on a discretionary basis without any admission or inference of liability, a contribution towards the costs of

- any remediation works required under a Notice (as defined below) on the terms of this clause 7 ("the Contribution") subject to us reserving the right to withdraw the offer of a contribution at any time.
- c. In the event that a Remediation Notice is served on the First Purchaser or First Purchaser's Lender of a Property Site under Part IIA of the Environmental Protection Act 1990 ("the Notice") We may, at our absolute discretion, contribute to the cost of such works as either the First Purchaser or First Purchaser's Lender (but not both) are required to carry out under the Notice subject to the provisions of this clause 7 and on the following terms:
 - the Contribution shall only apply to contamination or a pollution incident present or having occurred prior to the date of the Report;
 - ii. the Contribution shall only apply where the Property Site is a single residential dwelling house or a single residential flat within a block of flats. For the avoidance of doubt, this obligation does not apply to any commercial property, nor to any Property Site being developed or redeveloped whether for residential purposes or otherwise;
 - iii. the Contribution is strictly limited to the cost of works at the Property Site and at no other site; and
 - the Contribution will not be paid in respect of any of the following: (1) radioactive contamination of whatsoever nature; (2) asbestos or asbestos-containing materials on or in structures or services serving the Property Site. For the avoidance of doubt, We may contribute towards asbestos in the ground; (3) the intentional disregard of or knowing wilful or deliberate non-compliance by any owner or occupier of the Property Site with any statute, regulation, administrative complaint, notice of violation, or notice letter of any Regulatory Authority; (5) any condition which is known or ought reasonably to have been known to the First Purchaser or the First Purchaser's Lender prior to the purchase of the Report; (6) any condition which is caused by acts of war or an act of terrorism; (7) any property belonging to or in the custody or control of the First Purchaser which does not form a fixed part of the Property Site or the structure; and/or (8) any losses incurred following a material change in use of, alteration or development of the Property Site.
- d. Without prejudice to Your other rights and remedies under the Agreement, the maximum sum that may be contributed by Us in respect of any Contribution shall be limited to; £100,000 for Homecheck Professional® Reports; £150,000 for Envirosearch® Residential Reports; and £250,000 for RiskView Residential Reports. In the event that more than one Report is purchased on the Property Site the Contribution shall only be considered under the first Report purchased by or on behalf of any First Purchaser or First Purchaser's Lender and no Contribution shall be considered in respect of subsequent Reports purchased by or on behalf of such First Purchaser, First Purchaser's Lender or any person connected to them.
- We shall only consider a Contribution where the Notice is served within 36 months of the issue date of the Report.
- f. Any rights to a Contribution under this clause 7 are not assignable in the event of a sale of the Property Site and We shall not make any Contribution after the date of completion of such sale.
- g. In the event the First Purchaser or First Purchaser's Lender wishes to claim any Contribution, it shall notify Us in writing within 3 months of the date of the Notice. The First Purchaser or First Purchaser's Lender (as applicable) shall comply with all Our reasonable requirements with regard to the commission and conduct of the remediation works to be carried out under the Notice, and in the event the First Purchaser or First Purchaser's Lender (as applicable) does not do so, including without limitation, obtaining Our prior written consent to any estimates for such works or complying with any other reasonable request by Us, We shall not be required to pay any Contribution. Notwithstanding the payment of the Contribution by Us the First Purchaser or First Purchaser's Lender as applicable shall take all reasonable steps to mitigate any costs incurred in connection with the conduct of works required under the terms of any Notice.

h. In the event that the First Purchaser or First Purchaser's Lender receives any communication from a statutory authority to the effect that there is an intent to serve a notice received under Part IIA of the Environmental Protection Act 1990 You shall use reasonable endeavours to ensure that they advise Us within a maximum period of two months from receipt of such communication. This clause 7.h and the service of any notice under it shall not affect the provisions of clauses 7.e and 7.g, and any such communications, even if advised to Us will not operate as notice under clause 7.e.

8. Assignment and Sub-contracting

- a. We shall be entitled to assign or transfer the Agreement.
- b. The Agreement is personal to You. You shall not assign, transfer, sublicence or otherwise deal with any of Your rights and obligations under the Agreement without Our prior written consent.
- c. We may authorise or allow Our contractors and other third parties to provide to Us and/or to You services necessary or related to the Services and to perform Our obligations and exercise Our rights under these Terms, which may include collecting payment on Our behalf.

9. Events Beyond Our Control

a. Neither party to the Agreement shall be liable for any delay or failure to perform their obligations caused by any circumstance beyond their control, and such party shall be entitled to a reasonable extension of time for the performance of such obligation.

10. Complaints and Dispute Resolution

- a. Any complaints in relation to the Services should, in the first instance, be in writing addressed to the Customer Service Support Manager at Our registered office. We will (or Our agents will) respond to any such complaints in writing as soon as practicably possible. Alternatively you may wish to make a complaint to The Property Ombudsman by contacting them at https://www.tpos.co.uk/.
- b. If any dispute arises out of or in connection with the Terms of the Agreement or their validity ("Dispute") the parties undertake, subject to clause 10.c, that prior to commencement of court proceedings they will negotiate in good faith to settle such Dispute by mediation in accordance with the Centre for Effective Dispute Resolution Model Mediation Procedure as in force from time to time, which Procedure is deemed to be incorporated by reference into this clause. Unless otherwise agreed between the parties, the mediator will be nominated by the Centre for Effective Dispute Resolution. To initiate the mediation a party shall give notice in writing to the other party to the dispute requesting a mediation. The mediation will start not later than 21 days after the date of service of such notice. If the Dispute has not been resolved to the mutual satisfaction of the parties within 60 days (or such other period as they shall agree) after the date of service of such notice then either party may refer the Dispute to the courts in accordance with clause 11.f.
- c. Clause 10.b shall be without prejudice to the rights of termination stated in clause 4.b and in addition shall not prevent Us from:
 - applying for injunctive relief in the case of: (1) breach or threatened breach of confidentiality; or (2) infringement or threatened infringement of Our or Our Suppliers' Intellectual Property Rights; or
- ii. pursuing a debt claim for the payment of the Fees.

11. General

- a. If any provision of the Agreement is found by either a court or other competent authority to be void, invalid, illegal or unenforceable, that provision shall be deemed to be deleted from the Agreement and never to have formed part of the Agreement and the remaining provisions shall continue in full force and effect.
- b. No delay, failure or omission on Our, or any Supplier's, part in enforcing, exercising or pursuing any right, power, privilege, claim or remedy conferred by or arising under the Agreement or by law shall be deemed to be or construed as a waiver of that or any other right, power, privilege, claim or remedy, nor shall any single or partial exercise of any such right, power, privilege, claim or remedy preclude

the exercise of that or any other right, power, privilege, claim or remedy.

- c. Our privacy policy as displayed on Our Website and updated from time to time governs the use that We shall make of any information provided by You or an End User.
- d. A person who is not a party to any contract made pursuant to these Terms shall have no right under the Contract (Rights of Third Parties) Act 1999 to enforce any terms of the Agreement and We shall not be liable to any such third party in respect of the Products, save that any Supplier may enforce any of these terms and conditions against You in accordance with the Contracts (Rights of Third Parties) Act 1999. Notwithstanding any other provisions of the Agreement, We may rescind or vary the Agreement in accordance with its terms without the consent of the Suppliers and accordingly section 2(1) of the Contracts (Rights of Third Parties) Act 1999 shall not apply.
- e. You shall ensure that each End User agrees to comply with and is bound by the Terms and shall procure that We may in Our own right enforce such terms and conditions against the End User pursuant to the Contracts (Rights of Third Parties) Act 1999.
- f. The Agreement and any non-contractual obligations arising out of or in connection with it shall be governed by and construed in accordance with the laws of England and, subject to clause 10.b, each party irrevocably submits to the exclusive jurisdiction of the courts of England and Wales.

Version 9.0. Last updated: October 2020 © Landmark Information Group 2020.

APPENDIX C

Borehole and Trial Pit Logs

		SP Asso	ociates	TEST PIT NUMBER TE
CLIENT	Mr. F	P. Hunt		PROJECT NAME The Bannutt
PROJEC	T NUN	WBER _	S1735	PROJECT LOCATION Bringsty
DATE ST	TARTE	D 14/4	/21 COMPLETED 14/4/21	GROUND ELEVATION TEST PIT SIZE
EXCAVA	TION	CONTRA	ACTOR	GROUND WATER LEVELS:
EXCAVA	TION	METHO	7 Trial Pit	AT TIME OF EXCAVATION
LOGGED	BY_	PVC	CHECKED BY SMP	AT END OF EXCAVATION
NOTES	Trial	pit rema	ined stable and dry.	AFTER EXCAVATION
DEPTH (m)	SAMPLE TYPE NUMBER	GRAPHIC		MATERIAL DESCRIPTION
		37.7	Brown, silty CLAY (Topsoil)	
-		11. 11.	.30	
-			Firm, brown, friable CLAY (Weathered	d Raglan Formation)
1				
-				
1				
		1	.10	Dealer Francisco
-			Stiff, brown, slightly silty CLAY (Weath	nered Ragian Formation)
-				
-			-	
		Y/////11	.90	Bottom of test pit at 1.90 meters.
				Ť.

Les	5	SP Associates			BORING NUMBER BH
	Mr. P	P. Hunt IBER _S1735			
DATE S	STARTE	D 27/4/21	COMP	_ETED _27/4/21	GROUND ELEVATION HOLE SIZE GROUND WATER LEVELS:
LOGGE	D BY _	PVC	CHECK	GED BY SMP 3m slotted.	AT END OF DRILLING
DEPTH (m)	SAMPLE TYPE NUMBER	TESTS	GRAPHIC LOG		MATERIAL DESCRIPTION
-	UD 1		0.20	Loose, dark brown, sil Ground) Firm, red brown, slight	ty SAND with some fine to medium, sub-angular to rounded gravel (Made tly sandy CLAY
1	UD 2	SPT N @ 1m = 6	1.00	Soft to firm, red brown	, sandy CLAY
2	UD 3	SPT N @ 2m = 10	2.30	Firm, red brown, slight	
3	UD 4	SPT N @ 3m = 18	3.70	Firm, red brown CLAY	with occasional fine to medium, sub-angular to rounded gravel
4	SPT 5	SPT N @ 4m = 50+	4.45	Still, led blowli GEAT	
			k/////a.40		Bottom of borehole at 4.45 meters.

IENT	Mr. P	. Hunt		PROJECT NAME The Bannutt
	C			PROJECT LOCATION Bringsty
TE S	TARTE	D _27/4/21	COMP	LETED 27/4/21 GROUND ELEVATION HOLE SIZE
ILLIN	G CON	TRACTOR		GROUND WATER LEVELS:
		HOD Window Sa		AT TIME OF DRILLING
				KED BY SMP AT END OF DRILLING
TES	Borer	lole remained dry.	T T	AFTER DRILLING
(m)	SAMPLE TYPE NUMBER	TESTS	GRAPHIC	MATERIAL DESCRIPTION
-	Г		11 - 24 12 . 20 pt. 27	Soft to firm, red brown, very sandy CLAY
	UD 1		0.50	Firm, red brown, slightly sandy CLAY
1			1.00	Firm, becoming stiff, red brown CLAY with occasional fine to medium, sub-angular to rounded grav
1	UD			
-	2	SPT N @ 1m = 11		
2				
-				
-	UD 3	SPT N @ 2m = 20		
	3			
3				
	SPT 4	SPT N @ 3m = 50+	3.45	
				Bottom of borehole at 3.45 meters.

r gr	S	P Associates			BORING NUMBER B
LIENT N	_ 1г. Р.	Hunt			PROJECT NAME The Bannutt
		BER _ S1735			PROJECT LOCATION Bringsty
					GROUND ELEVATION HOLE SIZE
					_ GROUND WATER LEVELS:
		HOD Window Sa		KED BY SMP	Control (Control Control Contr
				CED BY SIMP	
0123 _5	OTETT	ole femanica dry.			ALIER DISELING
(m) SAMPLE TYPE	NUMBER	TESTS	GRAPHIC LOG		MATERIAL DESCRIPTION
	\rightarrow		3,18, Vp	Brown, sandy CLAY (Topsoil)
	D		0.30	Firm, red brown, sligh	itly sandy CLAY
	1				
1			1.00		
-				Firm, becoming stiff, I	red brown, slightly sandy CLAY
	JD 2	SPT N @ 1m = 15			
	-				
2	DT				
	3	SPT N @ 2m = 50+	2.45		

	5	SP Associates			BORING NU	PAGE 1 O
LIENT	Mr. F	P. Hunt			PROJECT NAME The Bannutt	
ROJE	CT NUN	MBER S1735			PROJECT LOCATION Bringsty	
ATE S	TARTE	D 27/4/21	COM	PLETED _27/4/21	GROUND ELEVATION HOLE SIZE	
					GROUND WATER LEVELS:	
		HOD Window Sa			=1 () 10 April 10 April 10 Day = 10 Da	
				KED BY SMP		
OTES	Stand	apipe installed to 3r	n, im piain	, 2m slotted.	AFTER DRILLING	
(m)	SAMPLE TYPE NUMBER	TESTS	GRAPHIC LOG		MATERIAL DESCRIPTION	
-	UD 1			Soft to firm, red brov	vn CLAY	
-	UD 2	SPT N @ 1m = 12	1.00	Firm, red brown, slig	htly sandy CLAY	
-	UD 3	SPT N @ 2m = 20	2.70	Stiff, red brown CLA	Y	
-	SPT	SPT N @ 3m = 50+				
-/			3.45		Bottom of borehole at 3.45 meters.	
						1

MBER <u>\$1735</u> ED <u>27/4/21</u> NTRACTOR THOD <u>Window Sa</u> PVC	COMP	PROJECT NAME The Bannutt PROJECT LOCATION Bringsty PLETED 27/4/21 GROUND ELEVATION HOLE SIZE GROUND WATER LEVELS: AT TIME OF DRILLING AFTER DRILLING MATERIAL DESCRIPTION Soft to firm, red brown, slightly sandy CLAY Stiff, friable, grey with a red brown mottle CLAY with occasional fine to medium, sub-angular to rounded gravel
ED 27/4/21 NTRACTOR THOD Window Sa PVC shole remained dry. TESTS SPT N @ 1m = 4	COMP CHECK CHECK	GROUND WATER LEVELS: AT TIME OF DRILLING AFTER DRILLING MATERIAL DESCRIPTION Soft to firm, red brown, slightly sandy CLAY Stiff, friable, grey with a red brown mottle CLAY with occasional fine to medium, sub-angular for
NTRACTOR	CHECI CHECI	GROUND WATER LEVELS: AT TIME OF DRILLING AT END OF DRILLING AFTER DRILLING MATERIAL DESCRIPTION Soft to firm, red brown, slightly sandy CLAY Stiff, friable, grey with a red brown mottle CLAY with occasional fine to medium, sub-angular to
PVC shole remained dry. TESTS SPT N @ 1m = 4	CHECI CHECI	AT TIME OF DRILLING AT END OF DRILLING AFTER DRILLING MATERIAL DESCRIPTION Soft to firm, red brown, slightly sandy CLAY Stiff, friable, grey with a red brown mottle CLAY with occasional fine to medium, sub-angular to
PVC chole remained dry. TESTS SPT N @ 1m = 4	GRAPHIC	AFTER DRILLING MATERIAL DESCRIPTION Soft to firm, red brown, slightly sandy CLAY Stiff, friable, grey with a red brown mottle CLAY with occasional fine to medium, sub-angular to
TESTS SPT N @ 1m = 4	GRAPHIC	MATERIAL DESCRIPTION Soft to firm, red brown, slightly sandy CLAY Stiff, friable, grey with a red brown mottle CLAY with occasional fine to medium, sub-angular to
TESTS SPT N @ 1m = 4	GRAPHIC	MATERIAL DESCRIPTION Soft to firm, red brown, slightly sandy CLAY Stiff, friable, grey with a red brown mottle CLAY with occasional fine to medium, sub-angular to
SPT N @ 1m = 4		Soft to firm, red brown, slightly sandy CLAY Stiff, friable, grey with a red brown mottle CLAY with occasional fine to medium, sub-angular to
	2.30	Stiff, friable, grey with a red brown mottle CLAY with occasional fine to medium, sub-angular to
	2.30	Stiff, friable, grey with a red brown mottle CLAY with occasional fine to medium, sub-angular to
	2,30	Stiff, friable, grey with a red brown mottle CLAY with occasional fine to medium, sub-angular to
	2.30	Stiff, friable, grey with a red brown mottle CLAY with occasional fine to medium, sub-angular to
	2,30	Stiff, friable, grey with a red brown mottle CLAY with occasional fine to medium, sub-angular to
	2.30	Stiff, friable, grey with a red brown mottle CLAY with occasional fine to medium, sub-angular to
	2.30	Stiff, friable, grey with a red brown mottle CLAY with occasional fine to medium, sub-angular to
SPT N @ 2m = 9	2.30	Stiff, friable, grey with a red brown mottle CLAY with occasional fine to medium, sub-angular to
SPT N @ 2m = 9	2.30	Stiff, friable, grey with a red brown mottle CLAY with occasional fine to medium, sub-angular to
SPT N @ 2m = 9		Stiff, triable, grey with a red brown mottle CLAY with occasional fine to medium, sub-angular to rounded gravel
	19/19/2	
	6/30/101	
SPT N @ 3m = 27		
COT N @ 4m = 50		
SPIN@4m = 50+	4.45	
		Bottom of borehole at 4.45 meters.
		· ·
	SPT N @ 4m = 50+	

APPENDIX D

Laboratory Test Results



💸 eurofins

Chemtest

Eurofins Chemtest Ltd Depot Road Newmarket CB8 0AL Tel: 01638 606070

Email: info@chemtest.com

Final Report

Report No.:

21-15789-1

Initial Date of Issue:

19-May-2021

Client

SP Associates Ltd

Client Address:

1 Market Place

Warwick Warwickshire CV34 4SA

Contact(s):

Steven Peters

Project

S1735 The Bannutt, Bringsty

Quotation No.:

Date Received:

13-May-2021

Order No.:

Date Instructed:

13-May-2021

No. of Samples:

5

Turnaround (Wkdays):

Results Due:

19-May-2021

Date Approved:

19-May-2021

Approved By:

Details:

Glynn Harvey, Technical Manager

Results - Soil

Project: S1735 The Bannutt, Bringsty

Client: SP Associates Ltd	ALL SUPER	CONTRACTOR OF STREET	itest Jo	H-3/11/04/91/05/05/05	21-15789	21-15789	21-15789	21-15789	21-15789
Quotation No.:	Ch		t Samp		1199176	1199177	1199178	1199179	1199180
			nple Lo		BH1	BH2	BH3	BH4	BH5
			Sample	Type:	SOIL	SOIL	SOIL	SOIL	SOIL
		T	op Dep	th (m):	0.00	0.00	0.30	0.00	0.00
		Botte	om Dep	th (m):	0.20	0.50	1.00	0.50	0.50
		[Date Sa	mpled:	27-Apr-2021	27-Apr-2021	27-Apr-2021	27-Apr-2021	27-Apr-202
			Asbesto	s Lab:	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY
Determinand	Accred.	SOP	Units	LOD	N. S. C.				建制器机构
ACM Type	U	2192		N/A	7-1	-	-	-	-
Asbestos Identification	U	2192		N/A	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbesto Detected
ACM Detection Stage	U	2192		N/A		-		180	-
Moisture	N	2030	%	0.020	18	17	18	16	17
pH	U	2010		4.0	8.5	7.2	7.6	8.7	7.7
Sulphate (2:1 Water Soluble) as SO4	U	2120	g/l	0.010	0.039	< 0.010	< 0.010	< 0.010	< 0.010
Arsenic	U		mg/kg	1.0	7.8	4.3	13	6.7	4.0
Cadmium	U	2450		0.10	0.14	< 0.10	< 0.10	< 0.10	< 0.10
Chromium	U	2450	mg/kg	1.0	25	25	71	25	29
Copper	U	2450	mg/kg	0.50	18	11	23	12	9.5
Mercury	U	2450	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Nickel	U		ma/ka	0.50	30	29	92	30	35
Lead	U	2450	mg/kg	0.50	36	14	31	18	10
Selenium	Ü	2450	mg/kg	0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
Zinc	U		mg/kg	0.50	63	40	83	34	39
Aliphatic TPH >C5-C6	N		mg/kg	1.0	[B] < 1.0	[B] < 1.0	[B] < 1.0	[B] < 1.0	[B] < 1.0
Aliphatic TPH >C6-C8	N		mg/kg	1.0	[B] < 1.0	[B] < 1.0	[B] < 1.0	[B] < 1.0	[B] < 1.0
Aliphatic TPH >C8-C10	U		mg/kg	1.0	[B] < 1.0	[B] < 1.0	[B] < 1.0	[B] < 1.0	[B] < 1.0
Aliphatic TPH >C10-C12	U	and the second	mg/kg	1.0	[B] < 1.0	[B] < 1.0	[B] < 1.0	[B] < 1.0	[B] < 1.0
Aliphatic TPH >C12-C16	U	-	mg/kg	1.0	[B] < 1.0	[B] < 1.0	[B] < 1.0	[B] < 1.0	[B] < 1.0
Aliphatic TPH >C16-C21	U		mg/kg	1.0	[B] < 1.0	[B] < 1.0	[B] < 1.0	[B] < 1.0	[B] < 1.0
Aliphatic TPH >C21-C35	U		mg/kg	1.0	[B] < 1.0	[B] < 1.0	[B] < 1.0	[B] < 1.0	[B] < 1.0
Aliphatic TPH >C35-C44	N		mg/kg	1.0	[B] < 1.0	[B] < 1.0	[B] < 1.0	[B] < 1.0	[B] < 1.0
Total Aliphatic Hydrocarbons	N		mg/kg	5.0	[B] < 5.0	[B] < 5.0	[B] < 5.0	[B] < 5.0	[B] < 5.0
Aromatic TPH >C5-C7	N		mg/kg	1.0	[B] < 1.0	[B] < 1.0	[B] < 1.0	[B] < 1.0	[B] < 1.0
Aromatic TPH >C7-C8	N		mg/kg	1.0	[B] < 1.0	[B] < 1.0	[B] < 1.0	[B] < 1.0	[B] < 1.0
Aromatic TPH >C8-C10	U		mg/kg	1.0	[B] < 1.0	[B] < 1.0	[B] < 1.0	[B] < 1.0	[B] < 1.0
Aromatic TPH >C10-C12	U		mg/kg	1.0	[B] < 1.0	[B] < 1.0	[B] < 1.0	[B] < 1.0	[B] < 1.0
Aromatic TPH >C12-C16	U	-	mg/kg	1.0	[B] < 1.0	[B] < 1.0	[B] < 1.0	[B] < 1.0	[B] < 1.0
Aromatic TPH >C16-C21	U		mg/kg	1.0	[B] < 1.0	[B] < 1.0	[B] < 1.0	[B] < 1.0	[B] < 1.0
Aromatic TPH >C21-C35	U		mg/kg	1.0	[B] < 1.0	[B] < 1.0	[B] < 1.0	[B] < 1.0	[B] < 1.0
Aromatic TPH >C35-C44	N		mg/kg	1.0	[B] < 1.0	[B] < 1.0	[B] < 1.0	[B] < 1.0	[B] < 1.0
Total Aromatic Hydrocarbons	N		mg/kg	5.0	[B] < 5.0	[B] < 5.0	[B] < 5.0	[B] < 5.0	[B] < 5.0
Total Petroleum Hydrocarbons	N	- Commonweal	mg/kg	10.0	[B] < 10	[B] < 10	[B] < 10	[B] < 10	[B] < 10
Naphthalene	U		mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthylene	U		mg/kg		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene	U		mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluorene	U		mg/kg		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Phenanthrene	Ü		mg/kg		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Anthracene	U		mg/kg		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10

Results - Soil

Project: S1735 The Bannutt, Bringsty

Client: SP Associates Ltd		Chem	test Jo	b No.:	21-15789	21-15789	21-15789	21-15789	21-15789
Quotation No.:	Ch	emtes	t Samp	le ID.:	1199176	1199177	1199178	1199179	1199180
		Sar	nple Lo	cation:	BH1	BH2	BH3	BH4	BH5
			Sample	Type:	SOIL	SOIL	SOIL	SOIL 0.00 0.50 27-Apr-2021	SOIL 0.00 0.50 27-Apr-2021
		7	op Dep	th (m):	0.00	0.00	0.30		
		Botte	om Dep	th (m):	0.20	0.50 27-Apr-2021	1.00 27-Apr-2021		
			Date Sar	mpled:	27-Apr-2021				
			Asbesto	s Lab:	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY
Determinand	Accred.	SOP	Units	LOD			DICKS CONTRACT	Part of the Sale	
Fluoranthene	U	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Pyrene	U	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[a]anthracene	U	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Chrysene	U	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[b]fluoranthene	U	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[k]fluoranthene	U	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[a]pyrene	U	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Indeno(1,2,3-c,d)Pyrene	U	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Dibenz(a,h)Anthracene	U	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[g,h,i]perylene	U	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Total Of 16 PAH's	U	2700	mg/kg	2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Total Phenois	U	2920	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10

Deviations

In accordance with UKAS Policy on Deviating Samples TPS 63. Chemtest have a procedure to ensure 'upon receipt of each sample a competent laboratory shall assess whether the sample is suitable with regard to the requested test(s)'. This policy and the respective holding times applied, can be supplied upon request. The reason a sample is declared as deviating is detailed below. Where applicable the analysis remains UKAS/MCERTs accredited but the results may be compromised.

Sample:	Sample Ref:	Sample ID:	Sample Location:	Sampled Date:	Deviation Code(s):	Containers Received:
1199176			BH1	27-Apr-2021	В	Amber Glass 250ml
1199176			BH1	27-Apr-2021	В	Plastic Tub 500g
1199177			BH2	27-Apr-2021	В	Amber Glass 250ml
1199177			BH2	27-Apr-2021	В	Plastic Tub 500g
1199178			внз	27-Apr-2021	В	Amber Glass 250ml
1199178			ВН3	27-Apr-2021	В	Plastic Tub 500g
1199179			ВН4	27-Apr-2021	В	Amber Glass 250ml
1199179	- 4 7-		BH4	27-Apr-2021	В	Plastic Tub 500g
1199180			BH5	27-Apr-2021	В	Amber Glass 250ml
1199180			BH5	27-Apr-2021	В	Plastic Tub 500g

Test Methods

SOP	Title	Parameters included	Method summary
2010	pH Value of Soils	рН	pH Meter
2030	Moisture and Stone Content of Soils(Requirement of MCERTS)	Moisture content	Determination of moisture content of soil as a percentage of its as received mass obtained at <37°C.
2040	Soil Description(Requirement of MCERTS)	Soil description	As received soll is described based upon BS5930
2120	Water Soluble Boron, Sulphate, Magnesium & Chromium	Boron; Sulphate; Magnesium; Chromium	Aqueous extraction / ICP-OES
2192	Asbestos	Asbestos	Polarised light microscopy / Gravimetry
2450	Acid Soluble Metals in Soils	Metals, including: Arsenic; Barium; Beryllium; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Vanadium; Zinc	Acid digestion followed by determination of metals in extract by ICP-MS.
2680	TPH A/A Split	Aliphatics: >C5-C6, >C6-C8, >C8-C10, >C10-C12, >C12-C16, >C16-C21, >C21-C35, >C35-C44Aromatics: >C5-C7, >C7-C8, >C8-C10, >C10-C12, >C12-C16, >C16-C21, >C21-C35, >C35-C44	Dichloromethane extraction / GCxGC FID detection
2700	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Soil by GC-FID	Acenaphthene; Acenaphthylene; Anthracene; Benzo[a]Anthracene; Benzo[a]Pyrene; Benzo[b]Fluoranthene; Benzo[ghi]Perylene; Benzo[k]Fluoranthene; Chrysene; Dibenz[ah]Anthracene; Fluoranthene; Fluorene; Indeno[123cd]Pyrene; Naphthalene; Phenanthrene; Pyrene	Dichloromethane extraction / GC-FID (GC-FID detection is non-selective and can be subject to interference from co-eluting compounds)
2920	Phenols in Soils by HPLC	Phenolic compounds including Resorcinol, Phenol, Methylphenols, Dimethylphenols, 1- Naphthol and TrimethylphenolsNote: chlorophenols are excluded.	60:40 methanol/water mixture extraction, followed by HPLC determination using electrochemical detection.

Report Information

Key	
U	UKAS accredited
M	MCERTS and UKAS accredited
N	Unaccredited
S	This analysis has been subcontracted to a UKAS accredited laboratory that is accredited for this analysis
SN	This analysis has been subcontracted to a UKAS accredited laboratory that is not accredited for this analysis
Т	This analysis has been subcontracted to an unaccredited laboratory
I/S	Insufficient Sample
U/S	Unsuitable Sample
N/E	not evaluated
<	"less than"
>	"greater than"
SOP	Standard operating procedure
LOD	Limit of detection
	and the second s

Comments or interpretations are beyond the scope of UKAS accreditation

The results relate only to the items tested

Uncertainty of measurement for the determinands tested are available upon request

None of the results in this report have been recovery corrected

All results are expressed on a dry weight basis

The following tests were analysed on samples as received and the results subsequently corrected to a dry weight basis TPH, BTEX, VOCs, SVOCs, PCBs, Phenols

For all other tests the samples were dried at < 37°C prior to analysis

All Asbestos testing is performed at the indicated laboratory

Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1

Sample Deviation Codes

- A Date of sampling not supplied
- B Sample age exceeds stability time (sampling to extraction)
- C Sample not received in appropriate containers
- D Broken Container
- E Insufficient Sample (Applies to LOI in Trommel Fines Only)

Sample Retention and Disposal

All soil samples will be retained for a period of 45 days from the date of receipt All water samples will be retained for 14 days from the date of receipt Charges may apply to extended sample storage

If you require extended retention of samples, please email your requirements to: <u>customerservices@chemtest.com</u> SOCOTEC UK Limited Leofric Business Park Coventry Telephone: +44(0) 2475 310700





Liquid and Plastic Limits and Plasticity Indices

Report No:

DAM0081327/972/M1

Report Date:

21 May 2021

Client:

SP ASSOCIATES LTD

Our Contract Ref: 51062751

Tested By:

SOCOTEC Central

Address:

1 MARKET PLACE

WARWICK WARWICKSHIRE

Date Sampled:

Not given

CV34 4SA

Date Received:

13 May 2021

Client Contact:

Not Advised

Date Tested:

19 May 2021

Site:

The Bannutt

DISTURBED

Material Supplier:

Client

Sample Type:

Material Source:

Sampling Certificate: Samples Submitted by:

Not Received Client

Method of preparation:

BS1377-1:1990 7.4.3 & BS 1377-2:1990 4.2

Sampled by:

Client

Results:

Sample Reference	Client's Ref	Location	Description	Moisture Content (%)	Liquid Limit	Plastic Limit	Plasticity Index	% Passing on 425 µm
45381971		BH1 1.00 - 2.00	Red CLAY with silt	21	35	21	14	**100
45381972		BH3 1.00 - 2.00	Red CLAY with silt	20	36	21	15	**100

^{*} Washed over 425µm BS Test Sieve

Certified that the Liquid and Plastic Limits and Plasticity Indices were determined in accordance with BS1377-2:1990 Clauses 4.4, 5.0 and 5.4 respectively Certified that the Moisture Content was determined in accordance with BS1377-2:1990 3.2

Signed:



Maria Chandler - Laboratory Manager

for and on behalf of SOCOTEC UK Limited

Page 1 of 1

Form S1 v9 7/06

^{**} As received, coarse particles removed by hand prior to test







Moisture Content

Report No:

DAM0081327/972/M2

Report Date:

21 May 2021

Client:

Our Contract Ref:

51062751

SP ASSOCIATES LTD

Tested By:

SOCOTEC Central

Address:

1 Market Place Warwick Warwickshire CV34 4SA

Date Sampled:

Not given

GB

13 May 2021

Date Received:

Client Contact: Site:

Not Advised

Date Tested:

19 May 2021

Sampling Certificate:

Not Received

Material Supplier:

Client

Samples Submitted by:

Client

Material Source:

Site

Sampled by:

Client

Method of preparation:

BS1377-1:1990 7.4.2

Results:

Sample Reference	Clients Reference	Location	Moisture Content(%)	Sample Type	Description
45381971		BH1	21	Disturbed	Red CLAY with silt
45381972		ВН3	20	Disturbed	Red CLAY with silt

Certified that the Moisture Content were determined in accordance with BS1377-2:1990 3.2

Signed:



Maria Chandler - Laboratory Manager for and on behalf of SOCOTEC UK Limited

Page 1 of 1

Form S23 v8 08/16

APPENDIX E

Soakaway Test Data

SP ASSOCIATES SOAKAWAY TEST

1 Market Place, Warwick, CV34 4SA Tel: 01926 494271

Site: The Bannutt, Bringsty

Job No: S1735

Test Date: 14/04/2021 Report date: 19/04/21

Test Method: BRE 365 (2007)

Trial Pit Number: TP1

Depth: 1.9m, Length 1.4m Width 0.4m

Start Water Depth for Analysis - Datum (mbgl): 0.80

75% Effective Depth (mbgl): -

50% Effective Depth (mbgl): -

Elapsed Time (Mins):

25% Effective Depth (mbgl): -

Elapsed Time (Mins):

Base of Soakage Zone (mbgl): 1.9

Volume outflow between 75% and 25% effective depth (m3):

Mean surface area of outflow (m 2):

Time for outflow between 75% and 25% effective depth (mins):

Elapsed Time (minutes)	Water Depth (m below datum)	Elapsed Time (minutes)	Water Depth (m below datum)	
0	0.00	90	0.08	
1	0.00	100	0.08	
2	0.00	110	0.085	
3	0.00	120	0.09 0.09 0.09 0.09 0.10	
4	0.00	130		
5	0.01	140		
6	0.01	150		
7	0.01	160		
8	0.01	170	0.10	
9	0.01	180	0.10	
10	0.01	190	0.10	
15	0.015	200	0.11	
20	0.02	210	0.11	
25	0.025	220 230 240	0.11 0.12 0.12	
30	0.03			
40	0.04			
50	0.05	250	0.12	
60	0.065	260	0.13	
70	0.07	270	0.13	
80	0.075	280	0.13	

Soil Infiltration Rate (m/s): insufficient drainage achieved.