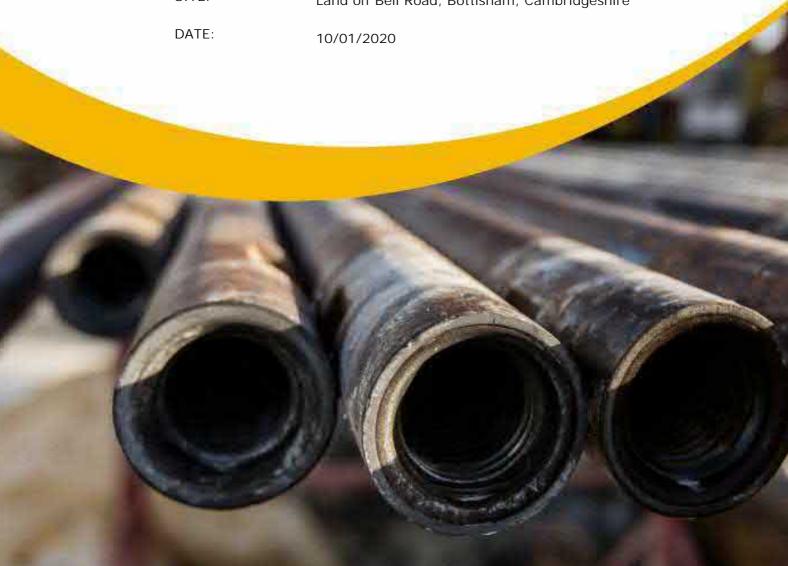


GEOSPHERE ENVIRONMENTAL

REPORT NUMBER: 4159,GI,GROUND/AT,LF/10-01-20/V1

SITE: Land off Bell Road, Bottisham, Cambridgeshire





DOCUMENT CONTROL SHEET

Report Number: 4159,GI,GROUND/AT,LF/10-01-20/V1

Client: The Master & Fellows of Peterhouse in the University of Cambridge c/o Bidwells

LLP

Project Name: Land off Bell Road, Bottisham, Cambridgeshire

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Limit of Reliance:

This report is based on the site findings at the time of the associated walkover/site investigation works and information provided by the client at the time of writing. Should site conditions alter or development proposals alter, a reassessment of the enclosed findings should be undertaken. Refer to Appendix 1 for full details of report limitations.

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VERSION RECORD

Version Date Document Revision Details Prepared By: Admin



EXECUTIVE SUMMARY

DESK STUDY DATA	A REVIEW								
Site Location /	The site was located to the east of Bell Road in the village of Bottisham								
Description	approximately 8.4km to the northeast of Cambridge Railway Station. The site								
	may be located by National Grid Reference (NGR) TL 54174 60312.								
	At the time this report was prepared, the site was used as arable farmland.								
History	The earliest available historical map, dated 1887, indicated the site to comprise								
	undeveloped land. Two elongated narrow ponds / drainage ditches were located								
	along the eastern site boundary, with a drainage ditch along the northern								
	boundary, and there was a pond 15m east of the site.								
	Mapping indicated the site has remained undeveloped since the earliest available								
	map. The narrow ponds / drainage ditches along the eastern boundary appeared								
	to have been infilled sometime between 1996 and 1999, at the same time that								
	the shape of the pond 15m east of the site altered.								
	The land immediately north of the site underwent residential development								
	between 2000 and 2019.								
Conceptual	Two potential sources of contamination were identified at the site:								
Model	 Infill material associated with the pond / drainage ditches in the east of the 								
	site and 15m offsite to the east; and								
	Carbon dioxide generation from the underlying chalk geology								
SITE INVESTIGAT	TON DATA REVIEW								
Site Works	Site works were carried out between 08 and 11 October 2019 and comprised the								
Site Works	following:								
	Formation of ten exploratory boreholes using windowless sampler								
	techniques, to depths between 2m and 4m bgl;								
	Installation of two ground gas monitoring wells; The product of the produ								
	Excavation of three trial pits using a mechanical excavator, to depths between 1.6m and 1.0m bal, and subsequent infiltration testing in line with								
	between 1.6m and 1.9m bgl, and subsequent infiltration testing in line with BRE 365 guidance within the pits; and								
	Associated soil logging, sampling and in-situ testing.								
	7,6555,dated 55,11 (egginig) sampling and in sita testing.								
Ground	The encountered ground conditions typically comprised a nominal amount of								
Conditions	Topsoil / Made Ground underlain by cohesive deposits.								
Gas Monitoring	Based upon the results of the gas monitoring, the site falls within the category								
	of CS-2 (low risk), indicating that some gas protection measures may be required								
Laboratory	as part of the proposed development.								
Laboratory Results	The laboratory results did not identify any of the tested analytes to be present								
Results	at levels above the relevant screening criteria.								



Advanced	Based upon the results of the laboratory testing, and that no groundwater was
Conceptual	encountered during the site works, the soils at the site are not considered to
Model	pose a risk to human health or Controlled Waters.
	The site falls within CS-2 (low risk), and therefore, gas protection measures may
	The site rails within 63-2 (low risk), and therefore, gas protection measures may
	be required at the site.
Geotechnical	The site and ground conditions are considered suitable for the adoption of a
Considerations	conventional spread foundation bearing into the West Melbury Marly Chalk
	Formation, with an NABP of 225kN/m². Foundations should penetrate all Topsoil,
	Made Ground, and superficial deposits, and found at least 150mm into
	undisturbed Chalk.
	Suspended ground floors are recommended, with a void incorporated into the
	design in order to accommodate the volume change potential of the underlying
	soils.
	It is recommended that in-situ CBR testing is undertaken, to obtain values for
	pavement design. The effect of frost heave on the proposed pavement must be
	considered.

This Executive Summary only provides a summary of the site data and its assessment. It does not provide a definitive engineering analysis and is for guidance only. It is recommended that the reader reviews the report in its entirety and any material referenced therein.



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1. INTRODUCTION

Geosphere Environmental Ltd was commissioned by Bidwells LLP on behalf of the Client, The Master & Fellows of Peterhouse in the University of Cambridge, to undertake a Phase 1 Desk Study and Phase 2 Ground Investigation for a proposed residential development at Land off Bell Road, Bottisham, Cambridgeshire.

It was understood that the site is to be developed for residential end use.

1.1 Objectives of Phase 1 - Desk Study

The primary objectives of the Desk Study were to:

- Assess the environmental sensitivity at the site and the surrounding area in relation to any suspected or known contamination which may significantly affect the site and the proposed development; and
- Indicate whether further works are required, and the nature of the works, to enable a more complete assessment of the site.

These were achieved by:

- Undertaking a walkover of the site;
- Researching and assessing the available information regarding the current site status, including recorded geology, hydrogeology and hydrology of the site and surrounding area, as well as the history of the site; and
- Developing a Conceptual Site Model.

1.2 Objectives of Phase 2 - Ground Investigation

The primary objectives of the Ground Investigation were to:

- Assess the ground conditions at the site; and
- Assess the potential risk to human health and the environment based on the findings of the investigation.

These were achieved by:

- Undertaking an intrusive investigation at the site, based upon the findings of previous site data and the scope agreed with the Client;
- Logging and sampling the soils on the site and noting any visual or olfactory evidence of contamination;



- Undertaking laboratory chemical analysis and geotechnical testing of selected soil samples to assess soil quality and ground conditions at the site;
- Installing monitoring wells for ground gas monitoring; and
- Updating the Conceptual Site Model and defining suitable remedial / mitigating and verification actions where necessary.



2. SITE SETTINGS

2.1 Site Description

The subject site was situated on the southern outskirts of the village of Bottisham, approximately 8.4km to the northeast of Cambridge Railway Station. The site may be located by National Grid Reference (NGR) TL 54174 60312.

A Site Location Plan is included as Drawing reference 4159,GI/001/Rev0 within Appendix 3.

At the time of the walkover survey, the majority of the site was occupied by arable farmland. A strip of woodland was situated to the northeast of the site, further north of which was a strip of unmaintained grassland containing a track and drainage ditch.

The site was adjoined to the north by a residential housing estate, to the west by Bell Road, and to the east and south by rural land use, namely arable farmland.

Photographic records are presented in Appendix 12 of this report.

2.2 Geological Setting

Details of the geology underlying the site have been obtained from the British Geological Survey (BGS) digital mapping at a scale of 1:50,000, which is provided within the Envirocheck Report included in Appendix 4.

2.2.1 Superficial Deposits

The geological map indicated there to be no superficial deposits underlying the site.

2.2.2 Bedrock Geology

The geological map indicated the bedrock geology underlying the site comprised the West Melbury Marly Chalk Formation.

2.2.3 Geohazards and Ground Workings

Table 1 overleaf summarises potential geohazards and ground workings which may have a potential impact upon the engineering of the proposed development:



Table 1 - Geohazards and Ground Workings												
Potential Hazard	Recorded Risk [m] / [Direction] Comments											
	Onsite	Within 250m	Within 500m									
Non-Coal Mining Areas of Great Britain.	Rare	-	-									
Collapsible Ground.	Very low	-	-									

2.3 Hydrogeological Setting

2.3.1 Underlying Aquifers

The hydrogeological data, provided within the Envirocheck Report, indicates the site to be underlain by a bedrock Principal Aquifer, namely the West Melbury Marly Chalk Formation.

The Environment Agency define Principal Aquifers as 'layers of rock or drift deposits that have high intergranular and / or fracture permeability, meaning they usually provide a high level of water storage. They may support water supply and / or river base flow on a strategic scale'.

2.3.2 Groundwater Vulnerability

The bedrock Principal Aquifer underlying the site is classed as being highly vulnerable.

The Environment Agency define areas of high groundwater vulnerability as 'areas able to easily transmit pollution to groundwater. They are characterised by high leaching soils and the absence of low permeability superficial deposits'.

Soils of high leaching potential are soils that readily transmit liquid discharges because they are either shallow or susceptible to rapid by-pass flow directly to rock, gravel or groundwater.

2.3.3 Source Protection Zones

The site was not located within a groundwater Source Protection Zone (SPZ). A total catchment (Zone 3) SPZ was indicated approximately 174m to the south of the site.

There were two groundwater abstraction wells within 500m of the site. The closest well was situated approximately 79m to the east and was used for domestic and agricultural purposes.



2.4 Hydrological Setting

The nearest surface watercourse or feature was a drainage ditch along the northernmost site boundary. A second drainage ditch was indicated immediately to the southeast of the site.

A pond was indicated roughly 15m east of the site. This was not visible at the time of the site works due to dense vegetation cover.

There were no surface water abstraction points indicated within 500m of the site.

The Envirocheck data indicates a strip of land in the north of the site to be at a low risk of surface water flooding (1 in 1000-year return).

2.5 Radon

The HPA 'Indicative Atlas of Radon' 2007 (ref. R.1), indicated the site to lie within an area where there is a probability of <1% of present or future homes being above the action level of 200Bq/m³. As such, the site is not classified as a Radon Affected Area. This is confirmed by the Building Research Establishment, Report 211, 2007 (ref. R.2).

2.6 Nitrate Vulnerable Zone

The site was located within an area designated as a nitrate vulnerable zone. The Nitrates Directive (ref. R.3) defines a nitrate vulnerable zone as:

- Surface freshwater which contains or could contain, if preventative action is not taken, nitrate concentrations greater than 50mg/l;
- Groundwater which contains or could contain, if preventative action is not taken, nitrate concentrations
 greater than 50mg/l; and / or
- Natural freshwater lakes or other freshwater bodies, estuaries, coastal waters and marine waters, which are eutrophic or may become so in the near future if protective action is not taken.



3. ENVIRONMENTAL SEARCHES

3.1 Environmental Searches Summary

The environmental searches are detailed fully within the Envirocheck report presented within Appendix 4. The most relevant findings are summarised in Table 2 below.

Table 2 - Environmenta	l Search	es Sum	mary			
	Dista	nce From	The Site	Comments		
Activity	Onsite	Within 250m	250m to 500m	[m]/[direction]		
1. Flooding		-				
BGS Groundwater Flooding Susceptibility.	Y	Y	Y	Onsite: Potential for groundwater flooding to occur at surface.		
				61m/N, 249m/SW; 249m/SE; 274m/S; 333m/S; 413m/SW: Potential for groundwater flooding of property situated below ground level.		
2. Contemporary Trade Entrie	s of Conc	ern				
Contemporary Trade Directory Entries.	-	5	15	142m/N: Pet foods and animal foods (inactive). 211m/NE: Used car dealers (inactive). 211m/NE: Garage services. 211mn/NE: Scientific apparatus & instruments (inactive). 211m/NE: Used car dealers (inactive). For >250m, see Envirocheck report page 13.		
Fuel Stations	-	1	-	206m/NE: Murco (obsolete).		
Commercial Services	-	3	5	210m/NE: Vehicle repair, testing, & servicing.		
Manufacturing and Production	-	2	5	185m/NE and 186m/NE: Industrial features. 324m/E: Livestock farming and arable farming. 392m/NE: Livestock farming. 437m/NE: Industrial features.		
Public Infrastructure	-	-	2	411m and 413m/NE: Cemetery.		
3. Designed Environmentally	Sensitive	Sites				
Areas of Adopted Green Belt	1	-	1	Onsite: East Cambridgeshire District Council, Planning Department. 262m/SW: South Cambridgeshire District Council.		
Areas of Unadopted Green Belt	1	-	1	Onsite: Submission draft. 262m/SW: Submission draft.		

Where no relevant or significant data exists for an activity, it has been removed from the summary table. All data is included within Appendix 4.



4. SITE HISTORY

4.1 Historical Maps

A review of the history of the site has been conducted based upon the historical maps included within the Envirocheck report presented in Appendix 5.

The relevant changes of the subject site and immediate surrounding area from the large-scale mapping are detailed in Table 3 below.

Table 3 - Hi	storical Summary							
Data	Potentially Contaminativ	ve Land Uses / Significant Changes						
Date	Onsite [Direction]	Offsite [Distance/Direction]						
1887 (1:2,500)	The site comprised undeveloped land. Two elongated narrow ponds / drainage ditches ran along the eastern site boundary. A drainage ditch ran west along the northernmost site boundary.	 The site was located in a rural setting, largely comprising undeveloped land. The small village of Bottisham was located approximately 100m to the northeast. Om/W: Bell Road. Om/NE: Bendyshe Farm. 15m/E: Pond. 90m/E: Moat. 						
1902 (1:2,500)	No significant changes.	No significant changes.						
1926 (1:2,500)	No significant changes.	15m/E: Pond had altered and was larger.						
1972 (1:2,500)	No significant changes.	70m/N: Pumping station.90m/N: residential development.170m/NE: Works.190m/NE: Garage.						
1978 (1:2,500)	No significant changes.	No significant changes.						
1992 (1:2,500)	No significant changes.	50m/N: Residential development.						
1996 (1:2,500)	No significant changes.	No significant changes.						
1999 (aerial photography)	The elongated narrow ponds along the eastern boundary were no longer delineable.	15m/E: Pond previously identified was smaller in size.						
2000 (1:10,000)	No significant changes.	No significant changes.						



Table 3 - Historical Summary													
Date	Potentially Contaminative Land Uses / Significant Changes												
Date	Onsite [Direction]	Offsite [Distance/Direction]											
2006 (1:10,000)	No significant changes.	Om/NE: Residential development.											
2019 (1:10,000)	No significant changes.	Om/N: Residential development.											
Notes: It should be n	oted that the dates of the maps do not a	lways correspond with the time of the surveys.											

Where no significant factors or changes occur within a map edition, it is summarised with "No significant changes".

Please note that the alignment and extent of the detailed site area in early map editions is often misaligned compared to modern mapping due to variation in mapping / digitisation processes; this is compensated for where possible within the interpretation.



5. PRELIMINARY CONCEPTUAL SITE MODEL

The Risk Assessment methodology is based upon current guidelines (ref. R.4) and legislation (refs. R.5 and R.6).

The current guidance requires that a Conceptual Model be formulated, based upon the findings of the research. The Conceptual Site Model is limited, at this stage, to the identification and assessment of potential 'hazards' identified or suspected from the results of the research; the potential 'receptors' that may be affected; and the anticipated 'pathways' to those receptors. The findings are summarised in the following subsections.

The guidance proposes a four-stage approach for the assessment of contamination and the associated risks. The four stages are listed below:

- Hazard Identification;
- Hazard Assessment;
- Risk Estimation; and
- Risk Evaluation.

In accordance with the guidance (ref. R.4) only the first two stages are addressed in the preliminary Conceptual Site Model. Should hazards exist which are a potential risk, then more intrusive investigation works are recommended.

5.1 Hazard I dentification: Onsite

The desk-based research and historical review identified the following potential sources at the site which may pose a hazard to receptors:

- Potentially infilled ground along the eastern boundary, associated with two former narrow elongated ponds; and
- Underlying Chalk Geology (potential carbon dioxide risk).

5.2 Hazard Identification: Offsite

The desk-based research and historical review identified a pond 15m east of the site which may have been partially infilled. This is considered to pose a potential hazard to the site.

5.3 Hazard Assessment

The preliminary Risk Assessment has identified a single potential source of contamination that may pose risk to human health. Potential pollutant linkages that require further consideration are presented in Table 4 overleaf.



Table 4 - Conceptual Model																
		PAT	ΓHWA	AYS:			RECEPTORS:									
Sources	Root Uptake	Direct Contact	Ingestion	Respiration	Gas Accumulation	Plants	End Users	Structures (Concrete)	Services/Utilities	Construction Workers	Controlled Waters (GW)	Risk Rating	Comments	omments		
Potentially infilled ground (along eastern boundary and 15m/E).	n/a	n/a	n/a	U	U	n/a	S	Mi	Mi	S	n/a	MR		should be note	und gas risk from infill materials. ed that the size of the former ponds	
Carbon dioxide generation from the underlying Chalk geology.	N	N	N	U	U	N	S	N	N	Мо	N	MR	produce si The consequ	There is a potential, albeit unlikely, risk for the Chalk to		
Legend:	Proba	bility	y:			Cons	eque	nce (Sever	ity):		Risk Ra	lting:			
See Comparison of Consequence Against Probability within												V	ery High Risk	VH		
Appendix 6 for Key to Legend.	N	egligi	ble (1	1)			Ne	gligibl	e (N)				High Risk HR			
		Unlik							(Mi)			V	Moderate Risk MR			
			ikely (L) Moderate (Mo)			Low Risk	LR									
	Highly	y Like	ly (H	_)				Sever	e (S)			N	legligible Risk	NR		



PHASE 2 - SITE WORKS

6.1 Methodology

This site investigation was carried out in accordance with the practices set out in BS 10175:2011+A1:2013 (ref. R.7) and BS 5930:2015 (ref. R.8). The location of exploratory holes was planned, where possible, to provide the best possible coverage within budgetary constraints while targeting any locations highlighted in the Desk Study and / or site walkover.

6.2 Scope

Site works were undertaken between 08 and 11 October 2019 and comprised the following:

- Formation of ten exploratory boreholes using windowless sampling techniques, to depths between 2m and 4m bgl;
- Installation of two ground gas monitoring wells;
- Excavation of three trial pits using a mechanical excavator, to depths between 1.6m and 1.9m bgl;
- Undertaking infiltration testing in line with BRE 365 guidance within the trial pits; and
- Associated soil logging, sampling and in situ testing.

6.3 Ground Conditions Encountered

The sequence of the strata encountered during the investigation generally confirmed the anticipated geology as interpreted from the British Geological Survey (BGS) digital mapping, at a scale of 1:50,000.

The sequence and indicative thickness of the strata encountered is presented in Table 5 overleaf.



Table 5 - Gro	Table 5 - Ground Conditions													
Strata	Depth Encoun	itered (m bgl)	Strata Thickness	Composition										
Strata	From	То	(m)	Composition										
Topsoil / Made Ground	0.00	0.20 - 0.70	0.20 - 0.70	All exploratory holes: Generally, a brown slightly sandy slightly silty organic CLAY with occasional gravel. Sometimes including brick and clinker.										
Head Deposits	0.30 - 0.90	0.90 - 1.55	0.10	All exploratory holes: Generally, a light brown slightly gravelly clay. WSO3 only: Yellow brown fine sand.										
West Melbury Marly Chalk Formation	0.3 - 1.55	Unproven	Unproven	All exploratory holes: Generally, a cream becoming white gravelly SILT.										

6.4 Groundwater

No groundwater was encountered in the exploratory holes during the site investigation.

6.5 Visual and Olfactory Evidence of Contamination

There was no visual or olfactory evidence of contamination encountered during the intrusive investigation.

Limited anthropogenic materials were encountered within two locations, which were noted to contain brick and clinker.



7. LABORATORY TESTING

7.1 Methodology

Representative disturbed samples were taken at the depths shown on the Exploratory Hole records and despatched to the laboratory. The Exploratory Hole Logs are included in Appendix 7.

An Exploratory Hole Location Plan, Drawing ref. 4159,GI/002/Rev0, in included in Appendix 3.

Environmental samples were collected for chemical analysis, in amber glass jars and kept in a cool box with cooling aid. The samples selected for laboratory analysis were chosen based upon the encountered soil conditions (targeting potential contamination), and to provide an overview of the site.

Geotechnical samples were recovered in either plastic bulk bags or plastic tubs and sealed to prevent moisture loss. The samples selected for geotechnical testing were chosen based upon the encountered soil conditions and providing an overview of the site.

In-situ Standard Penetration Testing was undertaken within the window sampler holes at 1m intervals in order to obtain parameters for structural design.

7.2 Environmental Testing Suite

7.2.1 Quality Control

The environmental laboratory used (DETS), is an accredited laboratory by the United Kingdom Accreditation Service (UKAS), and at least 50% of individual parameters are from methods pending accreditation to the Environment Agency Monitoring Certification Scheme (MCERTS) for the range of analyses undertaken as part of this investigation. The MCERTS performance standard for the chemical testing of soil is an application of ISO 17025: 2005, specifically for the chemical testing of soil.

7.2.2 Environmental Testing Suite - Soils

The suite of chemical analyses undertaken was based upon the findings of the Phase 1 Desk Study to provide an overview of soil quality at the site. The chemical analyses were carried out on six samples of soil. The nature of the analyses undertaken is detailed below:

- Metals screen arsenic, cadmium, chromium, lead, mercury, selenium, boron (water soluble),
 beryllium, copper, nickel, vanadium and zinc;
- Organic screen polyaromatic hydrocarbons (PAH) USEPA 16 suite;
- Inorganics screen cyanide (total), sulphate (water soluble); and
- Others pH, organic matter, asbestos.

A copy of the environmental laboratory test results is included in Appendix 10.



7.3 Geotechnical Testing

The geotechnical testing has been chosen based on the soils encountered during the site investigation and was undertaken in accordance with BS 1377 at a UKAS accredited laboratory.

The following tests were undertaken:

- Moisture content determination;
- Plasticity testing;
- Point load testing; and
- pH and soluble sulphate testing.

A copy of the geotechnical laboratory test results is included in Appendix 11, with the pH and sulphate testing included in Appendix 10 with the environmental laboratory results.



8. MONITORING

8.1 Ground Gas

Ground gas monitoring was undertaken by a suitably qualified environmental consultant, using a GFM436 landfill gas analyser and a MultiRaeLite Photo-ionisation detector (PID). The main determinants recorded were Methane (CH_4), Carbon Dioxide (CO_2), Oxygen (O_2), VOCs, and flow rate.

Six rounds of ground gas monitoring were conducted in accordance with current guidance (ref. R.11), including during falling barometric pressure conditions.

The results of the ground gas monitoring are presented in Appendix 9 and summarised in Table 6 below.

Table 6	Table 6 - Summary of Ground Gas Monitoring Results													
				Flow Rate	VOC									
Location	Meth	nane	Carbon	Dioxide	Oxy	gen								
	[%、	v/v]	[%	v/v]	[% '	v/v]	[l/hr]	(ppm)						
	(max.)	(min.)	(max.)	(min.)	(max.)	(min.)	(max.)	(max.)						
WS01	<0.1	< 0.1	7.1	5.0	12.5	8.2	-0.2	0						
WS10	<0.1	< 0.1	2.4	0.8	19.3	17.5	0.1	0						

8.2 Groundwater

Groundwater levels within the monitoring wells have been measured a total of three times to date. Groundwater has been recorded in WS01 between a depth of 1.29m and 2.22m bgl. No groundwater has been recorded within WS10.



9. RISK ASSESSMENT

9.1 Risk to Human Health

9.1.1 Methodology

The current guidance requires that a Conceptual Model is formulated based upon the findings of the site research. The Conceptual Model is limited, at this stage, to the identification and assessment of potential 'hazards', identified or suspected from the results of the research; the potential 'receptors' that may be affected and the anticipated 'pathways' to those receptors. The findings are summarised in the following subsections.

The guidance proposes a four-stage approach for the assessment of contamination and the associated risks. The four stages are listed below:

- Hazard Identification;
- Hazard Assessment;
- Risk Estimation; and
- Risk Evaluation.

9.1.2 Soil Quality Screening Values

The results of the soil analyses have been compared to soil quality screening values where deemed applicable, such as:

- The LQM/CIEH S4ULs for Human Health Risk Assessment, (ref. R.9); and
- Defra/CL: AIRE Final C4SLs, (ref. R.10).

It is understood that the proposed end use is to comprise residential dwellings. Therefore, the laboratory results have been compared to the most conservative screening criteria; residential land use with plant uptake, with 1% soil organic matter.

Where the concentrations reported by the laboratory are at or below the respective screening values, they are considered to not pose a risk and are removed from further consideration.



9.2 Elevated Soil Concentrations

The laboratory results did not identify any of the tested analytes to be present at levels above the relevant screening criteria.

9.2.1 Asbestos

A total of seven samples were subject to asbestos screening, the results of which did not identify asbestos within soils.

Nevertheless, should any potential asbestos containing material (PACM) be discovered within soils at the site, the soils should be left in-situ and temporarily fenced off until its identification and removal has been established. Works in the immediate area of the suspected asbestos should cease until a suitably qualified and authorised person has given permission for works to continue.

9.3 Ground Gas

The results of the soil gas monitoring have been compared with current guidance (ref. R.11).

The results show no methane generation within soils at either monitoring location. Limited concentrations of carbon dioxide have been detected within WS10, however concentrations >5% have consistently been detected at location WS01. No significant gas flow has been detected at the site.

On the basis of the recorded methane concentrations, a gas screening value of $0.0002l_{CH4}/hr$ has been calculated. Similarly, on the basis of the recorded carbon dioxide concentrations a gas screening value of $0.0142_{CO2}/hr$ has been calculated.

These gas screening values correspond with Characteristic Situation 1 (CS-1) in accordance with CIRIA C665 guidance. However, the carbon dioxide levels observed within WS01 correspond with CS-2 (low risk) and therefore in line with C665 guidance gas protection measures may be required at the site. The CIRIA C665 guidance (ref. R.11) should be consulted for further guidance.

9.4 Risk to Controlled Waters

The risks to Controlled Waters have been assessed with respect to soil contamination only, as groundwater analysis was outside the scope of this investigation.



The Desk Study identified the site to be underlain by a Principal Aquifer, namely Chalk. The nearest surface water course comprised a drainage ditch along the northern boundary of the site. The historical map review indicated the site to have remained undeveloped since the first available map (1887).

The results of the environmental laboratory analysis did not identify any determinants to be present at levels above the most conservative human health screening criteria. This, coupled with the undeveloped nature of the site, mean the risk to controlled waters is considered to be very low.

9.5 Risk to Plants

A review of the commonly occurring phytotoxic chemicals (boron, copper, nickel and zinc) has been undertaken based upon the now superseded ICRCL guidance.

Concentrations of metals were recorded at concentrations below the thresholds considered to have phytotoxic effects.

9.6 Risk to Services - Pipes

Whilst no specific protection is envisaged, it is advised that the UK Water Industry Research Guidance (ref. R.11) is adopted and consultation with the local water company is sought prior to laying any services.

9.7 Advanced Conceptual Site Model

Following the findings of the Site Investigation, the Preliminary Conceptual Site Model for the site has been updated. A revised Conceptual Site Model is presented in Table 7 overleaf.



Table 7 - Advanced Conceptual Site Model															
	PATHWAYS:						RECEPTORS:								
Sources	Root Uptake	Direct Contact	Ingestion	Respiration	Gas Accumulation	Plants	End Users	Structures (Concrete)	Services/Utilities	Construction Workers	Controlled Waters (GW)	Risk Rating	Comments		
>5% Carbon dioxide within WS01	n/a	n/a	n/a	U	U	n/a	S	Mi	Mi	S	n/a	MR	Carbon dioxid ≥5% at WS01		ecorded at concentrations consistently
Legend:	Prob	abilit	y:			Cons	eque	nce (Sever	ity):		Risk Ra	ating:		
See Comparison of Consequence Against Probability within Appendix 6													Very High Risk	VH	
for Key to Legend.	1		ible (N				Ne	gligibl					High Risk	HR	_
			kely (L						l (Mi)				Moderate Risk MR		-
			kely (l				Moderate (Mo)					Low Risk LR			-
	High	y Like	ely (HL	_)				Sever	e (S)				Negligible Risk	NR	



10. GEOTECHNICAL CONSIDERATIONS

10.1 Proposed Development

Proposed development plans have not been provided at this stage. It is understood that the site will be developed for a residential end use.

In the absence of provided imposed loads, it has been assumed that the development will comprise two- storey conventional brick houses, and therefore vertical loadings ranging from 35kN/m² to 40kN/m² per storey have been assumed.

10.2 Summary of Ground Conditions

Ground conditions were recorded to typically comprise a nominal amount of Topsoil or Made Ground, underlain by superficial clay and / or the West Melbury Marly Chalk Formation.

Where present, Made Ground was noted to comprise a sandy clay or clayey sand with brick fragments and rare clinker. The Made Ground was recorded to a maximum depth of 0.7m bgl within WS06. A sandy, gravelly clay superficial deposit was noted to overlie the chalk in a number of locations.

The West Melbury Chalk Formation was recorded to comprise a structureless chalk, with very weak low-density chalk gravel in a slightly sandy, gravelly silt matrix. Comparison of the descriptions to the CIRIA C574 'Engineering in Chalk' guidance (ref. R.13) indicates a Grade Dm or Dc classification. High 'N' values were recorded which are likely to be more representative of a Grade Dc chalk or higher.

Groundwater was not encountered during the intrusive investigation.

10.3 Foundations

10.3.1 Ground Desiccation

The results of geotechnical classification testing indicate the superficial clay deposits are of low plasticity and low volume change potential when comparing the recorded plasticity index with the guidance of NHBC Chapter 4.2 (ref. R.14). Visual evidence of desiccation was noted within some samples.

As outlined in CIRIA C574, chalk can be classified as a shrinkable soil where it has a higher clay mineral content and plasticity indices are greater than 5%. Classification testing undertaken on a sample of the West Melbury Marly Chalk Formation, retrieved from the site, indicated the sample to have a plasticity index of 10% and to be of low volume change potential and low plasticity. Based upon this classification, the guidelines within NHBC Chapter 4.2 are considered relevant and shallow foundations constructed in the chalk should be designed considering this guidance.



It is noted that the above is not applicable in the case of the adoption of a raft or piled foundation. Whilst the NHBC guidance provides outline advice for the stated foundation design, it is recommended that advice from a professional structural engineer is sought.

10.3.2 Foundation Options

The site and ground conditions are considered suitable for the adoption of a conventional spread foundation bearing into the West Melbury Marly Chalk Formation, considered to be of Grade Dc in view of the recorded N values. Foundations should extend past Topsoil, Made Ground, and the superficial deposits, and found at least 150mm into undisturbed West Melbury Chalk Formation.

CIRIA C574 (ref. R.13) states that the design of shallow foundations in chalk is settlement dependent. In order to limit settlement, the stress applied to the chalk by the foundations should not exceed the yield stress of the chalk. CIRIA C574 suggests a guideline allowable bearing pressure of 225kN/m² for low density Grade Dc chalk.

A minimum foundation depth of 0.75m bgl is considered appropriate based upon the following provisions:

- Where influenced by trees, foundations will need designing in accordance with NHBC Chapter 4.2 "Building near Trees" (ref. R.14). At the time of the site works, there were a number of trees along the site perimeter and in the northeast site corner. Laboratory testing indicated soils at the site to be of low volume change potential;
- Where Made Ground exists at formation level, either existing or as a result of the removal of existing foundations or other underground structures, foundations should be extended to depth into undisturbed West Melbury Marly Chalk Formation by at least 150mm.

It should be noted that chalk may degrade rapidly following exposure and therefore it is recommended that foundations are cast immediately after excavating trenches. Alternatively, the trenches should be suitably covered and protected from atmospheric influences prior to casting foundations.

10.3.3 Tree Planting

As outlined above, the structureless chalk encountered beneath the site exhibited low volume change potential and low plasticity, due to the clay content of the soil. The superficial clay deposits were also of low volume change potential and low plasticity. As a result, the guidance provided in NHBC Standard Chapter 4.2 (ref. R.14) should be adhered to.



10.3.4 Excavations, Temporary Works and Groundwater Ingress

All excavations within the Made Ground must be assumed to be subject to short term instability.

Groundwater was not encountered during the investigation and as such it is considered unlikely to be encountered during foundation and service run excavations in the short term.

It is expected that excavations within the superficial clay deposits and the West Melbury Marly Chalk Formation will be stable in the short term. Where excavations are required to remain stable in the medium or long-term, they should be suitably supported or side slopes battered back to a safe angle of repose.

Where personnel access is required to an excavation, its stability should be assessed by a suitably qualified and experienced responsible person. For general guidance it is recommended that where access is required to excavations, the excavation should be fully supported or side slopes battered back to a safe angle of repose. Further guidance may be obtained from CIRIA C97, 'Trenching Practice' (ref. R.15).

10.4 Floor Slabs

In accordance with NHBC Chapter 5 'Ground floors and substructure' (ref. R.16), suspended ground floors should be adopted where the following ground conditions are encountered:

- Where Made Ground is proven to exceed 0.6m depth; and / or
- Where soils with volume change potential exist at shallow depths beneath the site.

It is also advised that suspended ground floors are adopted where foundations require extending beyond 1.2m bgl; either as a result of the influence of trees or to achieve a suitable bearing stratum.

Localised Made Ground and cohesive superficial deposits were encountered at shallow depths beneath the site. Laboratory testing indicated these to be of low volume change potential and low plasticity. It is therefore recommended that suspended ground floors are adopted, incorporating a void into the design in order to accommodate volume change of the underlying soil.

Differential movement between the floor slab and structural walls, and across the floor slab itself, should be anticipated. It is therefore recommended that ground bearing floors should be fully de-bonded from structural load bearing walls, and suitably reinforced top and bottom to enable spanning of soft spots. Further guidance is provided within NHBC Chapter 5, 'Ground floors and substructure' (ref. R.16).



10.5 Pavement Design

Any roadway pavements proposed at the site are likely to be constructed on a subgrade of either superficial gravelly clay or chalk.

Laboratory analysis on samples of the superficial clay deposits indicated plasticity indices to range from 10% and 15%. Based on this, guidance provided within the Highways Agency's 'Design Manual for Roads and Bridges' (ref. R.17) indicate an estimated CBR ranging from 4.5% to 5%, when considering a thin pavement under average construction conditions and a low water table.

Estimation of a CBR value within chalk is dependent upon the condition of the chalk upon excavation. Guidance within CIRIA C574 indicates that CBR values for chalk can range from 2% to >15%. Estimating a CBR value based upon the condition of the chalk recovered during this Ground Investigation would be considered unrepresentative, as the excavation method itself (window sampling) results in disturbance of the chalk. As a result, it is recommended that in-situ CBR testing is undertaken to obtain values for pavement design.

Any in-situ CBR testing should be undertaken once the site has been graded to the appropriate pavement formation level. Prior to pavement construction, the formation level should be proof-rolled, and any soft / loose pockets of material excavated and replaced with a well-compacted granular fill.

The effect of frost heave on pavements must be considered and temporary weather protection layers implemented to avoid irregular settlement of pavements and structures.

10.6 Soakaway Design

Planning policy, together with the support of the Environment Agency, recommend maximum practicable use of Sustainable Urban Drainage Systems (SUDS) within proposed new developments. SUDS should be installed, where appropriate, in order to limit surface runoff entering drainage systems, and to return surface water into the ground where it may follow its natural drainage path.

Further guidance, including details of SUDS methods, is provided within CIRIA C753 (ref. R.18) and CIRIA C687 (ref. R.19). CIRIA C687 states that the Flood and Water Management Act 2010 aims to encourage Local Authorities to be responsible for the approval and eventual adoption of SUDS, although the adoption of roadways which include permeable paving is often rejected.

Soakaway testing was undertaken in three locations at the site, in accordance with the guidance provided within BRE Digest 365 (ref. R.20). A summary of the infiltration rates achieved is presented in Table 8 overleaf, with the full results provided within Appendix 8 of this report.



Table 8 - Infiltration Testing Results (m/s)				
Location	Test 1	Test 2	Test 3	Comments
SK01	7.57 x 10 ⁻⁰⁵	7.51 x 10 ⁻⁰⁵	7.14 x 10 ⁻⁰⁵	
SK02	6.79 x 10 ⁻⁰⁵	6.17 x 10 ⁻⁰⁵	5.51 x 10 ⁻⁰⁵	
SK03	3.46 x 10 ⁻⁰⁵	2.68 x 10 ⁻⁰⁵	2.45 x 10 ⁻⁰⁵	

As shown above, infiltration rates ranged between 2.45 x 10^{-05} m/s and 7.57 x 10^{-05} m/s. Therefore, it is considered that a conservative infiltration rate of 2.45 x 10^{-05} m/s is appropriate for the site.

It is recommended that liaison with the relevant regulatory bodies and third parties (i.e. the LPA, the EA, Anglian Water) is undertaken at an early stage to ensure that any surface water drainage proposals are approved.

10.7 Buried Concrete

The results of chemical testing indicated soil sulphate levels at the site to be between <0.01g/l and 0.03g/l, with soil pH values between 7.9 and 8.6.

At the above values it is considered that an Aggressive Chemical Environment for Concrete (ACEC) classification of AC-1 is applicable for the site, with a Design Sulphate (DS) classification of DS-1.

Further guidance relating to the above classifications is provided within BRE Special Digest 1 (ref. R.21).



11. CONCLUSIONS AND RECOMMENDATIONS

Geosphere Environmental Ltd was commissioned by Bidwells LLP on behalf of the Client, The Master & Fellows of Peterhouse in the University of Cambridge, to undertake a Phase 1 Desk Study and Phase 2 Ground Investigation for a proposed residential development at Land off Bell Road, Bottisham, Cambridgeshire.

The Phase 1 Desk Study identified two potential sources of contamination at the site:

- A pond located 15m to the east, which historical mapping indicated may have been partially infilled;
- Carbon Dioxide generation from the Underlying Chalk Geology.

The Phase 2 Ground investigation was undertaken to assess the potential risks to human health and controlled waters, and to assess the ground conditions at the site for use in foundation design.

It is recommended that this report be submitted to the Local Authority as part of the planning submission for the site.

11.1 Risks to Human Health and the Environment

The environmental laboratory results did not identify any determinants to be present at levels above the most conservative screening criteria. The soils onsite are therefore not considered to pose a risk to human health or Controlled Waters.

Based upon the results of the gas monitoring, the site may be categorised as Characteristic Situation 2 (CS-2 – low risk), indicating that some gas protection measures may be required at the site. Further guidance is provided within the CIRIA C665 guidance (ref. R.11.).

11.2 Geotechnical Recommendations

The site and ground conditions are considered suitable for the adoption of a conventional spread foundation bearing into the West Melbury Marly Chalk Formation, with an NABP of 225kN/m². Foundations should penetrate all Topsoil, Made Ground, and superficial deposits, and found at least 150mm into undisturbed Chalk.

Suspended ground floors are recommended, with a void incorporated into the design in order to accommodate the volume change potential of the underlying soils.



It is recommended that in-situ CBR testing is undertaken to obtain values for pavement design. The effect of frost heave on the proposed pavement must be considered.

An AC-1 and DS-1 concrete classification is considered applicable based upon the results of chemical testing.

11.3 Soakaway Recommendations

Based upon the results of infiltration testing, it is considered that a conservative infiltration rate of 2.45 x 10^{-05} m/s is appropriate for the site.



APPENDICES



Appendix 1 - Report Limitations and Conditions

General Limitations and Exceptions

This report was prepared solely for our Client for the stated purposes only and is not intended to be relied upon by any other party or for any other use. No extended duty of care to any third party is implied or offered.

Geosphere Environmental Ltd does not purport to provide specialist legal advice.

The Executive Summary, Conclusions and Recommendations sections of the report provide an overview and guidance only and should not be specifically relied upon until considered in the context of the whole report.

Interpretations and recommendations contained within the report represent our professional opinions, which were arrived at in accordance with currently accepted industry practices at the time of reporting and based upon current legislation in force at that time.

Environmental and Geotechnical Reporting (including Phase 1, Phase 2 and Site Walkovers) Limitations and Exceptions

The comments given in this report and the options expressed herein, are based upon the readily available information collated for the report and an assessment based upon the current guidance which for Phase 1 / Phase 2 report is primarily the Contaminated Land Research (CLR) Report and notable, CLR report 3, 'Documentary research on industrial sites'.

The report has been prepared in relation to the proposed end-use and should another end-use be intended, reassessment may be required.

No warranty is given as to the possibility of future changes in the condition of the site.

The opinions expressed cannot be absolute, due to the limitation of time and resources imposed by the agreed brief.

With regards to any aspect of land contamination referred to, this is limited to those aspects specifically stated and necessarily qualified. No liability shall be accepted for other aspects which may be the result of gradual or sudden pollution incidents, past or present land uses and the potential for associated contamination migration.



Any Desk Study Report / data has been produced largely from the information purchased from The Landmark Information Group. The information is not necessarily exhaustive and further information relevant to the site may be available from other sources. The information purchased has been assumed to be correct and free from errors. However, there is the possibility that some data may be missing from the report including (but not limited to) unrecorded land uses both onsite and offsite or unrecorded pollution events. No attempt has been made to verify the information.

The accuracy of any map extracts cannot be guaranteed. It is possible that different conditions existed onsite, between and subsequent to the various map surveys provided.

Any site walkover undertaken is a snapshot of the site recording the visually evident conditions at the time of the walkover in the areas readily accessible. It is possible that after the walkover, the site was altered (for example by fly-tipping or groundworks) or before the walkover, the site conditions changed removing evidence of potentially contaminative features (such as oil tanks removed).

Any intrusive works only cover a tiny proportion of the site. Where exploratory holes are positioned by Geosphere Environmental Limited, they are located to give as good a coverage of the site as possible and to target features / proposed land use where applicable, whilst allowing for areas that cannot be accessed, Client requested locations and other site / time / budget constraints. Whilst assumptions may have been drawn between exploratory holes on the ground conditions and / or extent or otherwise of any contamination, this is for guidance only and no liability can be accepted on its accuracy.

Foundation design is outside of the remit of Geosphere Environmental Limited unless specifically stated and it is recommended that the services of foundation design specialists are sought as required. Any foundation appraisal contained within the report is limited to foundation optioneering.

Any conceptual site model is based upon the information available at the time of conducting this assessment and is an interpretive assessment of the conditions at the site. Redevelopment and / or further investigation of the site may reveal additional information and therefore alter the conceptual site model and the report conclusions.

Any infiltration testing results are considered to be representative of the ground conditions at the locations tested and at the time of testing. As well as lateral variation in ground conditions, seasonal changes in ground water level may affect the results.

Any post-fieldwork monitoring (including ground gas / groundwater) is a snapshot of the conditions at the time of monitoring.



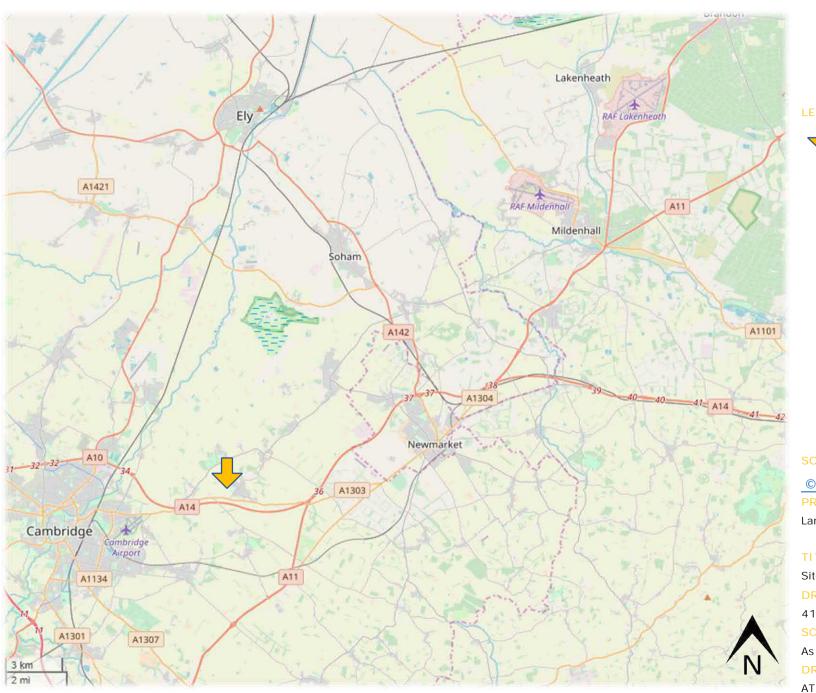
Appendix 2 - References

- R.1. Health Protection Agency and British Geological Survey, Report HPA-RPD-033 'Indicative Atlas of Radon in England and Wells', 2007.
- R.2. BRE Report 211, 'Radon, Guidance on the Protective Measures for New Buildings, 2015.
- R.3. Nitrates Directive (91/676/EEC) 1991.
- R.4. CLR 11, 'Model Procedures for the Management of Contaminated Land: Risk Assessment Procedure', DoE 2004.
- R.5. The Environmental Protection Act, Part IIA, Section 78, 1990.
- R.6. Environment Act 1995, Section 57, DoE 1995.
- R.7. British Standards Institute: BS 10175 'Investigation of Potentially Contaminated Sites', Code of Practice, BSI 2011+A2:2017.
- R.8. British Standards Institute: BS 5930 'Code of Practice for Ground Investigations', 2015.
- R.9. Land Quality Press, The LQM/CIEH S4ULs for Human Health Risk Assessment, 2015.
- R.10. SP1010 Development of Category 4 Screening Levels for Assessment of Land Affected by Contamination, Final Project Report (Revision 2), Contaminated Land: Applications in Real Environments (CL:AIRE) September 2014.
- R.11. CIRIA Report C665, 'Assessing Risks Posed by Hazardous Ground Gases to Buildings', 2007.
- R.12. UKWIR 'Guidance for the Selection of Water Supply Pipes to be Used in Brownfield Sites, August 2010.
- R.13. CIRIA Report C574, 'Engineering in Chalk', 2002.
- R.14. National House-Building Council, Standards, Chapter 4.2, 'Building Near Trees' 2018.
- R.15. CIRIA Report 97 (Second Edition) 'Trenching Practice', 2001.
- R.16. National House-Building Council, Standards, Chapter 5, 2018 'Ground Floors and Substructures'.
- R.17. Highways Agency, 'Design Manual for Roads and Bridges, Volume 7. Pavement Design and Maintenance: Foundations HD 25/94.
- R.18. CIRIA Report C753, 'The SuDS Manual', 2015.
- R.19. CIRIA Report C687, 'Planning for SuDS Making it Happen', 2010.
- R.20. BRE Digest 365, 'Soakaway Design', 2016.
- R.21. BRE Special Digest 1, 'Concrete in Aggressive Ground, 2005.



Appendix 3 - Drawings

Site Location Plan - Drawing ref. 4159,GI/001/Rev0
Exploratory Hole Location Plan - Drawing ref. 4159,GI/002/Rev0





LEGENI



Site Location

SOURCE

© OpenStreetMap contributors

PROJECT

Land off Bell Road, Bottisham, Cambridgeshire

TITLE

Site Location Plan

DRAWING NUMBER

4159,GI/001/Rev0

SCALE DA

As shown 05/11/2019

DRAWN BY CHECKED BY

T GF





EGEND

Site boundary



Window Sample



Trial Pit

SOURCE

© OpenStreetMap contributors

PROJECT

Land off Bell Road, Bottisham, Cambridgeshire

GF

TITLE

Exploratory Hole Location Plan

DRAWING NUMBER

4159,GI/002/Rev0

SCALE

DA1

NTS 05/11/2019
DRAWN BY CHECKED BY

AT



Appendix 4 - Envirocheck Data Search Report



Envirocheck® Report:

Datasheet

Order Details:

Order Number:

220424530_1_1

Customer Reference:

4159,GI

National Grid Reference:

554180, 260330

Slice:

Α

Site Area (Ha):

2.14

Search Buffer (m):

1000

Site Details:

Land off Bell Road Bottisham Cambridge CB25 9FL

Client Details:

Mrs A Davies Geosphere Environmental Ltd Brightwell Barns Ipswich Road Brightwell Suffolk IP10 0BJ



Order Number: 220424530_1_1





Report Section	Page Number
Summary	-
Agency & Hydrological	1
Waste	11
Hazardous Substances	-
Geological	12
Industrial Land Use	13
Sensitive Land Use	18
Data Currency	19
Data Suppliers	24
Useful Contacts	25

Introduction

The Environment Act 1995 has made site sensitivity a key issue, as the legislation pays as much attention to the pathways by which contamination could spread, and to the vulnerable targets of contamination, as it does the potential sources of contamination.

Valified the Care of Contamination, as it does the potential sources of contamination.

For this reason, Landmark's Site Sensitivity maps and Datasheet(s) place great emphasis on statutory data provided by the Environment Agency/Natural Resources Wales and the Scottish Environment Protection Agency; it also incorporates data from Natural England (and the Scottish and Welsh equivalents) and Local Authorities; and highlights hydrogeological features required by environmental and geotechnical consultants. It does not include any information concerning past uses of land. The datasheet is produced by querying the Landmark database to a distance defined by the client from a site boundary provided by the client.

In this datasheet the National Grid References (NGRs) are rounded to the nearest 10m in accordance with Landmark's agreements with a number of Data Suppliers.

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Report Version v53.0





Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Agency & Hydrological					
BGS Groundwater Flooding Susceptibility	pg 1	Yes	Yes	Yes	n/a
Contaminated Land Register Entries and Notices					
Discharge Consents	pg 1				2
Prosecutions Relating to Controlled Waters			n/a	n/a	n/a
Enforcement and Prohibition Notices					
Integrated Pollution Controls					
Integrated Pollution Prevention And Control					
Local Authority Integrated Pollution Prevention And Control					
Local Authority Pollution Prevention and Controls					
Local Authority Pollution Prevention and Control Enforcements					
Nearest Surface Water Feature	pg 1	Yes			
Pollution Incidents to Controlled Waters	pg 1				1
Prosecutions Relating to Authorised Processes					
Registered Radioactive Substances					
River Quality					
River Quality Biology Sampling Points					
River Quality Chemistry Sampling Points					
Substantiated Pollution Incident Register					
Water Abstractions	pg 2		1	1	8 (*8)
Water Industry Act Referrals					
Groundwater Vulnerability Map	pg 6	Yes	n/a	n/a	n/a
Groundwater Vulnerability - Soluble Rock Risk	pg 6	1	n/a	n/a	n/a
Groundwater Vulnerability - Local Information			n/a	n/a	n/a
Bedrock Aquifer Designations	pg 6	Yes	n/a	n/a	n/a
Superficial Aquifer Designations			n/a	n/a	n/a
Source Protection Zones	pg 6		1		
Extreme Flooding from Rivers or Sea without Defences				n/a	n/a
Flooding from Rivers or Sea without Defences				n/a	n/a
Areas Benefiting from Flood Defences				n/a	n/a
Flood Water Storage Areas				n/a	n/a
Flood Defences				n/a	n/a
OS Water Network Lines	pg 7	1	8	5	21



Summary

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Waste					
BGS Recorded Landfill Sites					
Historical Landfill Sites	pg 11				1
Integrated Pollution Control Registered Waste Sites					
Licensed Waste Management Facilities (Landfill Boundaries)					
Licensed Waste Management Facilities (Locations)					
Local Authority Landfill Coverage		2	n/a	n/a	n/a
Local Authority Recorded Landfill Sites					
Potentially Infilled Land (Non-Water)					
Potentially Infilled Land (Water)					
Registered Landfill Sites	pg 11				1
Registered Waste Transfer Sites					
Registered Waste Treatment or Disposal Sites					
Hazardous Substances					
Control of Major Accident Hazards Sites (COMAH)					
Explosive Sites					
Notification of Installations Handling Hazardous Substances (NIHHS)					
Planning Hazardous Substance Consents					
Planning Hazardous Substance Enforcements					





Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Geological					
BGS 1:625,000 Solid Geology	pg 12	Yes	n/a	n/a	n/a
BGS Estimated Soil Chemistry	pg 12	Yes	Yes		
BGS Recorded Mineral Sites					
BGS Urban Soil Chemistry					
BGS Urban Soil Chemistry Averages					
CBSCB Compensation District			n/a	n/a	n/a
Coal Mining Affected Areas			n/a	n/a	n/a
Mining Instability			n/a	n/a	n/a
Man-Made Mining Cavities					
Natural Cavities					
Non Coal Mining Areas of Great Britain	pg 12	Yes		n/a	n/a
Potential for Collapsible Ground Stability Hazards	pg 12	Yes		n/a	n/a
Potential for Compressible Ground Stability Hazards				n/a	n/a
Potential for Ground Dissolution Stability Hazards				n/a	n/a
Potential for Landslide Ground Stability Hazards				n/a	n/a
Potential for Running Sand Ground Stability Hazards				n/a	n/a
Potential for Shrinking or Swelling Clay Ground Stability Hazards				n/a	n/a
Radon Potential - Radon Affected Areas			n/a	n/a	n/a
Radon Potential - Radon Protection Measures			n/a	n/a	n/a
Industrial Land Use					
Contemporary Trade Directory Entries	pg 13		5	15	12
Fuel Station Entries	pg 15		1		
Points of Interest - Commercial Services	pg 16		3	5	
Points of Interest - Education and Health					
Points of Interest - Manufacturing and Production	pg 16		2	5	4
Points of Interest - Public Infrastructure	pg 17			2	2
Points of Interest - Recreational and Environmental					
Gas Pipelines					
Underground Electrical Cables					



Summary

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Sensitive Land Use					
Ancient Woodland					
Areas of Adopted Green Belt	pg 18	1		1	
Areas of Unadopted Green Belt	pg 18	1		1	
Areas of Outstanding Natural Beauty					
Environmentally Sensitive Areas					
Forest Parks					
Local Nature Reserves					
Marine Nature Reserves					
National Nature Reserves					
National Parks					
Nitrate Sensitive Areas					
Nitrate Vulnerable Zones	pg 18	2			
Ramsar Sites					
Sites of Special Scientific Interest					
Special Areas of Conservation					
Special Protection Areas				_	
World Heritage Sites				_	



Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Flooding Type:	Flooding Susceptibility Potential for Groundwater Flooding to Occur at Surface	A13SE (S)	0	1	554177 260333
	BGS Groundwater I Flooding Type:	Flooding Susceptibility Potential for Groundwater Flooding of Property Situated Below Ground Level	A13NE (N)	61	1	554177 260500
	BGS Groundwater I Flooding Type:	Flooding Susceptibility Potential for Groundwater Flooding of Property Situated Below Ground Level	A13SW (SW)	249	1	554000 260050
	BGS Groundwater F Flooding Type:	Flooding Susceptibility Potential for Groundwater Flooding of Property Situated Below Ground Level	A13NW (NW)	249	1	554000 260600
	BGS Groundwater F Flooding Type:	Flooding Susceptibility Potential for Groundwater Flooding of Property Situated Below Ground Level	A13SE (S)	274	1	554177 260000
	BGS Groundwater F Flooding Type:	Flooding Susceptibility Potential for Groundwater Flooding of Property Situated Below Ground Level	A8NW (S)	333	1	554050 259950
	BGS Groundwater I Flooding Type:	Flooding Susceptibility Potential for Groundwater Flooding of Property Situated Below Ground Level	A12SE (SW)	413	1	553700 260050
1	Discharge Consent Operator: Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy:	Anglian Water Services Limited PUMPING STATION ON SEWERAGE NETWORK (WATER COMPANY) Tunbridge La Ps, Bottisham, Cambs, Cb25 9ef Environment Agency, Anglian Region River Cam / The Lodes Aecnf11009 2 14th September 1999 14th September 1999 Not Supplied Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Freshwater Stream/River Trib Of Swaffham Bulbeck Lode Post National Rivers Authority Legislation where issue date > 31/08/1989 Located by supplier to within 10m	A19NW (NE)	890	2	554570 261240
1	Discharge Consent: Operator: Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy:	Anglian Water Services Limited PUMPING STATION ON SEWERAGE NETWORK (WATER COMPANY) Tunbridge La Ps, Bottisham, Cambs, Cb25 9ef Environment Agency, Anglian Region River Cam / The Lodes Aecnf11009 1 24th March 1992 24th March 1992 13th September 1999 Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Freshwater Stream/River Trib Of Swaffham Bulbeck Lode Post National Rivers Authority Legislation where issue date > 31/08/1989 Located by supplier to within 100m	A19NW (NE)	890	2	554570 261240
	Nearest Surface Wa	iter Feature	A13NE (NE)	0	-	554251 260401
2	Property Type: Location: Authority: Pollutant: Note: Incident Date: Incident Reference: Catchment Area: Receiving Water: Cause of Incident: Incident Severity:	Water Company Sewage: Pumping Station Ely District Environment Agency, Anglian Region Crude Sewage Tributary Of Swaffham Bulbeck Lode 14th May 1996 3438 Not Given Freshwater Stream/River Mechanical Failure Category 3 - Minor Incident Located by supplier to within 100m	A18NE (N)	932	2	554500 261300



Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
3	Water Abstractions Operator: Licence Number: Permit Version: Location: Authority: Abstraction Type: Source: Daily Rate (m3): Yearly Rate (m3): Details: Authorised Start: Authorised Start: Authorised End: Permit Start Date: Permit End Date: Positional Accuracy:	J.R. Leader, 6/33/34/*g/089 Not Supplied Borehole At Bendyshe Farm, BOTTISHAM Environment Agency, Anglian Region Domestic & Agriculture Not Supplied Well And Borehole 0 2270 C Chalk 7; Status: Revoked Not Supplied Located by supplier to within 10m	A13NE (E)	79	2	554400 260400
4	Water Abstractions Operator: Licence Number: Permit Version: Location: Authority: Abstraction Type: Source: Daily Rate (m3): Yearly Rate (m3): Details: Authorised Start: Authorised Start: Authorised End: Permit Start Date: Permit End Date: Positional Accuracy:	N F Newman Ltd 6/33/34/*G/0078 100 Borehole At Bottisham Environment Agency, Anglian Region General Farming And Domestic Water may be abstracted from a single point Groundwater Not Supplied Not Supplied C Chalk 7; Status: Perpetuity 01 January 31 December 1st July 1967 Not Supplied Located by supplier to within 10m	A14SW (E)	300	2	554600 260200
5	Water Abstractions Operator: Licence Number: Permit Version: Location: Authority: Abstraction Type: Source: Daily Rate (m3): Yearly Rate (m3): Details: Authorised Start: Authorised Start: Authorised End: Permit Start Date: Permit End Date: Positional Accuracy:	Anglian Water Services Ltd 6/33/34/*g/019 Not Supplied Bore At, BOTTISHAM Environment Agency, Anglian Region Public Water Supply Not Supplied Well And Borehole 364 1136500 C Chalk 7; Status: Revoked Not Supplied Located by supplier to within 10m	A18SE (N)	619	2	554400 261000
6	Water Abstractions Operator: Licence Number: Permit Version: Location: Authority: Abstraction Type: Source: Daily Rate (m3): Yearly Rate (m3): Details: Authorised Start: Authorised Start: Authorised End: Permit Start Date: Permit End Date: Positional Accuracy:	Mr J S Urquhart 6/33/34/*G/0065 101 Borehole At Bottisham Environment Agency, Anglian Region General Agriculture: Spray Irrigation - Direct Water may be abstracted from a single point Groundwater Not Supplied Not Supplied C Chalk 7; Status: Perpetuity 01 April 30 September 29th October 1999 Not Supplied Located by supplier to within 10m	A18SE (NE)	640	2	554500 261000



Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
7	Water Abstractions Operator: Licence Number: Permit Version: Location: Authority: Abstraction: Abstraction Type: Source: Daily Rate (m3): Yearly Rate (m3): Details: Authorised Start: Authorised End: Permit Start Date: Permit End Date: Positional Accuracy:	G & M Paul 6/33/34/*G/0093 101 Borehole At Bottisham Environment Agency, Anglian Region General Farming And Domestic Water may be abstracted from a single point Groundwater Not Supplied Not Supplied Not Supplied 01 January 31 December 13th July 2001 Not Supplied Located by supplier to within 10m	A14SE (E)	712	2	555010 260140
7	Water Abstractions Operator: Licence Number: Permit Version: Location: Authority: Abstraction Type: Source: Daily Rate (m3): Yearly Rate (m3): Details: Authorised Start: Authorised Start: Authorised End: Permit Start Date: Permit End Date: Positional Accuracy:	J G Paul 6/33/34/*G/0093 100 3 Boreholes At Bottisham Environment Agency, Anglian Region General Farming And Domestic Water may be abstracted from a single point Groundwater Not Supplied Not Supplied C Chalk 7; Status: Perpetuity 01 January 31 December 1st January 1967 Not Supplied Located by supplier to within 10m	A14SE (E)	712	2	555000 260100
7	Water Abstractions Operator: Licence Number: Permit Version: Location: Authority: Abstraction Type: Source: Daily Rate (m3): Yearly Rate (m3): Details: Authorised Start: Authorised End: Permit Start Date: Permit End Date: Positional Accuracy:	J G A Paul 6/33/34/*g/093 Not Supplied Borehole, BOTTISHAM Environment Agency, Anglian Region Domestic & Agriculture Not Supplied Well And Borehole 2 20680 C Chalk 7; Status: Perpetuity Not Supplied Located by supplier to within 10m	A14SE (E)	714	2	555001 260096
7	Water Abstractions Operator: Licence Number: Permit Version: Location: Authority: Abstraction Type: Source: Daily Rate (m3): Yearly Rate (m3): Details: Authorised Start: Authorised End: Permit Start Date: Permit End Date: Positional Accuracy:	J G A Paul 6/33/34/*g/093 Not Supplied Borehole , BOTTISHAM Environment Agency, Anglian Region Domestic & Agriculture Not Supplied Well And Borehole 2 20680 C Chalk 7; Status: Perpetuity Not Supplied Located by supplier to within 10m	A14SE (E)	719	2	555006 260096



Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
8	Water Abstractions Operator: Licence Number: Permit Version: Location: Authority: Abstraction: Abstraction Type: Source: Daily Rate (m3): Yearly Rate (m3): Details: Authorised Start: Authorised End: Permit Start Date: Permit End Date:	G & M Paul 6/33/34/*G/0093 101 Borehole At Bottisham Environment Agency, Anglian Region General Farming And Domestic Water may be abstracted from a single point Groundwater Not Supplied Not Supplied Not Supplied 101 January 31 December 13th July 2001 Not Supplied	A14SE (E)	833	2	555120 260080
9	Positional Accuracy: Water Abstractions Operator: Licence Number: Permit Version: Location: Authority: Abstraction Type: Source: Daily Rate (m3): Yearly Rate (m3): Details: Authorised Start: Authorised End: Permit Start Date: Permit End Date:	Located by supplier to within 10m	A14SE (E)	872	2	555140 260010
	Water Abstractions Operator: Licence Number: Permit Version: Location: Authority: Abstraction: Abstraction Type: Source: Daily Rate (m3): Yearly Rate (m3): Details: Authorised Start: Authorised End: Permit Start Date: Permit End Date: Positional Accuracy:	Garrows Estate Ltd 6/33/34/*G/0041 100 Well A E Of Stow Cum Quy Environment Agency, Anglian Region General Farming And Domestic Water may be abstracted from a single point Groundwater Not Supplied Not Supplied C Chalk 7; Status: Perpetuity 01 January 31 December 1st February 1967 Not Supplied Located by supplier to within 10m	A11SW (W)	1210	2	552800 260300
	Water Abstractions Operator: Licence Number: Permit Version: Location: Authority: Abstraction Type: Source: Daily Rate (m3): Yearly Rate (m3): Details: Authorised Start: Authorised End: Permit Start Date: Permit End Date: Positional Accuracy:	Garrows Estate Ltd 6/33/34/*G/0041 100 Well B E Of Stow Cum Quy Environment Agency, Anglian Region General Farming And Domestic Water may be abstracted from a single point Groundwater Not Supplied Not Supplied C Chalk 7; Status: Perpetuity 01 January 31 December 1st February 1967 Not Supplied Located by supplier to within 10m	A11SW (W)	1210	2	552800 260300



Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions Operator: Licence Number: Permit Version: Location: Authority: Abstraction Type: Source: Daily Rate (m3): Yearly Rate (m3): Details: Authorised Start: Authorised Start: Authorised End: Permit Start Date: Permit End Date:	Star Brewery (Cambridge) Ltd 6/33/34/*g/061 Not Supplied Borehole South East Of, STOW CUM QUY Environment Agency, Anglian Region Industrial Processing (Miscellaneous) Not Supplied Well And Borehole 1 2050 C Chalk 7; Status: Revoked Not Supplied Not Supplied Not Supplied Not Supplied Not Supplied	A11SW (W)	1216	2	552800 260200
	Water Abstractions Operator: Licence Number: Permit Version: Location: Authority: Abstraction: Abstraction Type: Source: Daily Rate (m3): Yearly Rate (m3): Details: Authorised Start: Authorised Start: Authorised End: Permit Start Date: Permit End Date:	Located by supplier to within 10m Bottisham Hall Farm 6/33/34/*s/151 Not Supplied Swaffham Bulbeck Lode, SWAFFHAM BULBECK Environment Agency, Anglian Region Spray Irrigation Not Supplied Stream 64 1437000 Status: Revoked Not Supplied Located by supplier to within 10m	A24NW (N)	1394	2	554650 261740
	Water Abstractions Operator: Licence Number: Permit Version: Location: Authority: Abstraction Type: Source: Daily Rate (m3): Yearly Rate (m3): Details: Authorised Start: Authorised Start: Authorised End: Permit Start Date: Permit End Date: Positional Accuracy:	A L Lee & Sons 6/33/36/*S/0217 102 Drains At Wood Fen Environment Agency, Anglian Region General Agriculture: Spray Irrigation - Direct Water may be abstracted from a river or stream reach, or a row of wellpoints Surface Not Supplied Not Supplied Not Supplied O1 April 31 October 12th June 2006 Not Supplied Located by supplier to within 10m	(S)	1905	2	554630 258410
	Water Abstractions Operator: Licence Number: Permit Version: Location: Authority: Abstraction: Abstraction Type: Source: Daily Rate (m3): Yearly Rate (m3): Details: Authorised Start: Authorised Start: Authorised End: Permit Start Date: Permit End Date: Positional Accuracy:	A L Lee & Sons 6/33/36/*S/0217 101 Drains At Wood Fen Environment Agency, Anglian Region General Agriculture: Spray Irrigation - Direct Water may be abstracted from a river or stream reach, or a row of wellpoints Surface Not Supplied Not Supplied Not Supplied Not Supplied 01 January 31 December 25th February 2004 Not Supplied Located by supplier to within 10m	(S)	1905	2	554630 258410



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Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions					
	Operator: Licence Number: Permit Version: Location: Authority: Abstraction Type: Source: Daily Rate (m3): Yearly Rate (m3): Details: Authorised Start: Authorised Start: Authorised End: Permit Start Date: Permit End Date: Positional Accuracy:	R C Badcock 6/33/34/*g/223 Not Supplied Well At Bottisham (Lode), BOTTISHAM Environment Agency, Anglian Region Spray Irrigation Not Supplied Well And Borehole 3 18180 C Chalk 7; Status: Revoked Not Supplied Located by supplier to within 10m	(N)	1918	2	553590 262220
		T.A. Rolph, 6/33/34/*g/077 Not Supplied Well At Quy, STOW CUM QUY Environment Agency, Anglian Region Agriculture (General) Not Supplied Well And Borehole 0 730 C Chalk 7; Status: Revoked Not Supplied Located by supplier to within 10m	(W)	1969	2	552100 260800
	Groundwater Vulne Combined Classification: Combined Vulnerability: Combined Aquifer: Pollutant Speed: Bedrock Flow: Dilution: Basseflow Index: Superficial Patchiness: Superficial Thickness: Superficial Recharge:	Principle Bedrock Aquifer - High Vulnerability High Productive Bedrock Aquifer, No Superficial Aquifer High Well Connected Fractures <300 mm/year >70% <90% <3m No Data	A13SE (S)	0	3	554177 260333
	Groundwater Vulne	erability - Soluble Rock Risk				
	Classification:	Significant Risk - Problems Unlikely	A13SE (S)	0	3	554177 260333
	Bedrock Aquifer De Aquifer Designation: Superficial Aquifer	Principal Aquifer	A13SE (S)	0	3	554177 260333
	No Data Available					
10	Source Protection 2 Name: Source: Reference: Type:	Not Supplied Environment Agency, Head Office Not Supplied Zone III (Total Catchment): The total area needed to support the discharge from the protected groundwater source.	A13SE (S)	174	2	554267 260088
	Extreme Flooding for None	rom Rivers or Sea without Defences				
	Flooding from Rive None	rs or Sea without Defences				
	Areas Benefiting fro	om Flood Defences				
	Flood Water Storag None	e Areas				



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Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Flood Defences None				
11	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 173.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Cam Ely Ouse and South Level Primacy: 1	A13NE (NE)	0	4	554251 260401
12	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 19.5 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Primacy: 1	A13NE (NE)	1	4	554232 260406
13	Watercourse Form: Inland river Watercourse Length: 154.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Primacy: 1	A13NE (N)	17	4	554189 260412
14	OS Water Network Lines Watercourse Form: Inland river Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Primacy: 11	A13SE (E)	19	4	554332 260285
15	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 16.1 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Cam Ely Ouse and South Level Primacy: 1	A13SE (E)	19	4	554332 260285
16	OS Water Network Lines Watercourse Form: Lake Watercourse Length: 26.0 Watercourse Level: On ground surface True Watercourse Name: Not Supplied Catchment Name: Cam Ely Ouse and South Level Primacy: 1	A13SE (E)	29	4	554344 260296
17	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 404.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Cam Ely Ouse and South Level Primacy: 1	A13NW (NW)	84	4	554067 260432
18	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 13.9 Watercourse Level: Underground True Watercourse Name: Not Supplied Catchment Name: Cam Ely Ouse and South Level Primacy: 1	A13NW (NW)	86	4	554080 260430
19	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 294.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Cam Ely Ouse and South Level Primacy: 1	A13NE (E)	94	4	554415 260351



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Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
20	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 57.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Cam Ely Ouse and South Level Primacy: 2	A14SW (E)	339	4	554639 260193
21	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 70.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Cam Ely Ouse and South Level Primacy: 2	A14SW (E)	393	4	554696 260195
22	OS Water Network Lines Watercourse Form: Inland river Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Primacy: 1	A12NE (NW)	401	4	553707 260588
23	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 109.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Cam Ely Ouse and South Level Primacy: 2	A12NE (NW)	401	4	553707 260588
24	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 444.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Cam Ely Ouse and South Level Primacy: 2	A12NE (W)	409	4	553642 260500
25	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 7.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Cam Ely Ouse and South Level Primacy: 2	A9NE (SE)	633	4	554842 259942
26	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 5.9 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Cam Ely Ouse and South Level Primacy: 2	A9NE (SE)	636	4	554842 259935
27	OS Water Network Lines Watercourse Forn: Inland river Watercourse Length: 57.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Cam Ely Ouse and South Level Primacy: 2	A9NE (SE)	640	4	554842 259928
28	OS Water Network Lines Watercourse Forn: Inland river Watercourse Length: 2.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Cam Ely Ouse and South Level Primacy: 2	A9NW (SE)	640	4	554840 259926



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Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
29	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 1.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Cam Ely Ouse and South Level Primacy: 2	A9NE (SE)	640	4	554842 259930
30	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 182.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Cam Ely Ouse and South Level Primacy: 1	A17SE (NW)	674	4	553537 260811
31	OS Water Network Lines Watercourse Form: Inland river Watercourse Level: 292.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Primacy: 22	A17SE (NW)	674	4	553537 260811
32	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 370.7 Watercourse Level: On ground surface True Watercourse Name: Not Supplied Catchment Name: Cam Ely Ouse and South Level Primacy: 2	A18NE (N)	763	4	554470 261133
33	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 208.6 Watercourse Level: On ground surface True Watercourse Name: Not Supplied Catchment Name: Cam Ely Ouse and South Level Primacy: 1	A17SW (NW)	818	4	553355 260813
34	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 453.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Catherent Name: Cam Ely Ouse and South Level Primacy: 1	A19NW (NE)	839	4	554822 261057
35	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 289.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Cam Ely Ouse and South Level Primacy: 2	A18NW (N)	841	4	554001 261202
36	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 443.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Cam Ely Ouse and South Level Primacy: 1	A19NW (NE)	842	4	554739 261115
37	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 9.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Cam Ely Ouse and South Level Primacy: 1	A19NW (NE)	843	4	554812 261070



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
38	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 168.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Cam Ely Ouse and South Level Primacy: 2	A17NE (NW)	847	4	553552 261052
39	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 173.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Cam Ely Ouse and South Level Primacy: 2	A19NW (NE)	849	4	554810 261078
40	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 8.3 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Cam Ely Ouse and South Level Primacy: 2	A17NW (NW)	955	4	553385 261055
41	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 199.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Catchment Name: Primacy: 2	A17NW (NW)	959	4	553377 261054
42	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 10.1 Watercourse Level: Underground Permanent: True Watercourse Name: Catchment Name: Cathment Name: Primacy: 2 OS Water Network Lines Inland river Load Hondard Inland river Load Hondard Voltaground True Not Supplied Cathment Name: Cam Ely Ouse and South Level Primacy: 2	A23SE (N)	974	4	554235 261373
43	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 141.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Cam Ely Ouse and South Level Primacy: 2	A23SE (N)	980	4	554243 261379
44	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 75.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Primacy: 11 Cam Ely Ouse and South Level 1	A23SE (N)	1000	4	554501 261369
45	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 85.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Catchment Name: Cathment Name: Primacy: 2 OS Water Network Lines Inland river Not ground surface True Not Supplied Cathment Name: Cathment Name: 2 True Not Supplied Cathment Name: Cathment Name: 2 True Not Supplied Cathment Name: Cathment Name: 2	A23SE (N)	1000	4	554501 261369





Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Historical Landfill S	ites				
46	Licence Holder: Location: Name: Operator Location: Boundary Accuracy: Provider Reference: First Input Date: Last Input Date: Specified Waste Type: EA Waste Ref: Regis Ref: WRC Ref: BGS Ref: Other Ref:		A9NW (SE)	742	2	554787 259719
	Local Authority Lan	dfill Coverage				
	Name:	East Cambridgeshire District Council - Has supplied landfill data		0	6	554177 260333
	Local Authority Lan	dfill Coverage				
	Name:	Cambridgeshire County Council - Has not been able to supply Landfill data		0	5	554177 260333
	Local Authority Lan	dfill Coverage				
	Name:	South Cambridgeshire District Council - Has supplied landfill data		236	7	553848 260103
	Registered Landfill	Sites				
47	Licence Holder: Licence Reference: Site Location: Licence Easting: Licence Northing: Operator Location: Authority: Site Category: Max Input Rate: Waste Source Restrictions: Status: Dated: Preceded By Licence: Superseded By Licence: Positional Accuracy: Boundary Accuracy: Authorised Waste Prohibited Waste	Adj A 45, Bottisham, Cambridge, Cambridgeshire 554800 259700 Head Office, Snetterton, NORWICH, Norfolk, NR16 2LB Environment Agency - Anglian Region, Central Area Landfill Undefined Only waste produced on site Licence lapsed/cancelled/defunct/not applicable/surrenderedCancelled 1st March 1994 Not Given Not Given Approximate location provided by supplier	A9NW (SE)	515	2	554626 259880





Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS 1:625,000 Solid Geology Description: Grey Chalk Subgroup	A13SE (S)	0	1	554177 260333
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil 415 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 20 - 40 mg/kg Concentration: Lead Concentration: Lead Concentration: Lead Concentration: <100 mg/kg Nickel 15 - 30 mg/kg Concentration:	A13SE (S)	0	1	554177 260333
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil <15 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 40 - 60 mg/kg Concentration: Lead Concentration: <100 mg/kg Nickel 15 - 30 mg/kg Concentration:	A13SW (W)	10	1	554000 260333
	BGS Measured Urban Soil Chemistry No data available				
	BGS Urban Soil Chemistry Averages No data available Coal Mining Affected Areas				
	In an area that might not be affected by coal mining Non Coal Mining Areas of Great Britain Risk: Rare Source: British Geological Survey, National Geoscience Information Service	A13SE	0	1	554177 260333
	Potential for Collapsible Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	(S) A13SE (S)	0	1	554177 260333
	Potential for Compressible Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13SE (S)	0	1	554177 260333
	Potential for Ground Dissolution Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13SE (S)	0	1	554177 260333
	Potential for Landslide Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13SE (S)	0	1	554177 260333
	Potential for Running Sand Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13SE (S)	0	1	554177 260333
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13SE (S)	0	1	554177 260333
	Radon Potential - Radon Affected Areas Affected Area: The property is in a Lower probability radon area (less than 1% of homes are estimated to be at or above the Action Level). Source: British Geological Survey, National Geoscience Information Service	A13SE (S)	0	1	554177 260333
	Radon Potential - Radon Protection Measures Protection Measure: No radon protective measures are necessary in the construction of new dwellings or extensions Source: British Geological Survey, National Geoscience Information Service	A13SE (S)	0	1	554177 260333



Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
48	Contemporary Trade Directory Ent Name: Trophy Petfood Location: 55, Bell Road, Classification: Pet Foods & Ar Status: Inactive Positional Accuracy: Automatically p	s Ltd Bottisham, Cambridge, CB5 9DF imal Feeds	A13NW (N)	142	-	554142 260492
49	Contemporary Trade Directory Ent Name: C C S Cars Location: 56, High Street Classification: Car Dealers - U Status: Inactive Positional Accuracy: Automatically p	, Bottisham, Cambridge, Cambridgeshire, CB25 9DA lsed	A13NE (NE)	211	-	554415 260573
49	Contemporary Trade Directory Ent Name: E C Auto Care Location: 56, High Street Classification: Garage Service Status: Active Positional Accuracy: Automatically p	Llp , Bottisham, Cambridge, CB25 9DA s	A13NE (NE)	211	-	554415 260573
49		ineering Ltd , Bottisham, Cambridge, CB25 9DA ratus & Instruments - Manufacturers	A13NE (NE)	211	-	554415 260573
49	Contemporary Trade Directory Ent Name: C C S Location: 56, High Street Classification: Car Dealers - L Status: Active Positional Accuracy: Automatically p	, Bottisham, Cambridge, CB25 9DA lsed	A13NE (NE)	211	-	554415 260573
49		ge , Bottisham, Cambridge, CB25 9BA facturers - Home & Office	A13NE (NE)	254	-	554449 260604
50	Contemporary Trade Directory Ent Name: Brian Mckay	ries se, Newmarket Road, Bottisham, Cambridge, Cambridgeshire, hicle Dealers	A12SE (SW)	251	-	553819 260161
50	Location: Lakepress Hou	ration & Air Conditioning Ltd se, Newmarket Road, Bottisham, Cambridge, CB25 9BD g & Refrigeration Contractors	A12SE (SW)	257	-	553812 260159
50	Location: Lakepress Hou	ration & Air Conditioning Ltd se, Newmarket Road, Bottisham, Cambridge, CB25 9BD Freezers - Servicing & Repairs	A12SE (SW)	257	-	553812 260159
50		se, Newmarket Road, Bottisham, Cambridge, CB25 9BD quipment - Commercial	A12SE (SW)	258	-	553812 260157
50	Contemporary Trade Directory Ent Name: E C Autocare Location: Newmarket Ro Classification: Garage Service Status: Active Positional Accuracy: Automatically p	ad, Bottisham, Cambridge, CB25 9BD s	A12SE (SW)	258	-	553813 260156



Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Contemporary Trad	e Directory Entries				
50	Name: Location:	Brian Mckay Commercial Vehicles Lakepress Court,Newmarket Road, Bottisham, Cambridge, Cambridgeshire, CB25 9BD	A12SE (W)	262	-	553787 260186
	Classification: Status: Positional Accuracy:	Commercial Vehicle Dealers Active Automatically positioned to the address				
	Contemporary Trad	e Directory Entries				
51	Name: Location: Classification: Status: Positional Accuracy:	Cambridge Clearance & Collection 45, High Street, Bottisham, Cambridge, CB25 9BA Waste Disposal Services Inactive Automatically positioned to the address	A13NE (NE)	293	-	554436 260655
	Contemporary Trad					
51	Name: Location: Classification: Status:	Autos & Sons Greengables, Bottisham, Cambridge, Cambridgeshire, CB25 9DB Car Breakers & Dismantlers Active	A13NE (NE)	307	-	554476 260650
	-	Manually positioned within the geographical locality				
52	Contemporary Trad Name: Location: Classification: Status:	S & J Cleaning 1, Downing Close, Bottisham, Cambridge, CB25 9DD Commercial Cleaning Services Active	A14NW (NE)	337	-	554537 260642
		Automatically positioned to the address				
53	Contemporary Trad Name: Location: Classification: Status:	e Directory Entries Easyfit Workspace Beechwood Av, Bottisham, Cambridge, Cambridgeshire, CB25 9DB Office Furniture & Equipment Inactive	A18SE (NE)	367	-	554474 260718
		Manually positioned within the geographical locality				
54	Contemporary Trad Name: Location: Classification: Status:	e Directory Entries Pestagon Pest Control Cambridge 70, Beechwood Avenue, Bottisham, Cambridge, CB25 9DB Pest & Vermin Control Active	A19SW (NE)	369	-	554519 260696
		Automatically positioned to the address				
55	Contemporary Trad Name: Location: Classification: Status: Positional Accuracy:	e Directory Entries Geoff Rank The Garage,56 High St, Bottisham, Cambridge, Cambridgeshire, CB25 9DQ Lawnmowers & Garden Machinery - Sales & Service Inactive Manually positioned within the geographical locality	A18SE (N)	373	-	554308 260768
	Contemporary Trad					
56	Name: Location: Classification: Status: Positional Accuracy:	Bottisham Garage Ltd 10, Tunbridge Lane, Bottisham, Cambridge, CB25 9DU Garage Services Inactive Automatically positioned to the address	A18SE (NE)	429	-	554395 260808
	Contemporary Trad	e Directory Entries				
56	Name: Location: Classification: Status:	Bottisham Vehicle Services Ltd 10, Tunbridge Lane, Bottisham, Cambridge, CB25 9DU Garage Services Active Automatically positioned to the address	A18SE (NE)	434	-	554391 260814
	Contemporary Trad					
57	Name: Location: Classification: Status:	Admiral A, 2, Arber Close, Bottisham, Cambridge, Cambridgeshire, CB5 9DR Carpet, Curtain & Upholstery Cleaners Inactive Automatically positioned to the address	A18SE (N)	523	-	554201 260920
	Contemporary Trad	· · · · · · · · · · · · · · · · · · ·				
57	Name: Location: Classification: Status:	Diamond Cleaning Services Ltd A, 2, Arber Close, Bottisham, Cambridge, Cambridgeshire, CB5 9DR Carpet, Curtain & Upholstery Cleaners Inactive Automatically positioned to the address	A18SE (N)	523	-	554201 260920



Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Contemporary Trad	le Directory Entries				
58	Name: Location: Classification: Status: Positional Accuracy:	N & G Tunbridge Lane, Bottisham, Cambridge, CB5 9EA Car Dealers Inactive Automatically positioned to the address	A18SE (NE)	576	-	554500 260932
	Contemporary Trad	le Directory Entries				
59	Name: Location: Classification: Status:	Diamond Cleaning Services Ltd A, 2, Arber Close, Bottisham, Cambridge, CB5 9DR Cleaning Services - Commercial Inactive Automatically positioned in the proximity of the address	A18SE (N)	584	-	554319 260980
	Contemporary Trad	le Directory Entries				
59	Name: Location: Classification: Status:	M & K 38, Arber Close, Bottisham, Cambridge, CB25 9DR Commercial Cleaning Services Inactive Automatically positioned to the address	A18SE (N)	615	-	554354 261006
	Contemporary Trad	le Directory Entries				
60	Name: Location: Classification: Status:	A C E Beechwood Av, Bottisham, Cambridge, Cambridgeshire, CB25 9BG Carpet, Curtain & Upholstery Cleaners Inactive Manually positioned to the road within the address or location	A14NE (NE)	601	-	554854 260662
	Contemporary Trad	le Directory Entries				
61	Name: Location: Classification: Status:	Bottisham Medical Practice Tunbridge Lane, Bottisham, Cambridge, CB25 9DU Medical & Dental Laboratories Inactive Automatically positioned to the address	A19SW (NE)	615	-	554551 260955
	Contemporary Trad					
62	Name: Location: Classification: Status:	Time Lifestyle Management 2, Thomas Christian Way, Bottisham, Cambridge, CB5 9DX Cleaning Services - Domestic Inactive Automatically positioned to the address	A19NW (NE)	701	-	554541 261051
	Contemporary Trad					
62	Name: Location: Classification: Status:	Phaseolus 4 Tunbridge Court, Tunbridge La, Bottisham, Cambridge, Cambridgeshire, CB25 9TU Food Products - Manufacturers Inactive Manually positioned to the address or location	A19NW (NE)	712	-	554588 261045
	Contemporary Trad	le Directory Entries				
63	Name: Location: Classification: Status:	Cambridge Cognition Ltd 9-10, Tunbridge Court, Tunbridge Lane, Bottisham, Cambridge, Cambridgeshire, CB25 9TU Medical Equipment Manufacturers Inactive Automatically positioned to the address	A19NW (NE)	741	-	554660 261044
	Contemporary Trad	le Directory Entries				
63	Name: Location: Classification: Status:	Thermo Fisher Scientific 6, Tunbridge Court, Tunbridge Lane, Bottisham, Cambridge, CB25 9TU Scientific Apparatus & Instruments - Manufacturers Inactive Automatically positioned to the address	A19NW (NE)	741	-	554626 261060
	Contemporary Trad	le Directory Entries	1			
64	Name: Location: Classification: Status:	First Copy 187, High Street, Bottisham, CAMBRIDGE, CB25 9BB Copying & Duplicating Machines & Supplies Active Automatically positioned to the address	A14SE (E)	777	-	555079 260155
	Fuel Station Entries	3				
65	Name: Location: Brand: Premises Type: Status:	Rank Bros Garage 56, High Street , Bottisham , Cambridge, Cambridgeshire, CB25 9DA Murco Not Applicable Obsolete Automatically positioned to the address	A13NE (NE)	206	-	554415 260568



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
66	Points of Interest - Commercial Services Name: E C Auto Care LLP Location: 56 High Street, Bottisham, Cambridge, CB25 9DA Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A13NE (NE)	210	8	554414 260573
66	Points of Interest - Commercial Services Name: E C Auto Care Location: The Garage 56, High Street, Bottisham, Cambridge, CB5 9DA Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A13NE (NE)	211	8	554415 260573
66	Points of Interest - Commercial Services Name: E C Autocare Location: Newmarket Road, Bottisham, Cambridge, CB25 9BD Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A13NE (NE)	211	8	554415 260573
66	Points of Interest - Commercial Services Name: Bottisham Asbestos Services Location: 45 High Street, Bottisham, Cambridge, CB25 9BA Category: Recycling Services Class Code: Recycling, Reclamation and Disposal Positional Accuracy: Positioned to address or location	A13NE (NE)	293	8	554436 260655
67	Points of Interest - Commercial Services Name: Pestagon Pest Control Cambridge Location: 70 Beechwood Avenue, Bottisham, Cambridge, CB25 9DB Category: Contract Services Class Code: Pest and Vermin Control Positional Accuracy: Positioned to address or location	A19SW (NE)	368	8	554519 260695
68	Points of Interest - Commercial Services Name: Bottisham Vehicle Services Ltd Location: 10 Tunbridge Lane, Bottisham, Cambridge, CB25 9DU Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A18SE (NE)	429	8	554394 260808
68	Points of Interest - Commercial Services Name: Bottisham Motors Location: 10 Tunbridge Lane, Bottisham, Cambridge, CB5 9DU Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A18SE (NE)	429	8	554395 260808
68	Points of Interest - Commercial Services Name: Bottisham Garage Location: 10 Tunbridge Lane, Bottisham, Cambridge, CB25 9DU Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A18SE (NE)	429	8	554395 260808
69	Points of Interest - Manufacturing and Production Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A13NE (NE)	185	8	554381 260560
69	Points of Interest - Manufacturing and Production Name: Works Location: CB25 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A13NE (NE)	186	8	554381 260561
70	Points of Interest - Manufacturing and Production Name: Newman Farms Location: Parsonage Farm 112, High Street, Bottisham, Cambridge, CB25 9BA Category: Farming Class Code: Livestock Farming Positional Accuracy: Positioned to address or location	A14NW (E)	324	8	554645 260348
70	Points of Interest - Manufacturing and Production Name: Newman Farms Location: A E & W E Newman Farms Parsonage Farm 112, High Street, Bottisham, Cambridge, CB25 9BA Category: Farming Class Code: Arable Farming Positional Accuracy: Positioned to address or location	A14NW (E)	324	8	554645 260348

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Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
71	Points of Interest - Wanufacturing and Production Name: D & M K Green & Sons Location: 2 Tunbridge Lane, Bottisham, Cambridge, CB25 9DU Category: Farming Class Code: Livestock Farming Positional Accuracy: Positioned to address or location	A18SE (NE)	392	8	554367 260775
71	Points of Interest - Manufacturing and Production Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A18SE (NE)	437	8	554393 260816
71	Points of Interest - Manufacturing and Production Name: Works Location: CB25 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A18SE (NE)	437	8	554394 260816
72	Points of Interest - Manufacturing and Production Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A19SW (NE)	549	8	554558 260880
72	Points of Interest - Manufacturing and Production Name: Works Location: CB25 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A19SW (NE)	551	8	554560 260881
73	Points of Interest - Manufacturing and Production Name: Cambridge Poultry Location: Bottisham Place, High Street, Bottisham, Cambridge, CB25 9BB Category: Farming Class Code: Poultry Farming, Equipment and Supplies Positional Accuracy: Positioned to address or location	A14SE (E)	699	8	555002 260169
74	Points of Interest - Manufacturing and Production Name: D & M K Green & Sons Location: Tunbridge Hall 60, Tunbridge Lane, Bottisham, Cambridge, CB5 9DU Category: Farming Class Code: Livestock Farming Positional Accuracy: Positioned to address or location	A19NW (NE)	708	8	554629 261022
75	Points of Interest - Public Infrastructure Name: Cemetery Location: Not Supplied Category: Infrastructure and Facilities Class Code: Cemeteries and Crematoria Positional Accuracy: Positioned to an adjacent address or location	A14NW (NE)	411	8	554642 260640
75	Points of Interest - Public Infrastructure Name: Cemetery Location: CB25 Category: Infrastructure and Facilities Class Code: Cemeteries and Crematoria Positional Accuracy: Positioned to an adjacent address or location	A14NW (NE)	413	8	554644 260641
76	Points of Interest - Public Infrastructure Name: Sludge Beds Location: CB25 Category: Infrastructure and Facilities Class Code: Waste Storage, Processing and Disposal Positional Accuracy: Positioned to an adjacent address or location	A18NE (N)	949	8	554429 261332
76	Points of Interest - Public Infrastructure Name: Sewage Works Location: CB25 Category: Infrastructure and Facilities Class Code: Waste Storage, Processing and Disposal Positional Accuracy: Positioned to address or location	A23SE (N)	964	8	554411 261350



Sensitive Land Use

Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
77	Areas of Adopted	d Green Belt East Cambridgeshire District Council, Planning Department	A13SE	0	9	554174
.,	Plan Name: Status: Plan Date:	Proposal Map Adopted 21st April 2015	(S)	, c	, c	260285
	Areas of Adopted	d Green Belt				
78	Authority: Plan Name: Status: Plan Date:	South Cambridgeshire District Council Core Strategy Adopted 31st January 2007	A12SE (SW)	262	7	553819 260127
	Areas of Unadop	ted Green Belt				
79	Authority: Plan Name: Status: Plan Date:	East Cambridgeshire District Council, Planning Department East Cambridgeshire Local Plan Submission Draft 16th February 2018	A13SE (S)	0	9	554174 260285
	Areas of Unadop	ted Green Belt				
80	Authority: Plan Name: Status: Plan Date:	South Cambridgeshire District Council South Cambridgeshire Local Plan Submission Draft 28th March 2014	A12SE (SW)	262	7	553819 260127
	Nitrate Vulnerabl	le Zones				
81	Name: Description: Source:	Ely Ouse And Cut-Off Channel Nvz Surface Water Environment Agency, Head Office	A13SE (S)	0	3	554177 260333
	Nitrate Vulnerabl	le Zones				
82	Name: Description: Source:	Anglian Chalk Groundwater Environment Agency, Head Office	A13SE (S)	0	3	554177 260333

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Agency & Hydrological	Version	Update Cycle
Contaminated Land Register Entries and Notices		
Cambridge City Council - Environmental Health And Protection	April 2014	Annual Rolling Update
East Cambridgeshire District Council - Environmental Health Department	March 2015	Annual Rolling Update
South Cambridgeshire District Council	October 2017	Annual Rolling Update
Discharge Consents		
Environment Agency - Anglian Region	July 2019	Quarterly
Enforcement and Prohibition Notices	Moreh 2012	Annual Dalling Lindate
Environment Agency - Anglian Region	March 2013	Annual Rolling Update
Integrated Pollution Controls Environment Agency - Anglian Region	October 2008	Variable
	0010001 2000	Variable
Integrated Pollution Prevention And Control	luly 2010	Ou autorby
Environment Agency - Anglian Region	July 2019	Quarterly
Local Authority Integrated Pollution Prevention And Control		.,
South Cambridgeshire District Council - Environmental Health Department	February 2013	Variable
East Cambridgeshire District Council - Environmental Health Department	October 2014	Variable
Cambridge City Council - Environmental Health And Protection	September 2014	Variable
Local Authority Pollution Prevention and Controls		
East Cambridgeshire District Council - Environmental Health Department	October 2014	Annual Rolling Updat
South Cambridgeshire District Council - Environmental Health Department	October 2014	Annual Rolling Updat
Cambridge City Council - Environmental Health And Protection	September 2014	Not Applicable
Local Authority Pollution Prevention and Control Enforcements		
South Cambridgeshire District Council - Environmental Health Department	February 2013	Variable
East Cambridgeshire District Council - Environmental Health Department	October 2014	Variable
Cambridge City Council - Environmental Health And Protection	September 2014	Variable
Nearest Surface Water Feature	January 2040	
Ordnance Survey	January 2019	
Pollution Incidents to Controlled Waters		
Environment Agency - Anglian Region	September 1999	Not Applicable
Prosecutions Relating to Authorised Processes		
Environment Agency - Anglian Region	March 2013	Annual Rolling Update
Prosecutions Relating to Controlled Waters		
Environment Agency - Anglian Region	March 2013	Annual Rolling Update
Registered Radioactive Substances		
Environment Agency - Anglian Region	June 2016	
River Quality		
Environment Agency - Head Office	November 2001	Not Applicable
River Quality Biology Sampling Points		
Environment Agency - Head Office	July 2012	Annually
River Quality Chemistry Sampling Points		
Environment Agency - Head Office	July 2012	Annually
Substantiated Pollution Incident Register		
Environment Agency - Anglian Region - Central Area	July 2019	Quarterly
Water Abstractions		
Environment Agency - Anglian Region	July 2019	Quarterly
Water Industry Act Referrals		
Environment Agency - Anglian Region	October 2017	Quarterly
Groundwater Vulnerability Map		
Environment Agency - Head Office	June 2018	As notified
Groundwater Vulnerability - Soluble Rock Risk		
		ı

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Agency & Hydrological	Version	Update Cycle
Bedrock Aquifer Designations		
Environment Agency - Head Office	January 2018	Annually
Superficial Aquifer Designations		
Environment Agency - Head Office	January 2018	Annually
Source Protection Zones		
Environment Agency - Head Office	July 2019	Quarterly
Extreme Flooding from Rivers or Sea without Defences		
Environment Agency - Head Office	August 2019	Quarterly
Flooding from Rivers or Sea without Defences		
Environment Agency - Head Office	August 2019	Quarterly
Areas Benefiting from Flood Defences		
Environment Agency - Head Office	August 2019	Quarterly
Flood Water Storage Areas		
Environment Agency - Head Office	August 2019	Quarterly
Flood Defences		
Environment Agency - Head Office	August 2019	Quarterly
OS Water Network Lines		
Ordnance Survey	April 2019	Quarterly
Surface Water 1 in 30 year Flood Extent		
Environment Agency - Head Office	October 2013	Annually
Surface Water 1 in 100 year Flood Extent		
Environment Agency - Head Office	October 2013	Annually
Surface Water 1 in 1000 year Flood Extent		
Environment Agency - Head Office	October 2013	Annually
Surface Water Suitability		
Environment Agency - Head Office	October 2013	Annually
BGS Groundwater Flooding Susceptibility		
British Geological Survey - National Geoscience Information Service	May 2013	Annually

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Waste	Version	Update Cycle
BGS Recorded Landfill Sites		
British Geological Survey - National Geoscience Information Service	June 1996	Not Applicable
Historical Landfill Sites		
Environment Agency - Head Office	July 2019	Quarterly
Integrated Pollution Control Registered Waste Sites		
Environment Agency - Anglian Region	October 2008	Not Applicable
Licensed Waste Management Facilities (Landfill Boundaries)		
Environment Agency - Anglian Region - Central Area	July 2018	Quarterly
Licensed Waste Management Facilities (Locations)		
Environment Agency - Anglian Region - Central Area	July 2019	Quarterly
Local Authority Landfill Coverage		
Cambridge City Council	April 2007	Not Applicable
East Cambridgeshire District Council - Environmental Health Department	April 2007	Not Applicable
Cambridgeshire County Council	May 2000	Not Applicable
South Cambridgeshire District Council	May 2000	Not Applicable
Local Authority Recorded Landfill Sites		
South Cambridgeshire District Council	April 2003	Not Applicable
Cambridge City Council	April 2007	Not Applicable
East Cambridgeshire District Council - Environmental Health Department	April 2007	Not Applicable
Cambridgeshire County Council	May 2000	Not Applicable
Potentially Infilled Land (Non-Water)	,	
Landmark Information Group Limited	December 1999	Not Applicable
Potentially Infilled Land (Water)		77 /1
Landmark Information Group Limited	December 1999	Not Applicable
Registered Landfill Sites		
Environment Agency - Anglian Region - Central Area	March 2003	Not Applicable
Registered Waste Transfer Sites		
Environment Agency - Anglian Region - Central Area	March 2003	Not Applicable
Registered Waste Treatment or Disposal Sites		1 11
Environment Agency - Anglian Region - Central Area	March 2003	Not Applicable
Hazardous Substances	Version	Update Cycle
Control of Major Accident Hazards Sites (COMAH)		
Health and Safety Executive	April 2018	Bi-Annually
Explosive Sites		
Health and Safety Executive	March 2017	Annually
Notification of Installations Handling Hazardous Substances (NIHHS)		
Health and Safety Executive	November 2000	Not Applicable
Planning Hazardous Substance Enforcements		
Cambridge City Council	February 2016	Variable
Cambridgeshire County Council	February 2016	Variable
East Cambridgeshire District Council - Planning Department	February 2016	Variable
South Cambridgeshire District Council	February 2016	Variable
Planning Hazardous Substance Consents		
Cambridge City Council	February 2016	Variable
Cambridgeshire County Council	February 2016	Variable
East Cambridgeshire District Council - Planning Department	February 2016	Variable
		1

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Geological	Version	Update Cycle
BGS 1:625,000 Solid Geology		
British Geological Survey - National Geoscience Information Service	January 2009	Not Applicable
BGS Estimated Soil Chemistry		
British Geological Survey - National Geoscience Information Service	October 2015	Annually
BGS Recorded Mineral Sites		
British Geological Survey - National Geoscience Information Service	April 2019	Bi-Annually
CBSCB Compensation District		
Cheshire Brine Subsidence Compensation Board (CBSCB)	August 2011	Not Applicable
Coal Mining Affected Areas		
The Coal Authority - Property Searches	March 2014	Annual Rolling Update
Mining Instability		
Ove Arup & Partners	October 2000	Not Applicable
Non Coal Mining Areas of Great Britain		
British Geological Survey - National Geoscience Information Service	May 2015	Not Applicable
Potential for Collapsible Ground Stability Hazards	, 2010	11017.pp.11040.10
British Geological Survey - National Geoscience Information Service	January 2019	Annually
	January 2019	Affilially
Potential for Compressible Ground Stability Hazards	January 2040	A
British Geological Survey - National Geoscience Information Service	January 2019	Annually
Potential for Ground Dissolution Stability Hazards		
British Geological Survey - National Geoscience Information Service	January 2019	Annually
Potential for Landslide Ground Stability Hazards		
British Geological Survey - National Geoscience Information Service	January 2019	Annually
Potential for Running Sand Ground Stability Hazards		
British Geological Survey - National Geoscience Information Service	January 2019	Annually
Potential for Shrinking or Swelling Clay Ground Stability Hazards		
British Geological Survey - National Geoscience Information Service	January 2019	Annually
Radon Potential - Radon Affected Areas		
British Geological Survey - National Geoscience Information Service	July 2011	Annually
Radon Potential - Radon Protection Measures	,	,
British Geological Survey - National Geoscience Information Service	July 2011	Annually
	03.7 25.1	7
Industrial Land Use	Version	Update Cycle
Contemporary Trade Directory Entries		
Thomson Directories	July 2019	Quarterly
Fuel Station Entries		
Catalist Ltd - Experian	September 2019	Quarterly
Gas Pipelines		
National Grid	July 2014	
Points of Interest - Commercial Services		
PointX	September 2019	Quarterly
Points of Interest - Education and Health		
PointX	September 2019	Quarterly
Points of Interest - Manufacturing and Production	205132013	
Points of interest - Manufacturing and Production PointX	September 2019	Quarterly
	September 2019	Quarterly
Points of Interest - Public Infrastructure	Contomb == 2040	Occorde alle
PointX	September 2019	Quarterly
Points of Interest - Recreational and Environmental	_	_
PointX	September 2019	Quarterly
Underground Electrical Cables		



Sensitive Land Use	Version	Update Cycle
Ancient Woodland		
Natural England	August 2018	Bi-Annually
Areas of Adopted Green Belt		
Cambridge City Council	March 2019	As notified
East Cambridgeshire District Council - Planning Department	March 2019	As notified
South Cambridgeshire District Council	March 2019	As notified
Areas of Unadopted Green Belt		
Cambridge City Council	March 2019	As notified
East Cambridgeshire District Council - Planning Department	March 2019	As notified
South Cambridgeshire District Council	March 2019	As notified
Areas of Outstanding Natural Beauty		
Natural England	June 2019	Bi-Annually
Environmentally Sensitive Areas		
Natural England	January 2017	
Forest Parks		
Forestry Commission	April 1997	Not Applicable
Local Nature Reserves		
Natural England	March 2019	Bi-Annually
Marine Nature Reserves		
Natural England	July 2019	Bi-Annually
National Nature Reserves		
Natural England	July 2019	Bi-Annually
National Parks		
Natural England	April 2017	Bi-Annually
Nitrate Vulnerable Zones		
Environment Agency - Head Office	December 2017	Bi-Annually
Department for Environment, Food and Rural Affairs (DEFRA - formerly FRCA)	October 2015	
Ramsar Sites		
Natural England	April 2019	Bi-Annually
Sites of Special Scientific Interest		
Natural England	March 2019	Bi-Annually
Special Areas of Conservation		
Natural England	June 2019	Bi-Annually
Special Protection Areas		
Natural England	April 2019	Bi-Annually

Order Number: 220424530_1_1 Date: 04-Oct-2019 rpr_ec_datasheet v53.0 A Landmark Information Group Service Page 23 of 25





A selection of organisations who provide data within this report

Data Supplier	Data Supplier Logo
Ordnance Survey	Map data
Environment Agency	Environment Agency
Scottish Environment Protection Agency	SEPA
The Coal Authority	The Coal Authority
British Geological Survey	British Geological Survey
Centre for Ecology and Hydrology	Centre for Ecology & Hydrology NATURAL ENVIRONMENT RESEARCH COUNCIL
Natural Resources Wales	Cyfoeth Naturiol Cymru Natural Resources Wales
Scottish Natural Heritage	scottish Natural Heritage 땅살취
Natural England	NATURAL ENGLAND
Public Health England	Public Health England
Ove Arup	ARUP
Peter Brett Associates	peterbrett



Useful Contacts

Contact	Name and Address	Contact Details
1	British Geological Survey - Enquiry Service British Geological Survey, Environmental Science Centre, Keyworth, Nottingham, Nottinghamshire, NG12 5GG	Telephone: 0115 936 3143 Fax: 0115 936 3276 Email: enquiries@bgs.ac.uk Website: www.bgs.ac.uk
2	Environment Agency - National Customer Contact Centre (NCCC)	Telephone: 03708 506 506 Email: enquiries@environment-agency.gov.uk
	PO Box 544, Templeborough, Rotherham, S60 1BY	
3	Environment Agency - Head Office Rio House, Waterside Drive, Aztec West, Almondsbury, Bristol, Avon, BS32 4UD	Telephone: 01454 624400 Fax: 01454 624409
4	Ordnance Survey Adanac Drive, Southampton, Hampshire, SO16 0AS	Telephone: 03456 05 05 05 Email: customerservices@ordnancesurvey.co.uk Website: www.ordnancesurvey.gov.uk
5	Cambridgeshire County Council Shire Hall, Castle Hill, Cambridge, Cambridgeshire, CB3 OAP	Telephone: 01223 717111 Fax: 01223 717201 Website: www.camcnty.gov.uk
6	East Cambridgeshire District Council - Environmental Health Department The Grange, Nutholt Lane, Ely, Cambridgeshire, CB7 4PL	Telephone: 01353 665555 extn 284 Website: www.eastcambs.gov.uk
7	South Cambridgeshire District Council South Cambridgeshire Hall, Cambourne Business Park, Cambourne, Cambridgeshire, CB23 6EA	Telephone: 08450 450 500 Website: www.scambs.gov.uk
8	PointX 7 Abbey Court, Eagle Way, Sowton, Exeter, Devon, EX2 7HY	Website: www.pointx.co.uk
9	East Cambridgeshire District Council - Planning Department The Grange, Nutholt Lane, Ely, Cambridgeshire, CB7 4PL	Telephone: 01353 665555 Fax: 01353 665 240 Website: www.eastcambs.gov.uk
10	Natural England County Hall, Spetchley Road, Worcester, WR5 2NP	Telephone: 0300 060 3900 Email: enquiries@naturalengland.org.uk Website: www.naturalengland.org.uk
-	Public Health England - Radon Survey, Centre for Radiation, Chemical and Environmental Hazards Chilton, Didcot, Oxfordshire, OX11 0RQ	Telephone: 01235 822622 Fax: 01235 833891 Email: radon@phe.gov.uk Website: www.ukradon.org
-	Landmark Information Group Limited Imperium, Imperial Way, Reading, Berkshire, RG2 0TD	Telephone: 0844 844 9952 Fax: 0844 844 9951 Email: customerservices@landmarkinfo.co.uk Website: www.landmarkinfo.co.uk

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

Geology 1:50,000 Maps Legends

Superficial Geology

Map Colour	Lex Code	Rock Name	Rock Type	Min and Max Age	
	RTD3	River Terrace Deposits, 3	Sand and Gravel	Not Supplied - Quaternary	
	RTD4 River Terrace Deposits, 4 Sand and G		Sand and Gravel	Not Supplied - Quaternary	
	PEAT	Peat	Peat	Not Supplied - Quaternary	
	RTD1	RTD1 River Terrace Deposits, 1 Sand and Gr.		Not Supplied - Quaternary	
	RTD2	River Terrace Deposits, 2	Sand and Gravel	Not Supplied - Quaternary	
	HEAD Head		Clay, Silt, Sand and Gravel	Not Supplied - Quaternary	

Bedrock and Faults

Map Colour	Lex Code	Rock Name	Rock Type	Min and Max Age
	WMCH	West Melbury Marly Chalk Formation	Chalk	Not Supplied - Cenomanian
	TTST Totternhoe Stone Member		Chalk	Not Supplied - Cenomanian
	ZZCH	Zig Zag Chalk Formation	Chalk	Not Supplied - Cenomanian
	MR Melbourn Rock		Chalk	Not Supplied - Cenomanian
	HNCK	Holywell Nodular Chalk Formation and New Pit Chalk Formation (Undifferentiated)	Chalk	Not Supplied - Cenomanian
		Faults		

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Geology 1:50,000 Maps

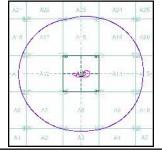
This report contains geological map extracts taken from the BGS Digital Geological map of Great Britain at 1:50,000 scale and is designed for users carrying out preliminary site assessments who require geological maps for the area around the site. This mapping may be more up to date than previously published paper maps.

The various geological layers - artificial and landslip deposits, superficial geology and solid (bedrock) geology are displayed in separate maps, but superimposed on the final 'Combined Surface Geology' map. All map legends feature on this page. Not all layers have complete nationwide coverage, so availability of data for relevant map sheets is indicated below.

Geology 1:50,000 Maps Coverage

Map ID: Map Sheet No: Map Name: Cambridge Map Date: 1981 Available Superficial Geology: Available Artificial Geology: Not Available Not Supplied Landslip: Not Available Rock Segments: Not Supplied

Geology 1:50,000 Maps - Slice A





Order Details:

 Order Number:
 220424530_1_1

 Customer Reference:
 4159,GI

 National Grid Reference:
 554180, 260330

 Slice:
 A

 Site Area (Ha):
 2.14

 Search Buffer (m):
 1000

Site Details:

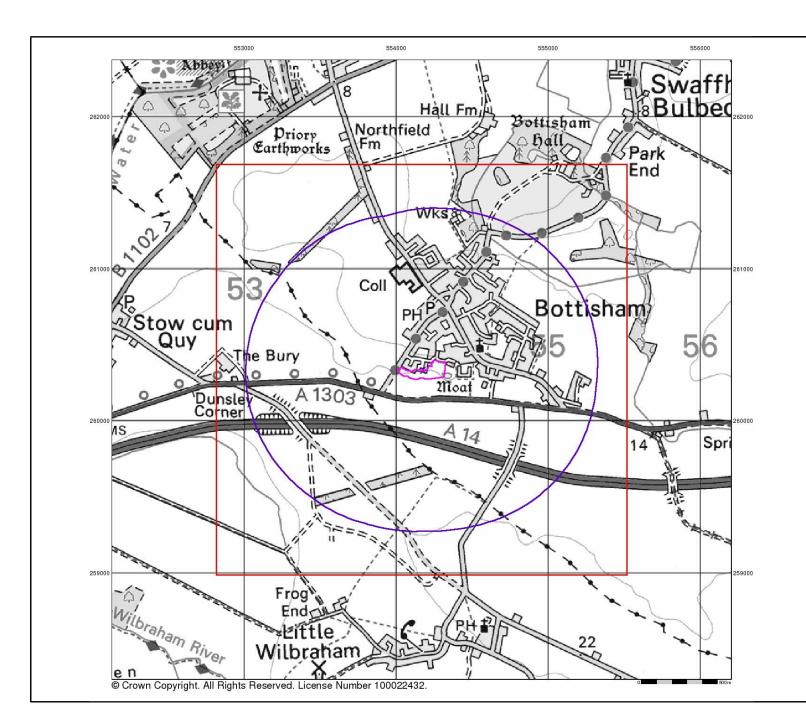
Land off Bell Road, Bottisham, Cambridge, CB25 9FL



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

v15.0 04-Oct-2019

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Artificial Ground and Landslip

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

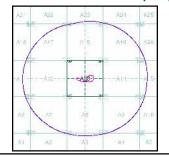
Artificial ground includes:

- Made ground man-made deposits such as embankments and spoil heaps on the natural ground surface.

 - Worked ground - areas where the ground has been cut away such as
- quarries and road cuttings.
- Infilled ground areas where the ground has been cut away then wholly or
- Landscaped ground areas where the surface has been reshaped.
 Disturbed ground areas of ill-defined shallow or near surface mineral. workings where it is impracticable to map made and worked ground

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

Artificial Ground and Landslip Map - Slice A





Order Details:

Order Number: 220424530 1 1 Customer Reference: 4159,GI National Grid Reference: 554180 260330 A 2.14

Site Area (Ha): Search Buffer (m): 1000

Site Details:

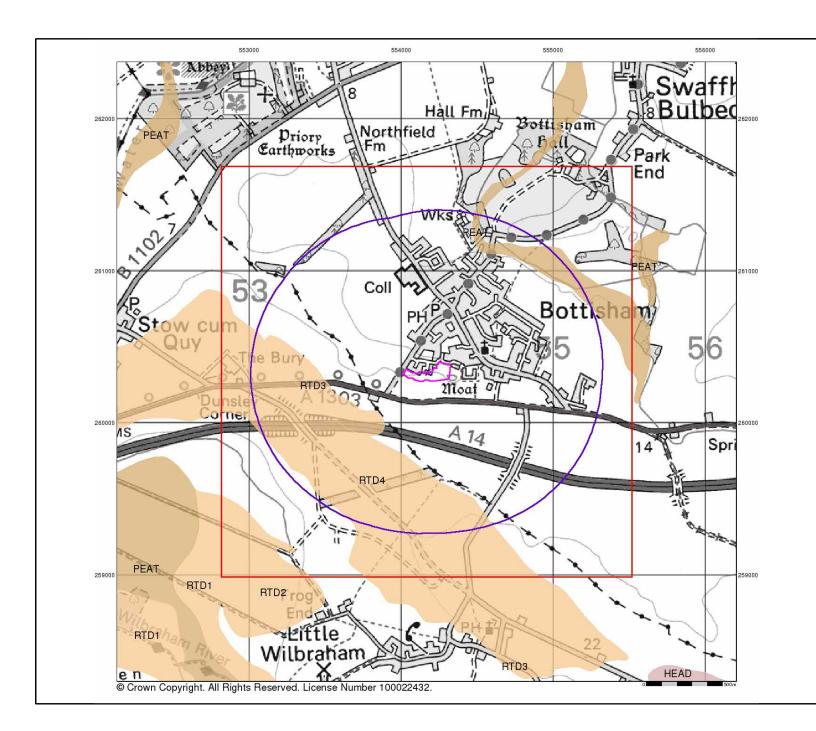
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Page 2 of 5



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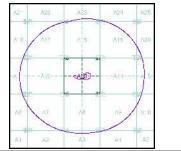
Superficial Geology

Superficial Deposits are the youngest geological deposits formed during the most recent period of geological time, the Quaternary, which extends back about 1.8 million years from the present.

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

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

Superficial Geology Map - Slice A



Order Details:

220424530_1_1 4159,GI Order Number: Customer Reference: National Grid Reference: 554180, 260330 A 2.14

Site Area (Ha): Search Buffer (m): 1000

Site Details:

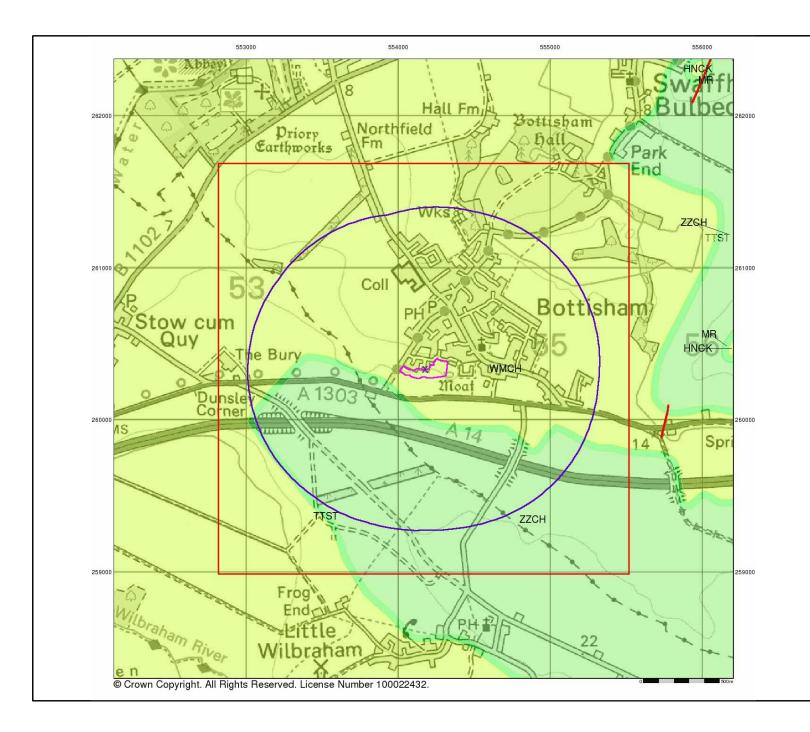
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Bedrock and Faults

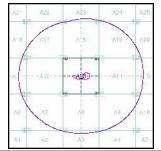
Bedrock geology is a term used for the main mass of rocks forming the Earth and are present everywhere, whether exposed at the surface in outcrops or concealed beneath superficial deposits or water.

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

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

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

Bedrock and Faults Map - Slice A





Order Details:

220424530_1_1 4159,GI Order Number: Customer Reference: National Grid Reference: 554180, 260330 A 2.14

Site Area (Ha): Search Buffer (m): 1000

Site Details:

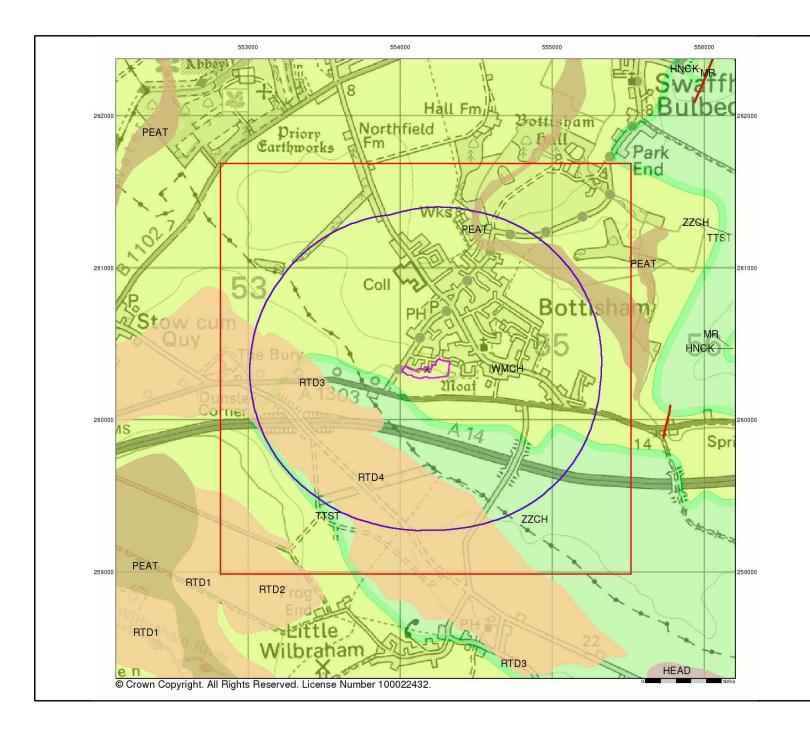
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Combined Surface Geology

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

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

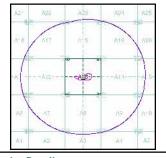
Additional Information

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

Contact

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

Combined Geology Map - Slice A





Order Details:

Order Number: 220424530_1_1
Customer Reference: 4159,GI
National Grid Reference: 554180, 260330
Slice: A
Site Area (Ha): 2.14
Search Buffer (m): 1000

Site Details:

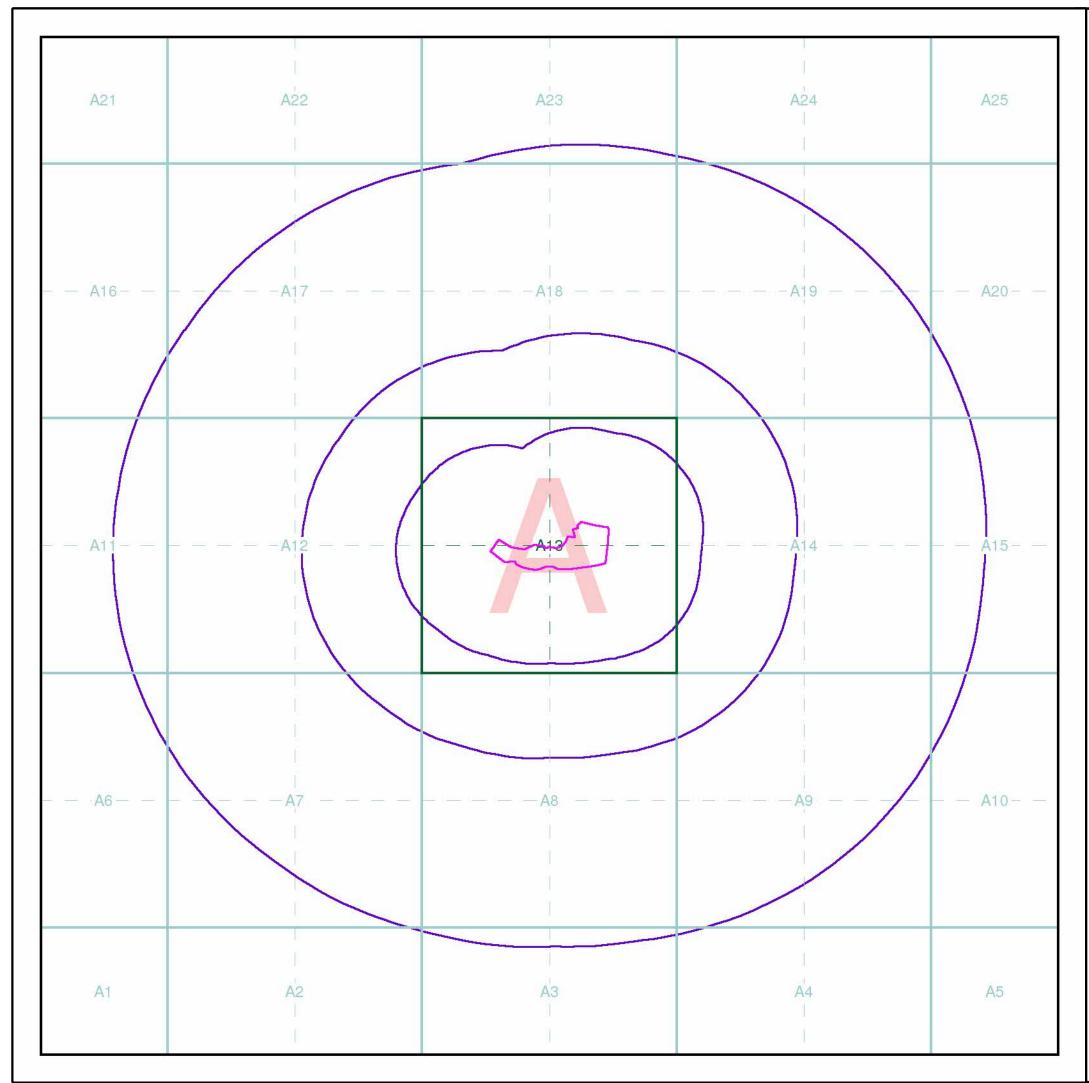
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el: 0844 844 9952 ax: 0844 844 9951 /eb: www.envirocheck.co.

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Index Map

For ease of identification, your site and buffer have been split into Slices, Segments and Quadrants. These are illustrated on the Index Map opposite and explained further below.

Slice

Each slice represents a 1:10,000 plot area (2.7km x 2.7km) for your site and buffer. A large site and buffer may be made up of several slices (represented by a red outline), that are referenced by letters of the alphabet, starting from the bottom left corner of the slice "grid". This grid does not relate to National Grid lines but is designed to give best fit over the site and buffer.

Seamen

A segment represents a 1:2,500 plot area. Segments that have plot files associated with them are shown in dark green, others in light blue. These are numbered from the bottom left hand corner within each slice.

Quadrant

A quadrant is a quarter of a segment. These are labelled as NW, NE, SW, SE and are referenced in the datasheet to allow features to be quickly located on plots. Therefore a feature that has a quadrant reference of A7NW will be in Slice A, Segment 7 and the NW Quadrant.

A selection of organisations who provide data within this report:









Envirocheck reports are compiled from 136 different sources of data

Client Details

Mrs A Davies, Geosphere Environmental Ltd, Brightwell Barns, Ipswich Road, Brightwell, Suffolk, IP10 0BJ

Order Details

Order Number: 220424530_1_1
Customer Ref: 4159,GI
National Grid Reference: 554200, 260320

Site Area (Ha): 2.14 Search Buffer (m): 1000

Site Details

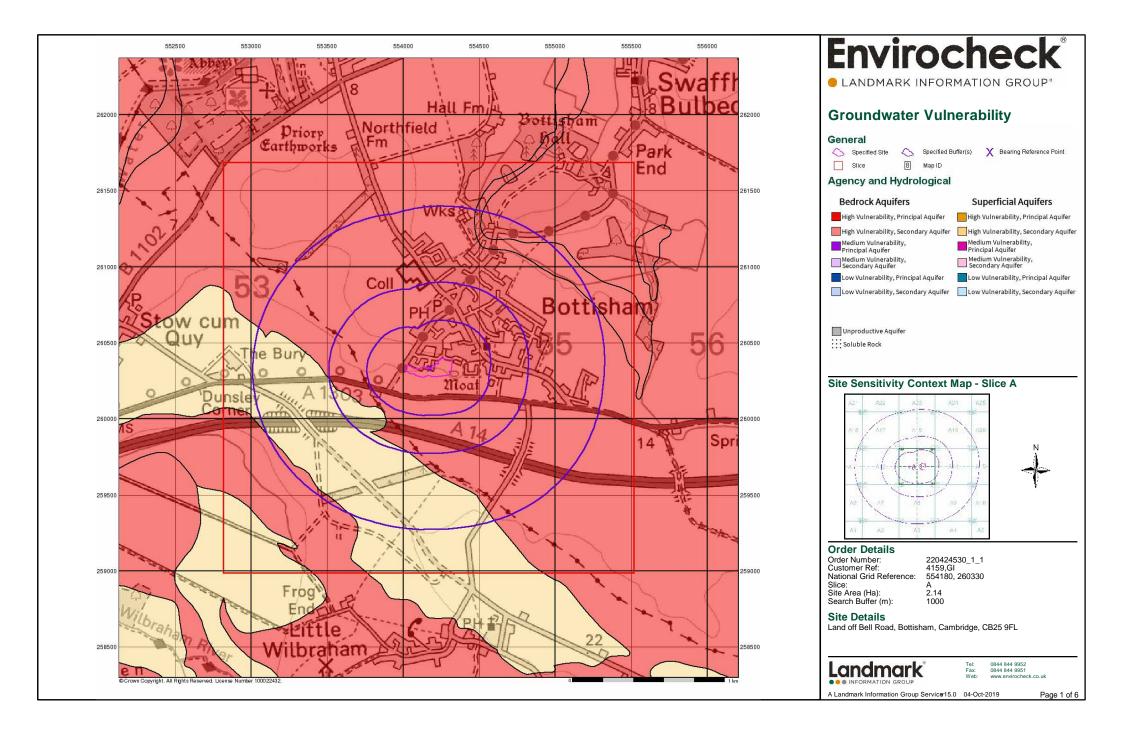
Land off Bell Road, Bottisham, Cambridge, CB25 9FL

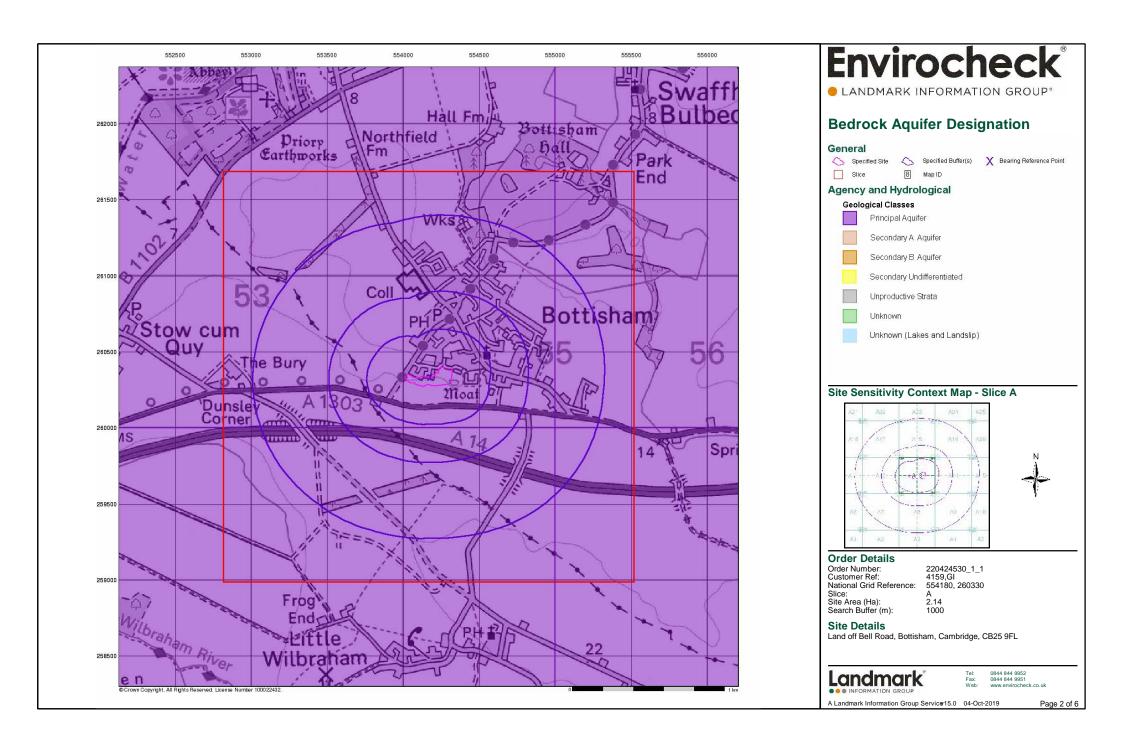
Full Terms and Conditions can be found on the following link: http://www.landmarkinfo.co.uk/Terms/Show/515

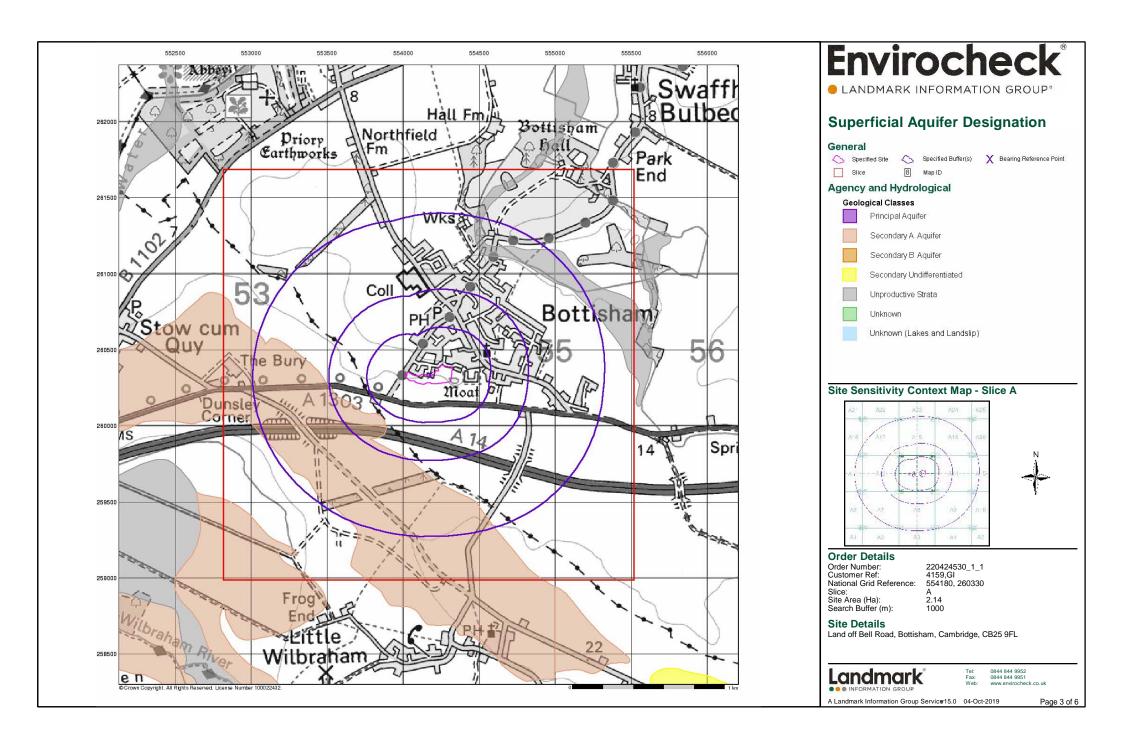


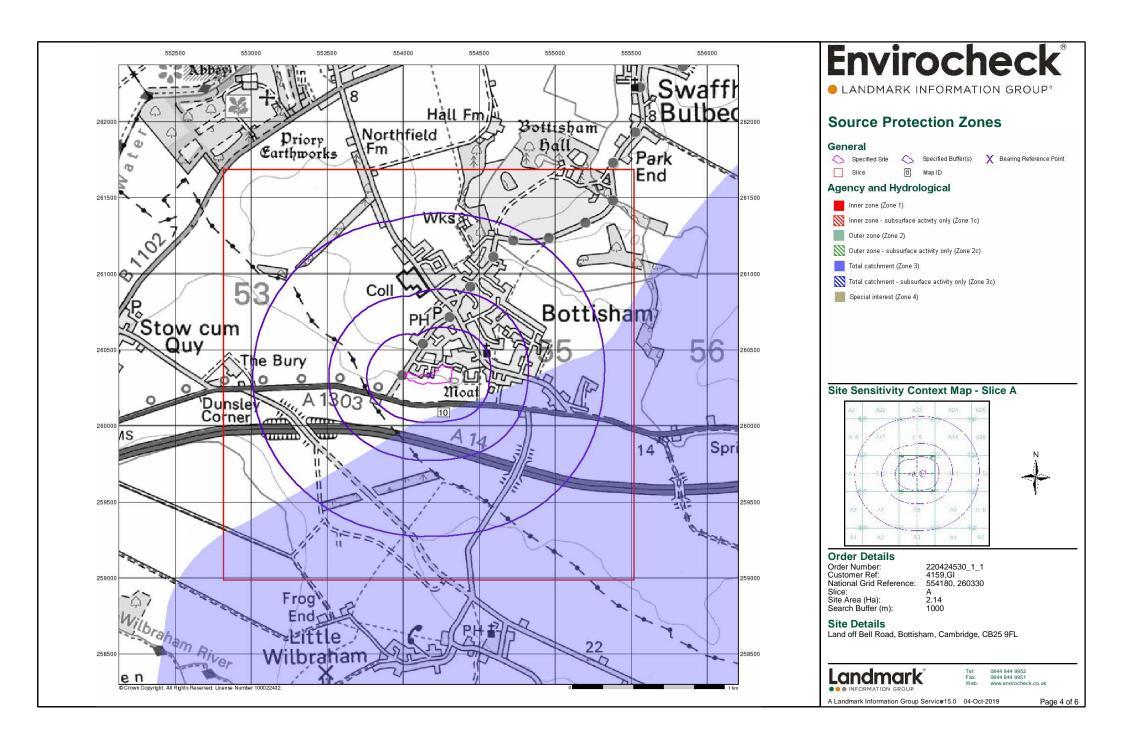
Fel: 0844 844 9952 Fax: 0844 844 9951 Veb: www.envirocheck.co.uk

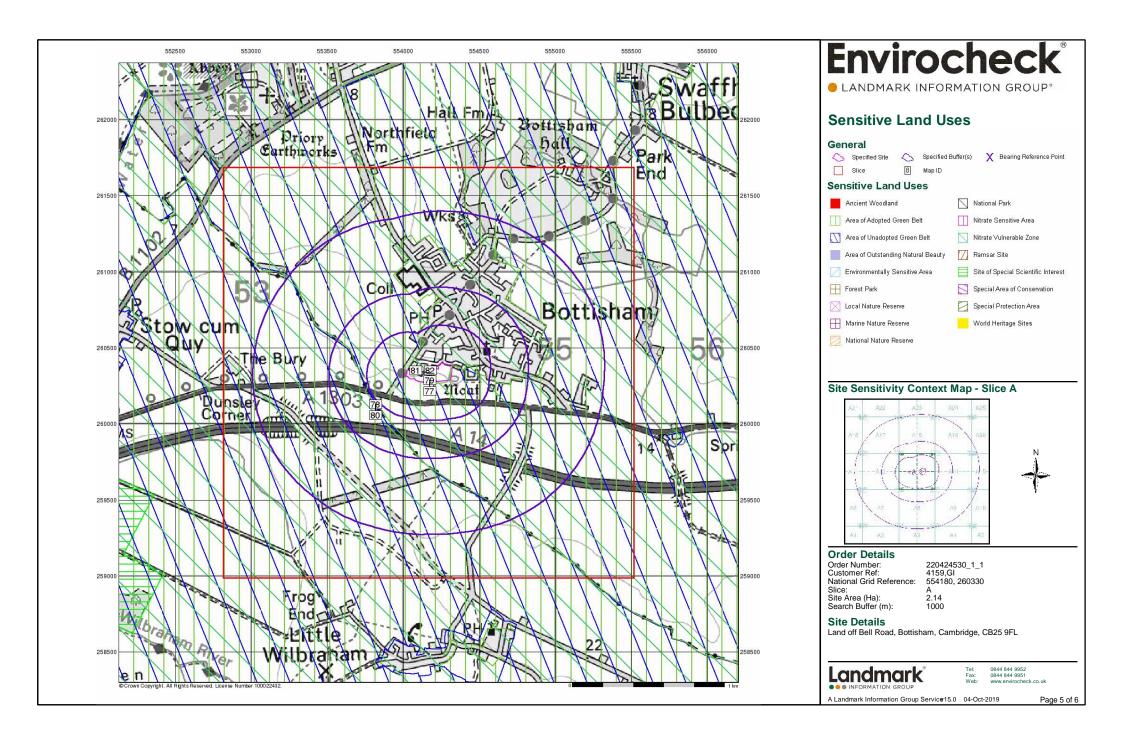
A Landmark Information Group Service v50.0 04-Oct-2019 Page 1 of 1

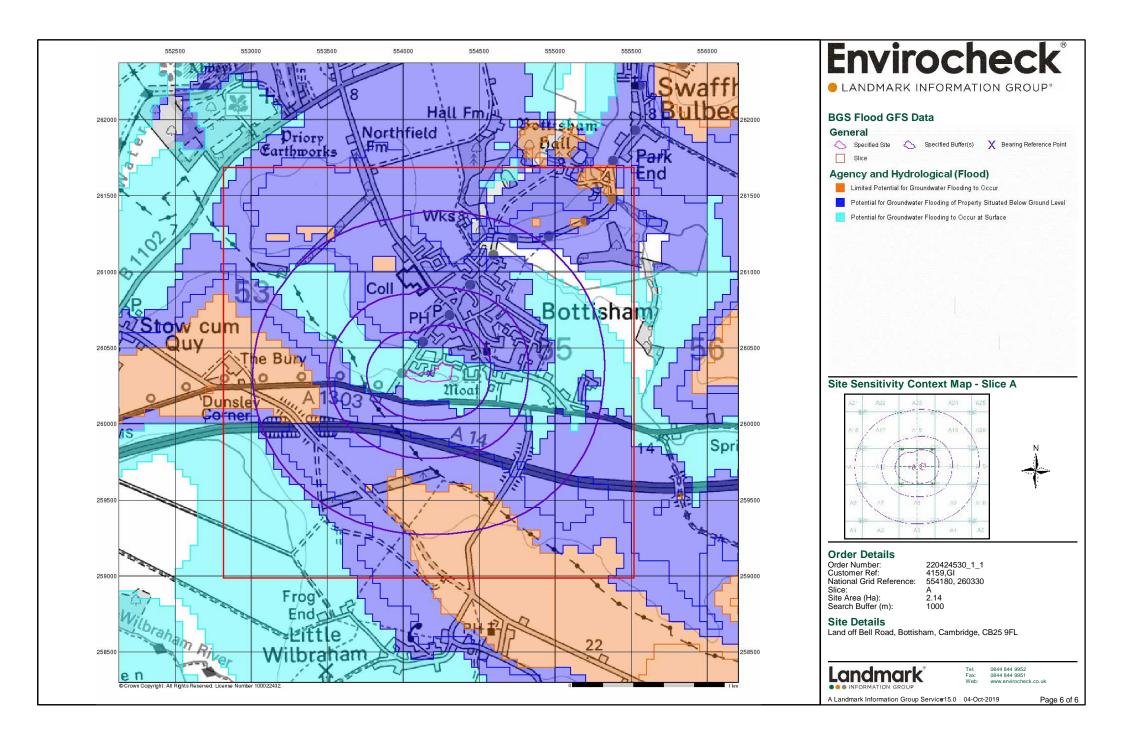


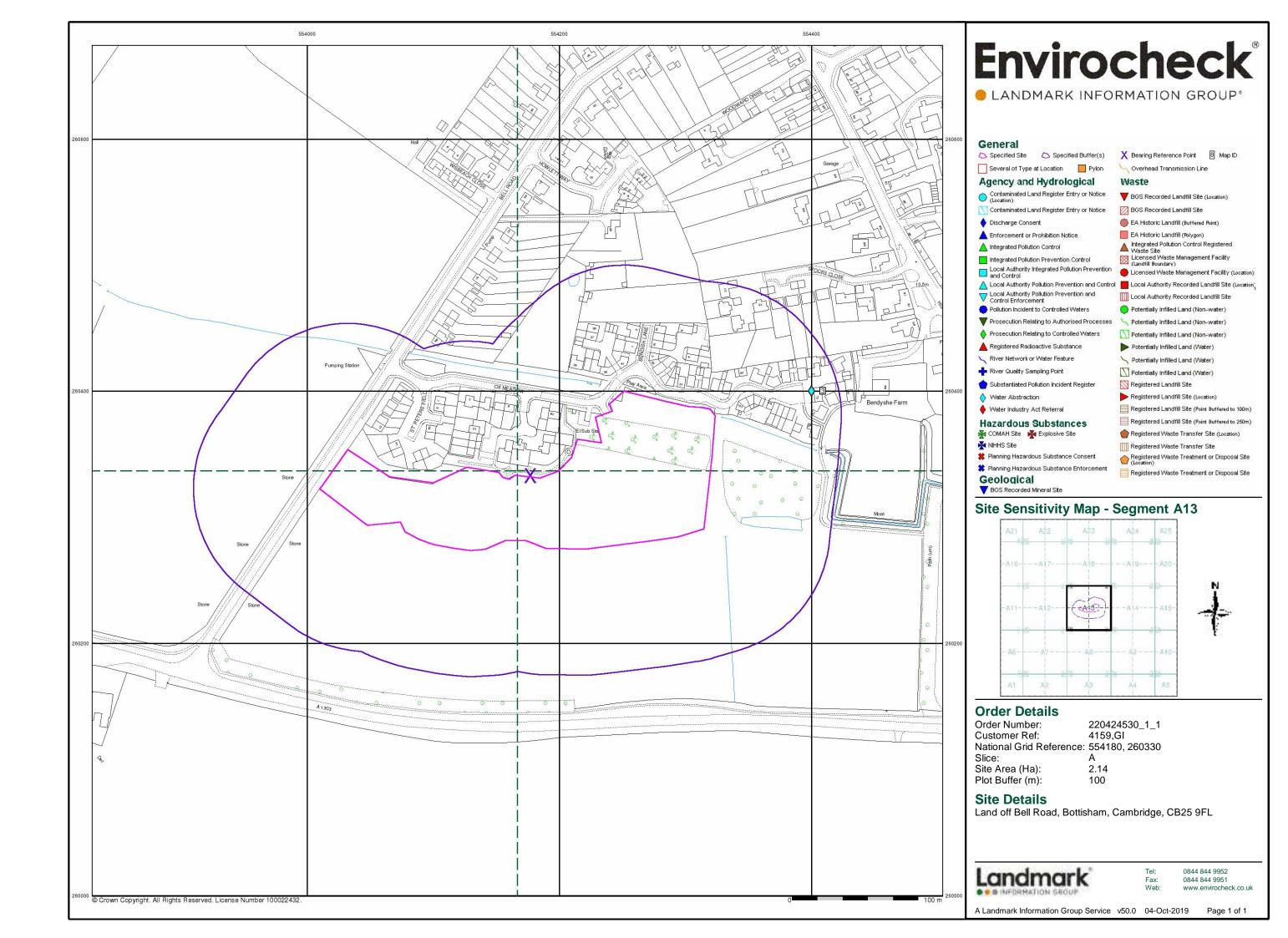


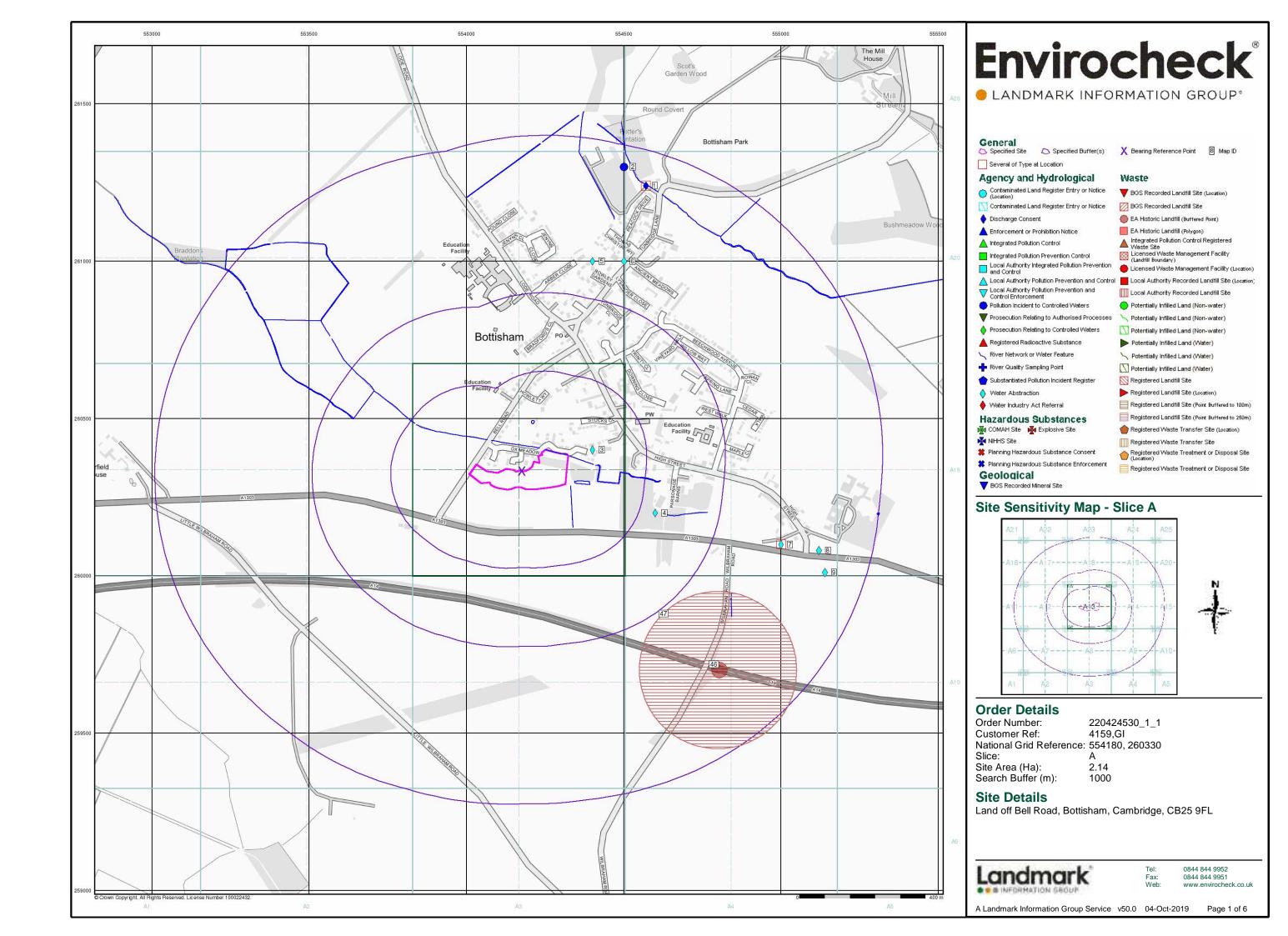


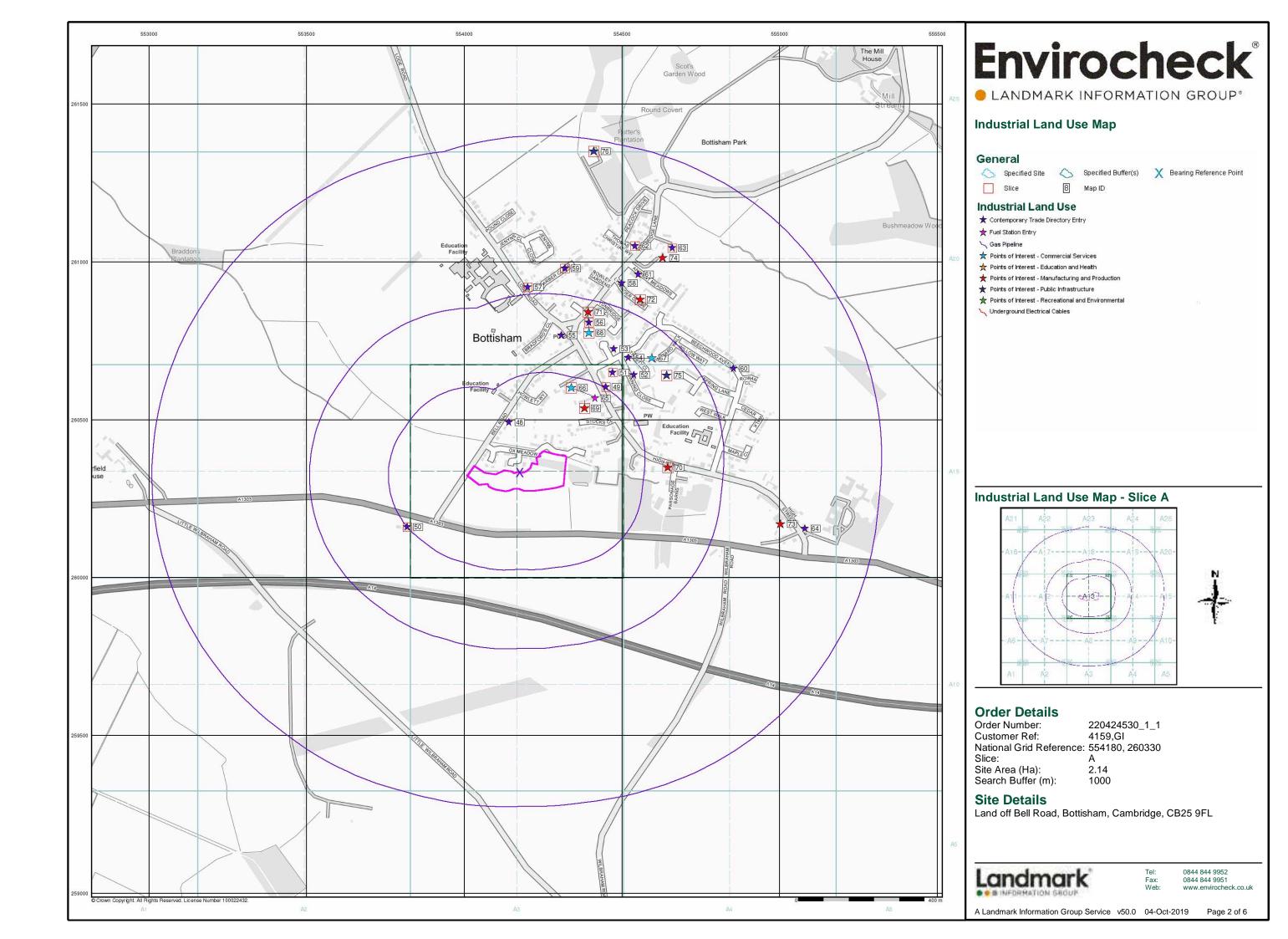


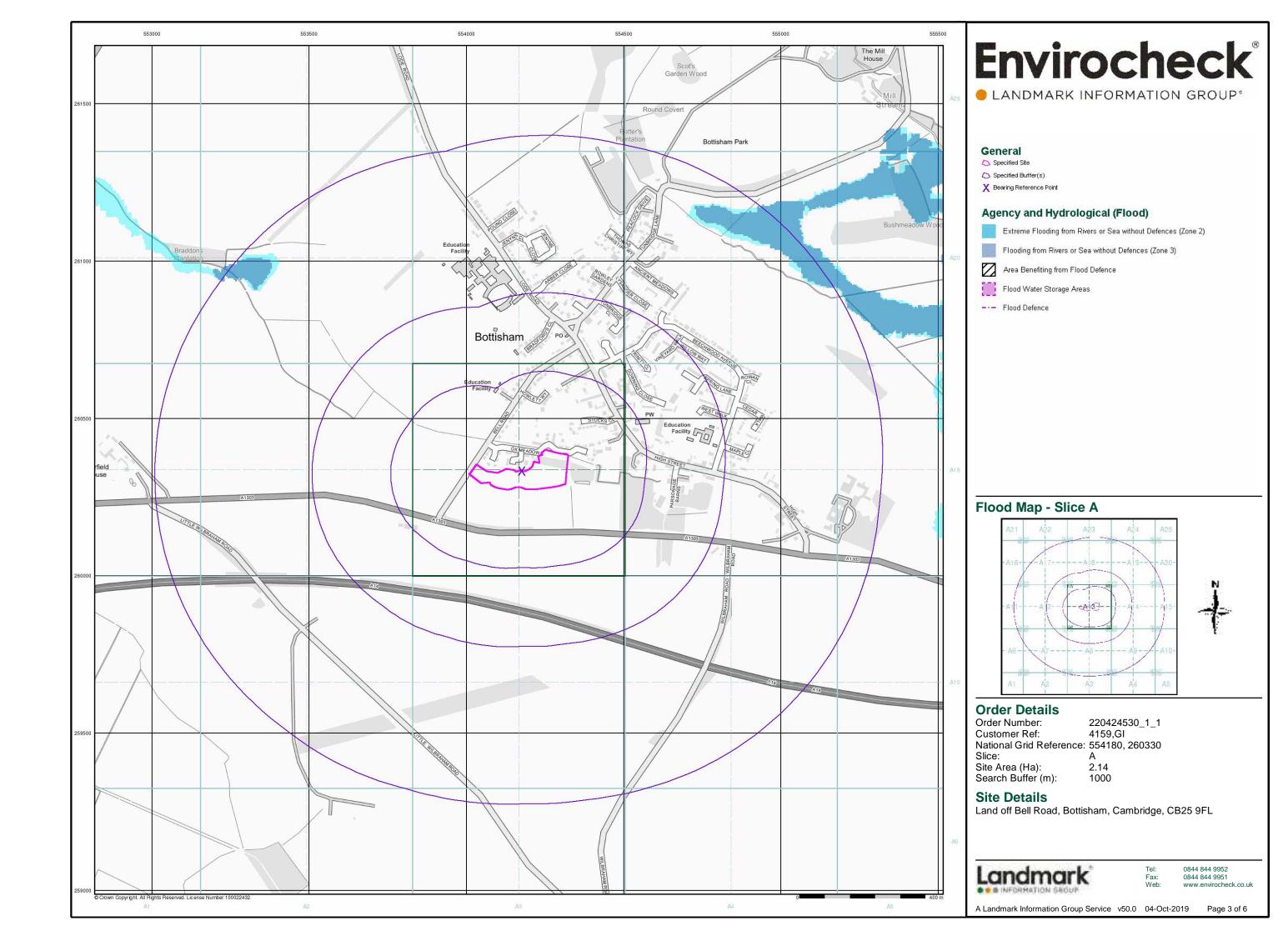


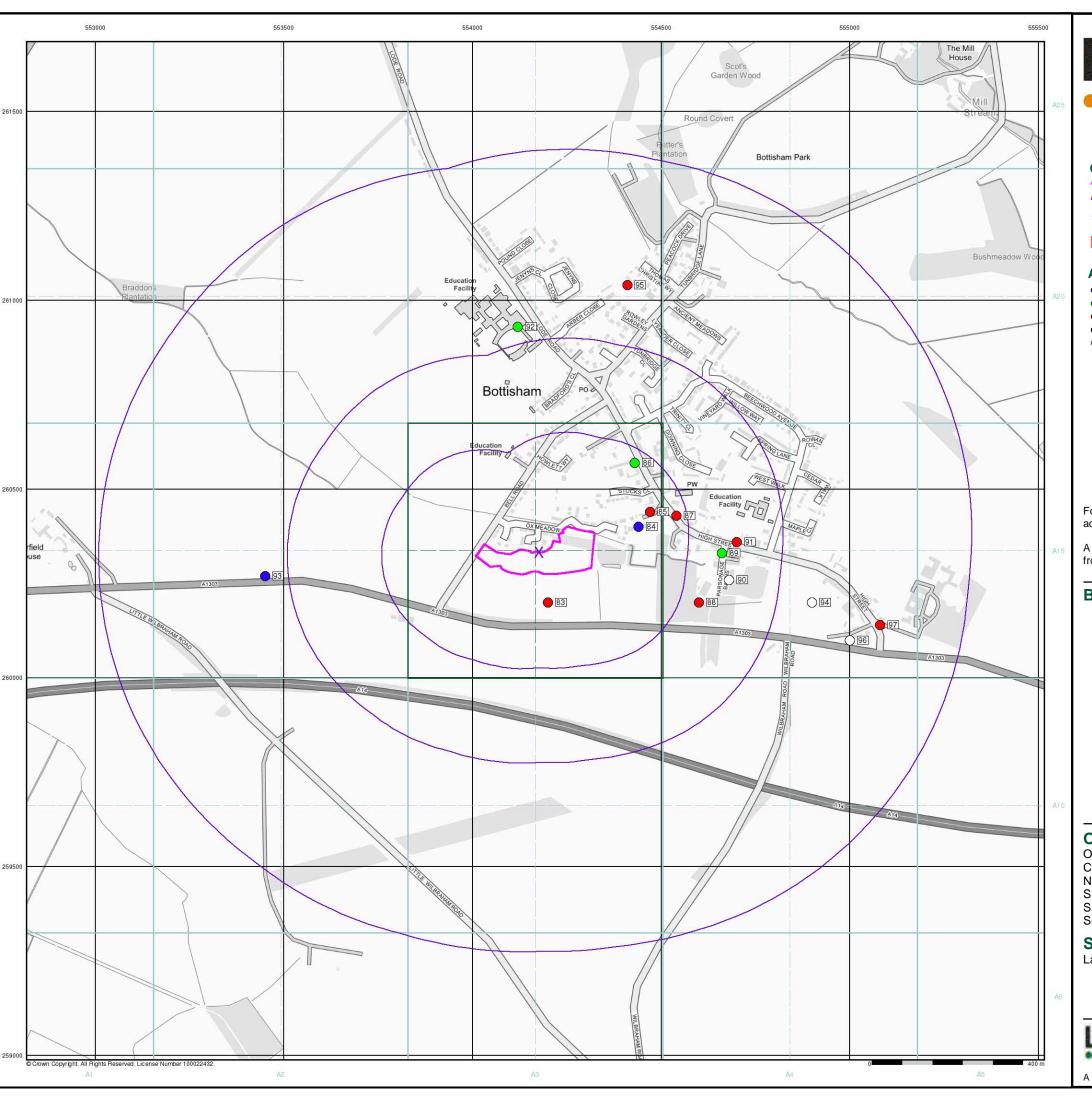












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General

Specified Buffer(s)

X Bearing Reference Point

8 Map ID

Several of Type at Location

Agency and Hydrological (Boreholes)

BGS Borehole Depth 0 - 10m

BGS Borehole Depth 10 - 30m

BGS Borehole Depth 30m +

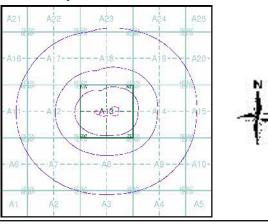
Confidential

Other

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

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

Borehole Map - Slice A



Order Details

Order Number: 220424530_1_1 Customer Ref: 4159,GI National Grid Reference: 554180, 260330

Slice:

Site Area (Ha): Search Buffer (m): 2.14 1000

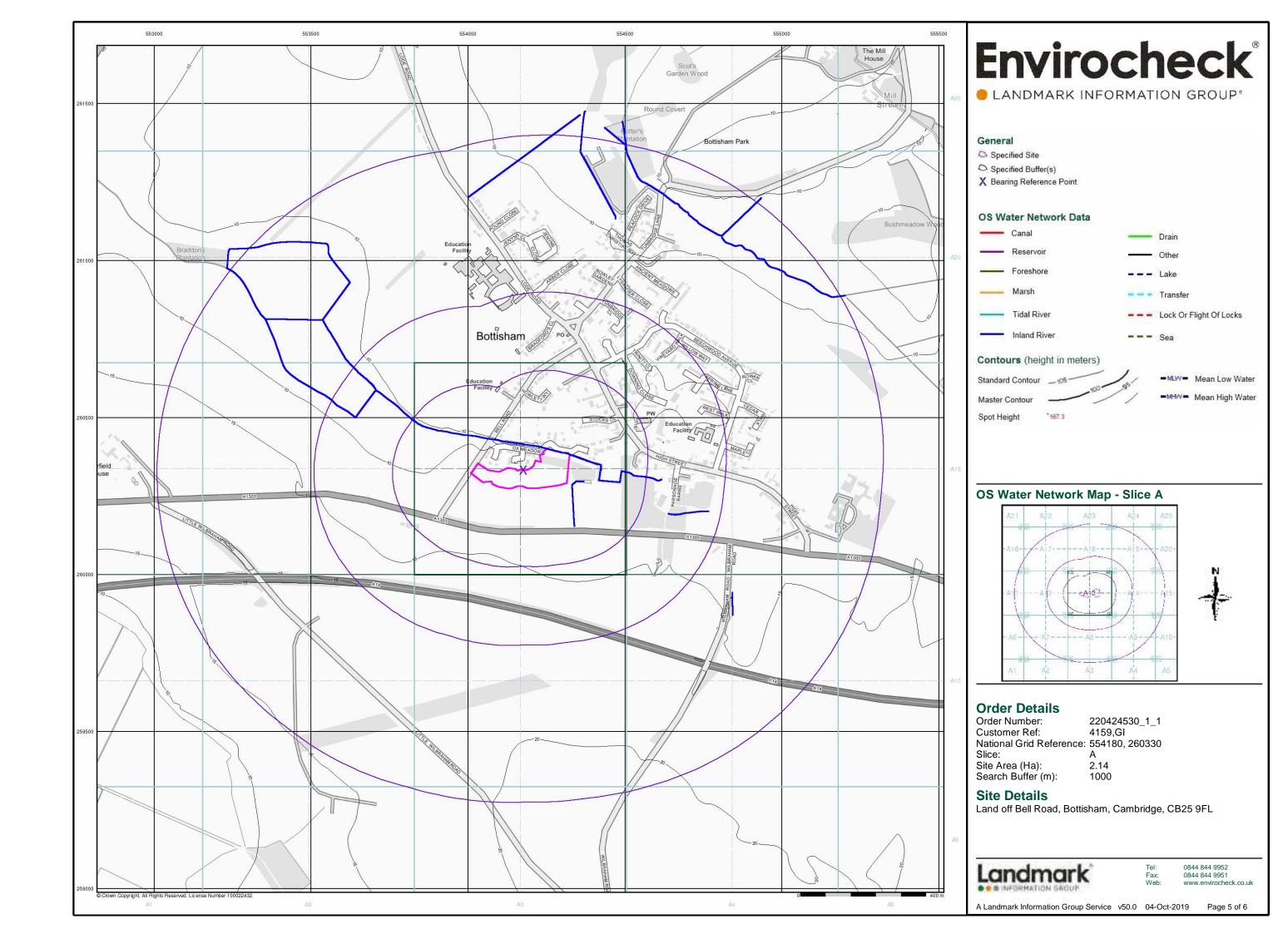
Site Details

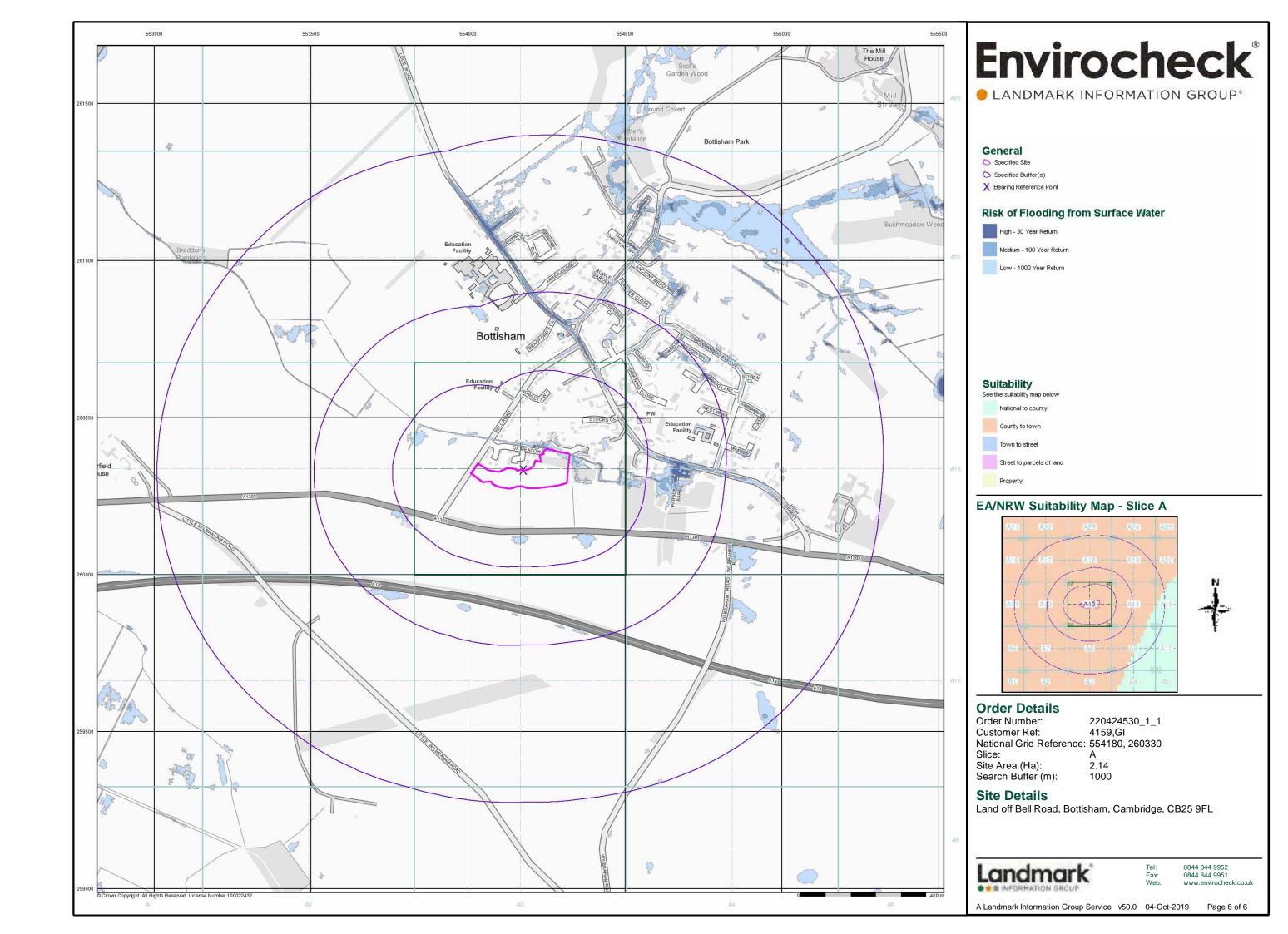
Land off Bell Road, Bottisham, Cambridge, CB25 9FL

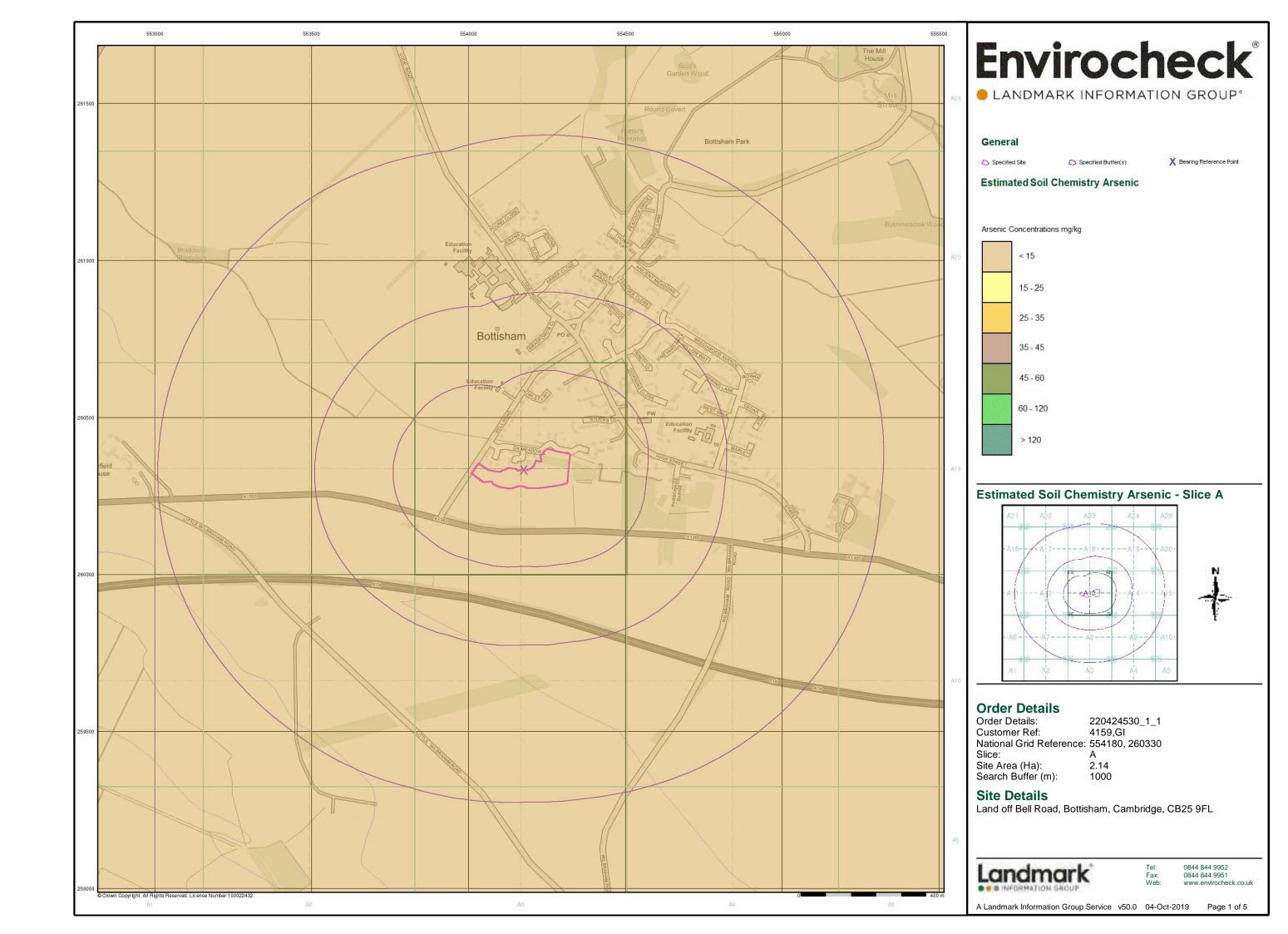


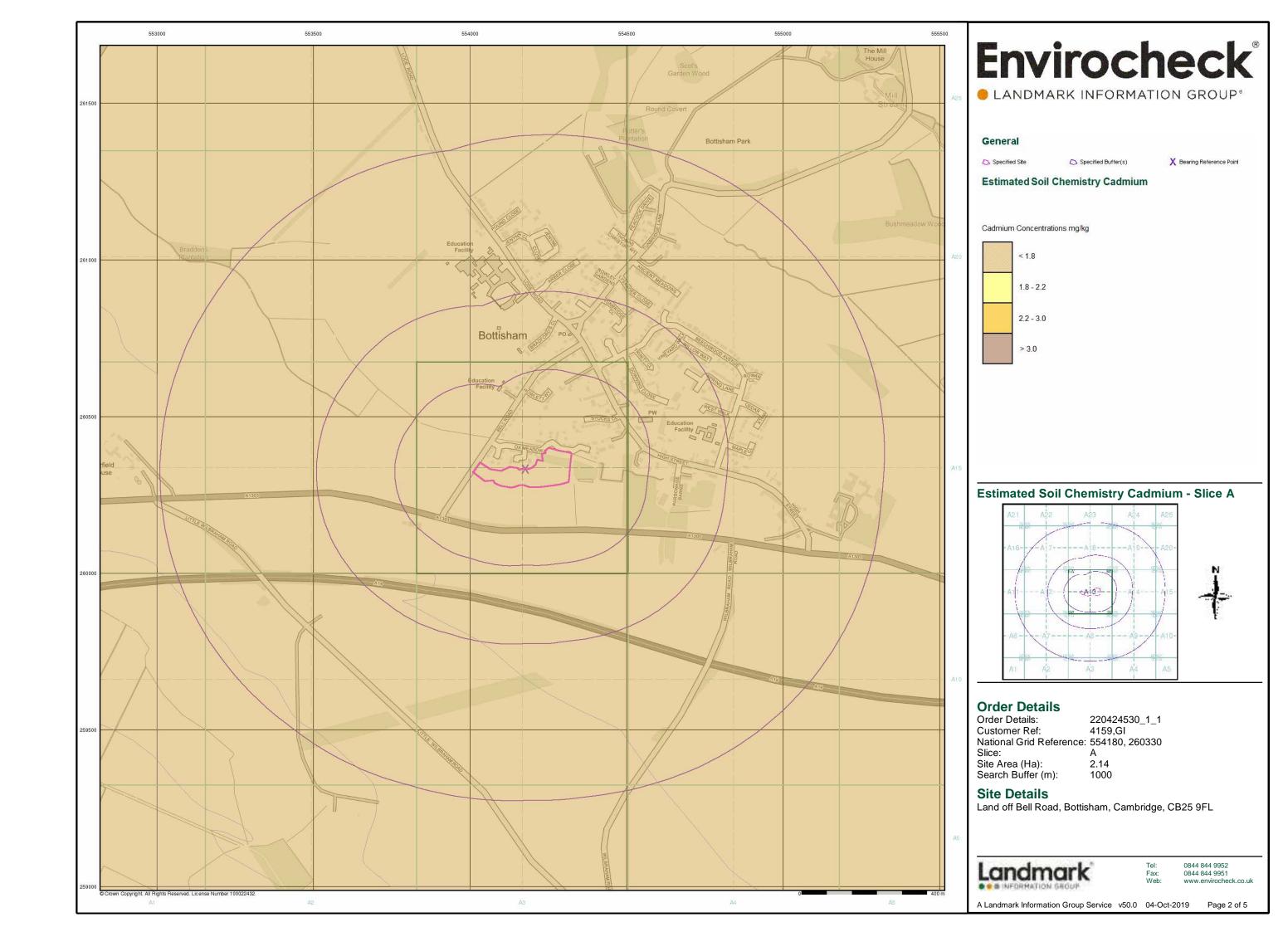
0844 844 9952

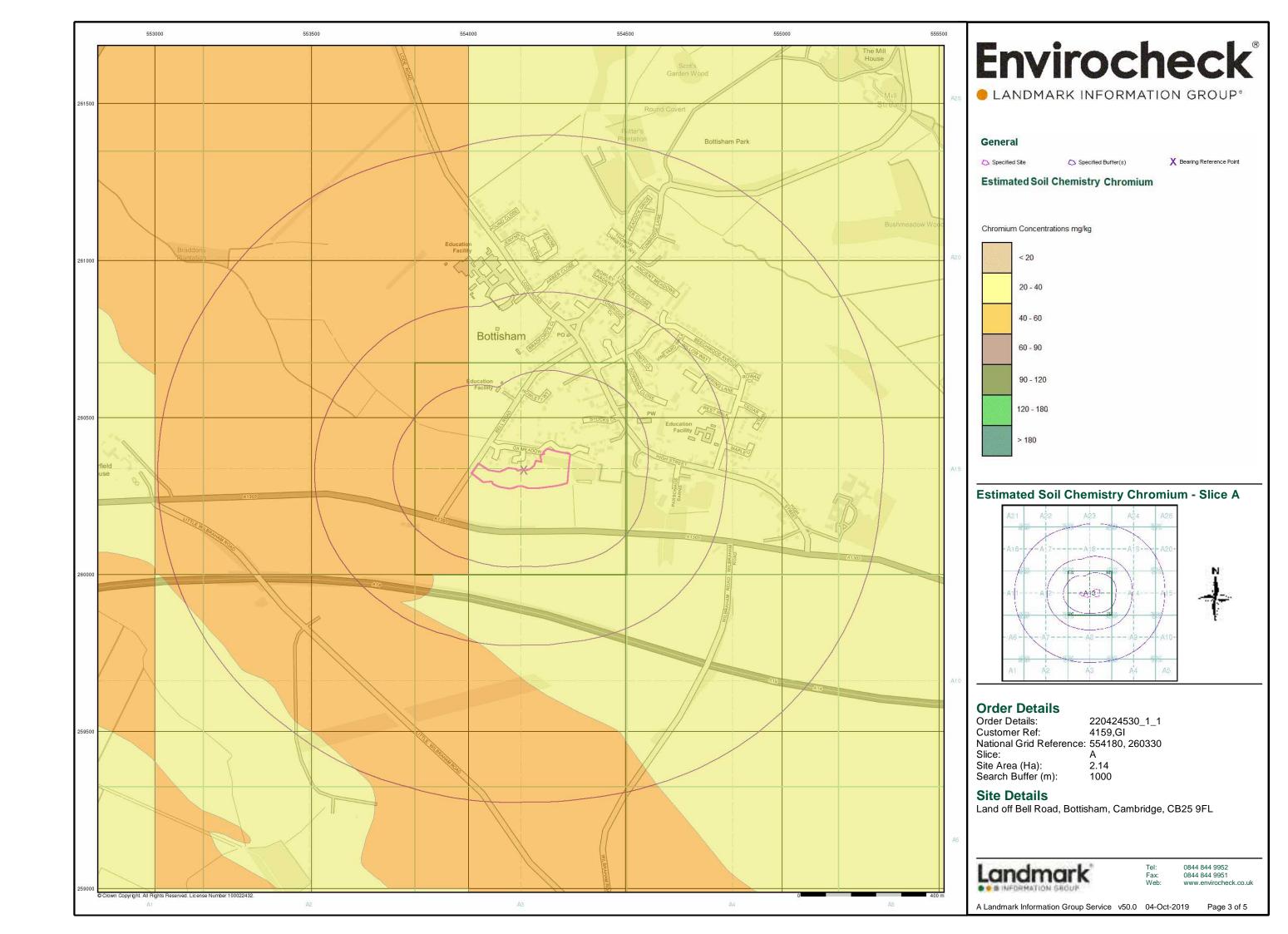
A Landmark Information Group Service v50.0 04-Oct-2019

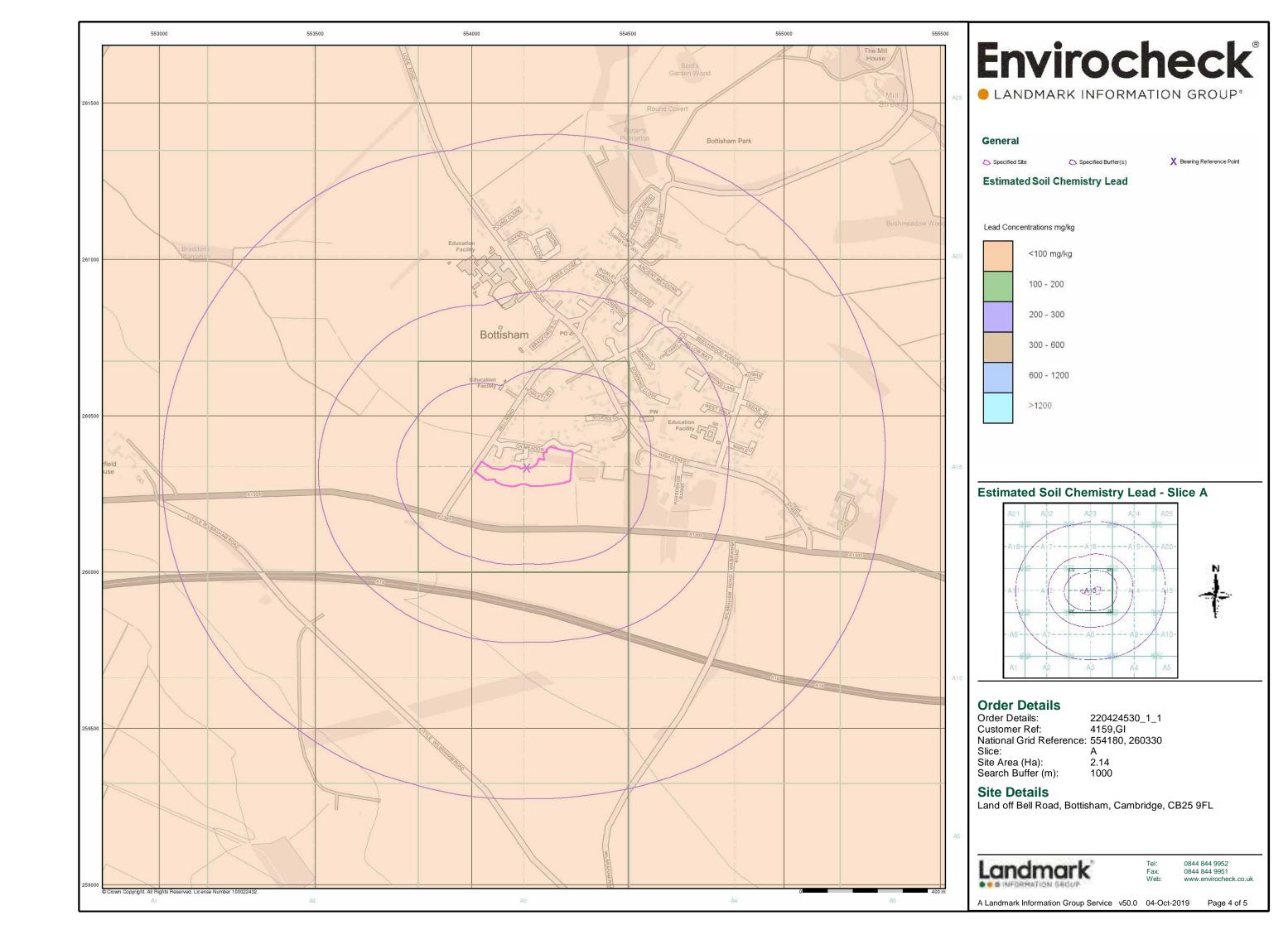


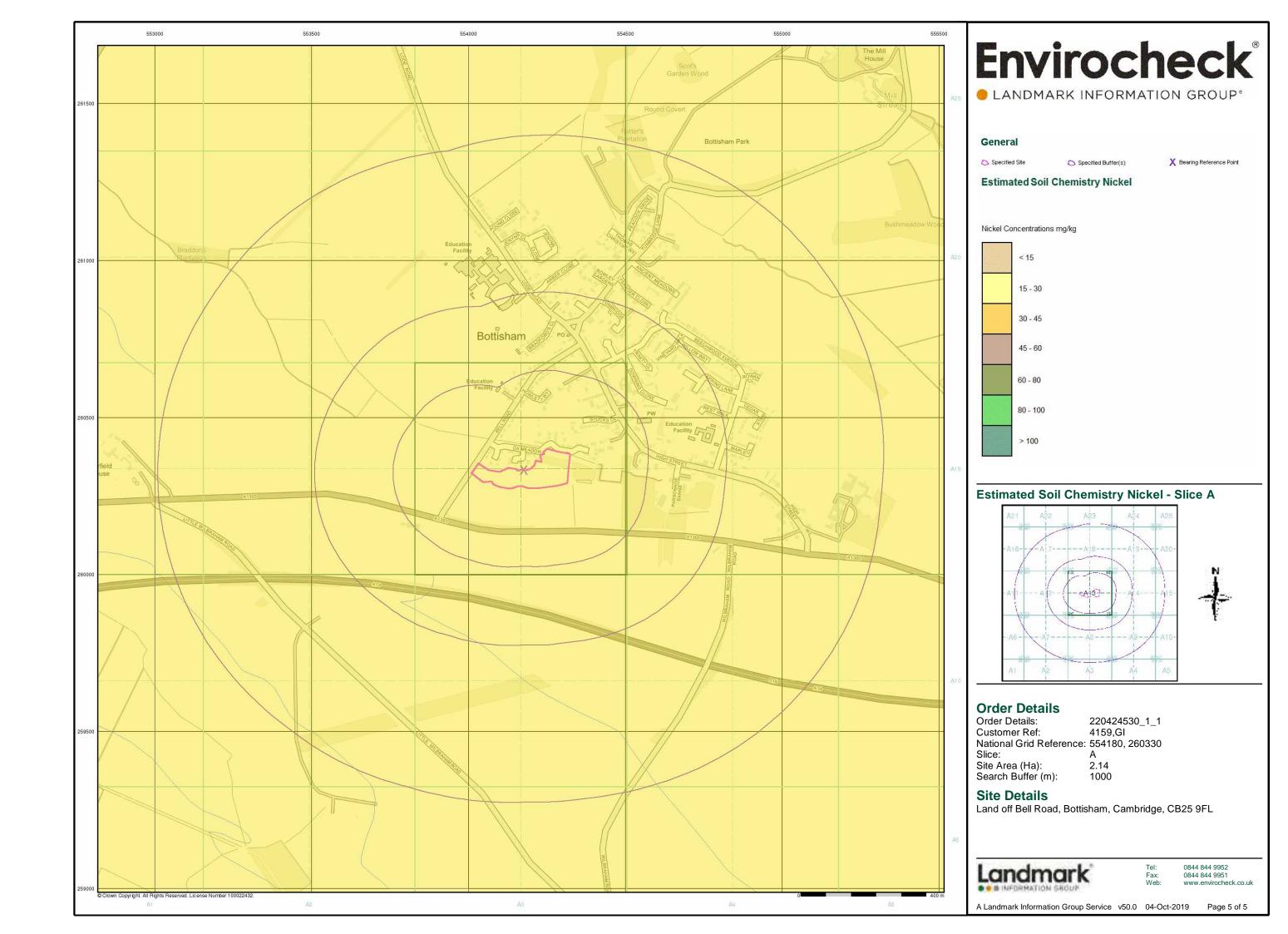










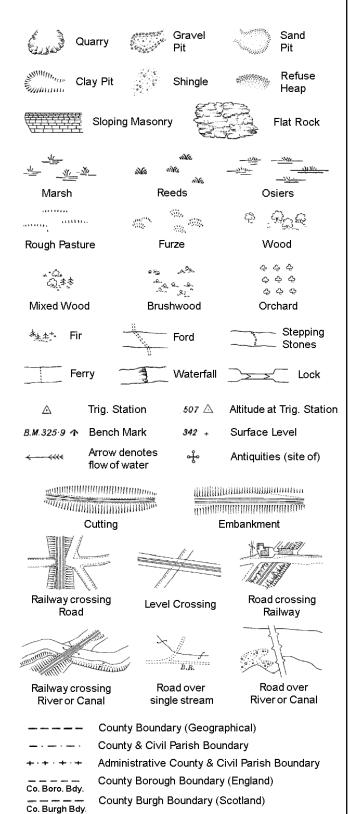




Appendix 5 - Envirocheck Historical Maps

Historical Mapping Legends

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



B.R.

EP

F.B.F.P.

G.P

Bridle Road

Foot Bridge

Foot Path

Mile Stone

M.P.M.R Mooring Post or Ring

Electricity Pylor

Signal Post

Telephone Call Box

Sluice

Trough

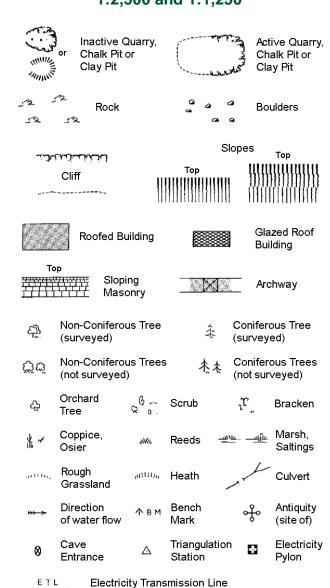
Well

S.P

Sl

T.C.B

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



 County Boundary (Geographical)
 County & Ci∨il Parish Boundary

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

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

1:1,250

	 Clitt Utivinion		Slo Top	opes 	Top
23	Rock		23	Rock (se	cattered)
\Box	Boulders		Δ	Boulders	s (scattered)
	Positioned	Boulder		Scree	
<u>දවු</u>	Non-Conife (surveyed)	erous Tree)	*	Coniferd (surveye	ous Tree ed)
ਨੁੱਚੱ	Non-Conife (not surve	erous Trees yed)	* **	Conifero (not sur	ous Trees veyed)
දා	Orchard Tree	Q 0.	Scrub	ູຕຸ	Bracken
* ~	Coppice, Osier	aVu,	Reeds ∸	<u>ικ —η</u> [κ	Marsh, Saltings
arrete,	Rough Grassland	mmm,	Heath	1	Culvert
*** >-	Direction of water flo	Δ w	Triangulatior Station	, f	Antiquity (site of)
E_T_L	_ Electric	ity Transmis	ssion Line	\boxtimes	Electricity Pylon
∤ ∤ вм	231.60m E	Bench Mark	7	Building Building	gs with g Seed
	Roofe	ed Building		∞ -	azed Roof uilding
		Civil parish	/community b	oundary	
		District boo	undary		
_ •		County box	undary		
c	,	Boundary	ost/stone		
×			mereing symb bear in oppose		
Bks	Barracks		P	Pillar, Po	le or Post

٥		Boundary mere always appear of three)		,	
Bks	Barracks		Р	Pillar,	Pole or Post
Bty	Battery		PO	Post 0	Office
Cemy	Cemetery		PC	Public	Convenience
Chy	Chimney		Pp	Pump	
Cis	Cistern		Ppg Sta	Pumpi	ing Station
Dismtd Rly	Dismant	tled Railway	PW	Place	ofWorship
El Gen Sta	Electrici Station	ty Generating	Sewage Pp	g Sta	Sewage Pumping Station
EIP	Electricity	Pole, Pillar	SB, S Br	Signa	l Box or Bridge
El Sub Sta	Electricity	Sub Station	SP, SL	Signa	l Post or Light
FB	Filter Bed		Spr	Spring	3
Fn/DFn	Fountain /	Drinking Ftn.	Tk	Tank	or Track
Gas Gov	Gas Valve	Compound	Tr	Troug	h
GVC	Gas Gover	ner	Wd Pp	Wind	Pump
GP	Guide Post	t	Wr Pt, Wr T	Water	Point, Water Tap
MH	Manhole		Wks	Works	(building or area)

Mile Post or Mile Stone

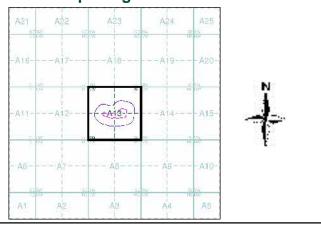
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Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Cambridgeshire & Isle Of Ely	1:2,500	1887	2
Cambridgeshire & Isle Of Ely	1:2,500	1902	3
Cambridgeshire & Isle Of Ely	1:2,500	1926	4
Ordnance Survey Plan	1:2,500	1972	5
Supply of Unpublished Survey Information	1:2,500	1973	6
Additional SIMs	1:2,500	1978	7
Ordnance Survey Plan	1:2,500	1984 - 1985	8
Additional SIMs	1:2,500	1992	9
Large-Scale National Grid Data	1:2,500	1994	10
Large-Scale National Grid Data	1:2,500	1996	11
Historical Aerial Photography	1:2,500	1999	12
Large-Scale National Grid Data Large-Scale National Grid Data	1:2,500 1:2,500	1994 1996	10 11

Historical Map - Segment A13



Order Details

Order Number: 220424530_1_1 4159,GI Customer Ref: National Grid Reference: 554180, 260330 Slice:

Site Area (Ha): 2.14 Search Buffer (m): 100

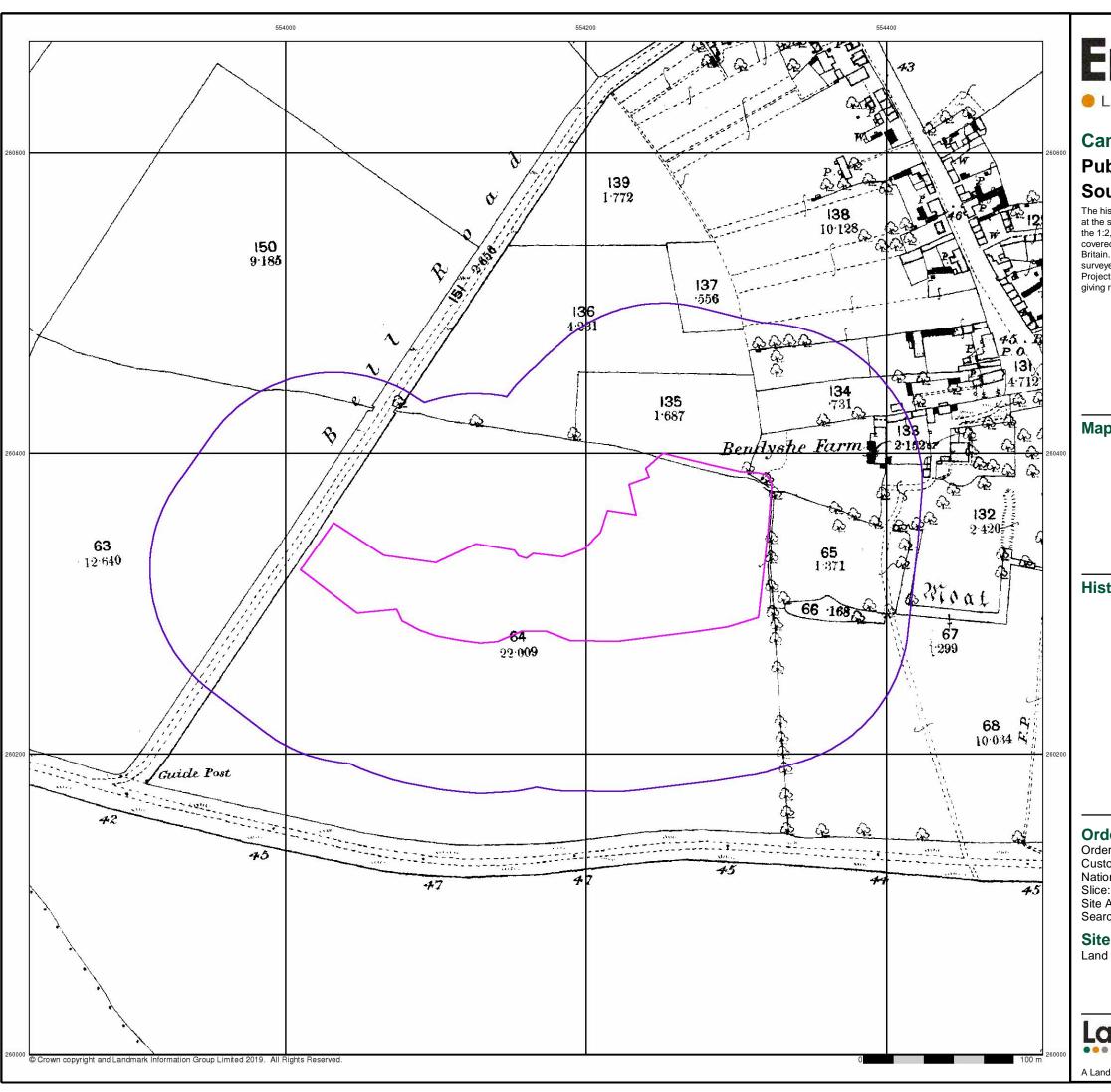
Site Details

Land off Bell Road, Bottisham, Cambridge, CB25 9FL



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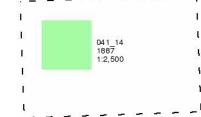
Cambridgeshire & Isle Of Ely

Published 1887

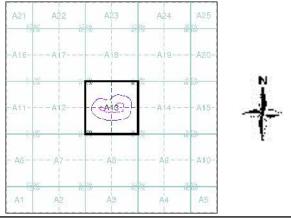
Source map scale - 1:2,500

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

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

Order Number: 220424530_1_1 Customer Ref: 4159,GI National Grid Reference: 554180, 260330

Site Area (Ha): Search Buffer (m): 2.14 100

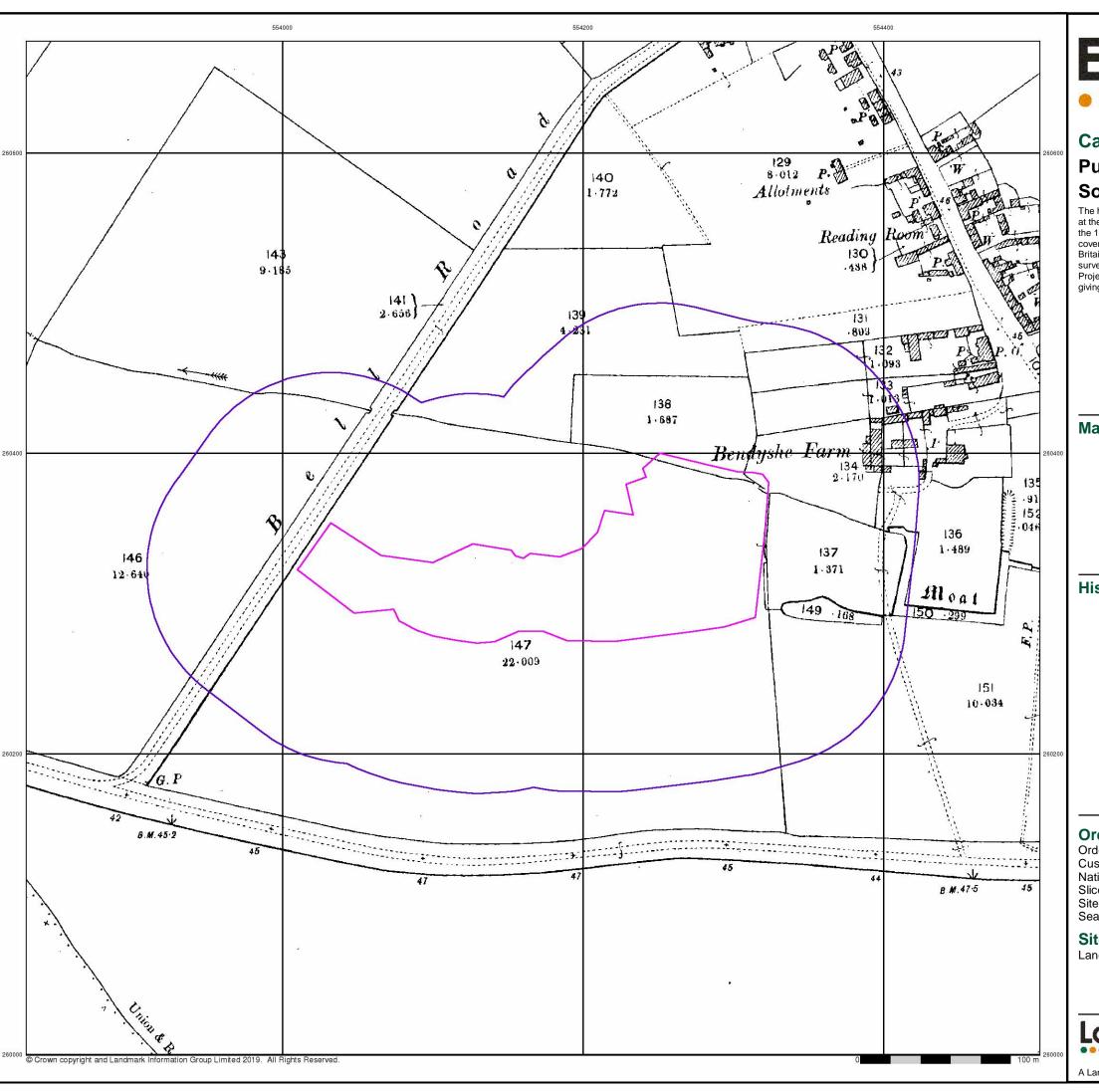
Site Details

Land off Bell Road, Bottisham, Cambridge, CB25 9FL

Landmark

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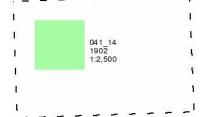
Cambridgeshire & Isle Of Ely

Published 1902

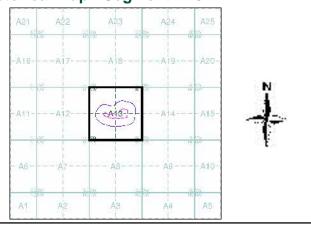
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