

Stonestreet Green Solar
Environmental Statement
Volume 4: Appendices
Chapter 11: Land Contamination
Appendix 11.2: Phase 1 Geoenvironmental and
Geotechnical Desk Study Part 5 of 5

PINS Ref: EN010135

Doc Ref. 5.4

Version 1

June 2024

APFP Regulation 5(2)(a)

Planning Act 2008

The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009



On the 29th March 2021, 1No. 250lb UXB was discovered on the seabed near Hinkley Point C harbour, Bristol. A maritime exclusion was imposed while the item was investigated and then destroyed in a controlled explosion.

On the 10th May 2021, 1No. Anti-Aircraft shell dating from WWII was found by a member of the public in Horsham, Surrey. It was destroyed in-situ by a bomb disposal unit.

On the 17th May 2021, 1No. Sea Wolf missile was brought onboard a fishing vessel near Brixham in Devon. A Royal Navy EOC team destroyed the missile in a controlled explosion.

On the 1st June 2021, a cache of approximately 100No. hand grenades dating from WWII were found in a Nottinghamshire forest, a possible relic from nearby wartime camps. They were destroyed.

On the 23rd July 2021, 1No. 18lb artillery shell dating from WWI was discovered in a private garden in Bloxham, Oxfordshire. It was transported to a nearby field where it was destroyed in a controlled explosion.

On the 24th July 2021, 1No. 500lb British UXB was uncovered during construction works in Goole, East Yorkshire. Reports indicated that the UXB had been jettisoned by a Lancaster bomber aircraft prior to crashing nearby in WWII. The item was investigated and destroyed.

On the 18th August 2021, 1No. UXB was found by construction workers on a Site in Earl Sterndale, Derbyshire. Upon inspection the UXB was deemed to be dangerous and a controlled detonation was undertaken.

On the 10th September 2021, EOD teams destroyed 25No. mortars which had been washed up onto beaches around Nairn and Ardersier in Morayshire. These beaches had been used during WWII for training prior to the D-Day landings in Normandy.

On the 18th October, 1No. 18.5lb artillery shell was discovered during the clearing-out of a farmyard barn near Aberfeldy in Perthshire. The shell dated from WWI and was removed.

On the 12th November 2021, 1No. unexploded artillery shell was found on a housing development site in Wrexham, Wales. It was destroyed in controlled explosion.

On the 15th December 2021, approximately 200No. artillery shells were discovered at a construction site located within the former Royal Ordnance Factory at Swynnerton in Staffordshire. The shells were removed and destroyed.

On the 15th December 2021, 1No. apparent UXB was snagged by a fishing trawler off the Norfolk Coast and then detonated, causing significant damage to the vessel. Upon further investigation, it was concluded that the UXB had been dropped in the water during WWII.

On the 2nd January 2022, 1No. heavily deteriorated 105mm artillery shell was discovered by dogwalkers on a beach in Cumbria. This may have originated on one of the several offshore ranges which have been operational along the nearby coastline since WWII.

Between the 24th and 27th January 2022, 5No. empty artillery shells were uncovered at a construction site in Manchester. These were likely linked to a shell-production factory which had been active on the site during WWII.

On the 17th February 2022, 1No. WWI-era Mk1 Mills hand grenade was found in the River Frome in Dorset by magnet fishermen. This was the third grenade to be pulled from the same stretch of the river over the past year. It was inspected by local police and destroyed.

Appendix 4 Glossary and Definitions

Abandoned Explosive Ordnance (AXO)	Abandoned Explosive Ordnance is explosive ordnance that has not been used during an armed conflict, that has been left behind or disposed of by a party to an armed conflict, and which is no longer under control of that party. Abandoned explosive ordnance may or may not have been primed, fuzed, armed or otherwise prepared for use.
Close Combat Munitions	Items of ordnance thrown, propelled or placed during land warfare, to include grenades, mortars, projectiles, rockets and land mines.
Demil	Derived from the term 'Demilitarisation', it refers to the break down and the recycling or disposal of ordnance components.
Detonation	The high-speed chemical breakdown of an energetic material producing heat, pressure, flame and a shock wave.
Device	This term is used for any component, sub-assembly or completed ordnance, which may or may not have an explosive risk. It can apply to detonators, primers, gaines, fuzes, shells or bombs.
Explosive	The term explosive refers to compounds forming energetic materials that under certain conditions chemically react, rapidly producing gas, heat and pressure. Obviously, these are extremely dangerous and should only be handled by qualified professionals.
Explosive Ordnance (EO)	Explosive Ordnance is all munitions containing explosives, nuclear fission or fusion materials and biological and chemical agents. This includes bombs and warheads, guided and ballistic missiles, artillery, mortar, rocket, small arms ammunition, mines, torpedoes, depth charges, pyrotechnics, cluster bombs & dispensers, cartridge & propellant actuated devices, electro-explosive devices, clandestine & improvised explosive devices, and all similar or related items or components explosive in nature.
Explosive Ordnance Clearance (EOC)	Explosive Ordnance Clearance is a term used to describe the operation of ordnance detection, investigation, identification and removal, with EOD being a separate operation.
Explosive Ordnance Disposal (EOD)	Explosive Ordnance Disposal is the detection, identification, on-site evaluation, rendering safe, recovery and final disposal of unexploded explosive ordnance.
Explosive Ordnance Reconnaissance (EOR)	Explosive Ordnance Reconnaissance is the detection, identification and on-site evaluation of unexploded explosive ordnance before Explosive Ordnance Disposal.
Explosive Remnants of War (ERW)	Explosive Remnants of War are Unexploded Ordnance (UXO) and Abandoned Explosive Ordnance (AXO), excluding landmines.

Explosive Substances and Articles (ESA)	<p>Explosive substances are solid or liquid substances (or a mixture of substances), which are either:</p> <ul style="list-style-type: none">• capable by chemical reaction in itself of producing gas at such a temperature and pressure and at such a speed as to cause damage to the surroundings.• designed to produce an effect by heat, light, sound, gas or smoke, or a combination of these as a result of a non-detonative, self-sustaining, exothermic reaction. <p>Explosive article is an article containing one or more explosive substances.</p>
Fuze	<p>A fuze is the part of an explosive device that initiates the main explosive charge to function. In common usage, the word fuze is used indiscriminately, but when being specific (and in particular in a military context), fuze is used to mean a more complicated device, such as a device within military ordnance.</p>
Gain	<p>Small explosive charge that is sometimes placed between the detonator and the main charge to ensure ignition.</p>
Geophysical survey	<p>A geophysical survey is essentially a range of methods that can be used to detect objects or identify ground conditions without the need for intrusive methods (such as excavation or drilling). This is particularly suited to ordnance as disturbance of ordnance items is to be avoided where ever possible.</p>
Gold line	<p>This is the estimated limit of blast damage from an explosive storage magazine. It usually means that development within this zone is restricted.</p>
High Explosive	<p>Secondary explosives (commonly known as High Explosives (HE)) make up the main charge or filling of an ordnance device. They are usually less sensitive than primary explosives. Examples of secondary explosives are: Nitro glycerine (NG), Trinitrotoluene (TNT), AMATOL (Ammonia nitrate + TNT), Gunpowder (GP), and Cyclotrimethylenetrinitramine (RDX).</p>
Munition	<p>Munition is the complete device charged with explosives, propellants, pyrotechnics, initiating composition, or nuclear, biological or chemical material for use in military operations, including demolitions. This includes those munitions that have been suitably modified for use in training, ceremonial or non-operational purposes. These fall into three distinct categories:-</p> <ul style="list-style-type: none">• inert - contain no explosives whatsoever.• live - contain explosives and have not been fired.• blind - have fired but failed to function as intended.

Primary Explosive	Primary explosives are usually extremely sensitive to friction, heat, and pressure. These are used to initiate less sensitive explosives. Examples of primary explosives are: Lead Azide, Lead Styphnate, and Mercury Fulminate. Primary explosive are commonly found in detonators.
Propellants	Propellants provide ordnance with the ability to travel in a controlled manner and deliver the ordnance to a predetermined target. Propellants burn rapidly producing gas, pressure and flame. Although usually in solid form they can be produced in liquid form. Examples of propellants are: Ballistite often found in a flake form and Cordite used in small arms ammunition.
Pyrotechnic	A pyrotechnic is an explosive article or substance designed to produce an effect by heat, light, sound, gas or smoke, or a combination of any of these, as a result of non-detonative, self-sustaining, exothermic chemical reactions.
Small Arms Ammunition (SAA)	SAA includes projectiles around 12mm or less in calibre and no longer than approximately 100mm. They are fired from a variety of weapons, including rifles, pistols, shotguns and machine guns.
Unexploded Anti-Aircraft (UXAA) Shell	UXAA shells are army ordnance commonly containing HE, though they can also contain pyrotechnic compounds that produce smoke. Most commonly, these were 3.7" and 4.5" HE shells, although they ranged from 2" to 5.25" calibre.
Unexploded Bomb (UXB)	UXB is a common term for unexploded air-dropped munitions.
Unexploded Ordnance (UXO)	UXO is explosive ordnance that has been either primed, fuzed, armed or prepared for use and has been subsequently fired, dropped, launched, projected or placed in such a manner as to present a hazard to operations, persons or objects and remains unexploded either by malfunction or design.
V1	The Vergeltungswaffe-1, V-1, also designated Fieseler Fi 103/FZG-76, known colloquially in English as the Flying Bomb, Buzz Bomb or Doodlebug, was the first guided missile used in WWII and the forerunner of today's cruise missile.
V2	The Vergeltungswaffe 2 (V-2) ('Reprisal Weapon 2') was the first ballistic missile. It was used by the German Army primarily against Belgian and British targets during the later stages of WWII. The V-2 was the first man-made object launched into space, during test flights that reached an altitude of 189km (117 miles) in 1944.

Appendix 5 Bibliography

- Boorman H R P, Hell's Corner 1940, 1950
- Bulloch G, Steeds J E, Green K, Sainsbury M G, Brockwell J S & Slade N J, Land Contamination: Technical Guidance on Special Sites: MoD Land
- Bulloch G, Steeds J E, Green K, Sainsbury M G, Brockwell J S, & Slade N J, R&D Technical Report P5-042/TR/03, Land Contamination: Technical Guidance on Special Sites: Explosives Manufacturing & Processing Sites
- CIRIA, Unexploded Ordnance (UXO), a Guide for the Construction Industry, 2009
- Clarke N J, Luftwaffe Target Reconnaissance, German aerial Photography 1939-1942, 1996
- Clarke N J, Adolf's British Holiday Snaps: Luftwaffe Aerial Reconnaissance Photographs of England, Scotland and Wales, 2012
- Cocroft W D, Dangerous Energy, 2000
- Cocroft W D, Thomas R J, Cold War, 2003
- Collyer D, East Kent at War, 1994
- Department of the Environment, Sampling Strategies for Contaminated Land, Department of the Environment: Contaminated Land Research Report, CLR Report No. 4, 1994.
- Dobinson C S, Twentieth Century Fortifications in England, Volume I 1, Anti-aircraft artillery, England's air defence gun sites. 1914 – 46. Council for British Archaeology, 1996
- Dobinson C S, Twentieth Century Fortifications in England, Volume I 2, Anti-aircraft artillery, Site gazetteer, WWI. Council for British Archaeology, 1996
- Dobinson C S, Twentieth Century Fortifications in England, Volume I. 3. Anti-aircraft artillery, 1914-46, Site gazetteer, WWII HAA & ZAA. Council for British Archaeology, 1996
- Dobinson C S, Twentieth Century Fortifications in England, Volume I 4, Anti-aircraft artillery, Site gazetteer, WWII LAA. Council for British Archaeology, 1996
- Dobinson C S, Twentieth Century Fortifications in England, Volume I 5, Anti-aircraft artillery, Sources. Council for British Archaeology, 1996
- Dobinson C S, Twentieth Century Fortifications in England, Volume II, Anti-invasion defences of WWII. Council for British Archaeology, 1996
- Dobinson C S, Twentieth Century Fortifications in England, Volume III, Bombing decoys of WWII, England's passive air defence 1939-45. Council for British Archaeology, 1996
- Dobinson C S, Twentieth Century Fortifications in England, Volume VIII, Civil defence in WWII, Protecting England's Civil Population. Council for British Archaeology, 1996
- Dobinson C S, Twentieth Century Fortifications in England, Supporting paper AA/1 Searchlight sites in WWII. Council for British Archaeology, 1996
- Dobinson C S, Fields of Deception, Britain's Bombing Decoys of World War II, 2000
- Dobinson C S, AA Command, 2001
- Fegan T, The Baby Killers, 2002
- Morris J, German Air Raids on Britain 1914-1918, 1993
- Ogley R, Kent at War, 1994
- Price A, Blitz on Britain 1939-45, 2000

Ramsey W, The Blitz Then and Now, Vol 1, 1987

Ramsey W, The Blitz Then and Now, Vol 2, 1988

Ramsey W, The Blitz Then and Now, Vol 3, 1990

Zetica, ZeticaUXO Handbook: a guide to dealing with UXO during construction, 2018

Established for over 31 years, Zetica's services include

- ☑ Desk studies
- ☑ Unexploded ordnance risk assessments and risk mitigation
- ☑ Utility services detection
- ☑ Environmental and engineering geophysical surveys
- ☑ Transport infrastructure surveys
- ☑ Pipeline & cable route surveys
- ☑ Intrusive ground investigations

More details are available at

www.zetica.com

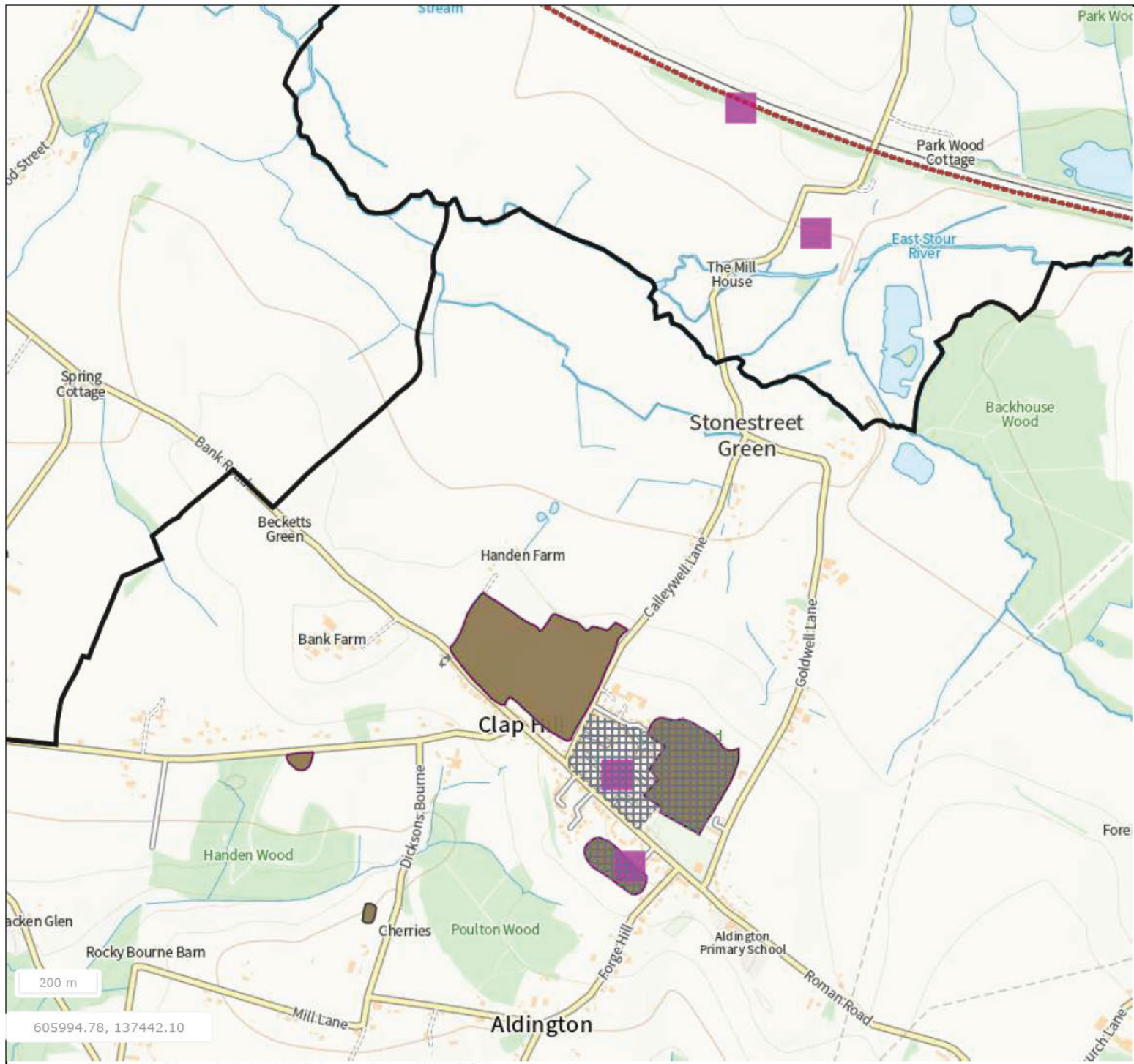















zeticauxo

Annex F

Local Authority Information



Title: Contaminated Land Search

-  LLPG
-  Wards Boundary
-  Env Health Responses
-  Contaminated Land (L)
-  Contaminated Land (P)
-  Landfill (CLARE)
-  Landfill Sites
-  Fuel Stations (KCC Interested)
-  Fuel Stations (Live)
-  Private Water Supplies
-  Waste Sites

Printed By:
anon anon

Printed On:
06-12-2021



200 m
605994.78, 137442.10



Soiltec Laboratories Limited
Soiltec House, Langley Park
Sutton Road, Langley,
Maidstone, Kent ME17 3NQ

Telephone: 01622 862138
Two Lines 01622 862904
E-mail: info@soiltec.net
Web: www.soiltec.net

PHASE I ENVIRONMENTAL ASSESSMENT (DESK STUDY REPORT)

Site: The Rear of 2 to 16 Longsfield, Aldington, near Ashford, Kent TN25 7DP



Prepared for: Peter Thomason and Associates on behalf of Ian Barber Associates

Date: 24th March 2017



CLIENT: Peter Thomason and Associates on behalf of Ian Barber Associates

SITE: The Rear of 2 to [REDACTED]

JOB NUMBER: 07504/23

DATE: 24th March 2017

	Name	Position	Signature	Date
Prepared by	Keith Huxley	Head of Environmental Division	[REDACTED]	24/03/17
Checked by	Martin King	Managing Director	[REDACTED]	24/3/17
On behalf of Soiltec Laboratories Limited				

Soiltec Laboratories disclaims any responsibility to the client and others in respect of matters outside the scope of this report. This report has been prepared within the terms of the contract with the client. This report is confidential to the client and Soiltec Laboratories accepts no responsibility of whatsoever nature to third parties to whom this report or part thereof is made known. Any such party relies upon the report at their own risk.

CONTENTS & EXECUTIVE SUMMARY

	Page No
1. Introduction.....	1
2. The Site and Surrounding Areas.....	1
2.1 Location and Setting.....	1
2.1.1 Walkover Survey.....	2
2.2 Hydrology.....	2
3. Historical Site Use.....	3
3.1 1871 to 1907.....	3
3.2 1939 to 1954.....	3
3.3 1971 to Date.....	3
3.4 Planning and Uses.....	4
4. Environmental Sensitivity.....	4
4.1 Site Sensitivity.....	4
4.2 Potentially Contaminative Use.....	5
4.3 Landfill and Waste Transfer Sites.....	6
4.4 Hydrogeology.....	6
4.5 Geology.....	6
5. Discharge Consents, Water Abstractions and Pollution Incidents.....	7
5.1 Discharge Consents.....	7
5.2. Abstraction Consents.....	7
5.3 Pollution Incidents and Permits.....	7
6. Mining Hazards, Subsidence and Radon.....	8
6.1 Mining.....	8
6.2 Subsidence.....	8
6.3 Radon.....	8

7. Recommendations	9
7.1 General.....	9
7.2 On-Site Contamination Impact.....	9
7.3 Off-Site Contamination Impact.....	9
7.4 Conceptual Model.....	10
7.4.1 Source(s).....	10
7.4.2 Pathway(s).....	10
7.4.3 Receptor(s).....	11
7.4.4 Assessment of Risk.....	12
7.5 Investigation Work Recommended.....	14
7.5.1 General.....	14
7.5.2 Sampling Locations and Analysis.....	14
7.5.3 Timescale.....	15
7.6 Excavated Soils.....	15
7.7 Additional Notes.....	15

APPENDICES

APPENDIX 1 Site Plans (3 pages)

APPENDIX 2 Aerial Photograph (1 page)

APPENDIX 3 Site Photographs (3 pages)

APPENDIX 4 Historical Maps (17 pages)

1871 (1:10560)

1871 (1:2500)

1896 (1:10560)

1898 (1:2500)

1906 (1:10560)

1907 (1:2500)

1939-40 (1:10560)

1939 (1:2500)

1954-55 (1:10560)

1970-71 (1:2500)

1974 (1:2500)

1975 (1:10000)

1988 (1:10000)

1991-93 (1:2500)

2002 (1:10000)

2010 (1:10000)

2014 (1:10000)

APPENDIX 5 Environmental Maps (25 pages)

Historical Land Use Map (1 page)

Environmental Permits, Incidents and Registers Maps (1 page)

Landfill and Other Waste Sites Map (1 page)

Current Land Use Map (1 page)

Hydrogeology and Hydrology Maps (5 pages)

Environment Agency Flood Map (2 pages)

Designated Environmentally Sensitive Sites Map (1 page)

Artificial Ground Map (1 page)

Superficial Deposits and Landslips Map (1 page)

Bedrock and Faults Map (1 page)

Ground Workings Map (1 page)

Mining, Extraction and Natural Cavities Map (1 page)

Ground Stability Maps (6 pages)

Borehole Records Map (1 page)

Railway and Tunnels Map (1 page)

APPENDIX 6 Conceptual Model (1 page)

Executive Summary

Soiltec Laboratories Limited was instructed by Peter Thomason and Associates on behalf of Ian Barber Associates to carry out a Phase 1 Environmental Assessment (Desk Study) of the site at

The Rear of 2 to 16 Longsfield, Aldington, near Ashford, Kent TN25 7DP

A planning application has been submitted to Ashford Borough Council. A desk study report is required to accompany the application (reference 17/00388/AS) and also paragraph 121 of the National Planning Policy Framework (NPPF) that came into force in March 2012.

The site is on the northwest side of the road Quarry Wood and to the north of the rear gardens of the houses in Longsfield and is occupied by a vacant plot of land. It is proposed to develop the site with five residential houses all with off road parking and private gardens.

From the investigations carried out for this desk study the site was undeveloped and within an area of part quarry and sand/grave pit and part farmland from at least the early 1870's until at least 1907. By the late 1930's the site was part of an allotment garden that remained until at least the mid 1950's. By the early 1970's the site was no longer an allotment and has remained undeveloped to date. The site may have also been infilled.

The immediate surrounding areas have been mainly a mix of quarries and sand/gravel pits and residential houses. The houses in the immediate area were built after the mid 1950's and mainly between the early 1970's to mid 1990's. The houses to the west were built on a former council depot and there are historic landfill sites in the area on the former quarry sites.

The predominant underlying bedrock geology is The Hythe Formation (interbedded sandstone and limestone) of high permeability with no drift deposits and thus the site is overlying a major aquifer but is not within a groundwater source protection zone (SPZ).

There are no surface water abstractions in the area (within 2km).

There are no current groundwater abstractions for potable water but there are for other uses in the area (within 2km) although this is just over 1.9km from the site for dust suppression.

The findings of this report indicate that the site represents a **very low to moderate environmental risk** and that a detailed phase II intrusive investigation of the site is required.

Soiltec Laboratories Limited

1. Introduction

Soiltec Laboratories were instructed by Peter Thomason and Associates on behalf of Ian Barber Associates to carry out a Desk Study of the site at The Rear of 2 to 16 Longsfield, Aldington, near Ashford, Kent TN25 7DP (grid reference at the site centre 606135 136863). The site is approximately 78 metres above ordnance datum (AOD) in the village of Aldington, Kent.

The desk study would mainly comprise of a walkover survey of the site, review historical land use, review historical maps, assess the environmental sensitivity of the site and surrounding areas, review geological maps, investigate pollution incident registers, abstraction and discharge consents and liaise with the relevant personnel at the local authority if necessary.

The main sources of the information are, but not limited to; The Environment Agency (EA), Ordnance Survey, The Coal Authority, British Geological Survey, English Nature and The Health Protection Agency.

The site is on the northwest side of the road Quarry Wood and to the north of the rear gardens of the houses in Longsfield and is occupied by a vacant plot of land. It is proposed to develop the site with five residential houses all with off road parking and private gardens.

Site plans showing the site location and proposed layouts are shown in appendix 1, site plans (p1 and p2).

2. The Site and Surrounding Areas

2.1 Location and Setting

The site covers an area of approximately 0.13ha (1300m²) and off Quarry Wood to the rear of Longsfield in the village of Aldington.

It is located in an area of predominantly medium density residential use although there are small shops, a pub and small fire station in the area.

An aerial photograph of the site dated April 2015 is shown in appendix 2.

Immediately to the north/northwest of the site are residential houses in Celak Close that extend to approximately 90m from the site with Calleywell Lane and farmland beyond. Immediately to the north/northeast of the site is an area of former farmland that is currently being developed with residential houses with some areas of woodland beyond. Quarry Wood is approximately 100m to the northwest and extends to approximately 200m from the site.

Immediately to the west of the site are the residential houses in Longsfield and a block of lock up garages for the houses. Beyond Longsfield approximately 100m from the site is the junction of Calleywell Lane and Roman Road with a few houses and a shop in Roman Road beyond. Approximately 250m to the west/northwest is the junction of Roman Road and Frith Road with farmland beyond.

Immediately to the south/southwest of the site are residential houses in Longsfield and residential houses in Ragstone Hollow to the south/southeast. Approximately 75m to the south is the junction of Longsfield and Roman Road with a few houses opposite and in the roads Badgers Close and Earlsfield. Approximately 250m from the site beyond the houses is farmland. Approximately 260m to the southeast is the junction of Roman Road and Forge

Hill with the Walnut Tree pub at the junction. Further to the southeast approximately 500m from the site is Aldington Primary School.

Immediately to the east of the site is the road Quarry Wood with a few residential houses that extend to approximately 80m from the site. Beyond the houses are areas of farmland, woodland and scrub. Approximately 100m to the southeast at the nearest point is a large recreation ground/open space (Reynolds Field). Approximately 150m and 260m to the southeast are a small fire station and the village hall. Approximately 300m to the east beyond the recreation ground are Aldington Eco Centre (study centre) and Goldwell Lane with farmland beyond.

2.1.1 Walkover Survey

The walkover survey was carried out on the 24th March 2017. At the time of the walkover survey the site was unused and completely soft cover with areas of rough grass, weeds, brambles small trees and bushes. Parts of the site were covered with felled established bushes and small trees. The west/northwest area of the site was heavily overgrown with established bushes and trees. No access could be gained to this area. Established trees and bushes were along the east/southeast boundary with Quarry Wood.

There was a small amount of scattered/wind blown rubbish in the east/southeast area of the site (plastic drinks bottles and drinks cans). Elsewhere on the site was a small amount of timber (fence panels) and plastic.

All the vegetation on and adjacent to the site appeared to be in a healthy condition.

No above ground tanks were on or adjacent to the site and there was no evidence of any former above ground tanks. There was no evidence of below ground tanks on the site and no evidence of any storage of chemicals in or around the site.

The small electrical sub station adjacent to the southeast corner of the site was within a locked wooden fenced area, on a concrete plinth over gravel. No visible leaks were noted around the sub station.

A site plan showing the existing and proposed layout and the immediate surrounding areas is shown in appendix 1 (p3). Also shown on this site plan are the locations and view direction of the photographs of the site that were taken during the walkover survey. The site photographs are shown in appendix 3.

There are no current or former fuel stations registered within 250m of the site.

There are no high voltage underground electricity transmission cables or high pressure gas pipelines within 250m of the site.

This is shown in appendix 5 (current land use map).

2.2 Hydrology

There are no surface water features on, adjacent or near to the site although there are ponds on parts of the farmland in the area.

This is shown in appendix 5 (hydrology – detailed river network and river quality map).

3. Historical Site use

3.1 1871 to 1907

The study of the historical maps of the site, some of which can be found in appendix 4, Historical Maps, shows that the site was undeveloped in 1871 although the northwest area of the site was within an area that was part of a quarry. The southeast area of the site was within an area of farmland.

Most of the roads in the immediate area were not constructed although Roman Road, Calleywell Lane, Goldwell Lane, Frith Road and Forge Hill were all constructed. Further to the northwest a few houses were built and the pub (The Walnut Tree), a few houses and the school were further to the southeast. A lime kiln was within the area of the quarry approximately 90m west of the site and a few houses were to the south in Roman Road.

By 1896 the southeast area of the site is within a sand/gravel pit that was part of the quarry and an old quarry is marked further to the northwest off Calleywell Lane.

By 1907 the sand/gravel pit part of the quarry had been extended further to the east and the lime kiln is marked as an old lime kiln.

The site and immediate surrounding areas otherwise remained unchanged.

3.2 1939 to 1954

By 1939 the quarry and sand/gravel pit are no longer marked on the site, which is within part of a larger allotment garden that extended further to the west. Approximately 50m to 110m to the southeast were a few large industrial buildings that were within the area of the former quarry and sand/gravel pit. A few small rail tracks/tramways are near to these buildings. Further to the east excavations are shown and the area is marked as a disused quarry, which is now part of the recreation ground/open space. A few more houses had been built in the further environs including a small telephone exchange further to the west.

By 1954 most of the large industrial buildings to the southeast are no longer marked although the small rail tracks/tramways remained. Further to the south/southeast the road Earlsfield and its associated houses had been built.

The site remained unchanged (allotment garden).

3.3 1971 to Date

By 1971 the site is no longer marked as part of the allotment garden but remained undeveloped and many more houses had been built in the area including the Ragstone Hollow to the south/southeast on the site of the former industrial buildings and tracks. Just beyond the south boundary was a track that is now Quarry Road that led to a council depot that was just to the west of the site. A small slaughterhouse is also marked just to the south of Roman Road approximately 150m from the site and a small sewage pumping station is approximately 100m to the northeast on the former quarry site. Further to the southeast the small fire station and village hall had also been built.

By 1974 Longsfield and its associated houses and lock up garages had been built. A small electrical sub station is immediately beyond the south boundary.

By 1993 the road Quarry Wood and its associated houses had been built on the site of the council depot.

The site and immediate surrounding areas have generally remained unchanged to date although the houses in Celak Close and Badgers Close further to the south were built after 2002 and 2014 respectively.

3.4 Planning & Uses

Following an assessment of Ashford Borough Council planning website there has been two historical planning applications for the site apart from the existing application outlined above in section 1 (reference 17/00388/AS). Council online records for the area date from at least 1982.

Date	Planning Details
1988	Four detached four bedroom houses with garages – refused
1990	Residential development – refused

The current land use data indicates that there are four current ‘industrial sites’ within 250m of the site.

The nearest is adjacent to the site, which is a small electrical sub station that could impact the site if it has leaked or is leaking. This was assessed during the walkover survey and did not appear to have leaked or is leaking (see section 2.1.1).

The next nearest is the existing fire station 150m southeast of the site. This site and the others listed are unlikely to impact the site.

This is shown in appendix 5, Environmental Maps (current land use map, points 1 to 4).

4. Environmental Sensitivity

4.1 Site Sensitivity

The site is not within a site of special scientific interest, special protection area, a special area of conservation, RAMSAR (wetlands) site, a nature reserve, environmentally sensitive area, a world heritage site, ancient woodland, an area of outstanding natural beauty or a national park.

The site is within a designated nitrate vulnerable zone.

This is all shown in appendix 5 (designated environmentally sensitive sites map).

The site is not within an area that is at risk of flooding from rivers or sea without defences.

The risk of flooding from rivers and sea (RoFRaS) map shows that the risk is ‘very low’.

“The Environment Agency RoFRaS database provides an indication of river and coastal flood risk at a national level on a 50m grid with the flood rating at the centre of the grid calculated and given above. The data considers the probability that the flood defences will overtop or breach by considering their location, type, condition and standard of protection. RoFRaS data for the study site indicates the property is in an area with a Very Low (less than 1 in 1000) chance of flooding in any given year”. (Reference EA/Groundsure report)

This is shown in appendix 5 (Environment Agency flood maps).

The site is within an area where there is a limited potential for groundwater flooding Clearwater Flooding, limited potential within an unconfined aquifer.

“Where limited potential for groundwater flooding to occur is indicated, this means that although given the geological conditions there may be a groundwater flooding hazard, unless other relevant information, e.g. records of previous flooding, suggests groundwater flooding has occurred before in this area, you need take no further action in relation to groundwater flooding hazard”.

4.2 Potentially Contaminative Use

The site is within an area of potentially contaminative use from industrial uses (quarries, sand and gravel pits).

There are areas of potentially infilled land, industrial sites and/or energy features on the site and within 250m of the site.

There are areas of potentially infilled land on the site and in the area (former quarries). The potentially infilled land could impact the site.

There are also areas of contaminative use within 250m (former lime kiln and existing fire station), which are unlikely to impact the site.

This is all shown in appendix 5 (historical land use map).

There are historic surface ground workings, historic underground workings and/or current ground workings marked within 250m on the ground workings map in appendix 5.

There are several areas of historic surface ground workings on the site and in the area, which are the former quarries, sand and gravel pits.

These groundworkings could affect the site.

There are no historic underground workings or current ground workings marked within 250m. The ‘current’ groundworkings are the former quarries that all ceased many years ago.

The railways and tunnels map in appendix 5 shows that there are existing railways, former railways, tunnels and/or proposed railways within 250m.

The former tramways/tracks are marked approximately 70m to the southeast of the site, which are unlikely to affect the site. There are no existing railways, proposed railways or tunnels on the site or in the area.

There are no areas of reclaimed ground, made ground, infilled ground, disturbed ground, worked ground and/or landscaped ground within 500m of the site as shown on the artificial ground map in appendix 5.

4.3 Landfill and Waste Transfer Sites

There are three current or former EA registered historical licensed landfill sites or local authority registered licensed landfill sites within 250m.

All are former EA registered historical licensed landfill sites located 60m east, 100m northwest and 170m south of the site. All were licensed to accept inert waste with the nearest sites also being licensed to accept household waste and the next nearest site also accepting commercial waste. These sites could impact the site. The site to the east is also recorded by the BGS (British Geological Survey) as being a risk to a minor aquifer at a point 150m from the site.

There are no current or former registered waste treatments or other waste sites within 250m.

This is all shown in appendix 5 (landfill and other waste sites map).

4.4 Hydrogeology

As there are no superficial deposits on the site there is no classification by the Environment Agency (EA) for the aquifer status within the superficial geology on the site.

The site is classified by the Environment Agency (EA) as overlying a principal aquifer within the bedrock geology.

These are layers of rock or drift deposits that have high intergranular and/or fracture permeability usually providing a high level of water storage. They may support water supply and/or river base flow on a strategic scale. Generally, principal aquifers were previously designated as major aquifers.

The site therefore could be classed as overlying a major aquifer.

The site is not within a groundwater source protection zone (SPZ).

This is all shown in appendix 5 (hydrogeology maps).

4.5 Geology

According to geological information, British Geological Survey sheet 305/306, Folkestone and Dover, the site is underlain by Hythe Beds with no drift deposits.

This is also shown on the superficial deposits and landslips map in appendix 5 which shows that there are no superficial deposits on the site although there are in further environs but more than 500m from the site.

There are landslip deposits within 500m although the nearest is 380m southeast of the site.

The bedrock and faults map in appendix 5 shows that The Hythe Formation (interbedded sandstone and limestone) is the bedrock geology on the site of high permeability (area 1 on the map).

Area 2 (160m W) is The Atherfield Clay Formation (sandy mudstone)

Area 3 (240m W) is The Weald Clay Formation (mudstone)

There are no fault lines marked within 1000m.

There are no previously drilled boreholes marked within 250m of the site.

This is shown in appendix 5 (borehole records map).

5. Discharge Consents, Water Abstractions and Pollution Incidents

5.1 Discharge Consents

There are no current or former licensed discharge consent points within 500m of the site.

This is shown in appendix 5 (environmental permits, incidents and registers map).

5.2 Abstraction Consents

There are two current or former groundwater abstraction consents within 2000m of the site.

They are both current consents located 1920m northeast of the site for dust suppression uses.

There are no current or former surface water abstraction consents within 2000m of the site.

There are no current abstraction consents for potable water supplies within 2000m of the site.

This is shown in appendix 5 (hydrogeology – abstraction licence, SPZ and potable water abstraction maps), which shows up to 500m only.

5.3 Pollution Incidents and Permits

There are three recorded pollution incidents within 500m of the site.

The nearest occurred more than fourteen years ago 150m east of the site caused by an inert material/waste spill that is recorded as having no water or air impact and minor land impact. It is unlikely to have impacted the site. The other incidents were more than 350m from the site and are both unlikely to have impacted the site.

There are no current or former authorised activity enforcements within 250m of the site.

There are no integrated pollution control permits, dangerous substances inventory sites or radioactive substances authorisations within 250m of the site.

There are no sites determined as 'contaminated land' under Part 2A of the Environmental Protection Act 1990 within 500m of the site.

This is all shown in appendix 5 (environmental permits, incidents and registers map).

6. Mining Hazards, Subsidence and Radon

6.1 Mining

The site is not within an area that may be affected by historic mining or coal mining hazards.

There is one natural cavity within 500m of the site. This is located 240m northwest of the site, which is a gull/fissure due to cambering. It is highly unlikely to affect the site.

There are no non-coal mining cavities within 500m and the site is within an area where the non-coal mining activity is classed as 'rare'.

This is all shown in the mining, extraction and natural cavities map in appendix 5.

6.2 Subsidence

The clay swelling/shrinking subsidence hazard is classed as 'negligible hazard' (soils that are predominantly non plastic) although this will depend on the localised clay content.

The landslides ground stability hazard is classed as 'very low hazard'.

The ground dissolution subsidence hazard is classed as 'negligible hazard'.

The compressible subsidence hazard is classed as 'negligible hazard'.

The collapsible ground stability hazard is classed as 'very low hazard'.

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

All the above are shown on the ground stability maps in appendix 5.

6.3 Radon

There are less than 1% of properties in the area that are above the action level for radon and therefore radon protection measures are not necessary in new buildings and/or extensions.

7. Recommendations

7.1 General

From the investigations carried out for this desk study the site was undeveloped and within an area of part quarry and sand/gravel pit and part farmland from at least the early 1870's until at least 1907. By the late 1930's the site was part of an allotment garden that remained until at least the mid 1950's. By the early 1970's the site was no longer an allotment and has remained undeveloped to date.

The immediate surrounding areas have been mainly a mix of quarries and sand/gravel pits and residential houses. The houses in the immediate area were built after the mid 1950's and mainly between the early 1970's to mid 1990's. The houses to the west were built on a former council depot and there are historic landfill sites in the area on the former quarry sites. The land immediately to the north is currently being developed with residential houses.

There are no surface water features on, adjacent or near to the site.

The site overlies a major aquifer but is not within a groundwater source protection zone (SPZ).

The Hythe Formation (interbedded sandstone and limestone) is the bedrock geology on the site of high permeability with no drift deposits.

There are no current groundwater abstractions for potable water but there are for other uses in the area (within 2km) although this is just over 1.9km from the site for dust suppression.

There are no surface water abstractions in the area (within 2km).

It is assumed at this juncture that the surface water drainage for the new buildings will be discharged via either new surface water soakaways that will be installed on the site or the local mains system.

It is most likely that the foul drainage for the new buildings will be via the existing local mains system.

The site is not within a flood risk area.

7.2 On-Site Contamination Impact

From the investigations carried out for this desk study it is possible that the site has been impacted from its current uses.

There are no recorded pollution incidents on the site that could have impacted the site.

It is possible that landfill gases are impacting the site from on site sources.

7.3 Off-Site Contamination Impact

The findings of this desk study indicate that contamination impact to the site from the immediate surrounding areas is also possible.

There are no recorded pollution incidents near the site that could have impacted the site.

It is also possible that landfill gases are impacting the site from off site sources.

7.4 Conceptual Model

Using the Contaminated Land Exposure Assessment (CLEA) model and associated Contaminated Land Report (CLR11, Model Procedures for the Management of Land Contamination) framework to assess sites, a Source (contaminant) – Pathway – Receptor approach is used.

Source – (contaminant) “a substance that is in, on or under the land and has the potential to cause harm or to cause pollution of controlled waters”

Pathway – e.g. via air, soil or water “route or means by which a receptor can be exposed to, or affected by, a contaminant”

Receptor – e.g. humans, buildings and services, groundwater or surface waters “in general terms, something that could be adversely affected by a contaminant, such as people, an ecological system, property, or a water body”

If any of the above elements are missing i.e. there is no pollution linkage, then it is considered that there is no significant risk associated with contamination. If there is a pollution linkage the potential risks to the identified receptors need to be assessed.

7.4.1 Source(s)

The possible sources of contamination on this site from on site or off site former or current uses are:

Heavy metals (made ground/infilled land)

Polyaromatic hydrocarbons (made ground/infilled land)

Total petroleum hydrocarbons (made ground/infilled land)

BTEX compounds (made ground/infilled land)

VOC's and SVOC's (made ground/infilled land)

PCB's (verification required in the area adjacent to the off site small electrical sub station)

Asbestos (made ground/infilled land)

Landfill gases (on site and off site infilled land) – gas monitoring was carried out on the adjacent land prior to the current development. No methane was recorded although there were elevated carbon dioxide levels.

7.4.2 Pathway(s)

It is proposed to develop the site with residential houses with private gardens and off road parking.

Using the CLEA model the potential pathways for a residential site are:

Ingestion of soils/groundwater/surface water

Ingestion of dusts, gases and vapours (indoors and outdoors)

Dermal contact with soils/groundwater/surface water

Ingestion of contaminated vegetables and or soils attached to vegetables (if applicable)

Leachate via soakaways (if applicable)

The potential pathways for this site are:

Ingestion of soils

Ingestion of dusts, gases and vapours (indoors and outdoors)

Dermal contact with soils

Ingestion of contaminated vegetables and or soils attached to vegetables (if applicable)

Leachates via new soakaways (if applicable)

Leachates via infiltration

7.4.3 Receptor(s)

The potential receptors and associated risks for this site are:

Construction staff – very low to moderate risk

Residents on site – very low to moderate risk

Residents off site – very low risk (no apparent current impacted)

Buildings off site (existing houses appear to be not impacted) – very low risk

New buildings and below ground services – very low to moderate risk

Groundwater (major aquifer not SPZ) – very low to moderate risk from leachable contaminants via new soakaway(s) and infiltration

7.4.4 Assessment of Risk

The assessment of the associated risk is based on the CIRIA (Construction Industry Research and Information Association) C552 methodology, contaminated land risk assessment, a guide to good practice (2001), tabulated below and overleaf.

(SH = Significant Harm, SPOSH = Significant Possibility of Significant Harm).

Classification of Consequence

Classification	Definition
Severe	<p>Concentration of contaminants is likely to (or is known from previous data to) exceed that indicative of unacceptable intake or contact. Highly elevated concentrations likely to result in 'significant harm' to human health as defined by the EPA 1990 Part 2A, if exposure occurs i.e. SH/SPOSH concentrations are high enough to cause acute (short term) effects.</p> <p>Equivalent to an EA category 1 pollution incident including persistent and/or extensive effects on water quality (controlled waters); leading to a closure of a potable abstraction point; major impact on amenity value or major damage to agriculture or commerce.</p> <p>Major damage to aquatic or other ecosystems, which is likely to result in a substantial adverse change in its functioning or harm to a species of special interest that endangers the long term maintenance of the population.</p> <p>Catastrophic damage to buildings or property.</p>
Medium	<p>Concentration of contaminants is likely to (or is known from previous data to) exceed that indicative of unacceptable intake or contact. Elevated concentrations which could result in 'significant harm' to human health as defined by the EPA 1990 Part 2A, if exposure occurs i.e. greater than SH/SPOSH</p> <p>Equivalent to an EA category 2 pollution incident including a significant effect on water quality (controlled waters); notification required to abstractors; reduction on amenity value or significant damage to agriculture or commerce.</p> <p>Significant damage to aquatic or other ecosystems, which may result in a substantial adverse change in its functioning or harm to a species of special interest that may endanger the long term maintenance of the population.</p> <p>Significant damage to buildings or property.</p>

Classification of Consequence (cont)

Classification	Definition
Mild	<p>Concentration of contaminants is likely to (or is known from previous data to) exceed that indicative of no harm but not unacceptable intake or contact. Exposure to human health unlikely to lead to 'significant harm' i.e. concentrations are greater than SGV/GAC but less than SH/SPOSH.</p> <p>Equivalent to an EA category 3 pollution incident including minimal or short term effects on water quality (controlled waters); minor impact on amenity value, agriculture or commerce.</p> <p>Minor damage or short term damage to aquatic or other ecosystems, which is unlikely to result in a substantial adverse change in its functioning or harm to a species of special interest that endangers the long term maintenance of the population.</p> <p>Minor damage to buildings or property.</p>
Minor	<p>Concentration of contaminants is likely to (or is known from previous data to) be less than that indicative of no harm. No measurable effect on humans i.e. less than SGV/GAC.</p> <p>Equivalent to an unsubstantial pollution incident with no observed effect on water quality (controlled waters); no reduction on amenity value or damage to agriculture or commerce.</p> <p>No observed effect to aquatic or other ecosystems.</p> <p>Repairable effects of damage to buildings or property.</p>

Classification of Probability

Classification	Definition
High Likelihood	<p>There is a pollution linkage and an event that appears very likely in the short term and almost inevitable in the long term, or there is evidence at the receptor of harm or pollution.</p>
Likely	<p>There is a pollution linkage and all the elements are present and in the right place, which means that it is probable that an event will occur.</p> <p>Circumstances are such that an event is not inevitable but possible in the short term and likely over the long term.</p>
Low Likelihood	<p>There is a pollution linkage and circumstances are possible under which an event could occur.</p> <p>However, it is no means certain that even over a longer period such event could take place, and it is less likely in the shorter term.</p>
Unlikely	<p>There is a pollution linkage but the circumstances are such that it is improbable that an event would occur even in the very long term.</p>

Matrix of Consequence against Probability to determine Risk Classification

Probability	Consequence			
	Severe	Medium	Mild	Minor
High Likelihood	Very High Risk	High Risk	Moderate Risk	Low Risk
Likely	High Risk	Moderate Risk	Low Risk	Very Low Risk
Low Likelihood	Moderate Risk	Low Risk	Low Risk	Very Low Risk
Unlikely	Low Risk	Very Low Risk	Very Low Risk	Very Low Risk

A schematic diagram of the conceptual model for the site dated 24/03/17 is shown in appendix 6, conceptual model.

7.5 Investigation Work Recommended

7.5.1 General

As outlined above it is possible that there are sources of contamination on this site that could have impacted the site soils from the on site past activities.

It is also possible that the site has been impacted by the uses and or/activities from the immediate surrounding areas.

The risk to human health could be classed as very low to moderate.

The risk to the new building and below ground services could also be classed as very low to moderate.

The site overlies a major aquifer but is not within a source protection zone (SPZ). It is assumed that the surface water drainage for the new buildings will be discharged via new surface water soakaways that will be installed on the site or via the existing local mains.

The foul drainage for the new buildings is likely to be discharged via the existing local mains system.

The risk to controlled waters on completion of the development could be classed as very low to moderate.

It is therefore necessary to carry out a detailed phase II intrusive investigation of the site.

7.5.2 Sampling Locations and Analysis

Soils should be taken from various locations on the site including the locations of the new buildings, the proposed private gardens, proposed parking and access areas, the proposed location of the surface water soakaways (if applicable) and analysed for a general suite of determinands that must include heavy metals, polyaromatic hydrocarbons, total petroleum hydrocarbons and BTEX compounds as a minimum. Additional analysis on selected soils should also include SVOC's, VOC's and PCB's.

Near surface soils must also be screened for the presence of asbestos fibres.

Soil samples from the location and discharge depth of the surface water soakaways and from the proposed soft landscaped area should also be analysed for leachable contaminants. The suite of tests carried out on the prepared soil leachate ~~should be those~~ outlined above as a minimum.

Landfill gas monitoring should be carried out over a minimum period of eight weeks with at least six rounds of monitoring carried out during that period.

7.5.3 Timescale

The intrusive investigation work can be carried out immediately the site has been cleared of all vegetation, subject to approval of this report by the local authority.

7.6 Excavated Soils

Any excavated soils that are produced as part of the construction work that are to be removed from the site to landfill, chemical analysis will be required to classify the 'waste' in conjunction with the EU Landfill Directive that came into effect in 2005, which defines the criteria for the chemical analysis and classification of materials that are to be disposed to landfill.

Should soils need to be removed from the site to landfill, a European Landfill Directive Waste Acceptance Criteria analysis will be required on the material to be disposed to be submitted to the proposed receiving tip before the soil is removed from the site.

The different strata excavated (if applicable) should be segregated and analysed separately prior to disposal off site.

7.7 Additional Notes

Should any contaminants be encountered during the site investigation or development works that were not expected analysis must be carried out to identify the type and extent of the contamination.

During the construction work, exposed soils should be protected from any accidental leakage or spillages from stored oils/fuels or chemicals used in the construction work, if any, to prevent any potential impact to the site or controlled waters.

The ground stability hazards in section 6.2 and associated comments where applicable are the opinion of the BGS based on the expected geology.

A copy of this report should be forwarded to Ashford Borough Council or other regulators/insurers if applicable for their consideration and approval prior to the commencement of any further works on the site.

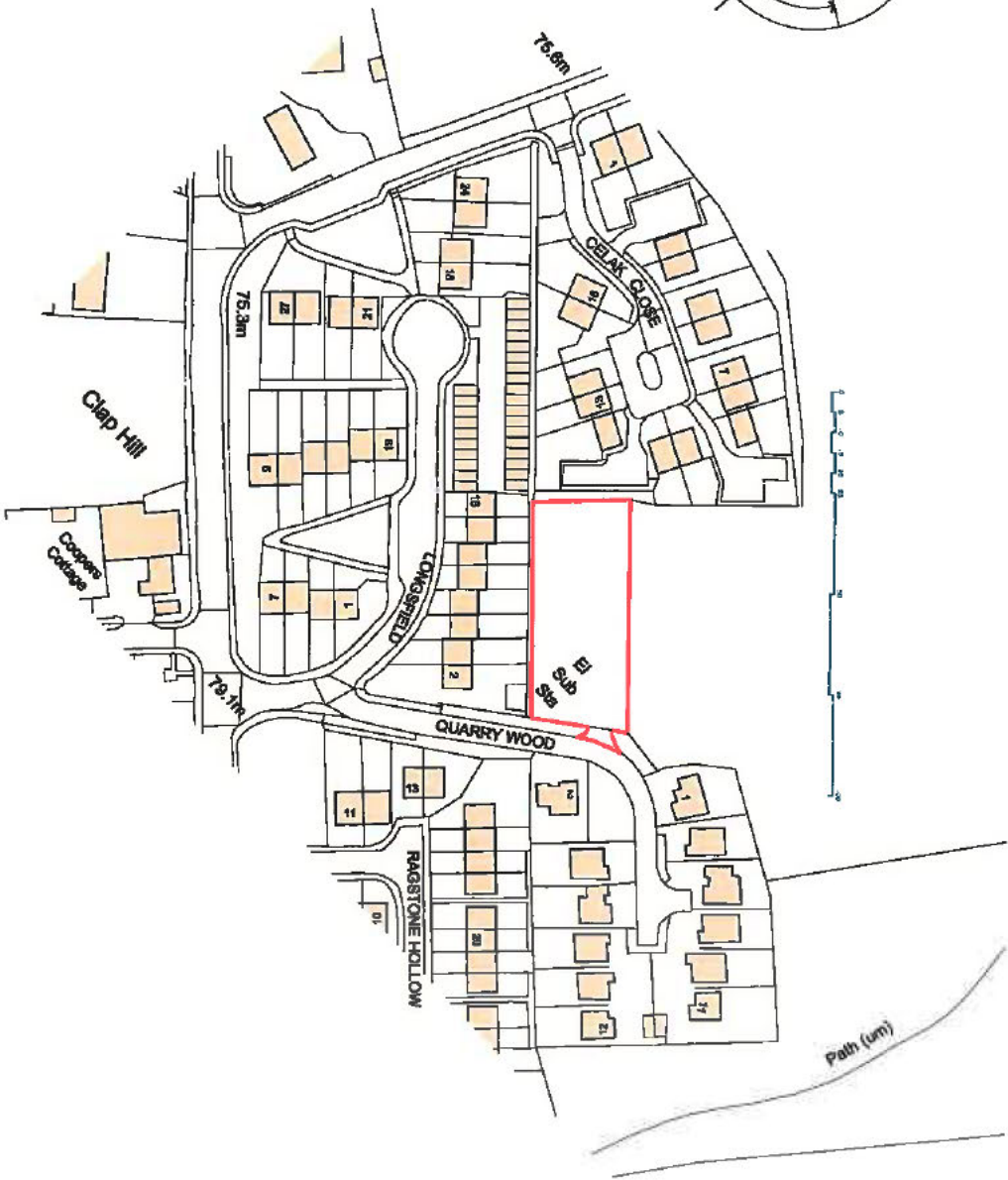
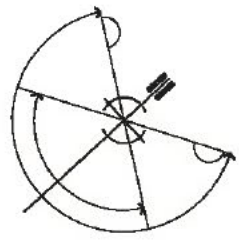
K.D.Huxley CSci CChem MRSC MIEEnvSc

Date: 24/03/17

APPENDIX 1

SITE PLANS

Copyright © Ian Barber Associates. All rights reserved. This drawing is the property of Ian Barber Associates and is not to be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or by any information storage and retrieval system, without the prior written permission of Ian Barber Associates. The drawings are prepared for the use of the client and are not to be used for any other purpose. Ian Barber Associates does not accept any liability for any loss or damage, whether direct or indirect, arising from the use of these drawings. Do not scale working dimensions from this drawing; all dimensions to be checked on site before construction.

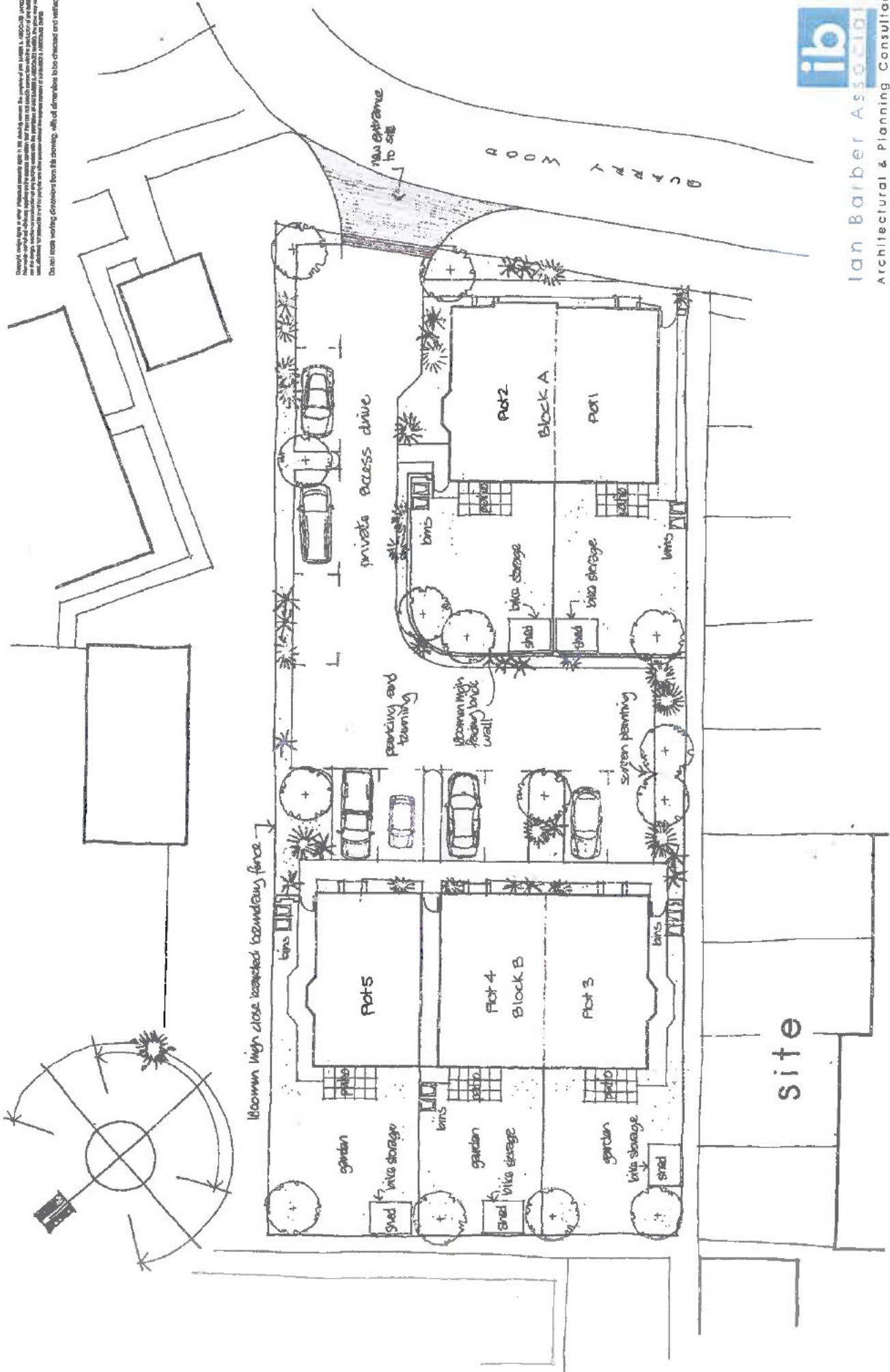


Location plan
scale 1:1250

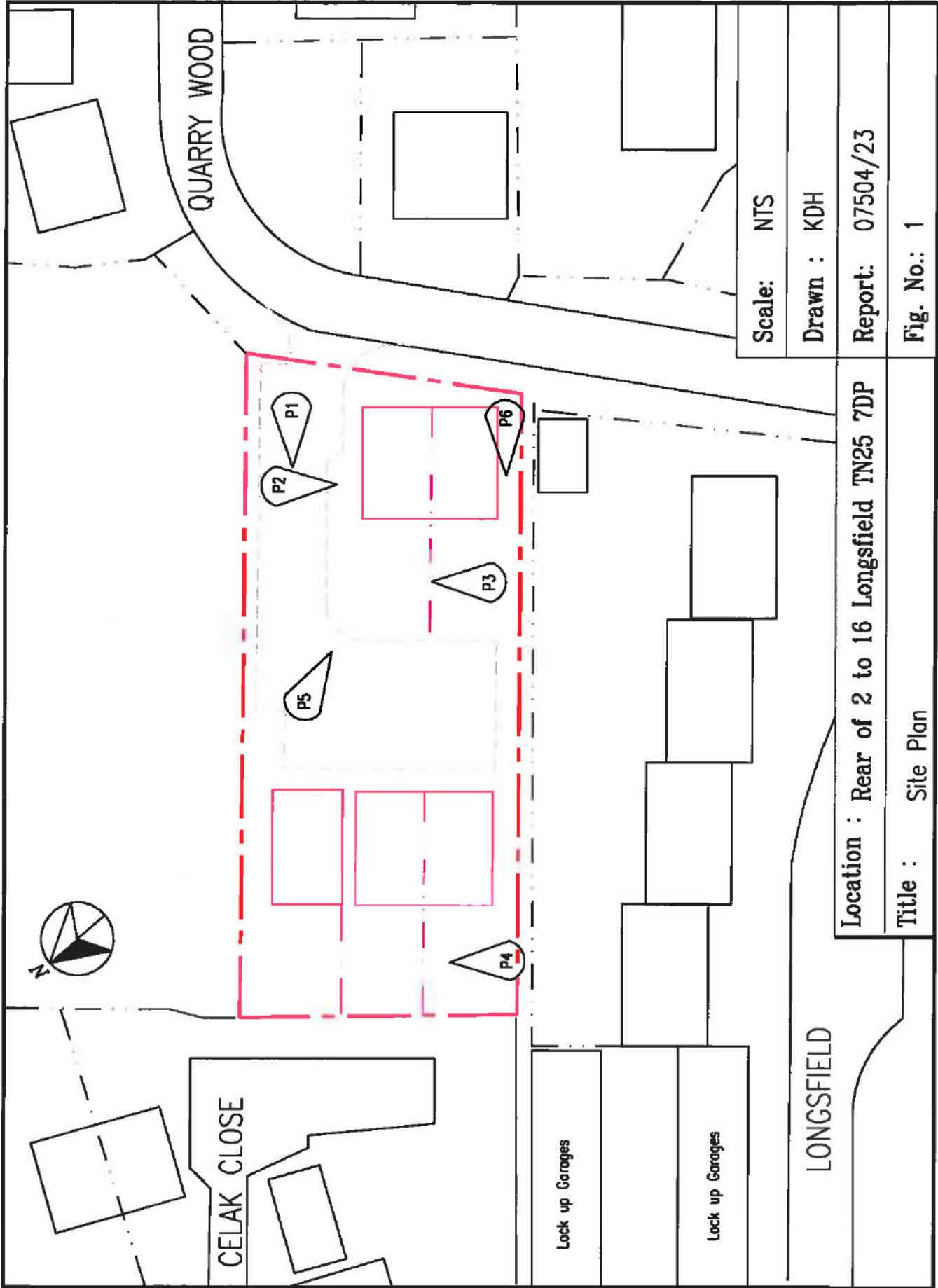
ib
Ian Barber Associates
 Architectural & Planning Consultants
 Unit 38a, Joseph Wilson Industrial Estate, Ashford Road, Walsbridge, Leam, CV35 9PS
 T: 01227 779311 E: ian@ianbarber.com W: www.ianbarber.com

Project: site of quarry wood
 Drawing title: location plan
 Client: Mr Fuller
 Scale: 1:1250 @ A4
 Drawing No.: 2304/01a

Client's design team is a registered planning consultant. The design team is not responsible for the accuracy of the information provided in this drawing. The design team is not responsible for the accuracy of the information provided in this drawing. The design team is not responsible for the accuracy of the information provided in this drawing.



Ian Barber Associates
 Architectural & Planning Consultants
 Unit 310 Joseph Whelan Industrial Estate, Millbrook Road, Westcliffe, Kent, CT15 3PC
 T: 01227 770811 E: ian@ianbarber.co.uk W: www.ianbarber.co.uk
 Drawing Title: proposed site plan
 Scale: 1:200 @ A3
 Drawing No: 2304/02
 Client: site of quarry wood
 Designer: mr Fisher



Scale: NTS

Drawn : KDH

Report: 07504/23

Fig. No.: 1

Location : Rear of 2 to 16 Longsfield TN25 7DP

Title : Site Plan

APPENDIX 2

AERIAL PHOTOGRAPH



Groundsure Enviro Insight

Address: Rear of 2 to 16 [REDACTED]
Date: 15 Mar 2017
Reference: CMAPS-CM-608020-5500-150317EDR
Client: CENTREMAPS



Aerial Photograph Capture date: 15-Apr-2015
Grid Reference: 606137,136864
Site Size: 0.13ha

Report Reference: CMAPS-CM-608020-5500-150317EDR
Client Reference: 5500

APPENDIX 3

SITE PHOTOGRAPHS

PHOTOGRAPH 1



Looking west across the north area of the site. This area will mainly be the new vehicle access. The adjacent new development is on the far right.

PHOTOGRAPH 2



Looking south across the east area showing the adjacent houses in Longsfield. This area will be mainly occupied by two of the new dwellings with vehicle access in the foreground.

PHOTOGRAPH 3



Looking north/northeast across part of the central area of the site. This area will mainly be private gardens. The adjacent new development is in the background.

PHOTOGRAPH 4



Looking north/northeast across the west area of the site that is heavily overgrown. This area will be private gardens.

PHOTOGRAPH 5



Looking south across part of the central area of the site. This area will be vehicle access in the foreground with private gardens and two houses in the background. The adjacent houses in Ragstone Hollow that are beyond Quarry Wood are in the far background.

PHOTOGRAPH 6



Looking west/northwest along the south boundary of the site with the rear of the houses in Longsfield on the left. This area will be the side access to one of the houses.

APPENDIX 4

HISTORICAL MAPS



Site Details:

Rear of 2 to 16 Longsfield,
Aldington, Ashford, TN25 7DP

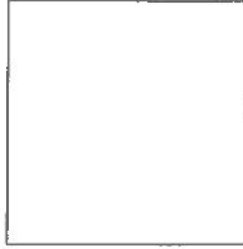
Client Ref: 5500
Report Ref: CMAPS-CM-608020-5500-150317HIS
Grid Ref: 506137, 136864

Map Names: County Series

Map date: 1871

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1871
Revised 1871
Edition N/A
Copyright N/A
Labeled N/A



Produced by
Groundsure Insights
www.groundsure.com

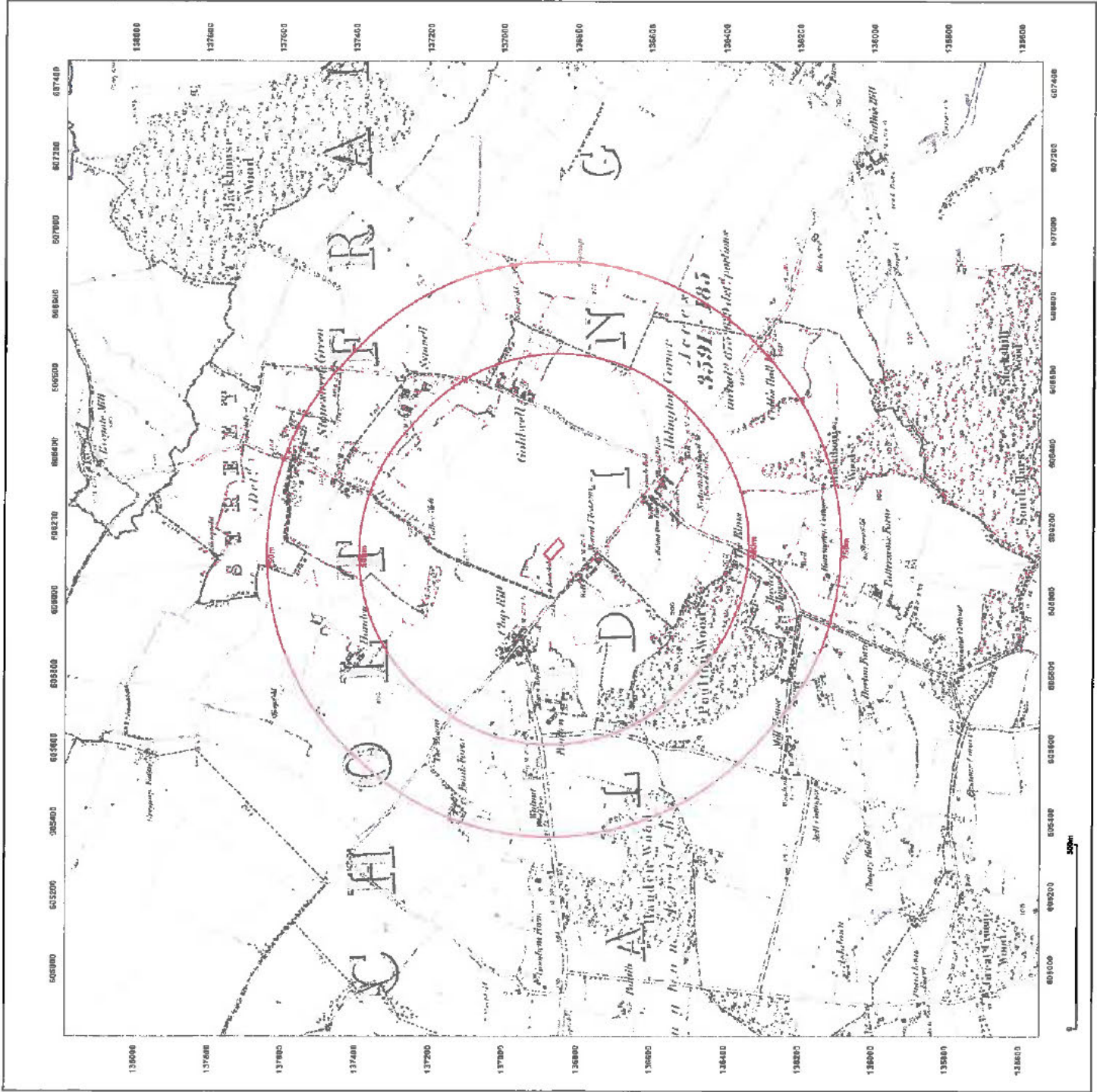


Supplied by:
www.centremapslive.com
groundsure@centremaps.com

© Crown copyright and database rights 2015 Ordnance Survey 100035207

Production date: 15 March 2017

To view map legend click here [Legend](#)





Site Details:

Rear of 2 to 16 Longsfield,
Aldington, Ashford, TN25 7DP

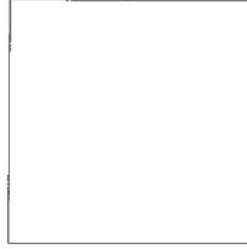
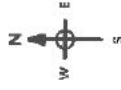
Client Ref: 5500
Report Ref: CMAPS-CM-608020-5500-150317HIS
Grid Ref: 606137, 136864

Map Names: County Series

Map date: 1871

Scale: 1:2,500

Printed at: 1:2,500



Surveyed 1871
Revised 1871
Edition N/A
Copyright N/A
Levelled N/A



Produced by
Groundsure Insights
www.groundsure.com

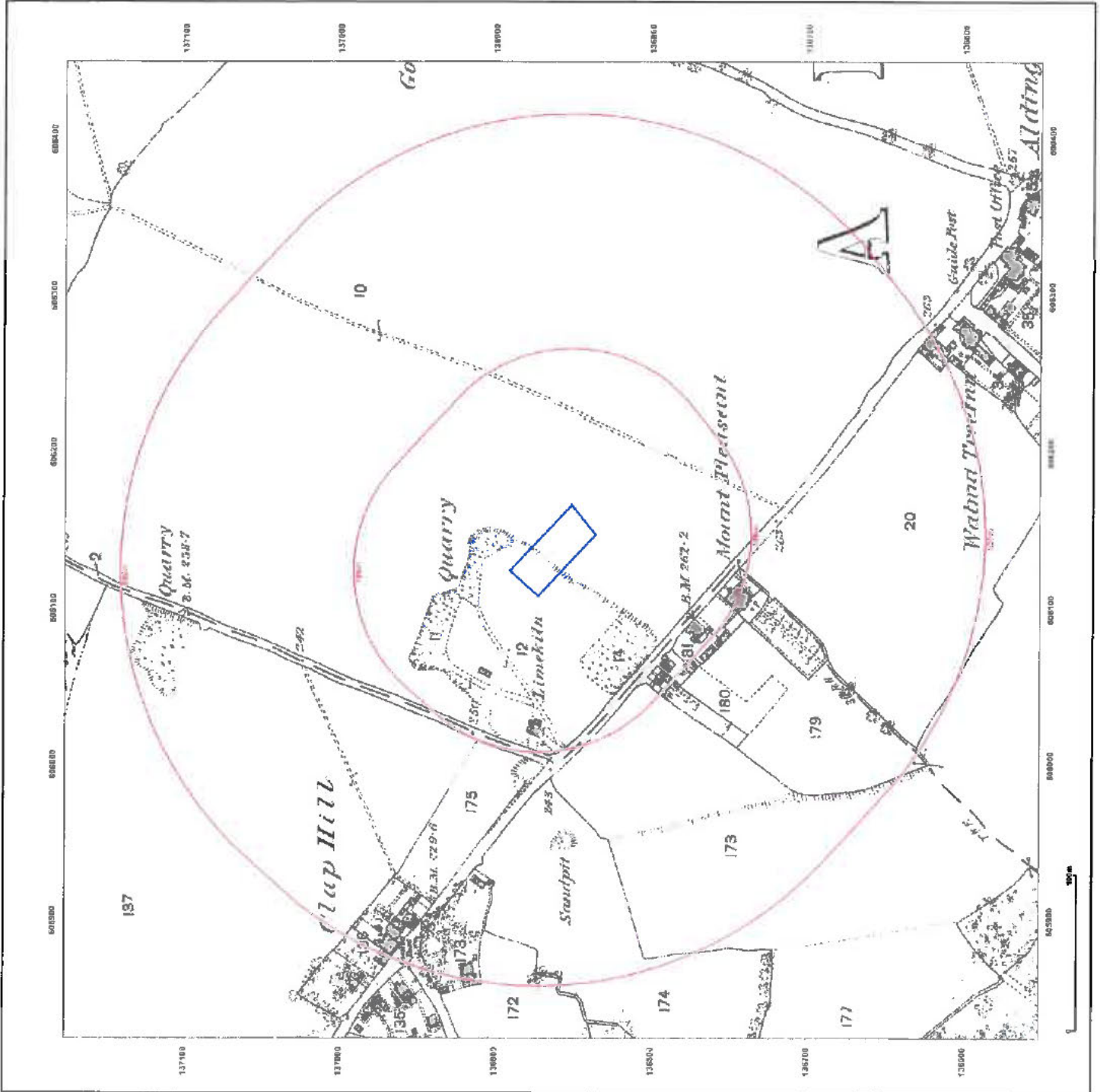


Supplied by:
www.centremapslive.com
groundsure@centremaps.com

© Crown copyright and database rights 2015 Ordnance Survey 100035207

Production date: 15 March 2017

To view map legend click here [Legend](#)





Site Details:

Rear of 2 to 16 Longsfield,
Aldington, Ashford, TN25 7DP

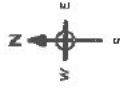
Client Ref: 5500
Report Ref: CMAPS-CM-609020-5500-150317HIS
Grid Ref: 606137, 136864

Map Name: County Series

Map date: 1896

Scale: 1:10,560

Printed at: 1:10,560



Sussex 1874
Revised 1886
Edition N/A
Copyright N/A
Levelled N/A
Surveyed 1871
Revised 1886
Edition N/A
Copyright N/A
Levelled N/A



Produced by
Groundsure Insights
www.groundsure.com

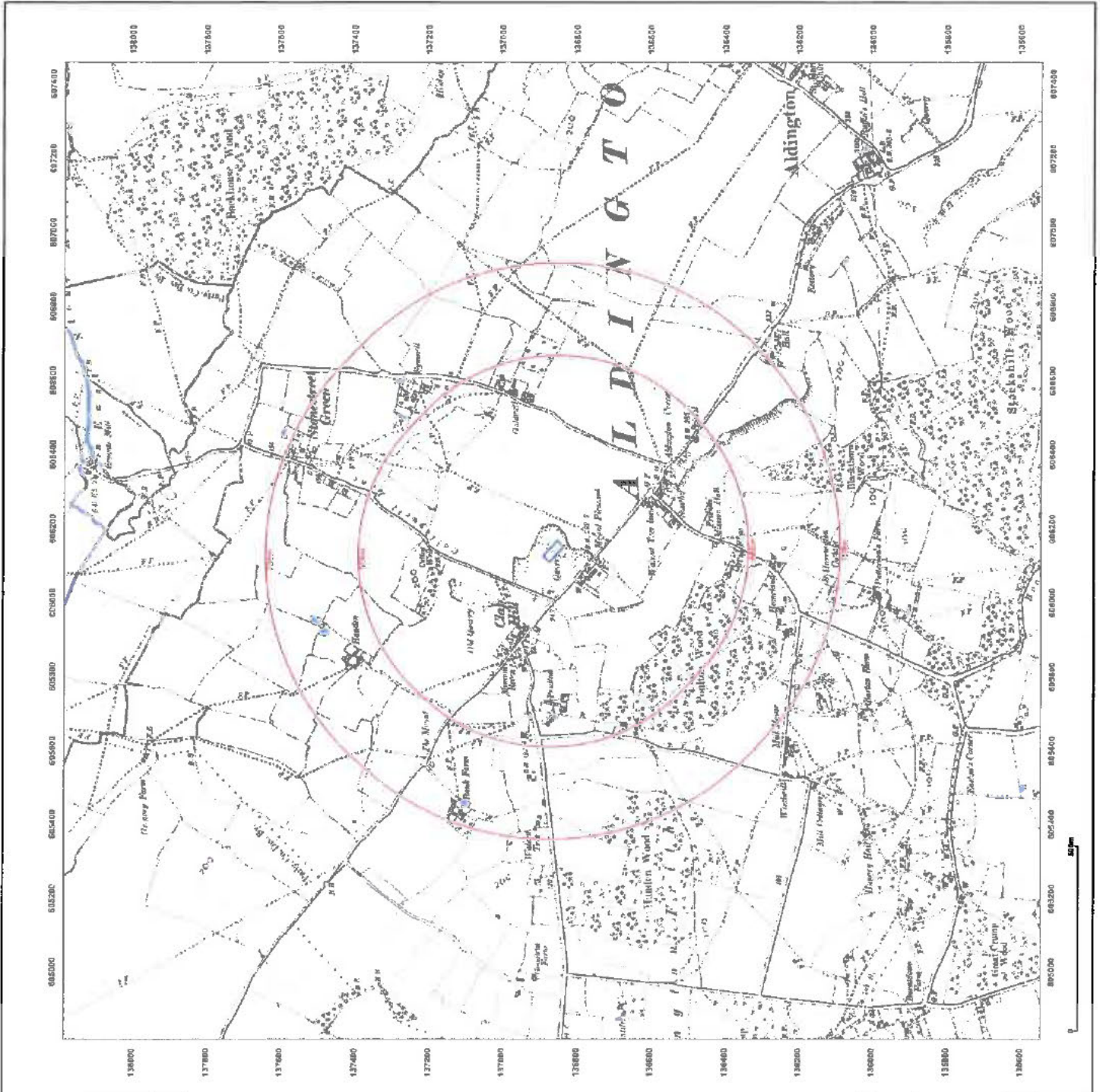


Supplied by:
www.centremapslive.com
groundsure@centremaps.com

© Crown copyright and database rights 2015 Ordnance Survey 100095207

Production date: 15 March 2017

To view map legend click here [Legend](#)





Site Details:

Rear of 2 to 16 Longsfield,
Aldington, Ashford, TN25 7DP

Client Ref: 5500
Report Ref: CMAPS-QM-608020-5500-150317HIS
Grid Ref: 606137, 136864

Map Name: County Series

Map date: 1898

Scale: 1:2,500

Printed at: 1:2,500



Surveyed 1895
Revised 1895
Edition N/A
Copyright N/A
Levelled N/A



Produced by
Groundsure Insights
www.groundsure.com

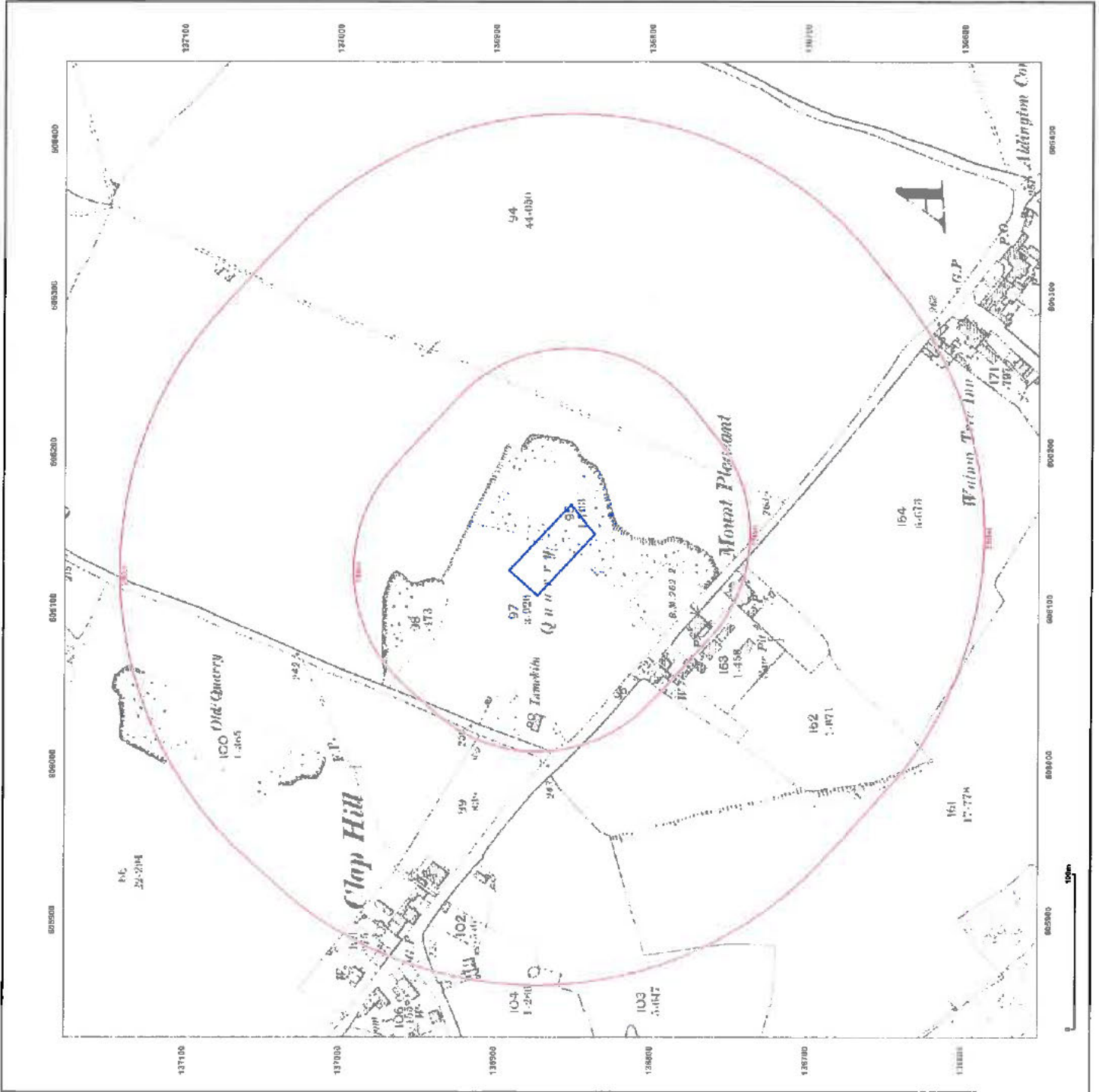


Supplied by:
www.centremapslive.com
groundsure@centremaps.com

© Crown copyright and database rights. 2015 Ordnance Survey 100055207

Production date: 15 March 2017

To view map legend click here [Legend](#)





Site Details:
 Rear of 2 to 16 Longsfield,
 Aldington, Ashford, TN25 7DP

Client Ref: 5500
Report Ref: CMAPS-QM-608020-5500-150317HIS
Grid Ref: 606137, 136864

Map Name: County Series
Map date: 1906
Scale: 1:10,560
Printed at: 1:10,560



Surveyed	1874
Revised	1906
Edition	N/A
Copyright	N/A
Labelled	N/A
Surveyed	1871
Revised	1906
Edition	N/A
Copyright	N/A
Labelled	N/A



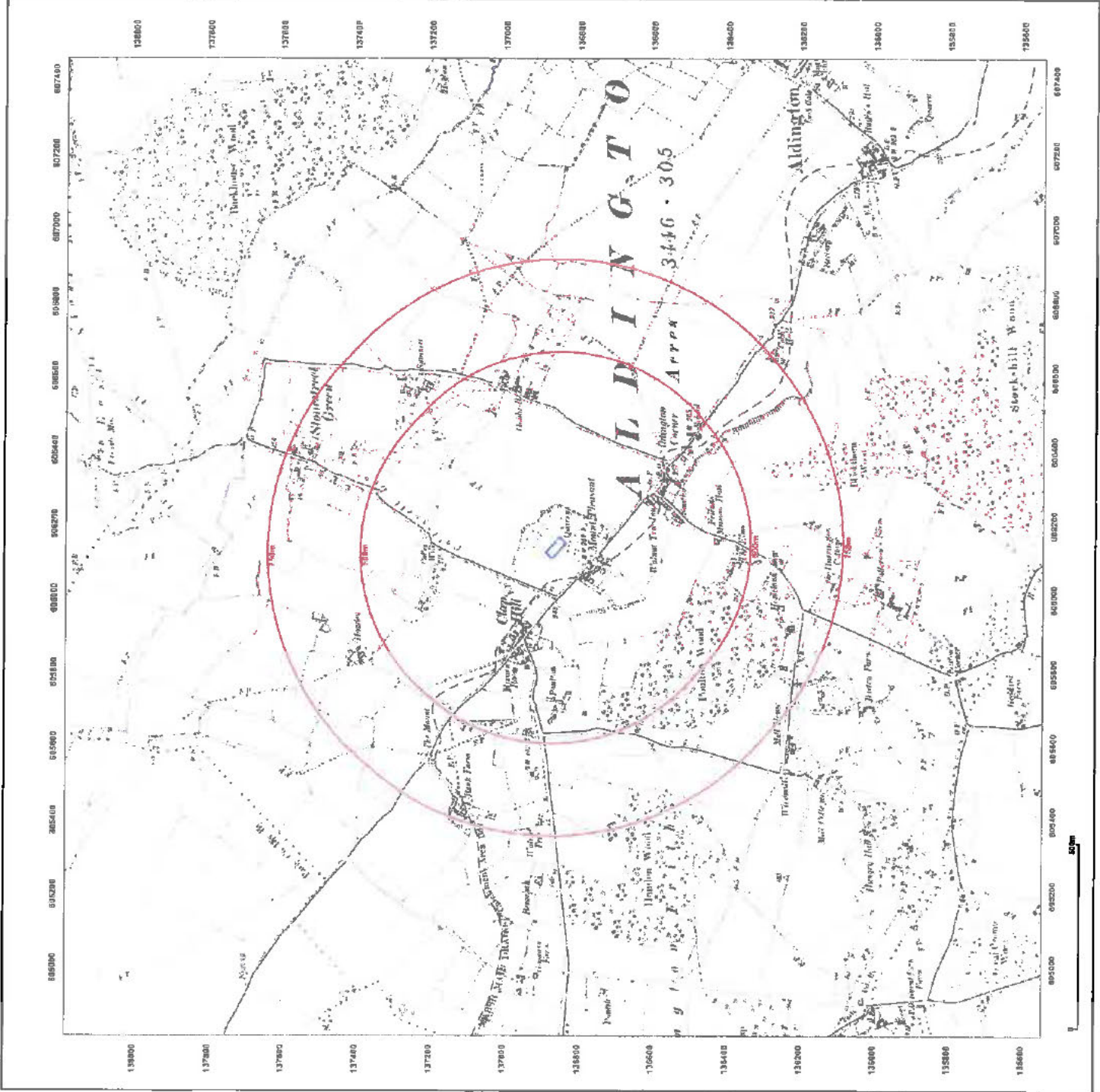
Produced by
 Groundsure Insights
www.groundsure.com



Supplied by:
www.centremapslive.com
groundsure@centremaps.com

© Crown copyright and database rights 2015 Ordnance Survey 10005207
 Production date: 15 March 2017

To view map legend click here [Legend](#)





Site Details:

Rear of 2 to 16 Longsfield,
Aldington, Ashford, TN25 7DP

Client Ref: 5500
Report Ref: CMAPS-CM-608020-5500-150317HIS
Grid Ref: 606137, 136664

Map Name: County Series

Map date: 1907

Scale: 1:2,500

Printed at: 1:2,500



Surveyed 1907
Revised 1907
Edition N/A
Copyright N/A
Levelled N/A



Produced by
Groundsure Insights
www.groundsure.com

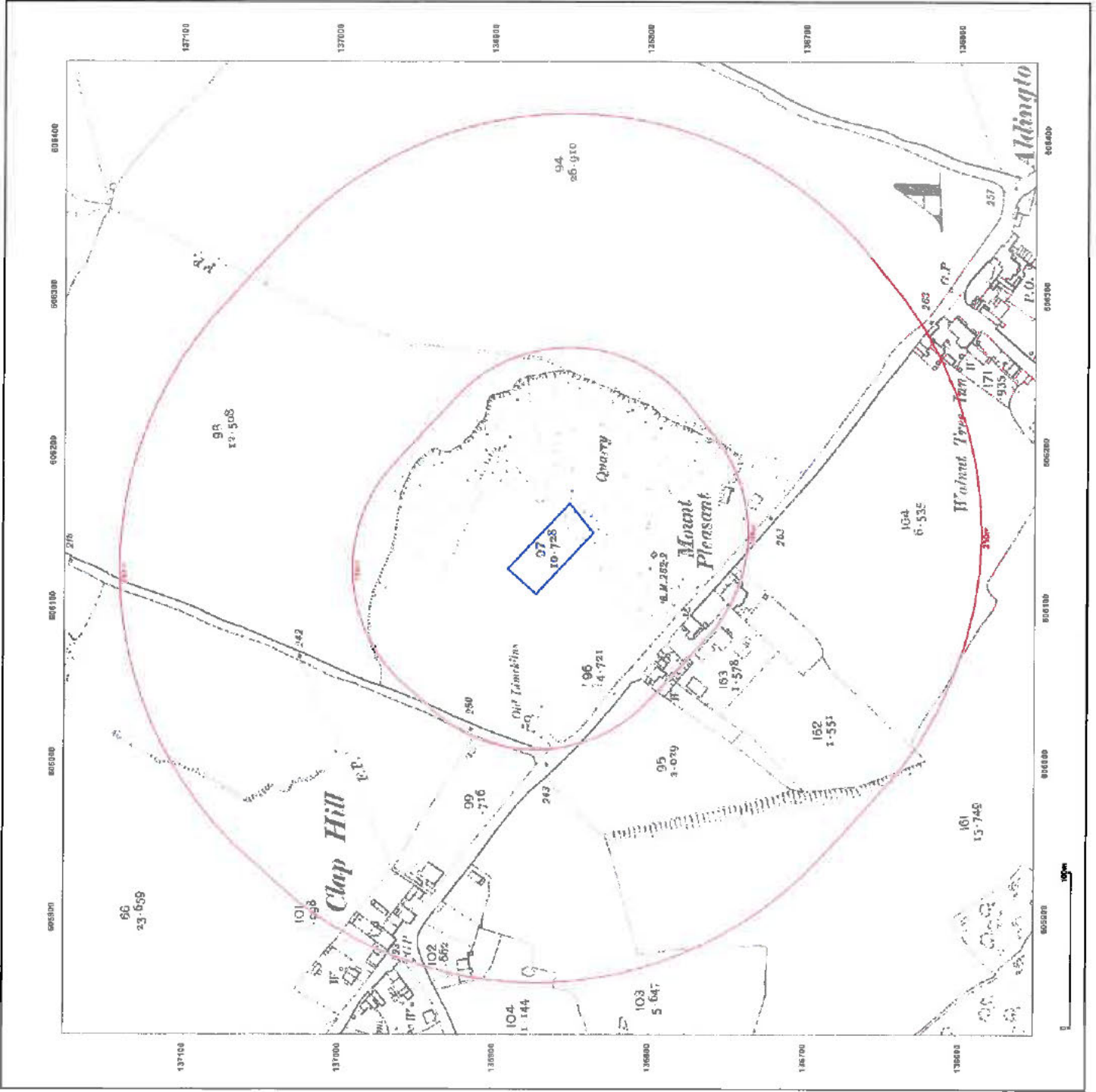


Supplied by:
www.centremapslive.com
groundsure@centremaps.com

© Crown copyright and database rights 2015 Ordnance Survey 100035207

Production date: 15 March 2017

To view map legend click here [Legend](#)





Site Details:

Rear of 2 to 16 Longsfield,
Aldington, Ashford, TN25 7DP

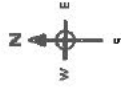
Client Ref: 5500
Report Ref: CMIAPS-CM-608020-5500-150317HIS
Grid Ref: 606137, 136864

Map Name: County Series

Map date: 1939-1940

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1877
Revised 1940
Edition N/A
Copyright N/A
Levelled N/A
Surveyed 1921
Revised 1939
Edition N/A
Copyright N/A
Levelled N/A



Produced by
Groundsure Insights
www.groundsure.com

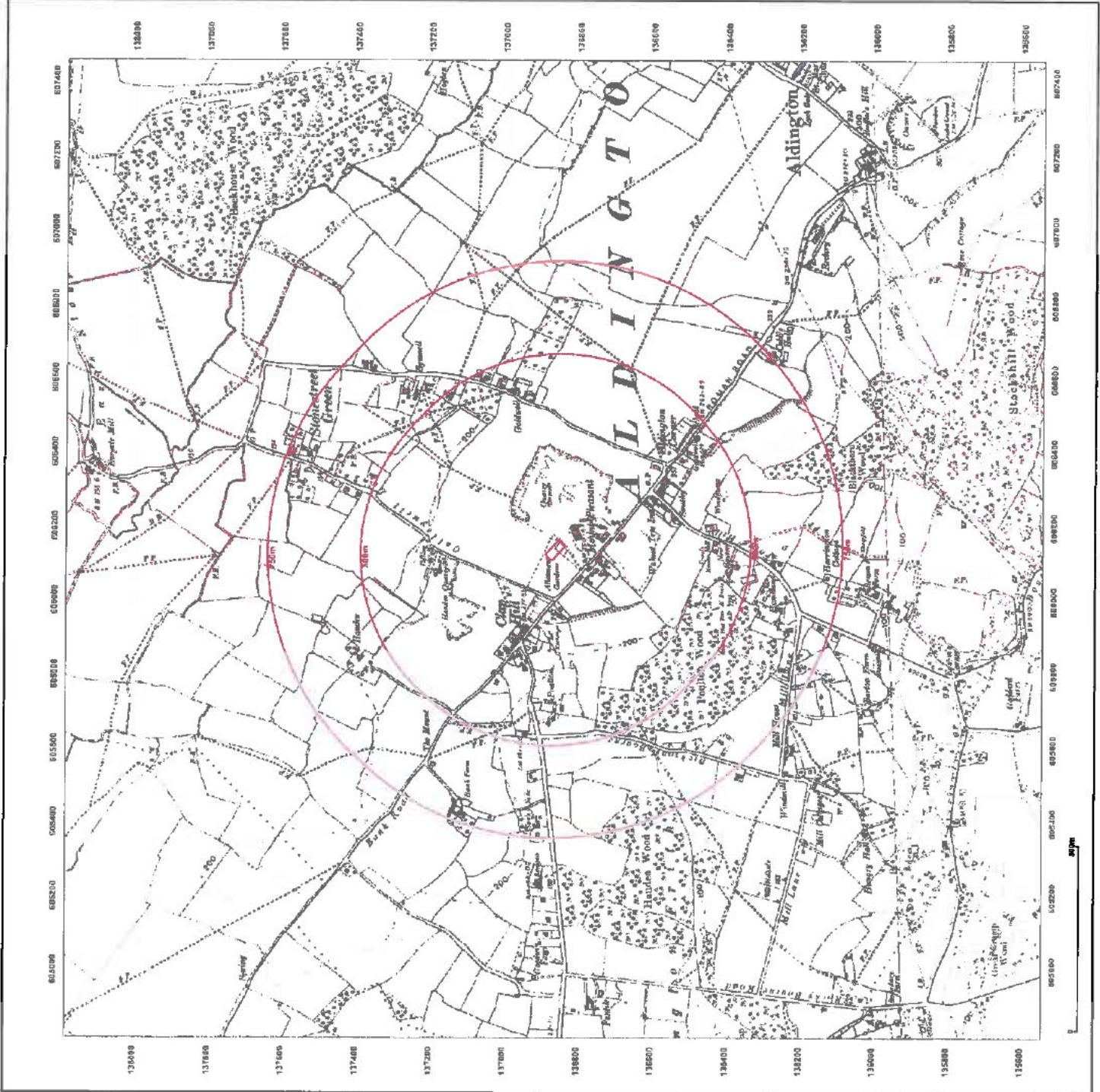


Supplied by:
www.centremapslive.com
groundsure@centremaps.com

© Crown copyright and database rights 2015 Ordnance Survey 100062017

Production date: 15 March 2017

To view map legend click here [Legend](#)





Site Details:

Rear of 2 to 16 Longsfield,
Aldington, Ashford, TN25 7DP

Client Ref: 5500
Report Ref: CMAPS-CM-608020-5500-150317HIS
Grid Ref: 606137, 136864

Map Name: County Series

Map date: 1939

Scale: 1:2,500

Printed at: 1:2,500



Surveyed 1939
Revised 1939
Edition N/A
Copyright N/A
Levelled N/A



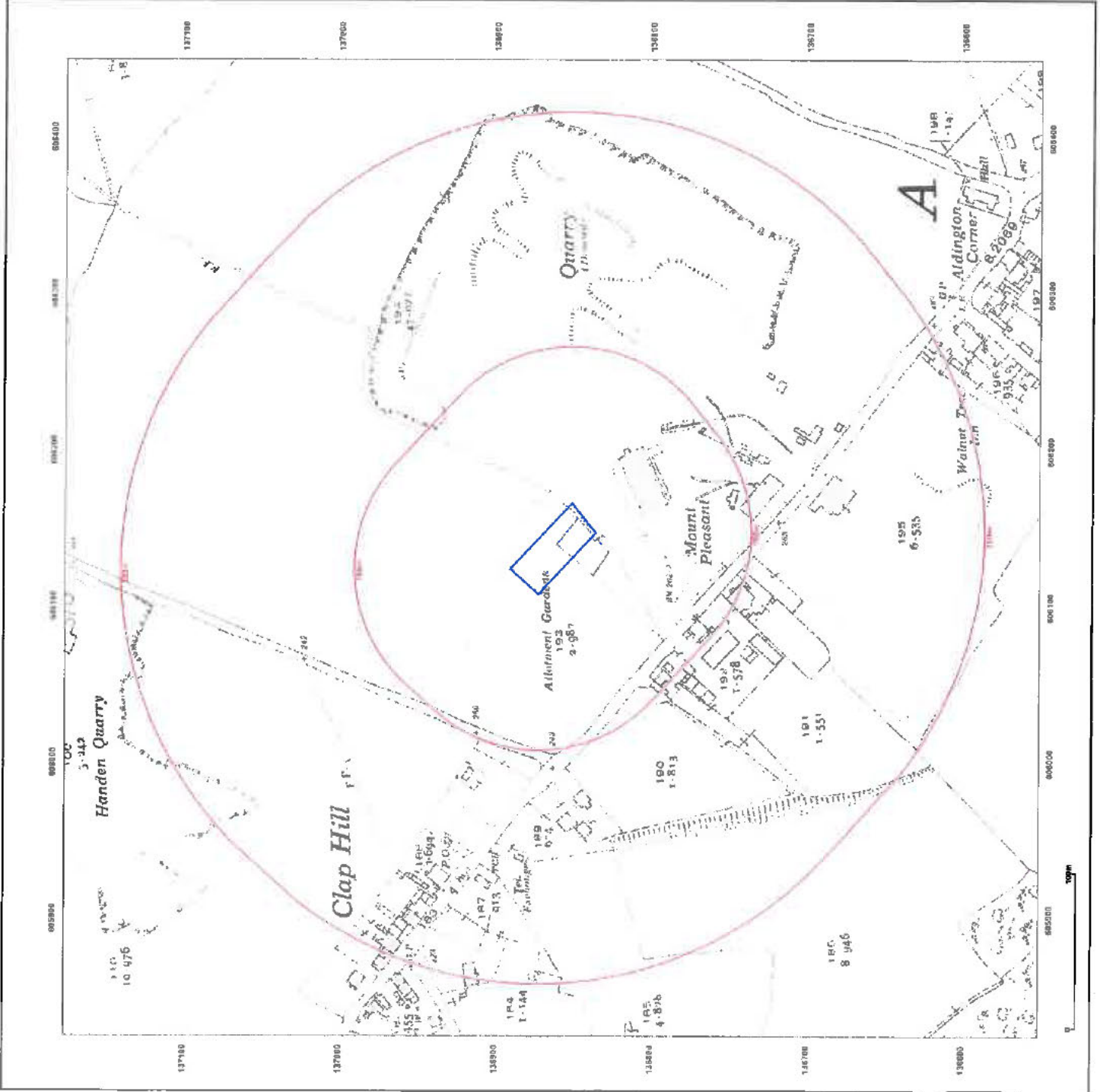
Produced by
Groundsure Insights
www.groundsure.com



Supplied by:
www.centremapslive.com
groundsure@centremaps.com

© Crown copyright and database rights 2015 Ordnance Survey 100055207
Production date: 15 March 2017

To view map legend click here [Legend](#)





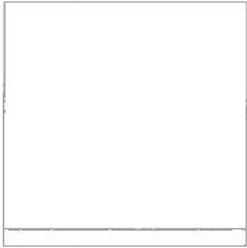
Site Details:
Rear of 2 to 16 Longsfield,
Aldington, Ashford, TN25 7DP

Client Ref: 5500
Report Ref: CMAPS-CM-608020-5500-150317HIS
Grid Ref: 606137, 136864

Map Name: Provisional
Map date: 1954-1955
Scale: 1:10,560
Printed at: 1:10,560



Surveyed 1955
Revised 1955
Edition N/A
Copyright N/A
Levelled N/A



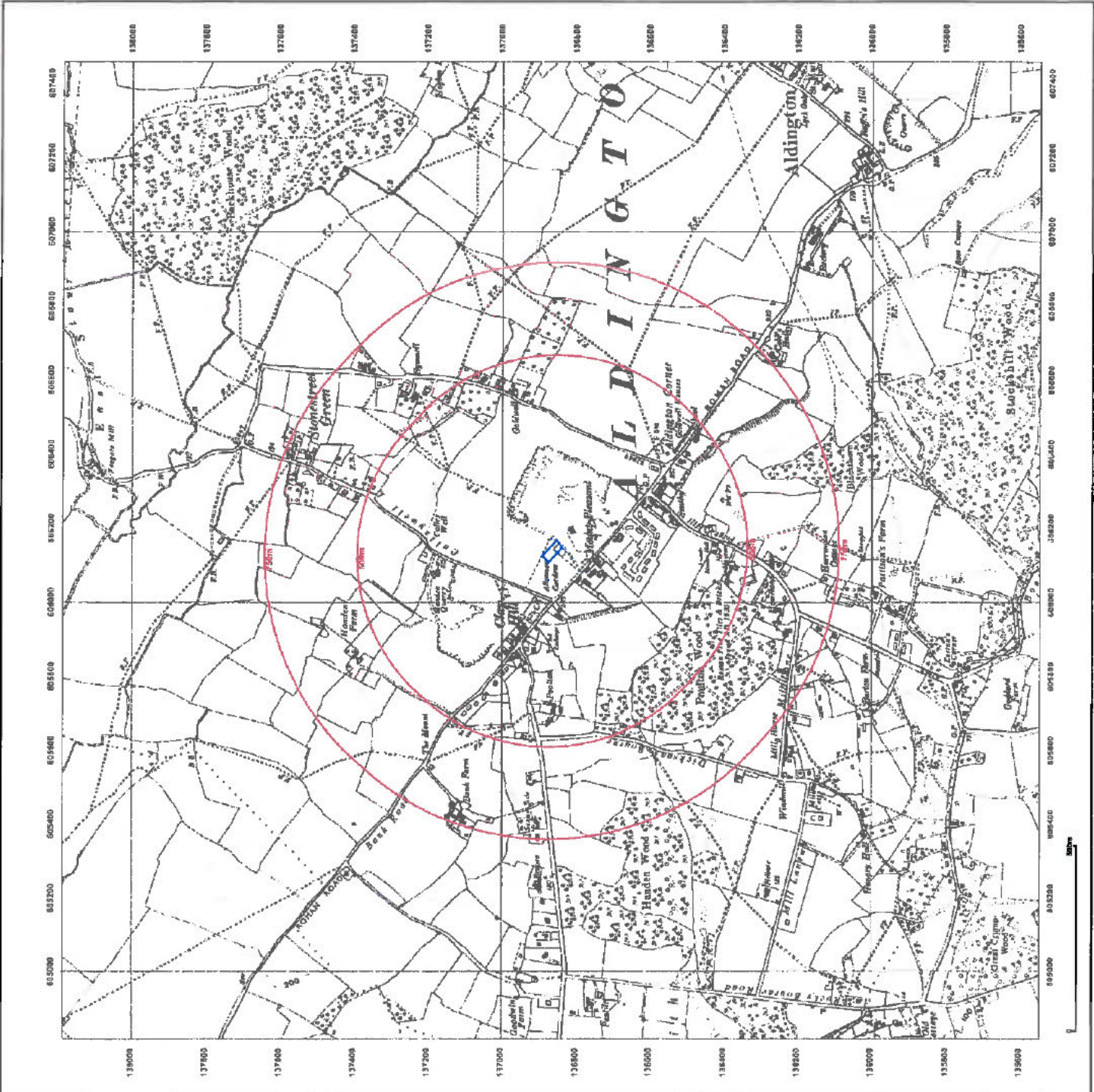
Produced by
Groundsure Insights
www.groundsure.com



Supplied by:
www.centremaps.com
groundsure@centremaps.com

© Crown copyright and database rights 2015 Ordnance Survey 10005267
Production date: 15 March 2017

To view map legend click here [Legend](#)





Site Details:

Rear of 2 to 16 Longsfield,
Aldington, Ashford, TN25 7DP

Client Ref: 5500
Report Ref: CMAPS-CM-608020-5500-150317HIS
Grid Ref: 606137, 136664

Map Name: National Grid

Map date: 1970-1971

Scale: 1:2,500

Printed at: 1:2,500



Surveyed 1971
Revised 1971
Edition N/A
Copyright 1972
Levelled 1951



Surveyed 1971
Revised 1971
Edition N/A
Copyright 1972
Levelled 1951

Surveyed 1970
Revised 1970
Edition N/A
Copyright 1971
Levelled 1951

Surveyed 1971
Revised 1971
Edition N/A
Copyright 1972
Levelled 1951



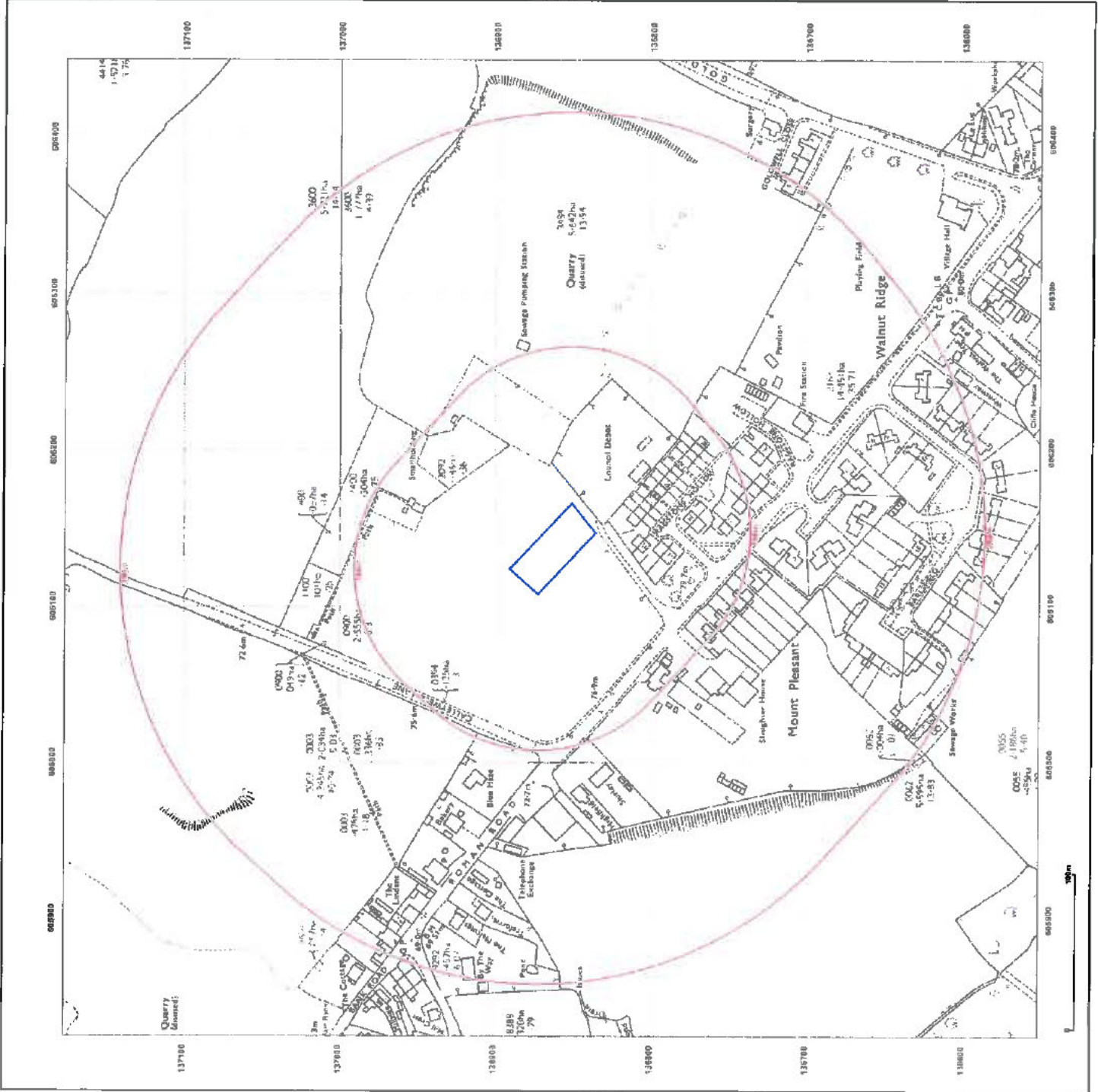
Produced by
Groundsure Insights
www.groundsure.com



Supplied by:
www.centremaps.com
groundsure@centremaps.com

© Crown copyright and database rights 2015 Ordnance Survey 10005207
Production date: 15 March 2017

To view map legend click here [Legend](#)





Site Details:

Rear of 2 to 16 Longsfield,
Aldington, Ashford, TN25 7DP

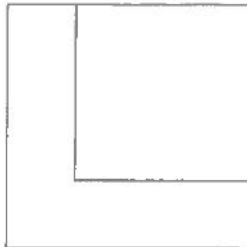
Client Ref: 5500
Report Ref: CMAPS-CM-608020-5500-150317-HIS
Grid Ref: 606137, 136864

Map Name: National Grid

Map date: 1974

Scale: 1:2,500

Printed at: 1:2,500



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



Produced by
Groundsure Insights
www.groundsure.com

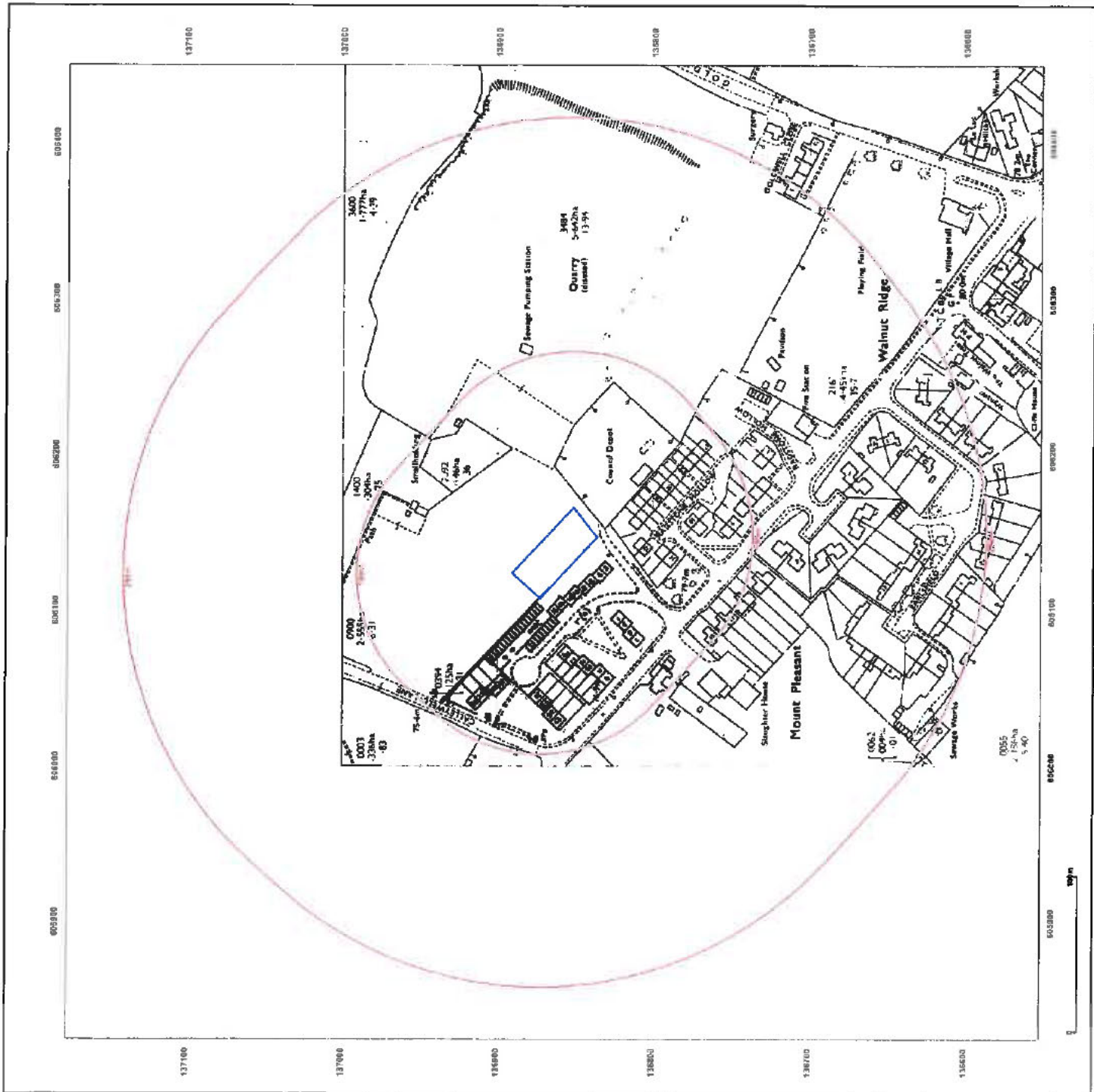


Supplied by:
www.centremaps.com
groundsure@centremaps.com

© Crown copyright and database rights 2015 Ordnance Survey 100049207

Production date: 15 March 2017

To view map legend click here [Legend](#)





Site Details:

Rear of 2 to 16 Longsfield,
Aldington, Ashford, TN25 7DP

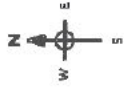
Client Ref: 5500
Report Ref: CMAPS-CM-608020-5500-150317HIS
Grid Ref: 608137, 136864

Map Name: National Grid

Map date: 1975

Scale: 1:10,000

Printed at: 1:10,000



Surveyed 1972
Revised 1975
Edition N/A
Copyright 1975
Levelled N/A



Surveyed 1971
Revised 1975
Edition N/A
Copyright 1975
Levelled N/A



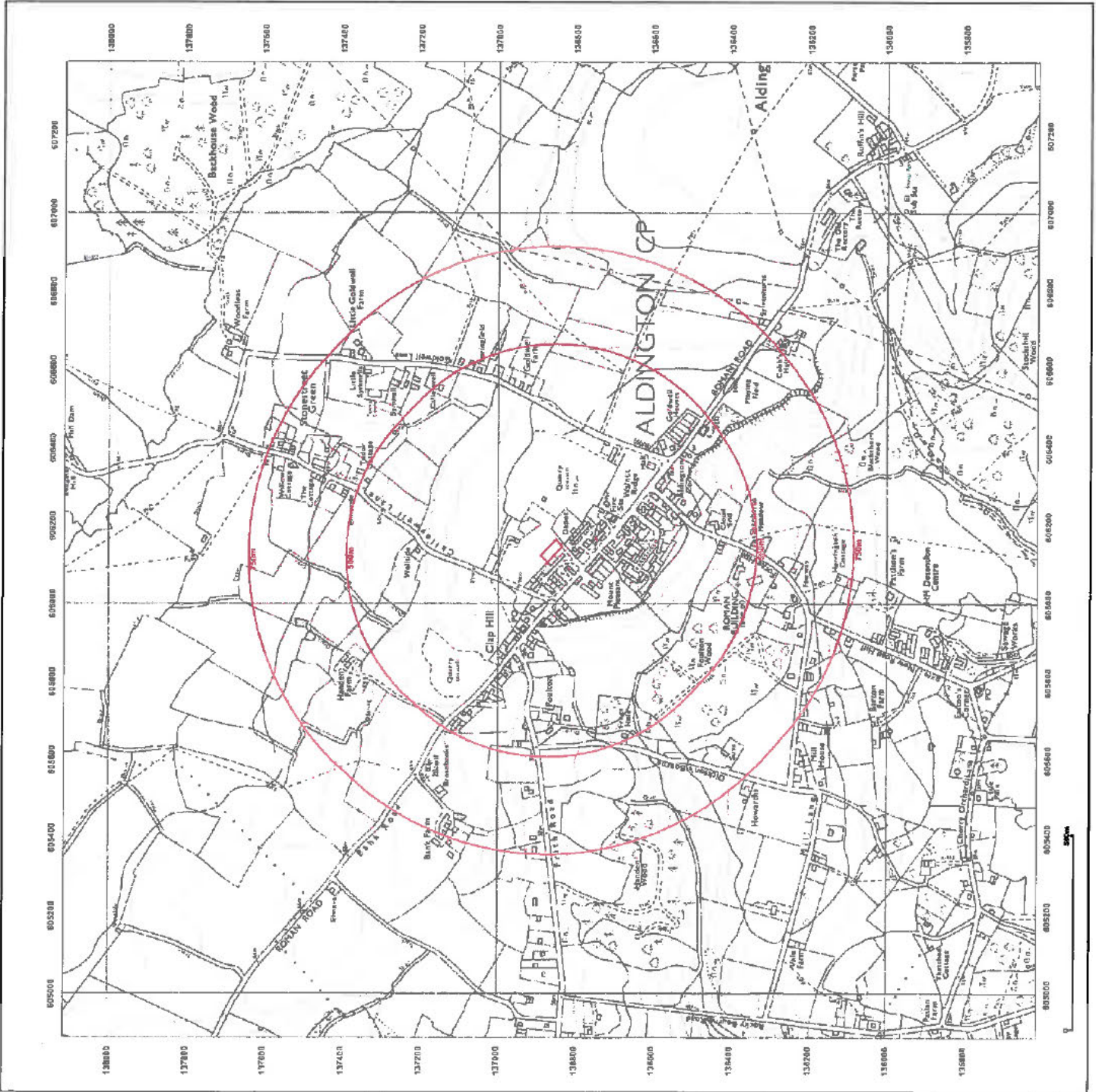
Produced by
Groundsure Insights
www.groundsure.com



Supplied by:
www.centremapslive.com
groundsure@centremaps.com

© Crown copyright and database rights 2018 Ordnance Survey 100055207
Production date: 15 March 2017

To view map legend click here [Legend](#)





Site Details:

Rear of 2 to 16 Longsfield,
Aldington, Ashford, TN25 7DP

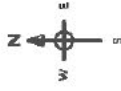
Client Ref: 5500
Report Ref: CMAPS-CM-608020-5500-1S0317HIS
Grid Ref: 606137, 136864

Map Name: National Grid

Map date: 1988

Scale: 1:10,000

Printed at: 1:10,000



Surveyed 1972
Revised 1988
Edition N/A
Copyright N/A
Licensed N/A



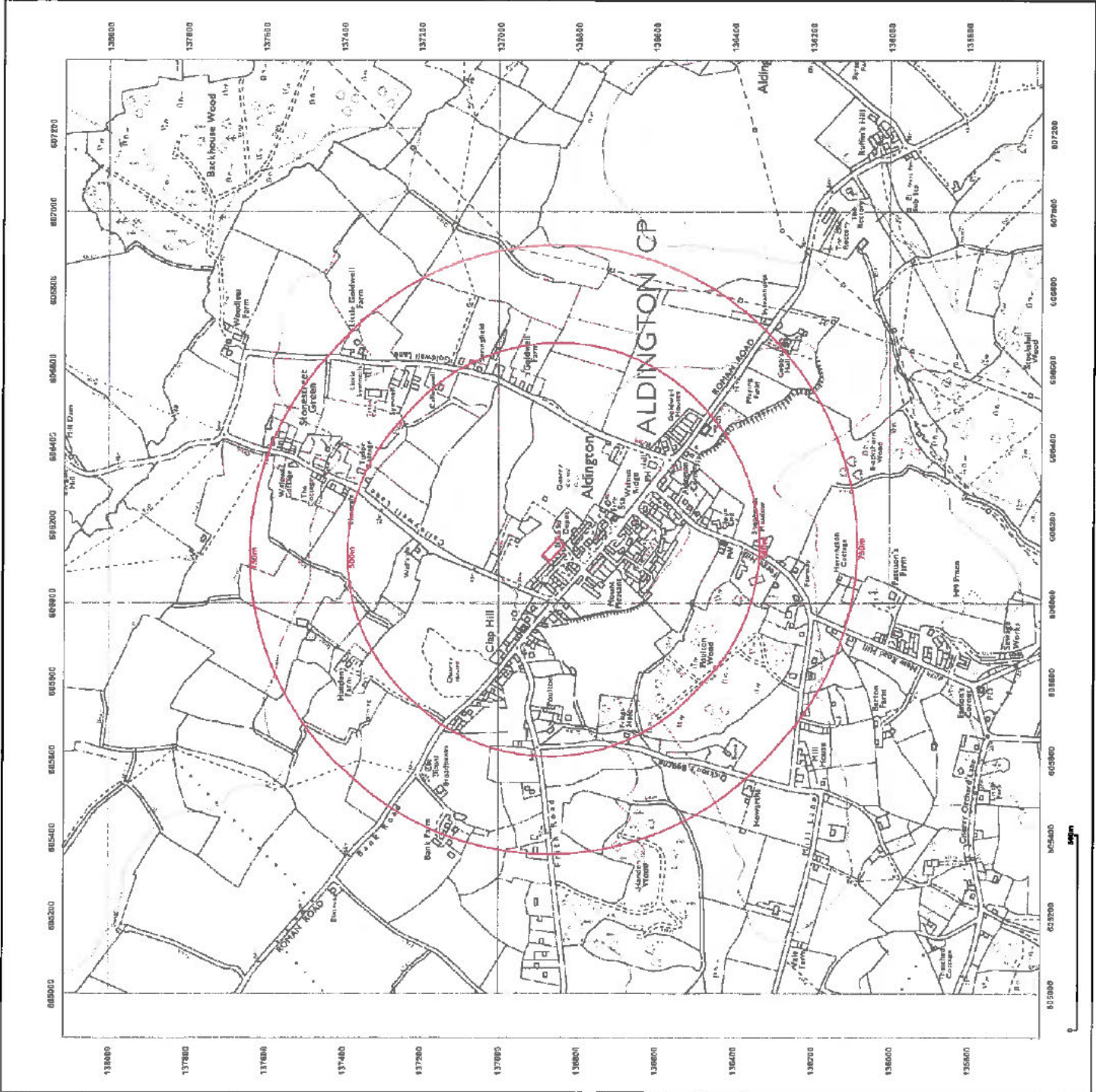
Produced by
Groundsure Insights
www.groundsure.com



Supplied by:
www.centremaps.com
groundsure@centremaps.com

© Crown copyright and database rights 2015 Ordnance Survey 100032007
Production date: 15 March 2017

To view map legend click here [Legend](#)





Site Details:

Rear of 2 to 16 Longsfield,
Aldington, Ashford, TN25 7DP

Client Ref: 5500
Report Ref: CMAPS-CM-508020-5500-150317HIS
Grid Ref: 606137, 136864

Map Name: National Grid

Map date: 1991-1993

Scale: 1:2,500

Printed at: 1:2,500

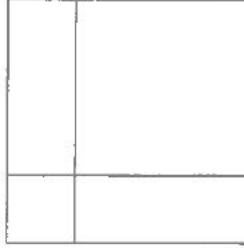


Surveyed 1993
 Revised N/A
 Edition N/A
 Copyright 1893
 Levelled N/A

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

Surveyed N/A
 Revised N/A
 Edition N/A
 Copyright 1893
 Levelled N/A

Surveyed N/A
 Revised N/A
 Edition N/A
 Copyright 1893
 Levelled N/A



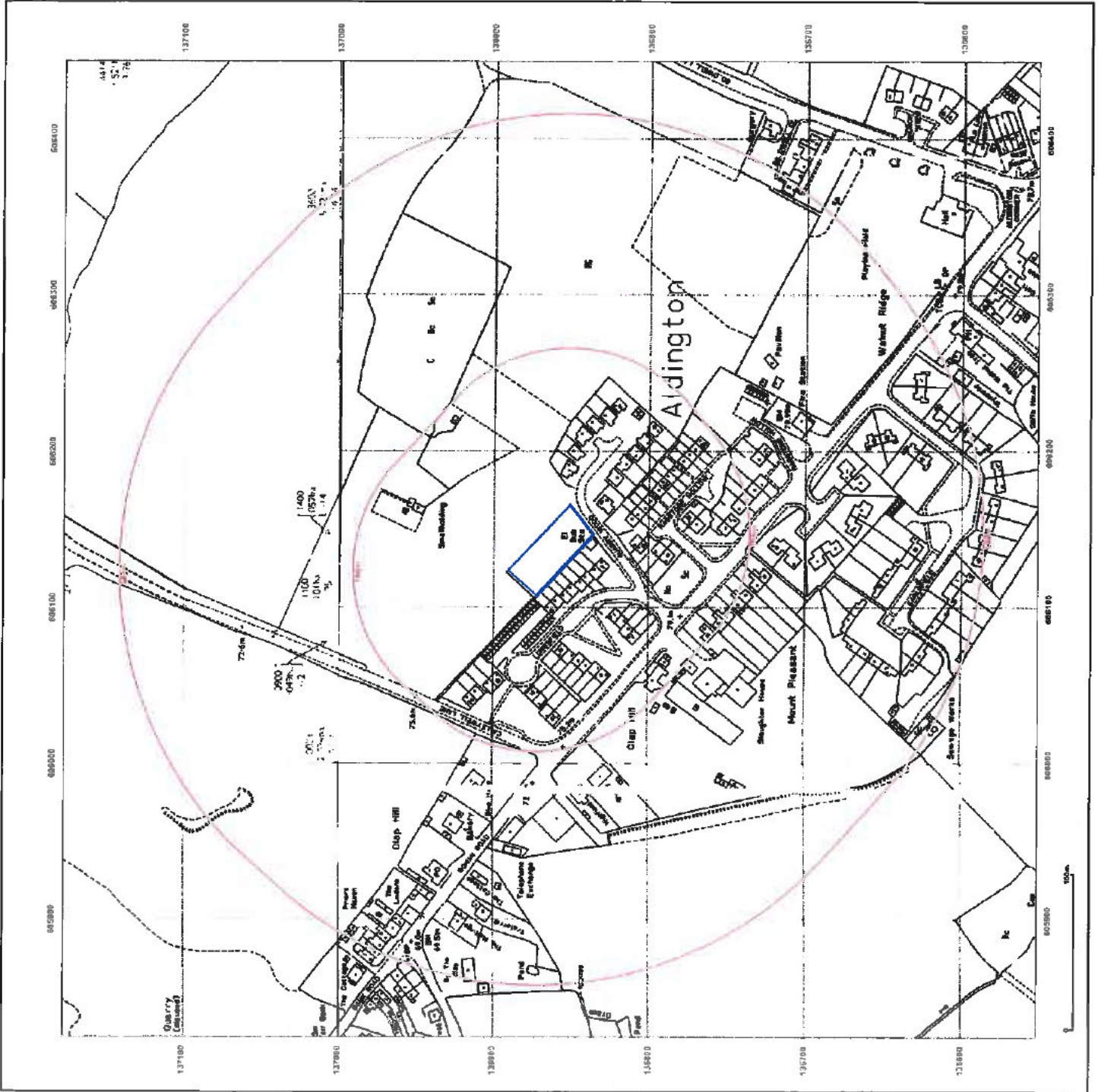
Produced by
Groundsure Insights
www.groundsure.com



Supplied by:
www.centremaps.com
groundsure@centremaps.com

© Crown copyright and database rights 2015 Ordnance Survey 10003207
 Production date: 15 March 2017

To view map legend click here [Legend](#)





Site Details:

Rear of 2 to 16 Longsfield,
Aldington, Ashford, TN25 7DP

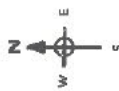
Client Ref: 5500
Report Ref: CMAPS-CM-808020-5500-150317HIS
Grid Ref: 606137, 136864

Map Name: 1:10,000 Raster

Map date: 2002

Scale: 1:10,000

Printed at: 1:10,000



Produced by
Groundsure Insights
www.groundsure.com

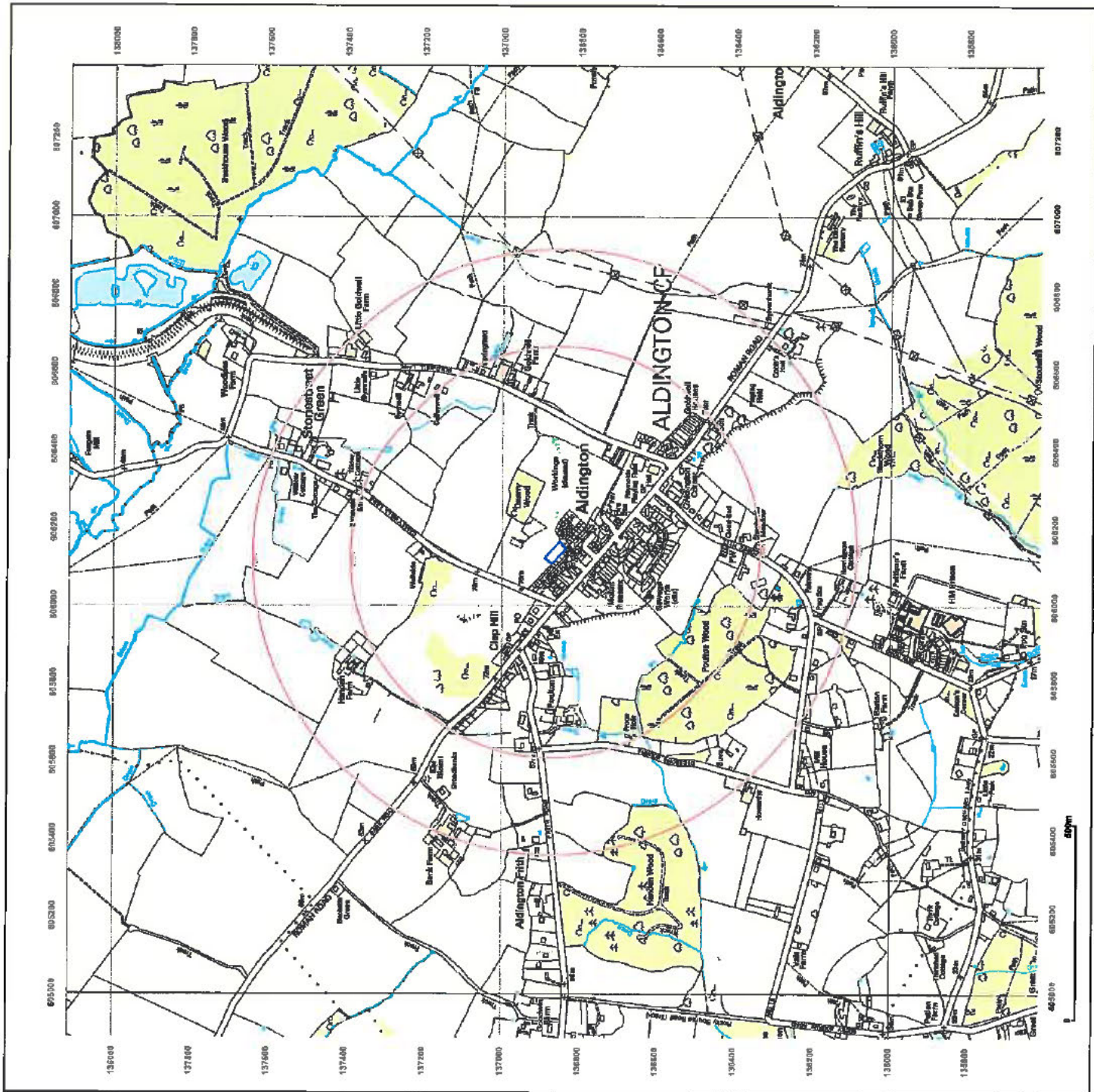


Supplied by:
www.centremaps.com
groundsure@centremaps.com

© Crown copyright and database rights 2015 Ordnance Survey 100065207

Production date: 15 March 2017

To view map legend click here [Legend](#)





Site Details:

Rear of 2 to 16 Longsfield,
Aldington, Ashford, TN25 7DP

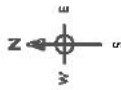
Client Ref: 5500
Report Ref: CMAPS-CM-608020-5500-150317HIS
Grid Ref: 606137, 136864

Map Name: National Grid

Map date: 2010

Scale: 1:10,000

Printed at: 1:10,000



2010



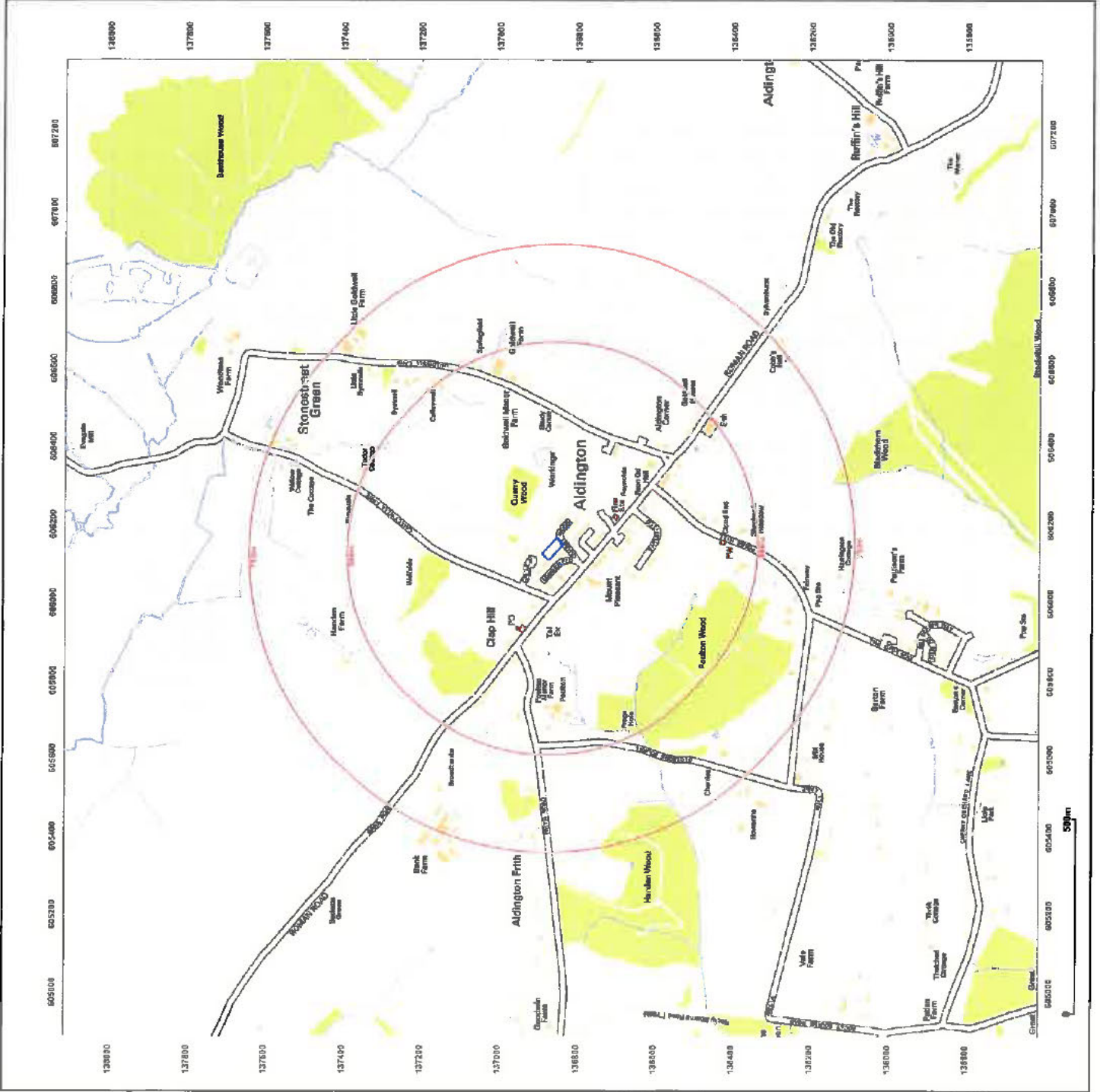
Produced by
Groundsure Insights
www.groundsure.com



Supplied by:
www.centremapslive.com
groundsure@centremaps.com

© Crown copyright and database rights 2015 Ordnance Survey 100065207
Production date: 15 March 2017

To view map legend click here [Legend](#)





Site Details:

Rear of 2 to 16 Longsfield,
Aldington, Ashford, TN25 7DP

Client Ref: 5500
Report Ref: CMAPS-CM-608020-5500-150317HIS
Grid Ref: 606137, 136864

Map Names: National Grid

Map date: 2014

Scale: 1:10,000

Printed at: 1:10,000



Produced by
Groundsure Insights
www.groundsure.com

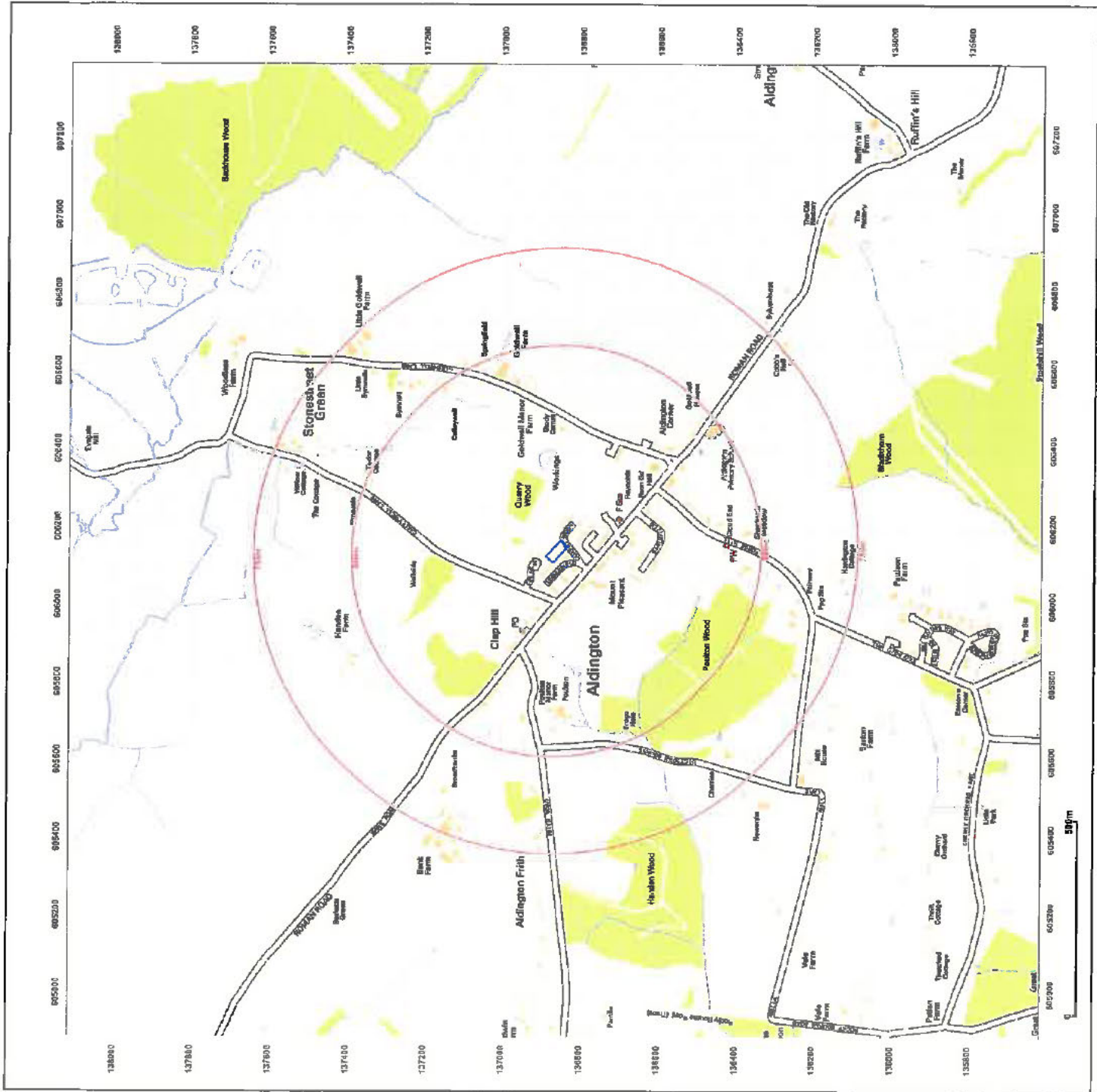


Supplied by:
www.centremapslive.com
groundsure@centremaps.com

© Crown copyright and database rights 2013 Ordnance Survey 100052507

Production date: 15 March 2017

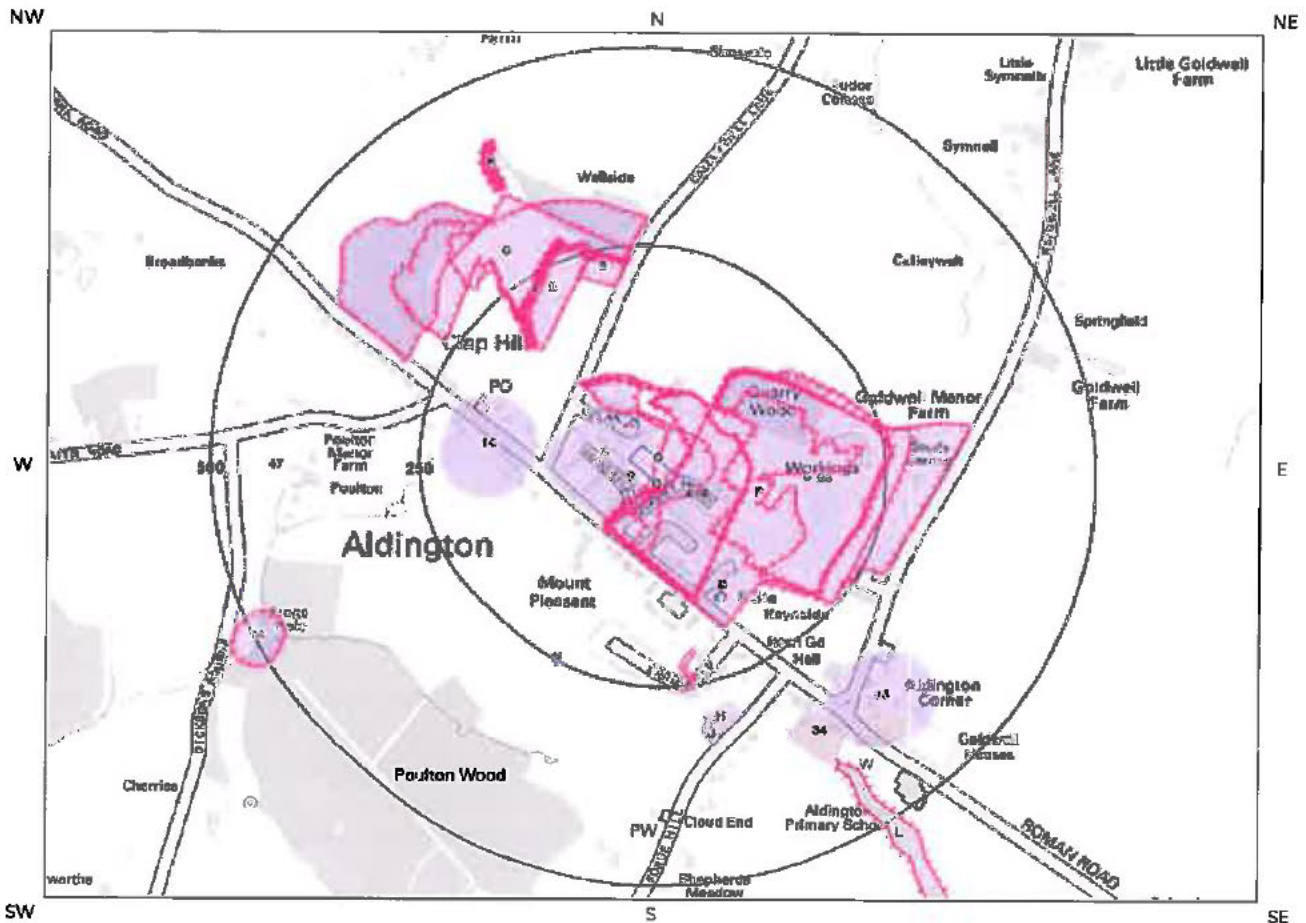
To view map legend click here [Legend](#)



APPENDIX 5

ENVIRONMENTAL MAPS

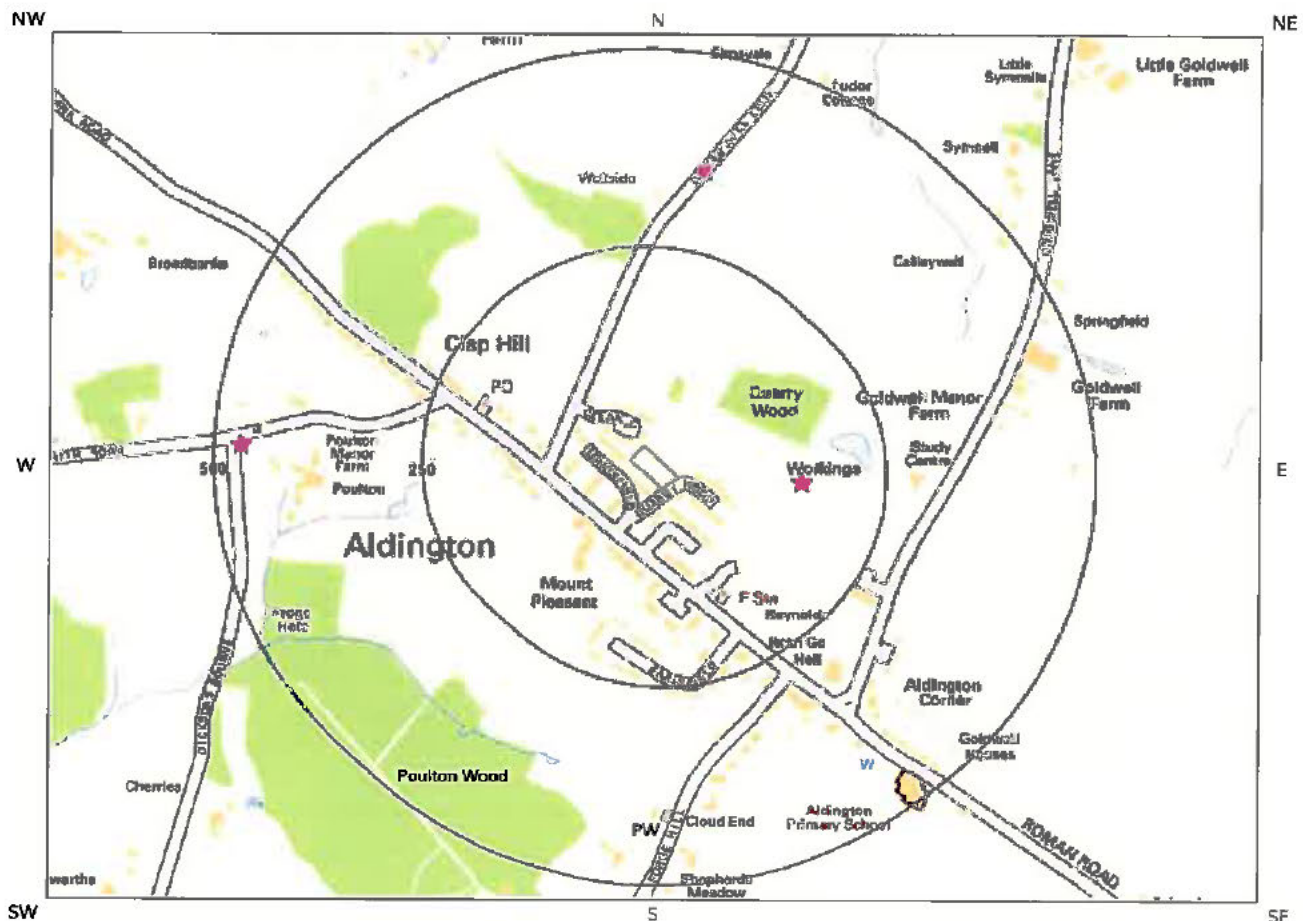
1. Historical Land Use



© Crown copyright and database rights 2017.
Ordnance Survey license 100038207.



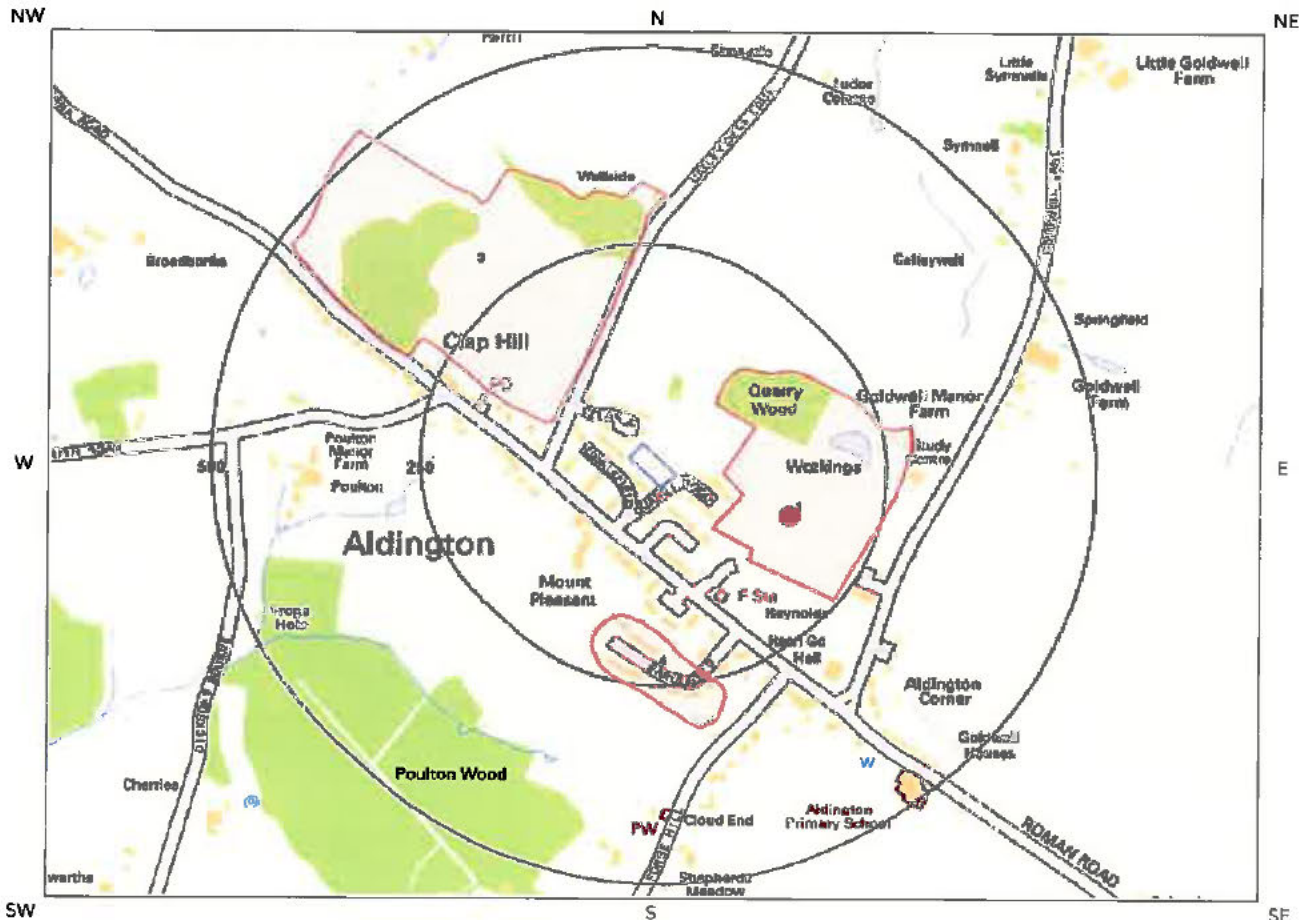
2. Environmental Permits, Incidents and Registers Map



© Crown copyright and database rights 2017.
Ordnance Survey license 10005207.

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

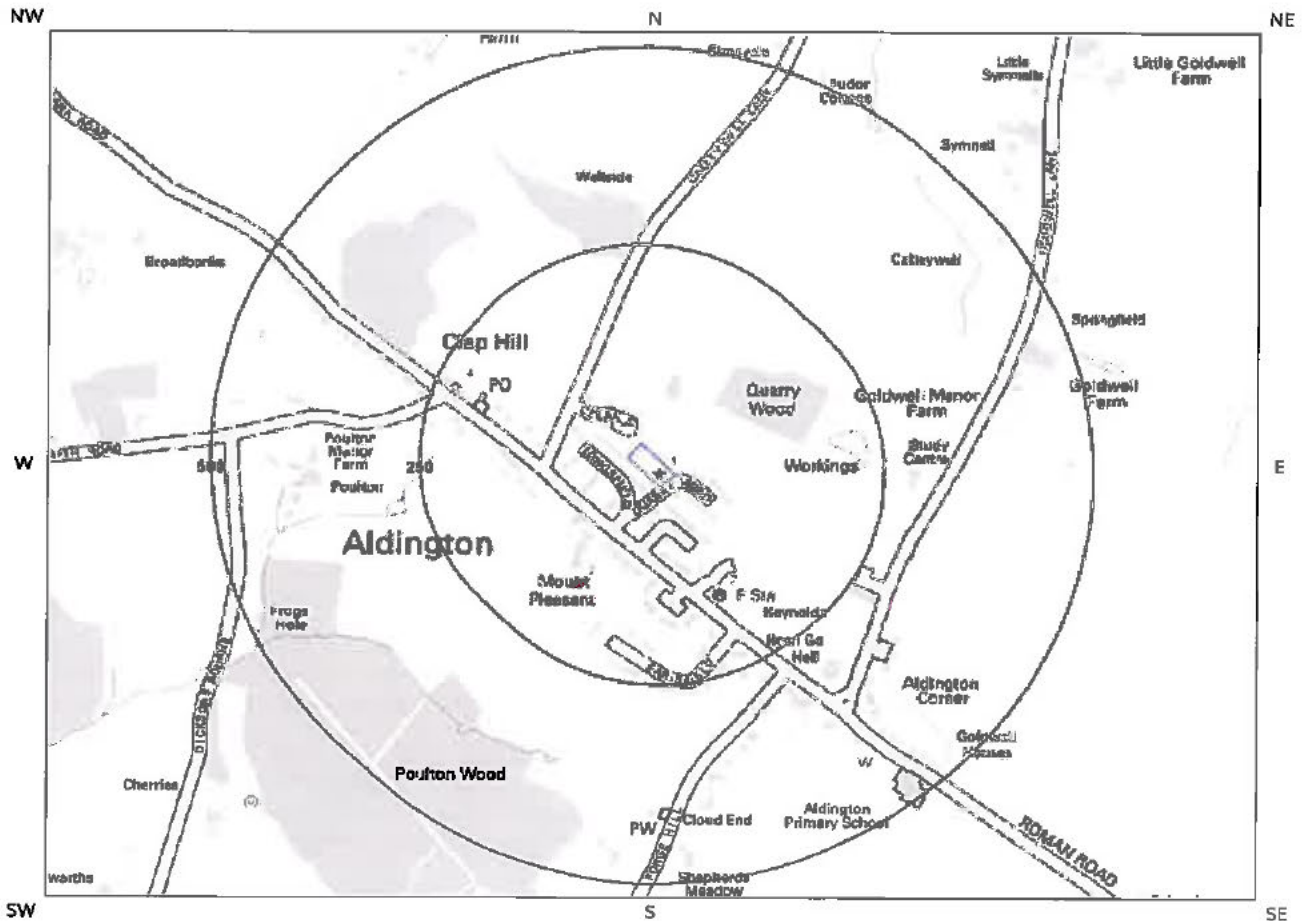
3. Landfill and Other Waste Sites Map



© Crown copyright and database rights 2017.
Ordnance Survey license 100035207.

- Site Outline
- 250 Search Buffer (m)
- 500 Search Buffer (m)
- EA/NRW Active Landfill
- EA/NRW Historic Landfill
- BGS / DoE Survey Landfill
- Historic and Planned Waste Sites
- EA/NRW Licensed Waste Site
- Local Authority/Historical Mapping Landfill Records

4. Current Land Use Map

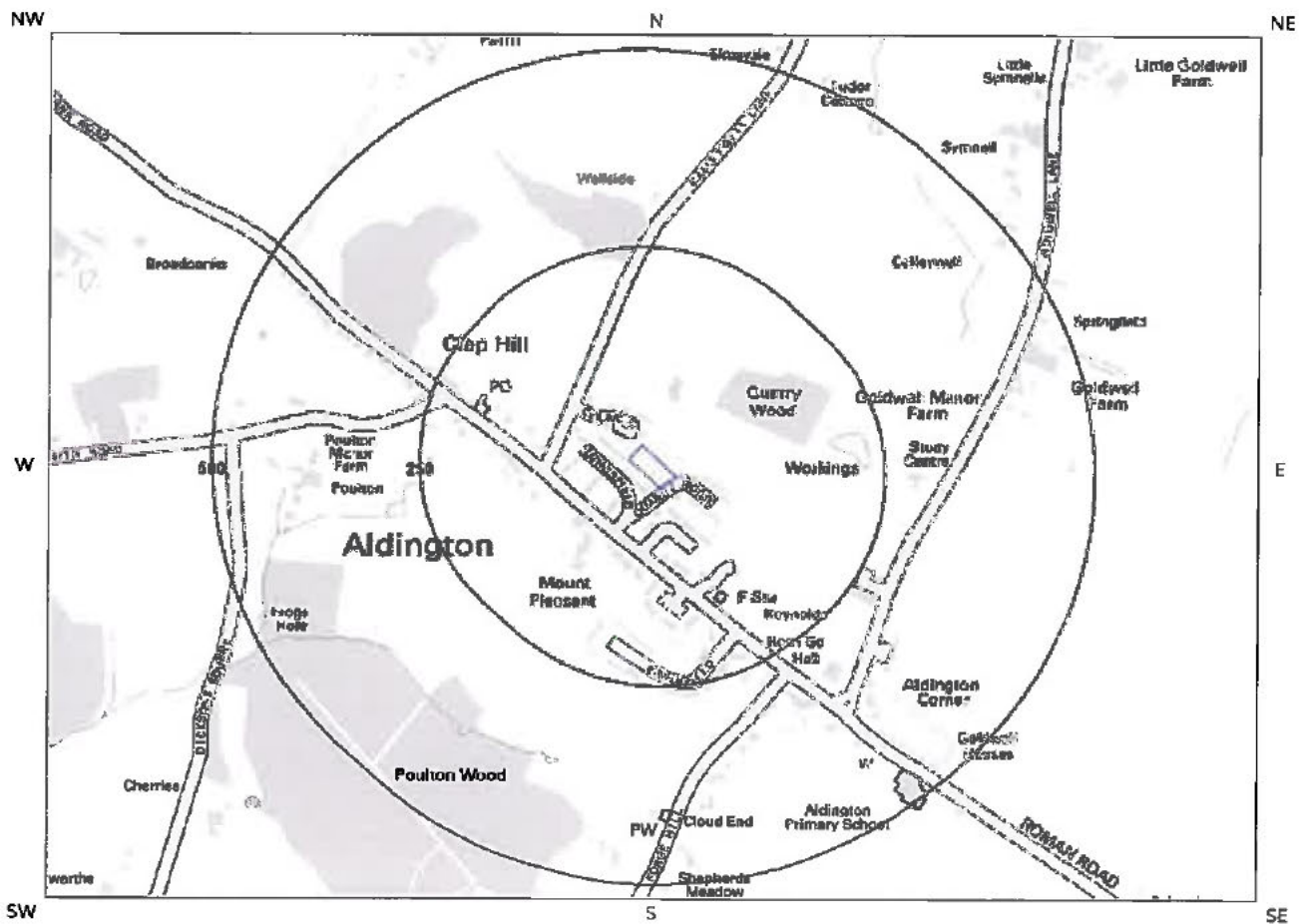


© Crown copyright and database rights 2017.
Ordnance Survey license 100035207.

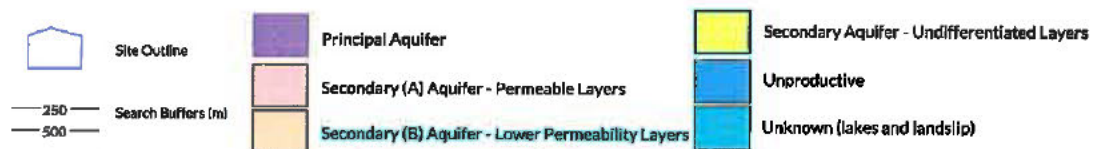
- | | | | | | |
|---|--------------------|---|--------------------------|---|---------------------------------|
|  | Site Outline |  | Current Industrial Sites |  | Electricity Transmission Cables |
|  | Search Buffers (m) |  | Petrol & Fuel Sites |  | Gas Transmission Pipelines |

6 Hydrogeology and Hydrology

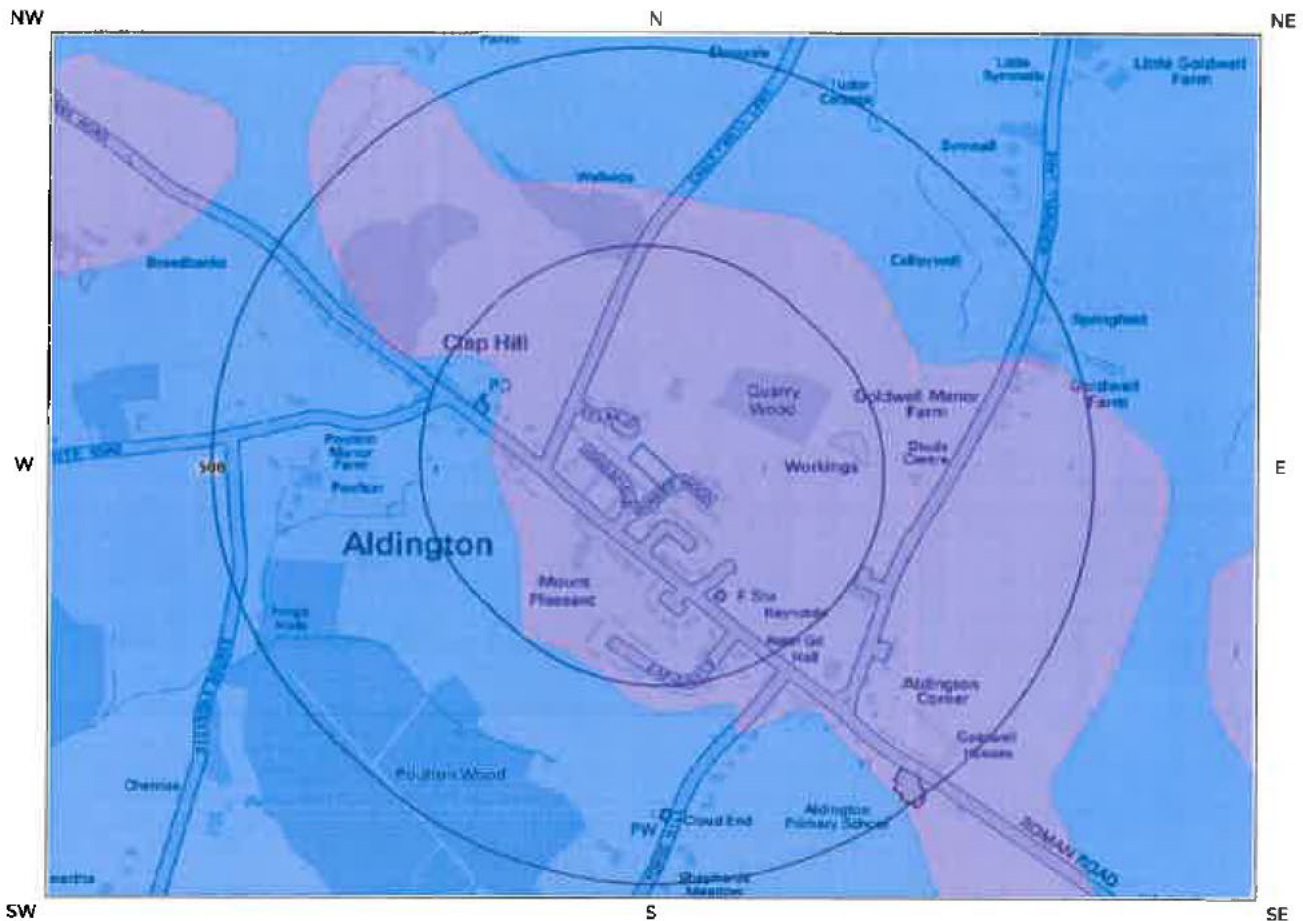
6a. Aquifer Within Superficial Geology



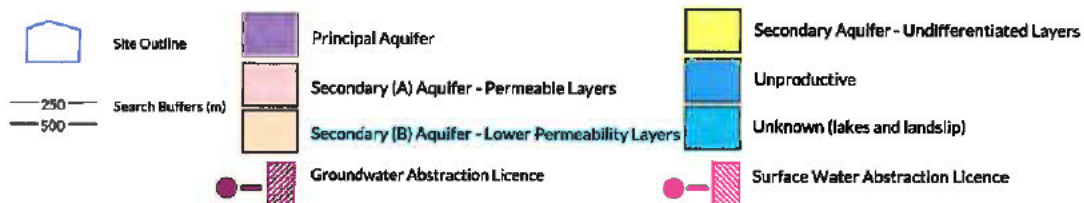
© Crown copyright and database rights 2017
Ordnance Survey license 100035207.



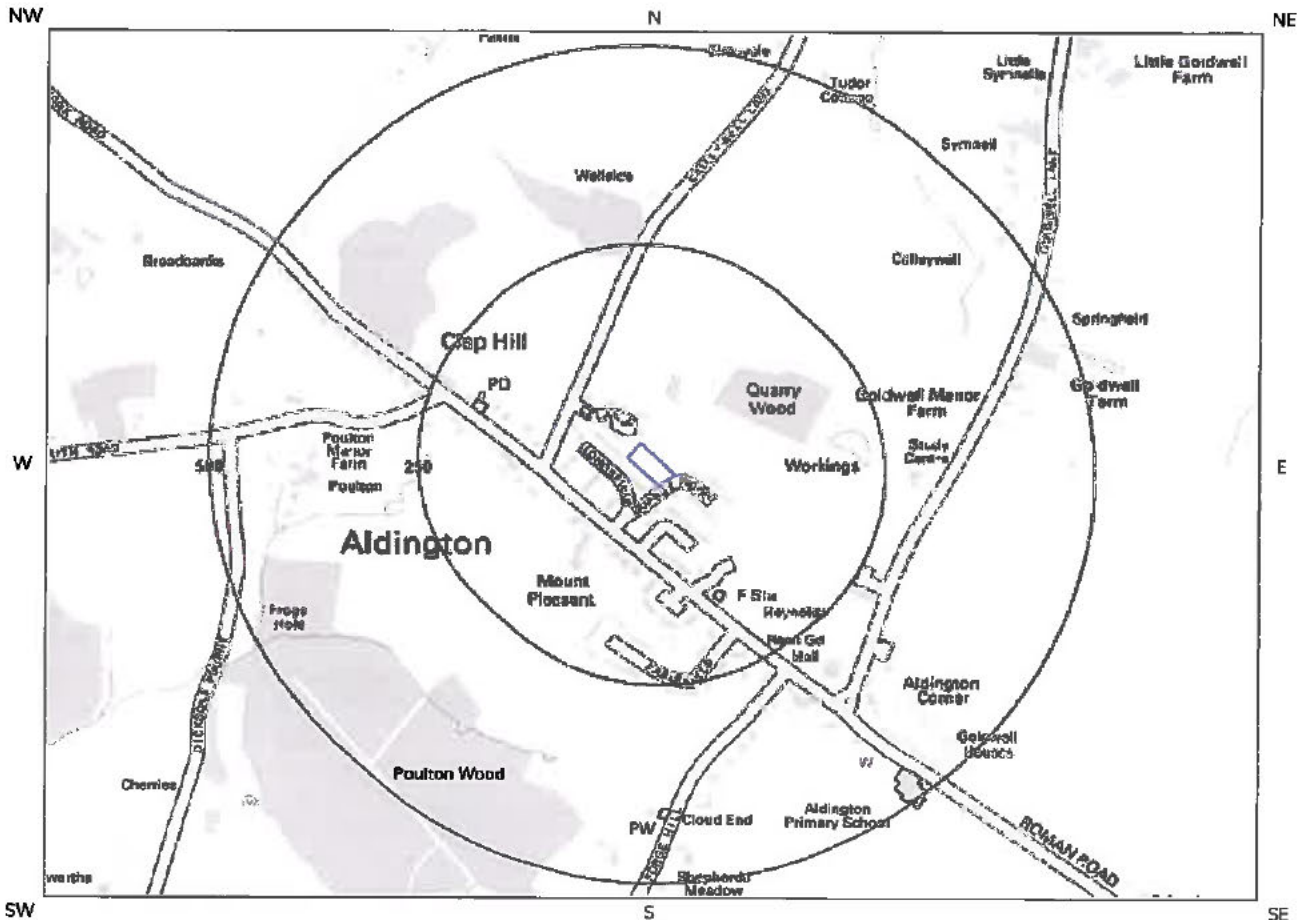
6b. Aquifer Within Bedrock Geology and Abstraction Licenses



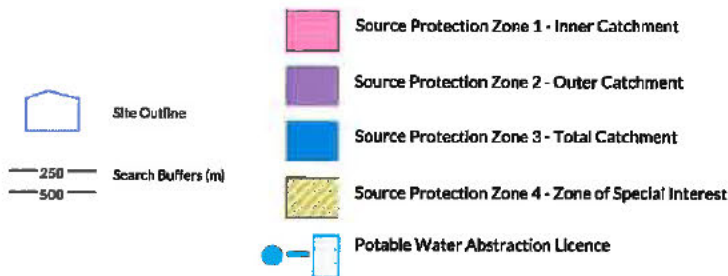
© Crown copyright and database rights 2017
Ordnance Survey license 100035207.



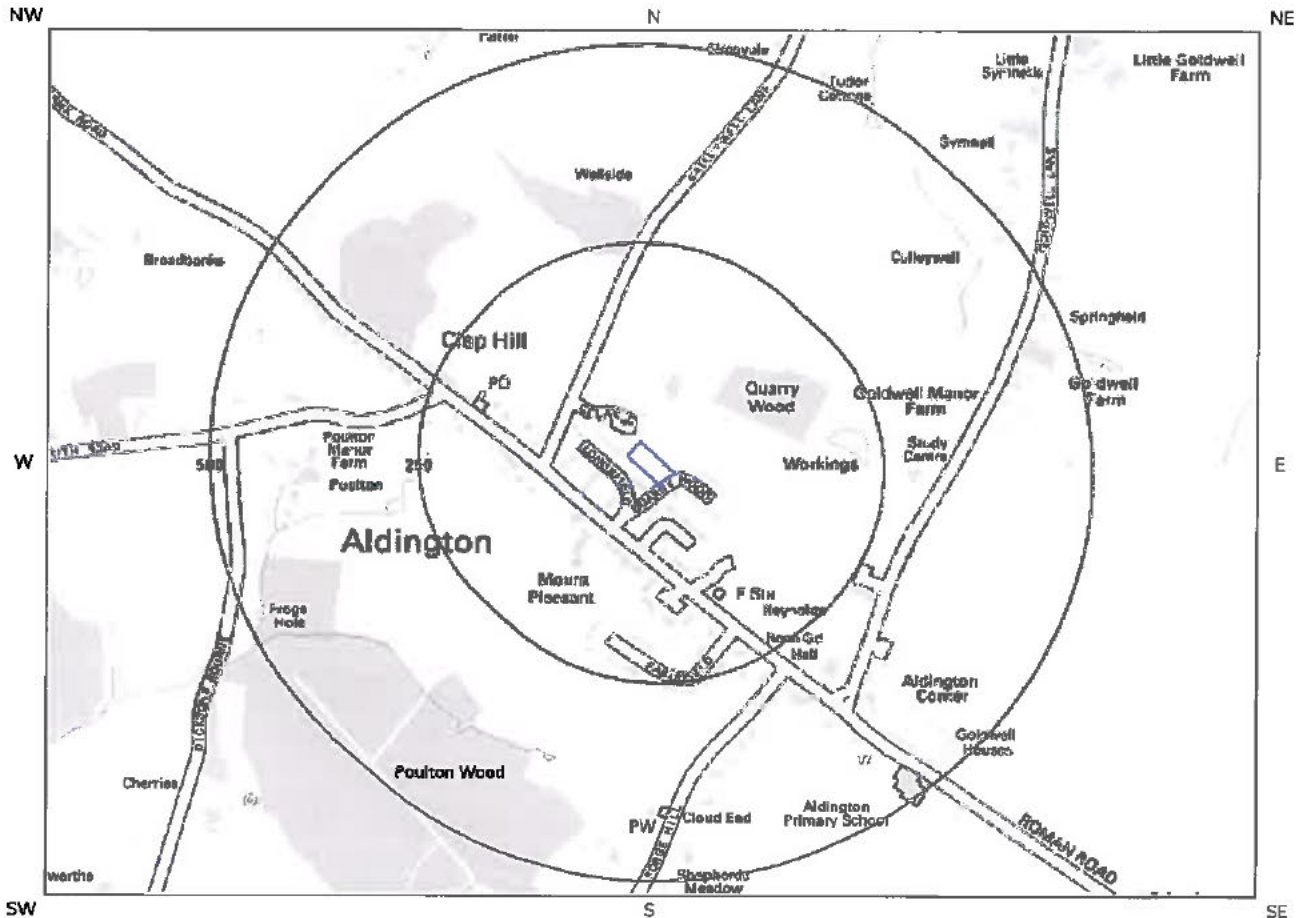
6c. Hydrogeology – Source Protection Zones and Potable Water Abstraction Licenses



© Crown copyright and database rights 2017
Ordnance Survey license 100035207.



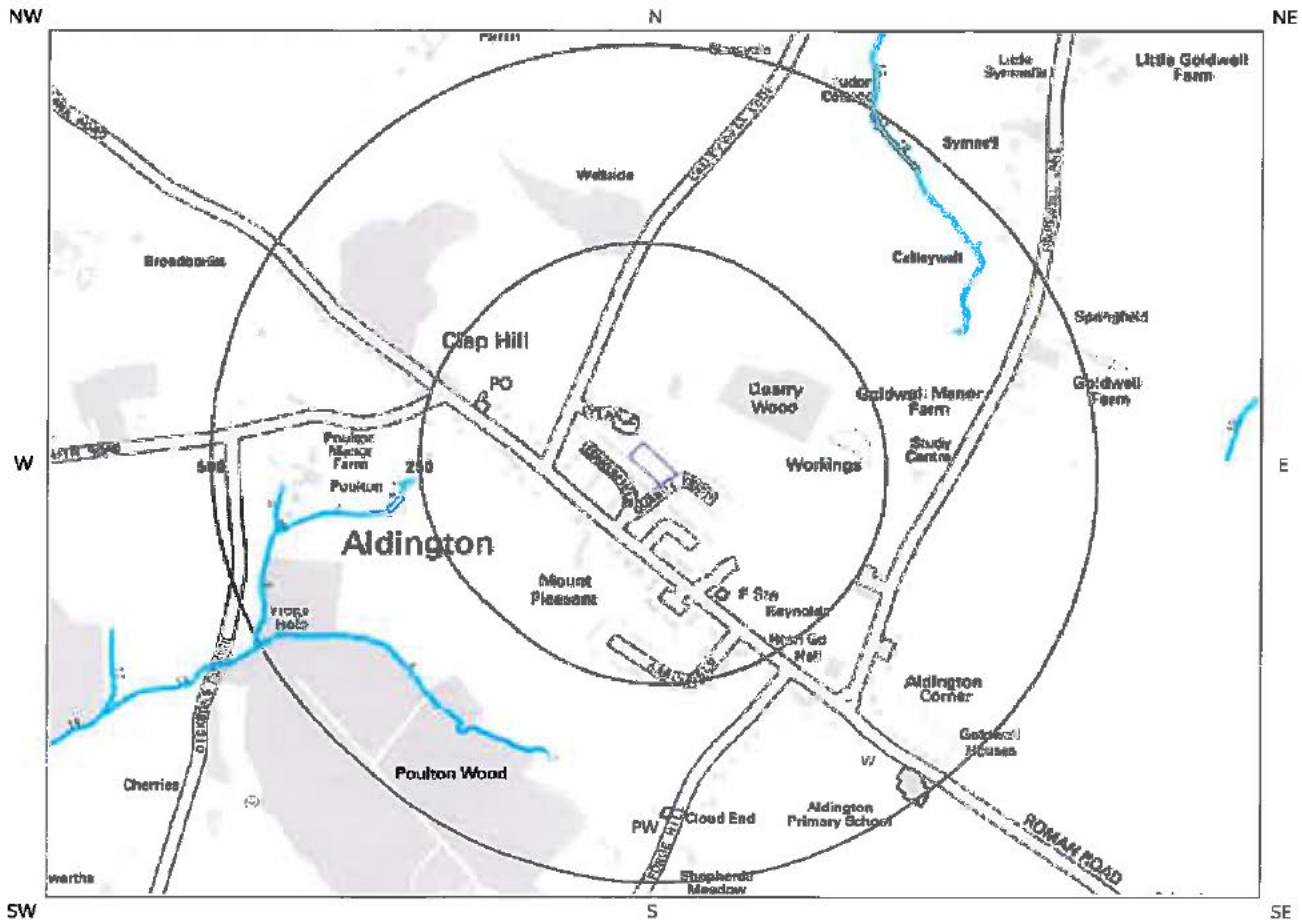
6d. Hydrogeology – Source Protection Zones within confined aquifer



© Crown copyright and database rights 2017
Ordnance Survey license 100035207.



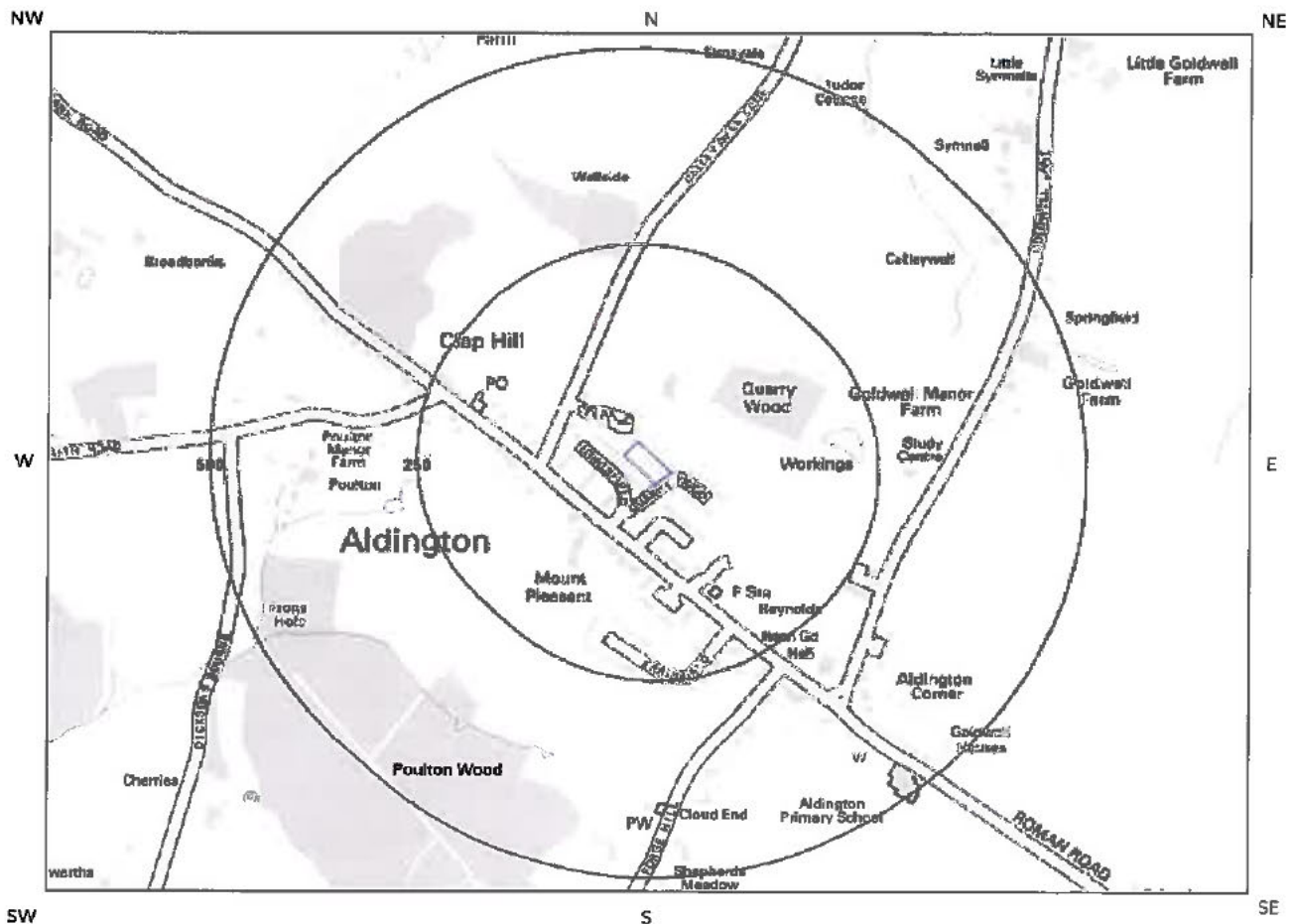
6e. Hydrology – Detailed River Network and River Quality



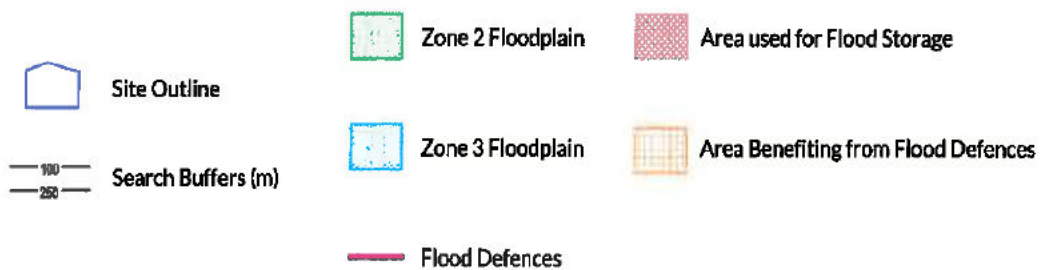
© Crown copyright and database rights 2017.
Ordnance Survey license 100038207.



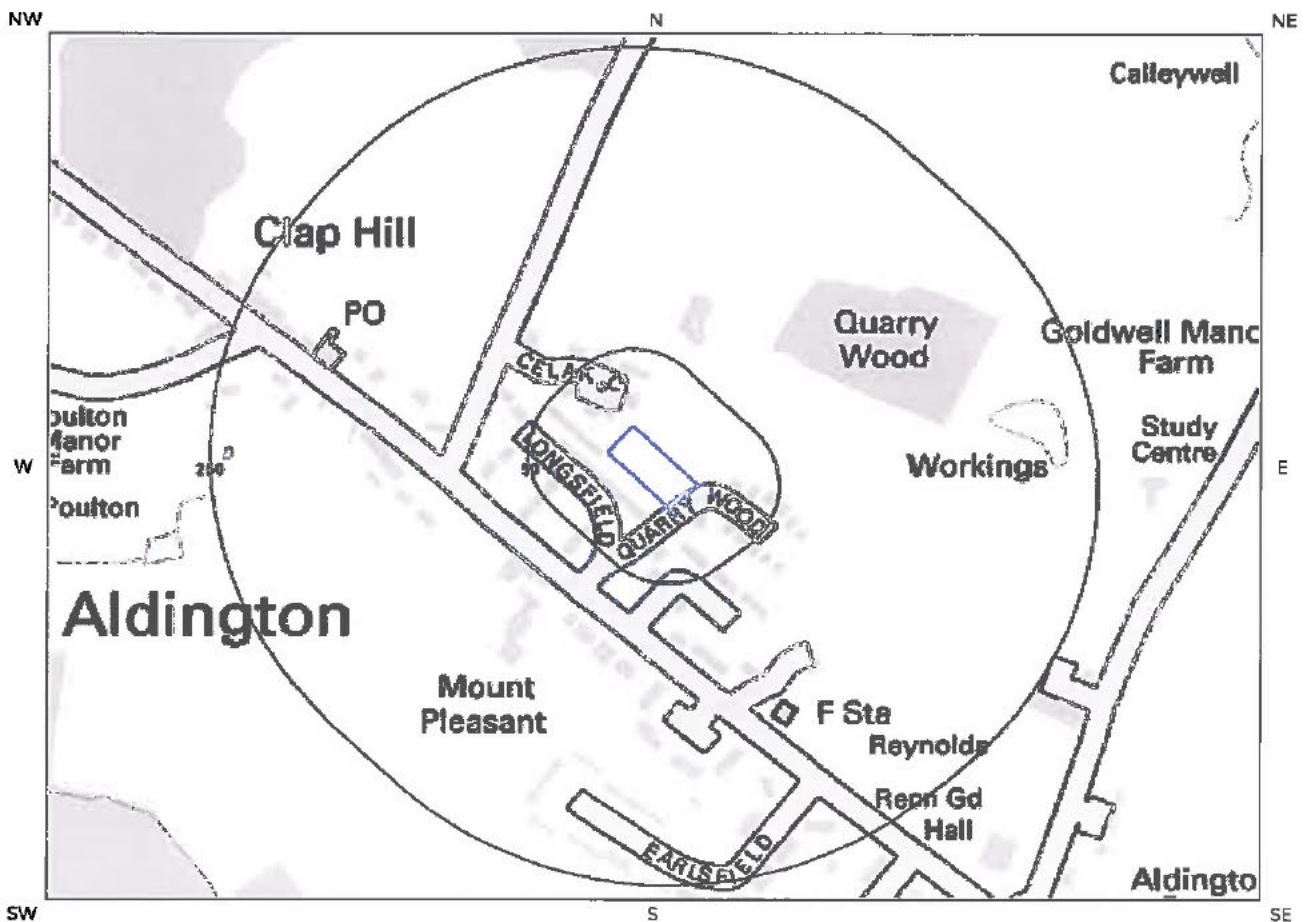
7a. Environment Agency/Natural Resources Wales Flood Map for Planning (from rivers and the sea)



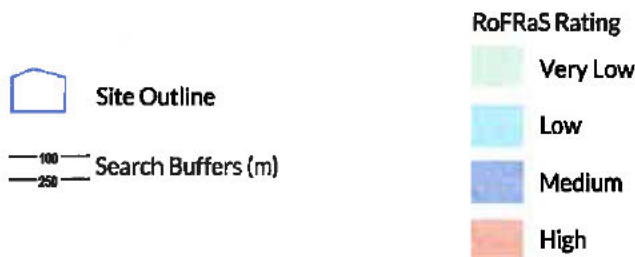
© Crown copyright and database rights 2017.
Ordnance Survey license 100035207.



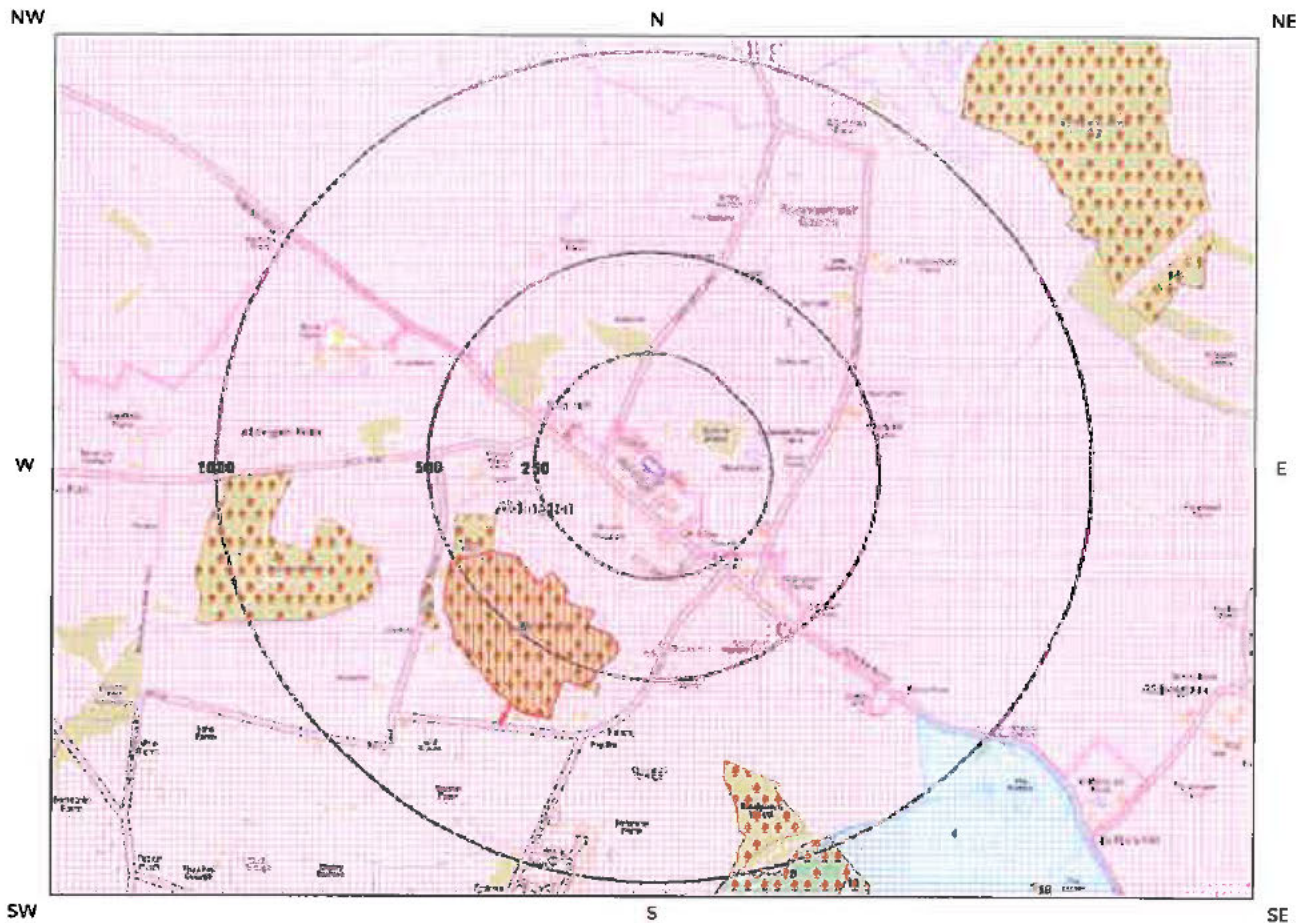
7b. Environment Agency/Natural Resources Wales Risk of Flooding from Rivers and the Sea (RoFRaS) Map



© Crown copyright and database rights 2017.
Ordnance Survey license 100035207.



8. Designated Environmentally Sensitive Sites Map

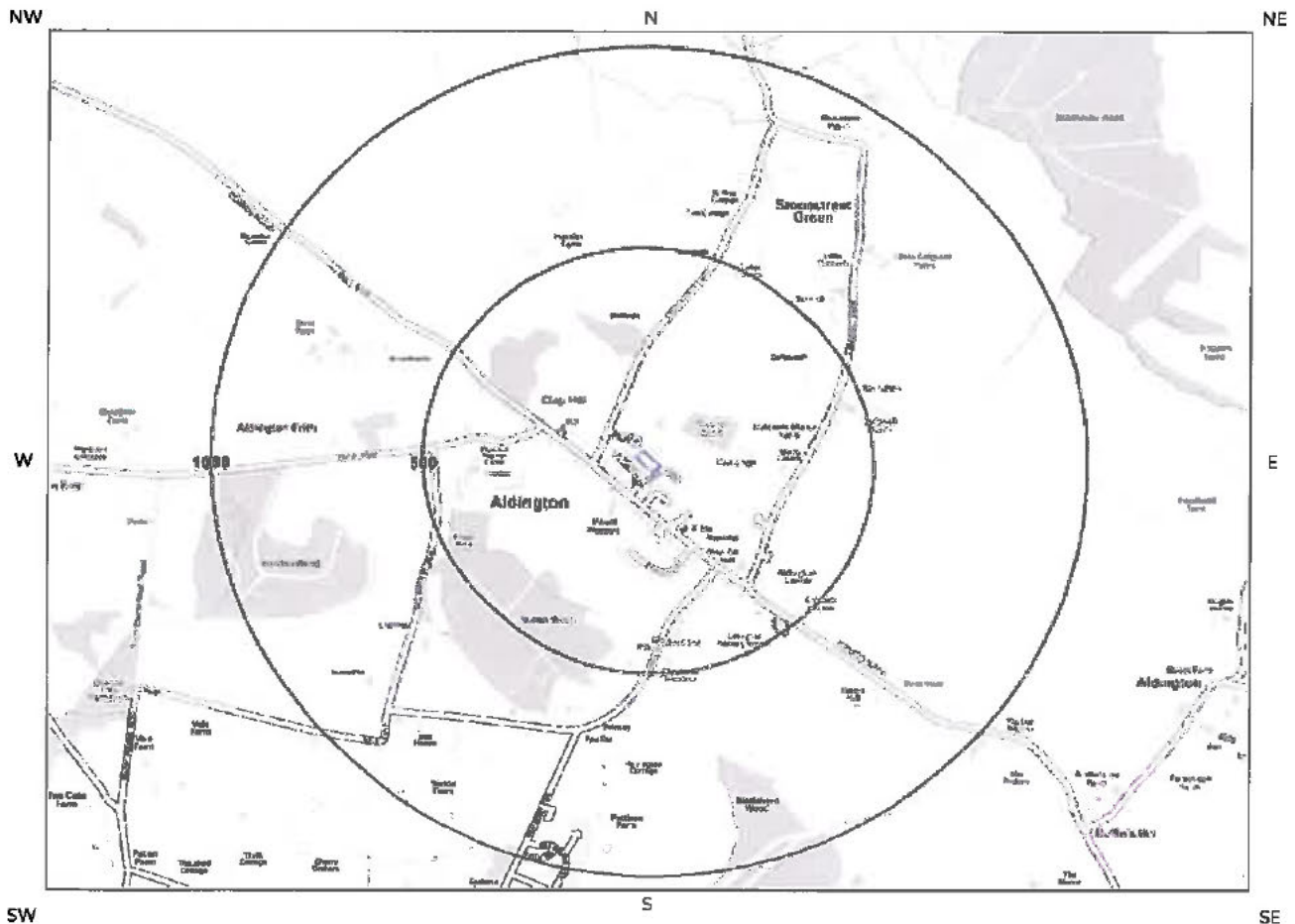


© Crown copyright and database rights 2017.
Ordnance Survey license 100038207.






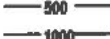




1 Geology (1:10,000 scale).

1.1 Artificial Ground Map (1:10,000 scale)

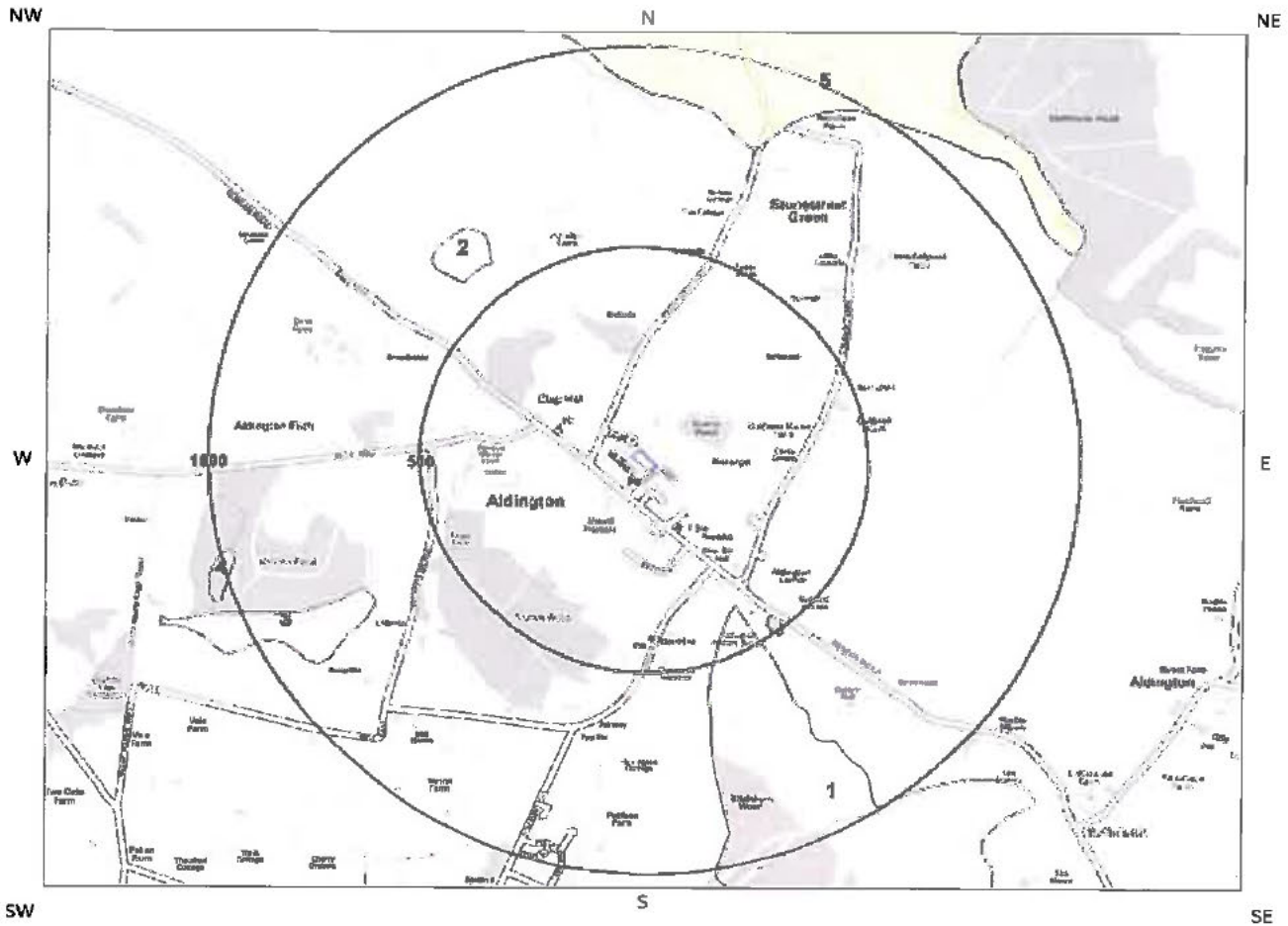


Artificial Ground Legend

© Crown copyright and database rights 2017.
Ordnance Survey license 100035207.




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

1.2 Superficial Deposits and Landslips Map (1:10,000 scale)

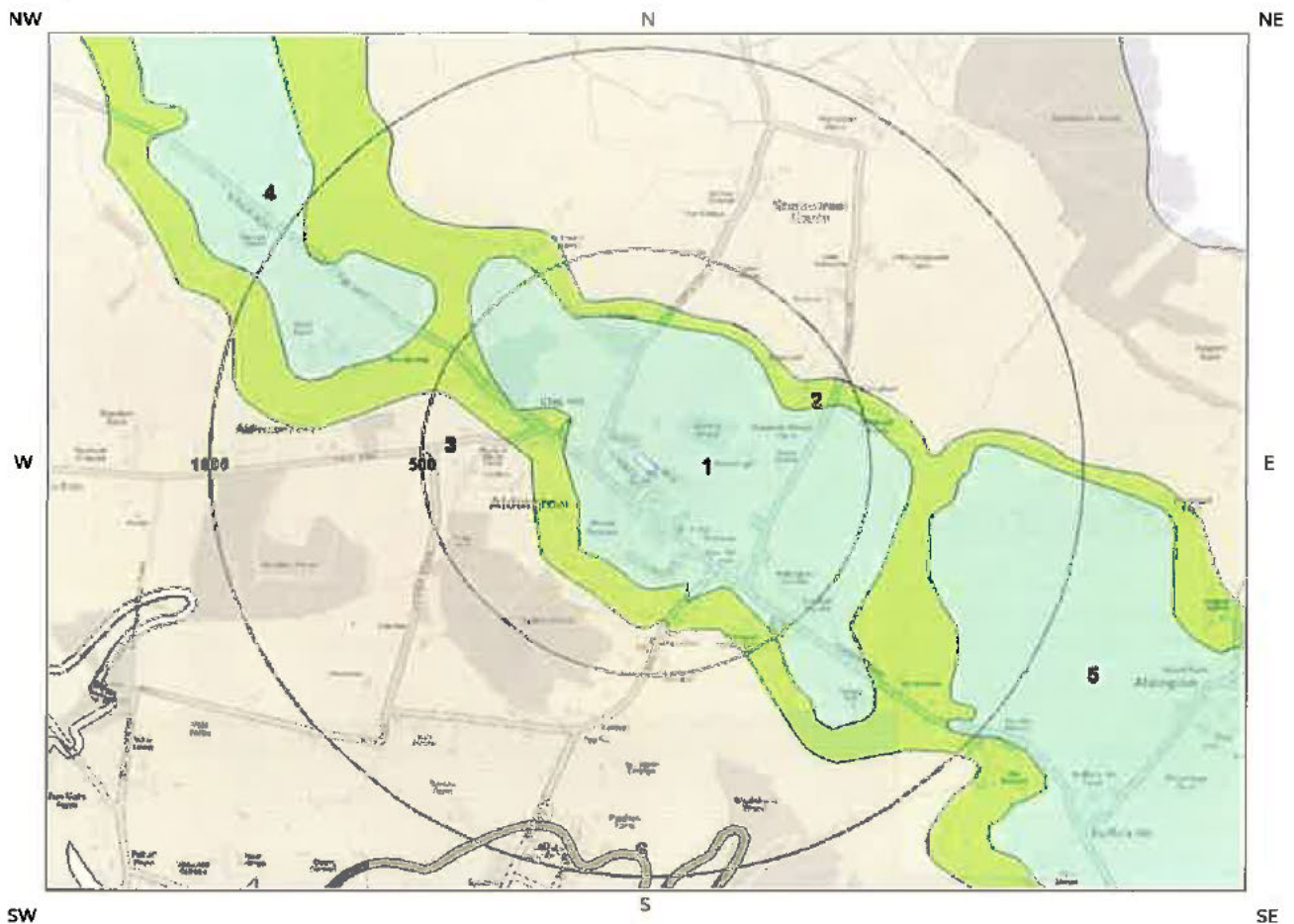


Artificial Ground Legend

© Crown copyright and database rights 2017.
 Ordnance Survey license 100035207.


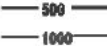
-  Site Outline
-  500
-  1000
- Search Buffers (m)

2.3 Bedrock and Faults Map (1:50,000 scale)

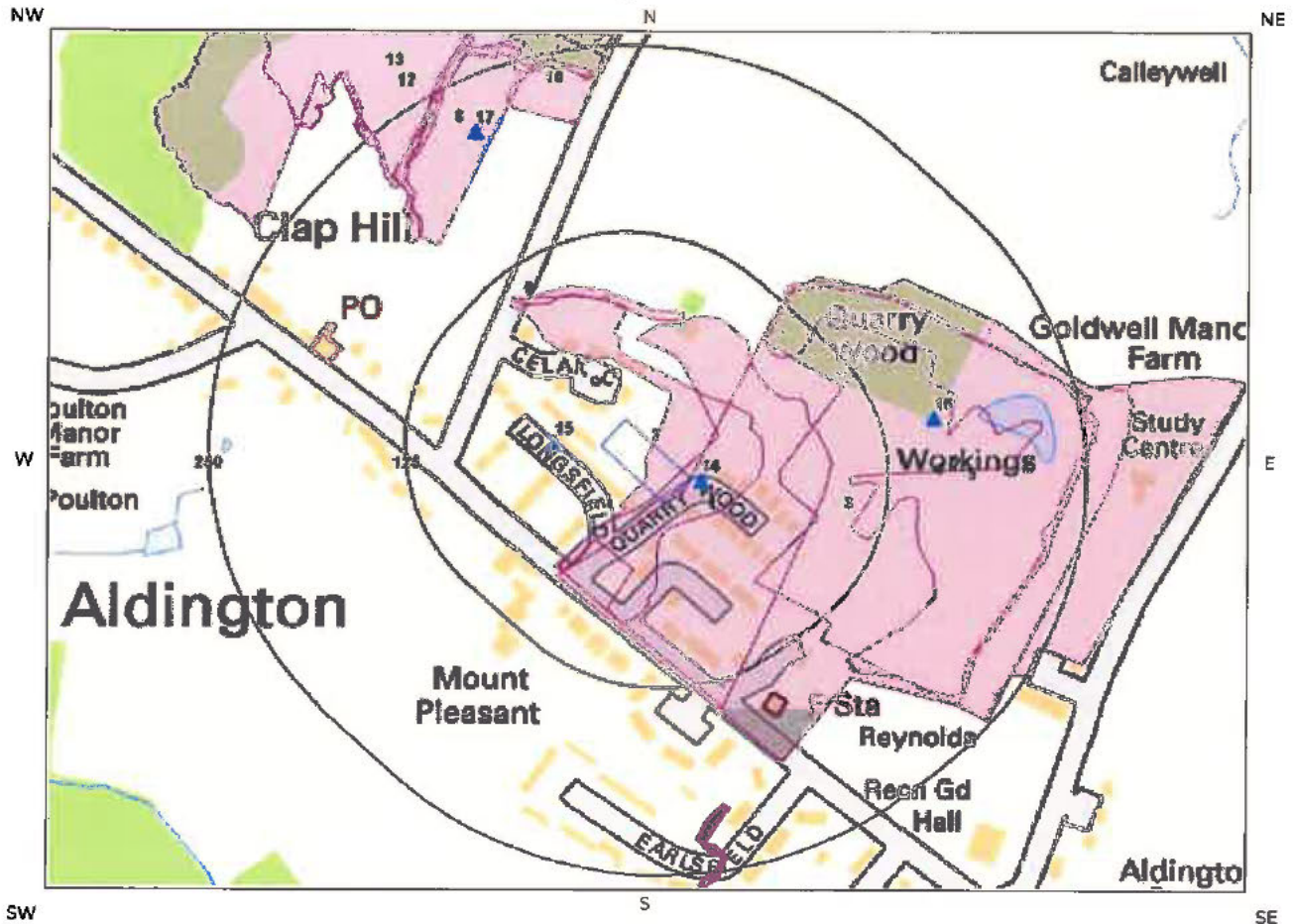


Ground Workings Legend

© Crown copyright and database rights 2017.
Ordnance Survey license 100035207.







-  Site Outline
-  Search Buffers (m)

4 Ground Workings Map

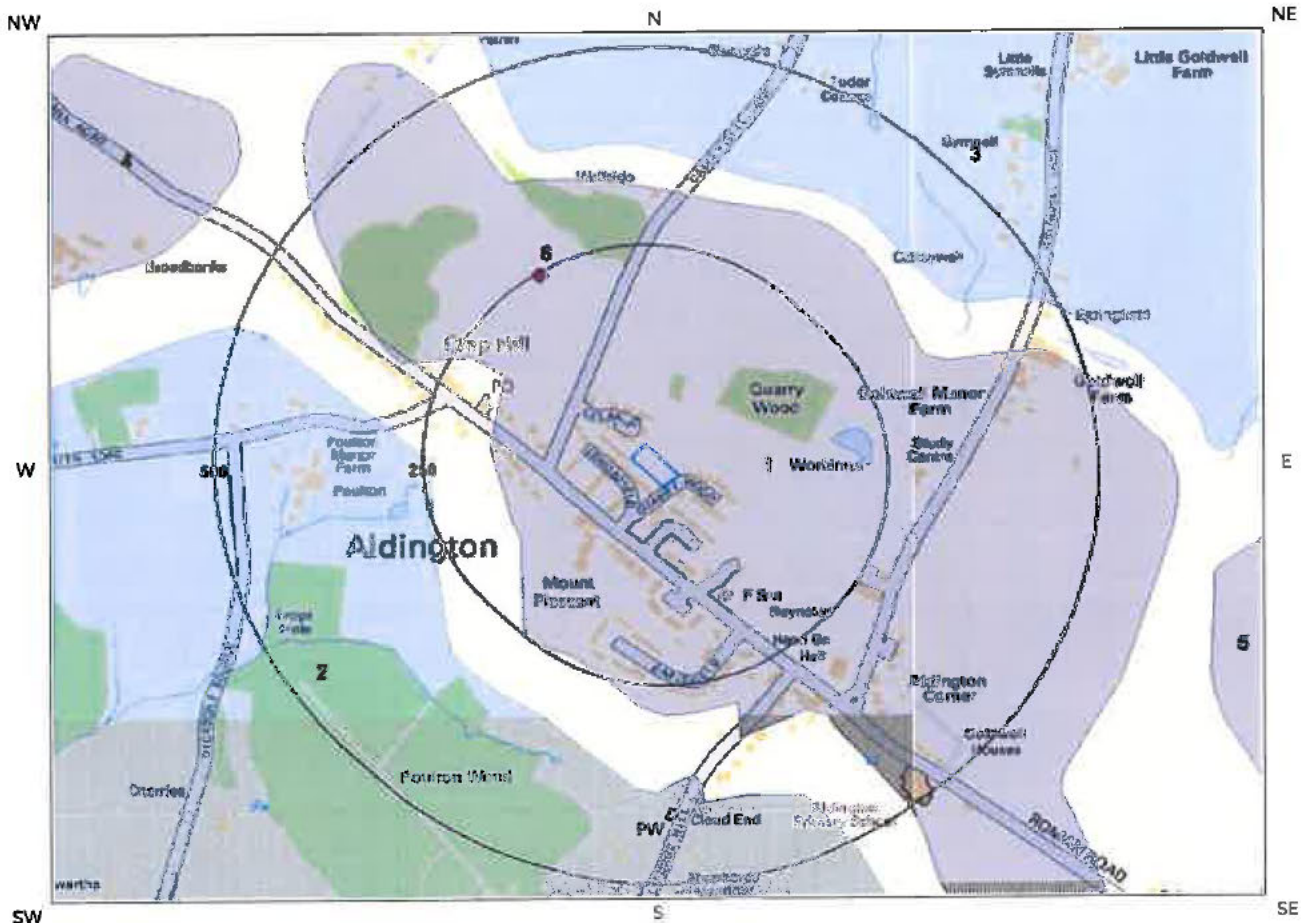


Ground Workings Legend

© Crown copyright and database rights 2017.
Ordnance Survey license 100035207.

-  Site Outline
-  125 Search Buffers (m)
-  250 Search Buffers (m)
-  Historic Surface Ground Workings
-  Historic Underground Workings
-  Current Ground Workings

5 Mining, Extraction & Natural Cavities Map



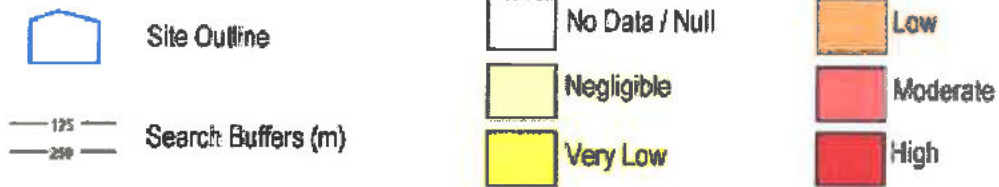
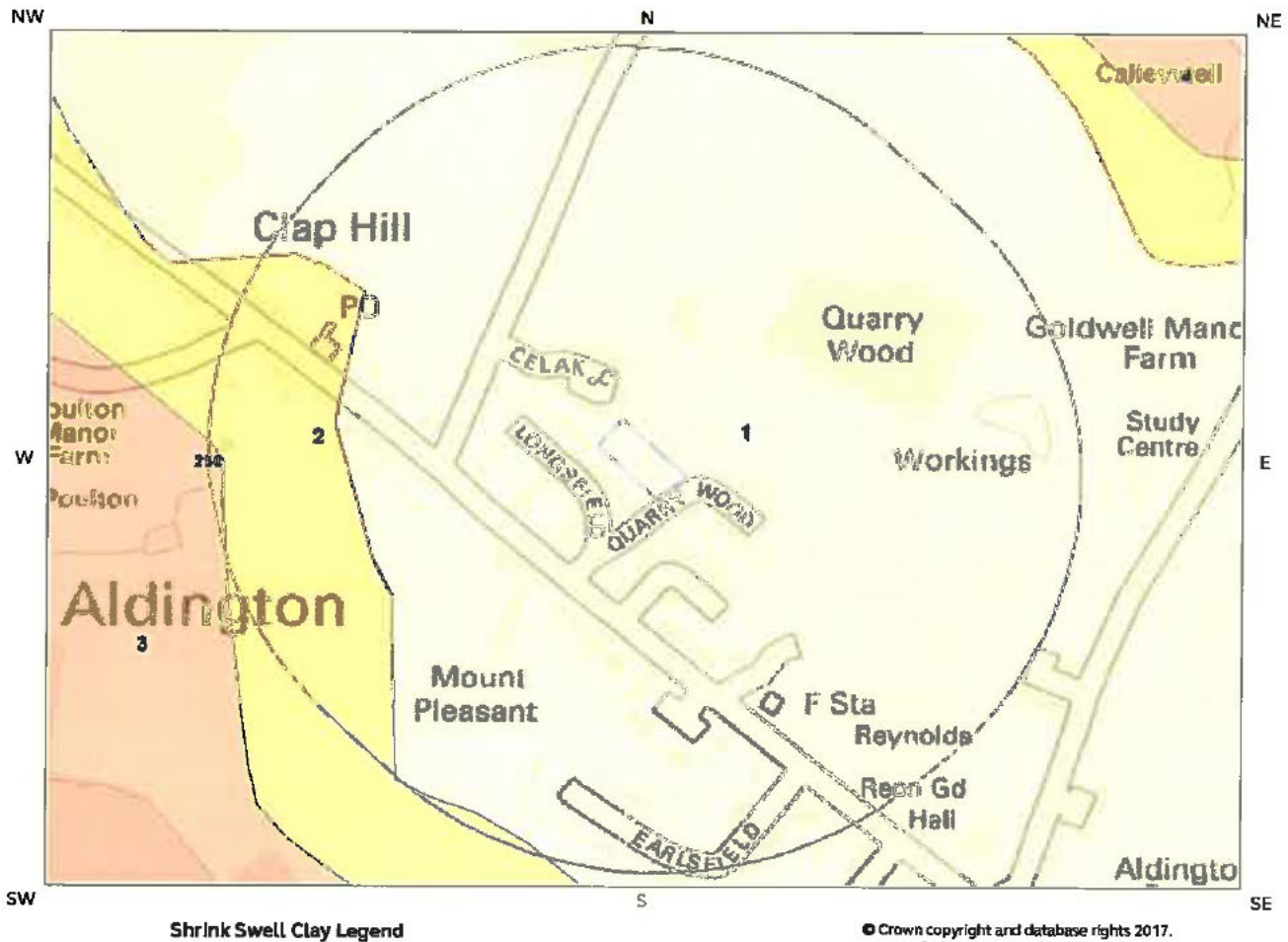
Mining, Extraction and Natural Cavities Legend

© Crown copyright and database rights 2017.
Ordnance Survey license 100035207.

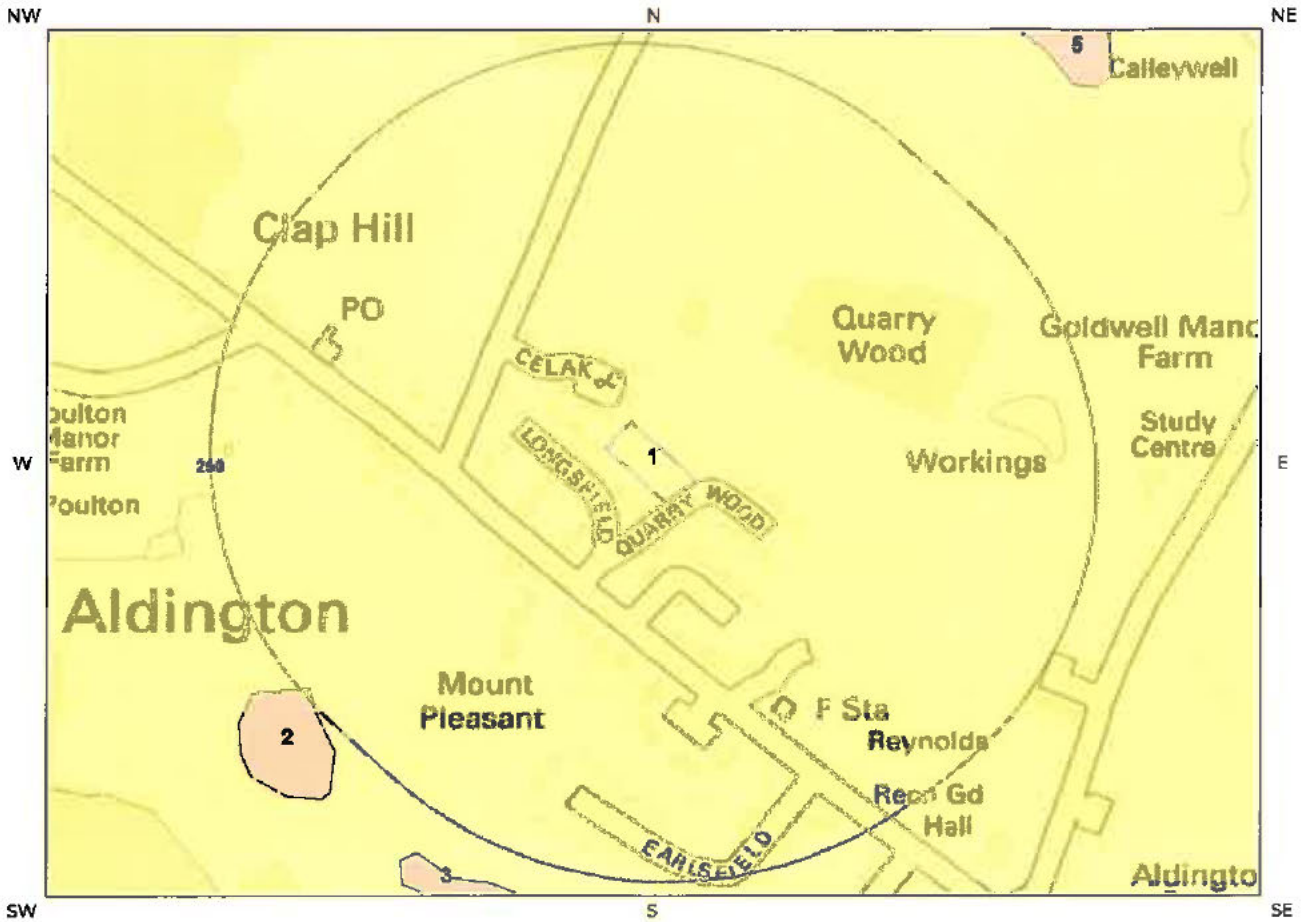


6 Natural Ground Subsidence

6.1 Shrink-Swell Clay Map

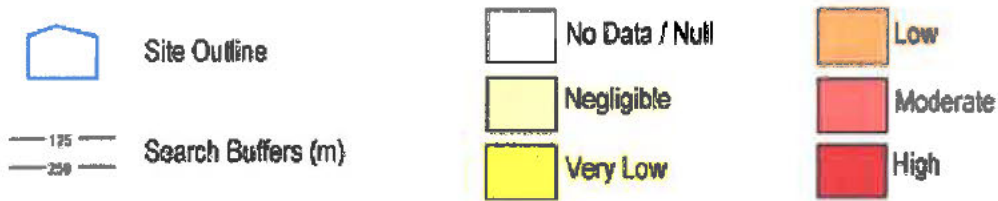


6.2 Landslides Map

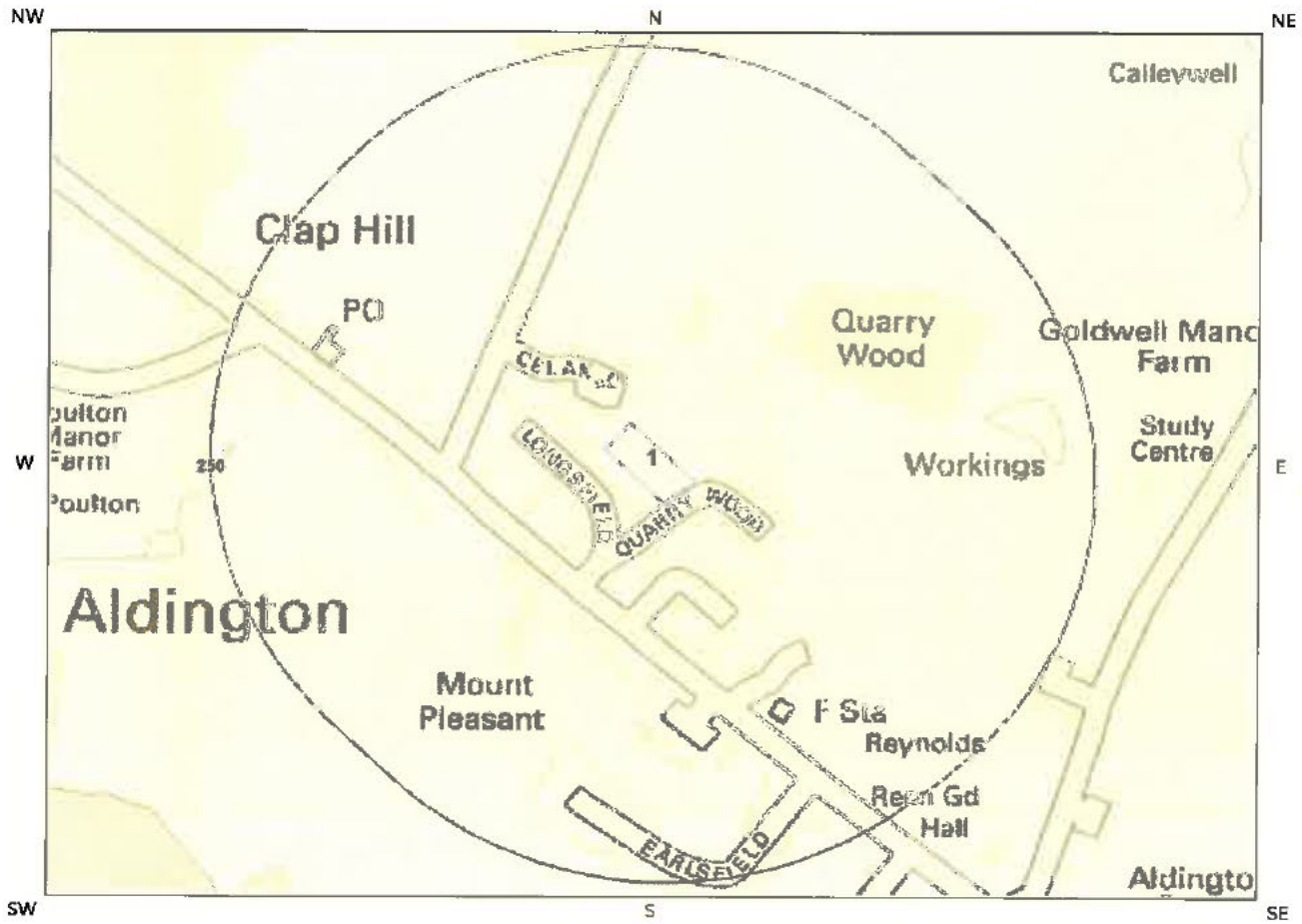


Landslides Legend

© Crown copyright and database rights 2017.
Ordnance Survey license 100035207.



6.3 Ground Dissolution of Soluble Rocks Map

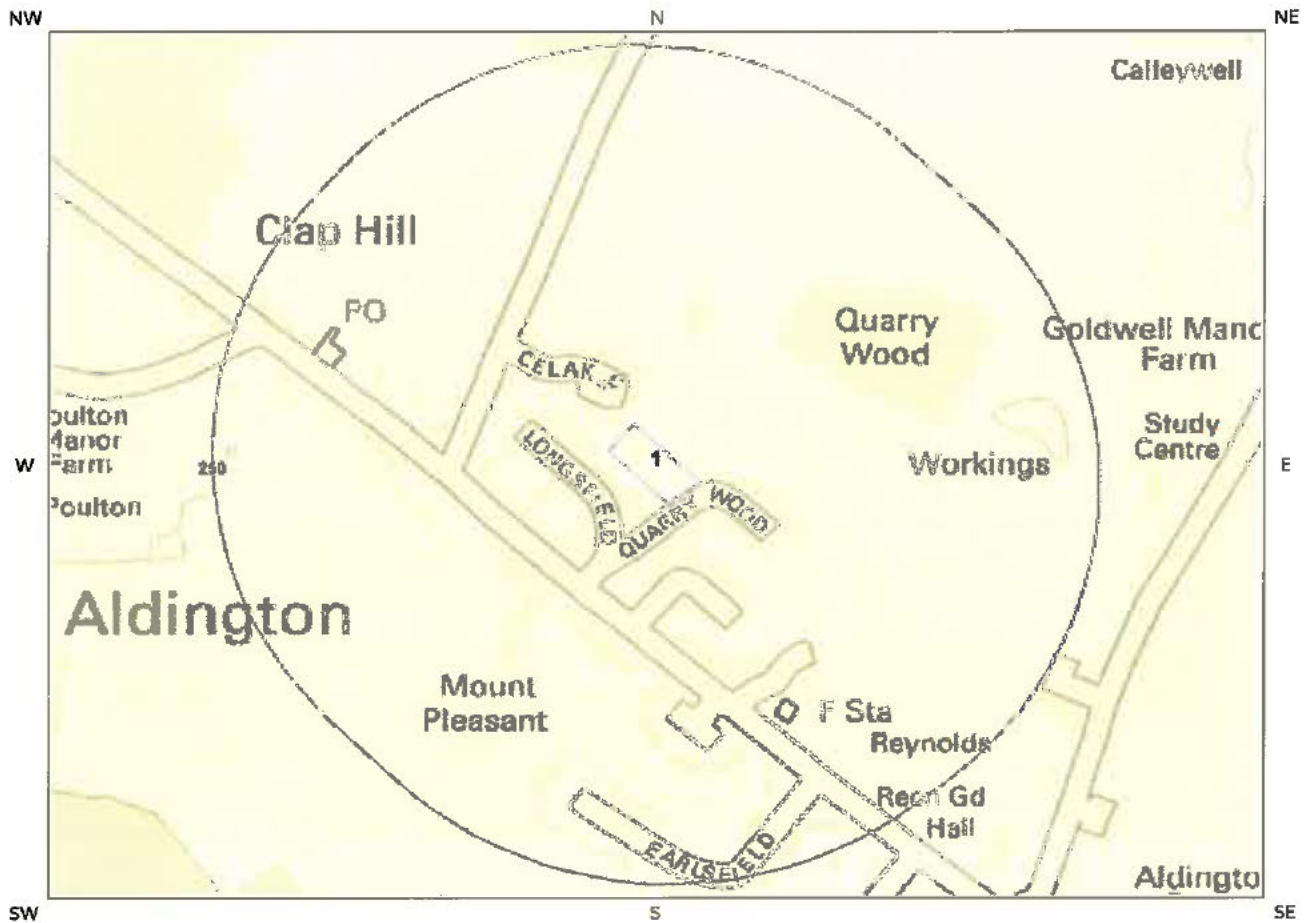


Ground Dissolution Soluble Rocks Legend

© Crown copyright and database rights 2017. Ordnance Survey license 100035207.

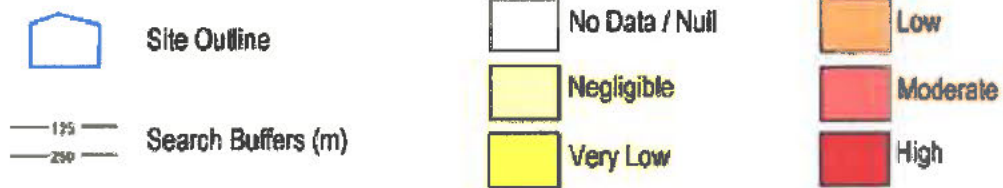


6.4 Compressible Deposits Map

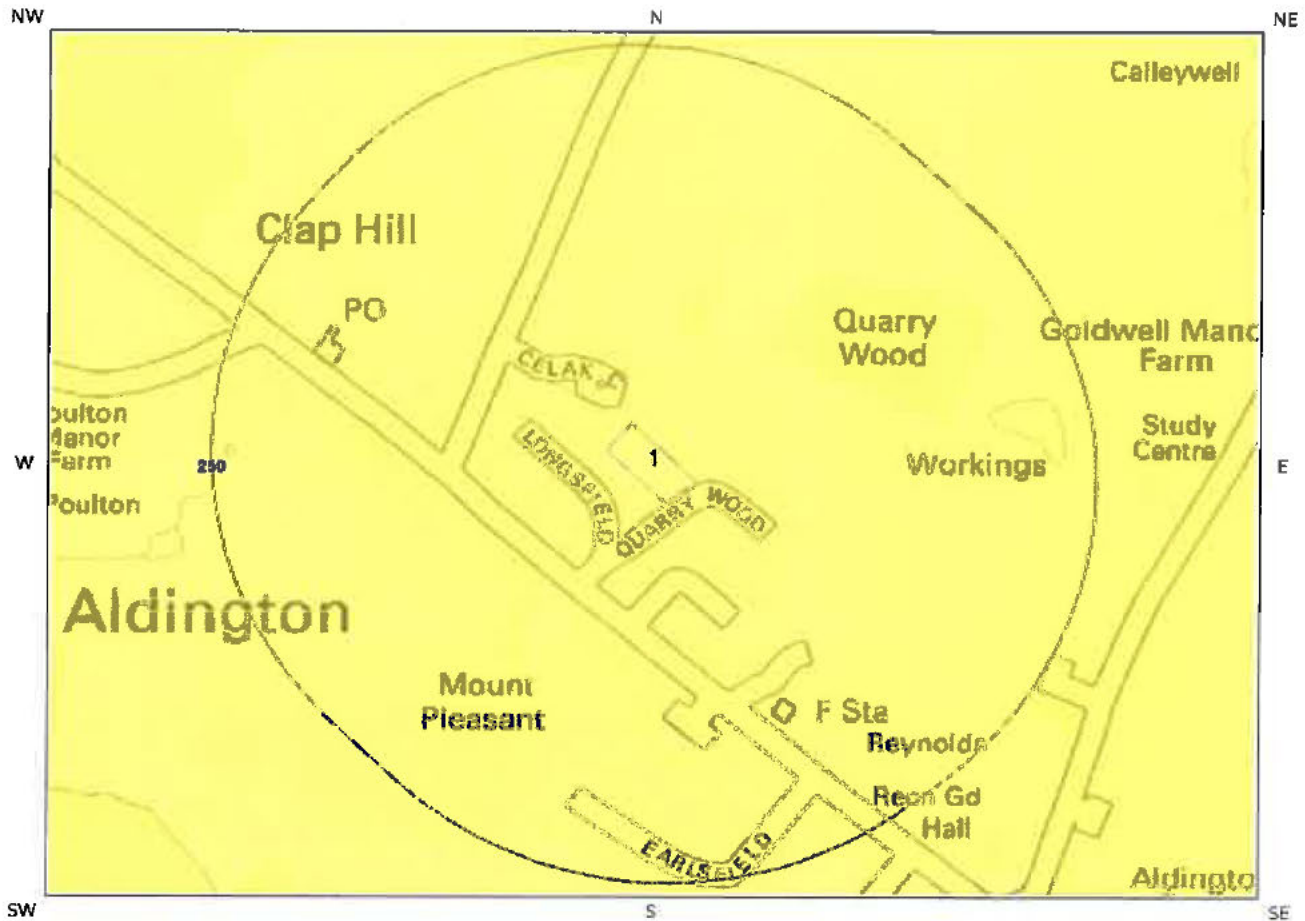


Compressible Deposits Legend

© Crown copyright and database rights 2017.
Ordnance Survey license 100035207.

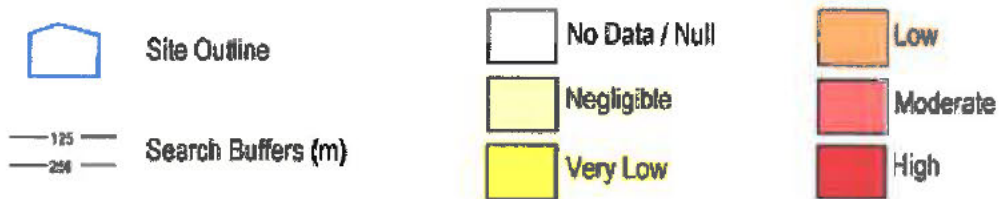


6.5 Collapsible Deposits Map

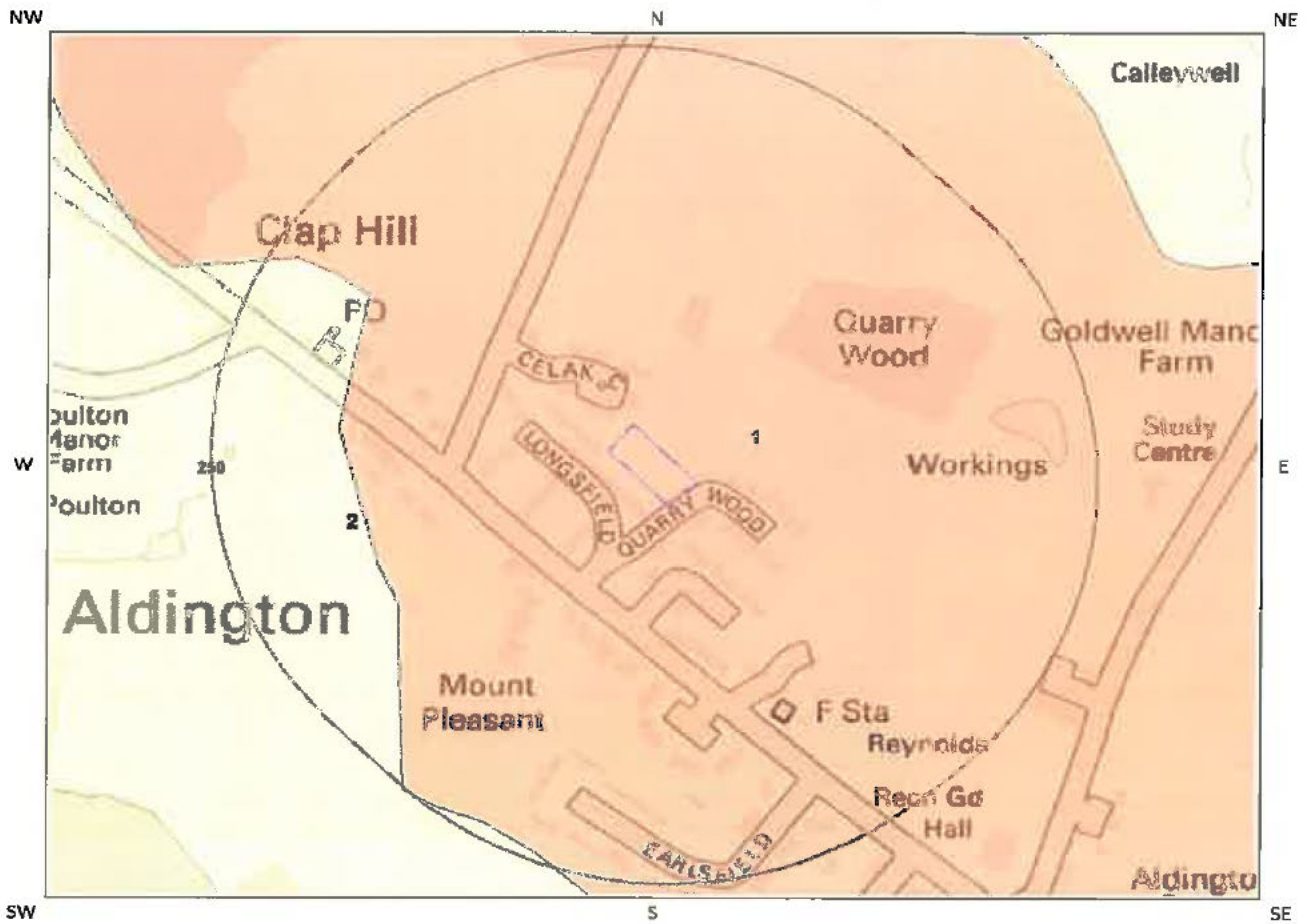


Collapsible Deposits Legend

© Crown copyright and database rights 2017.
Ordnance Survey license 100035207.

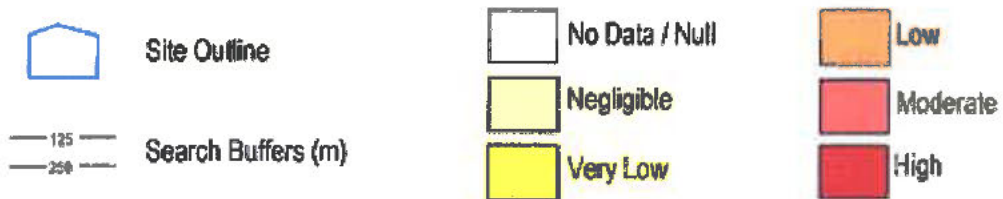


6.6 Running Sand Map

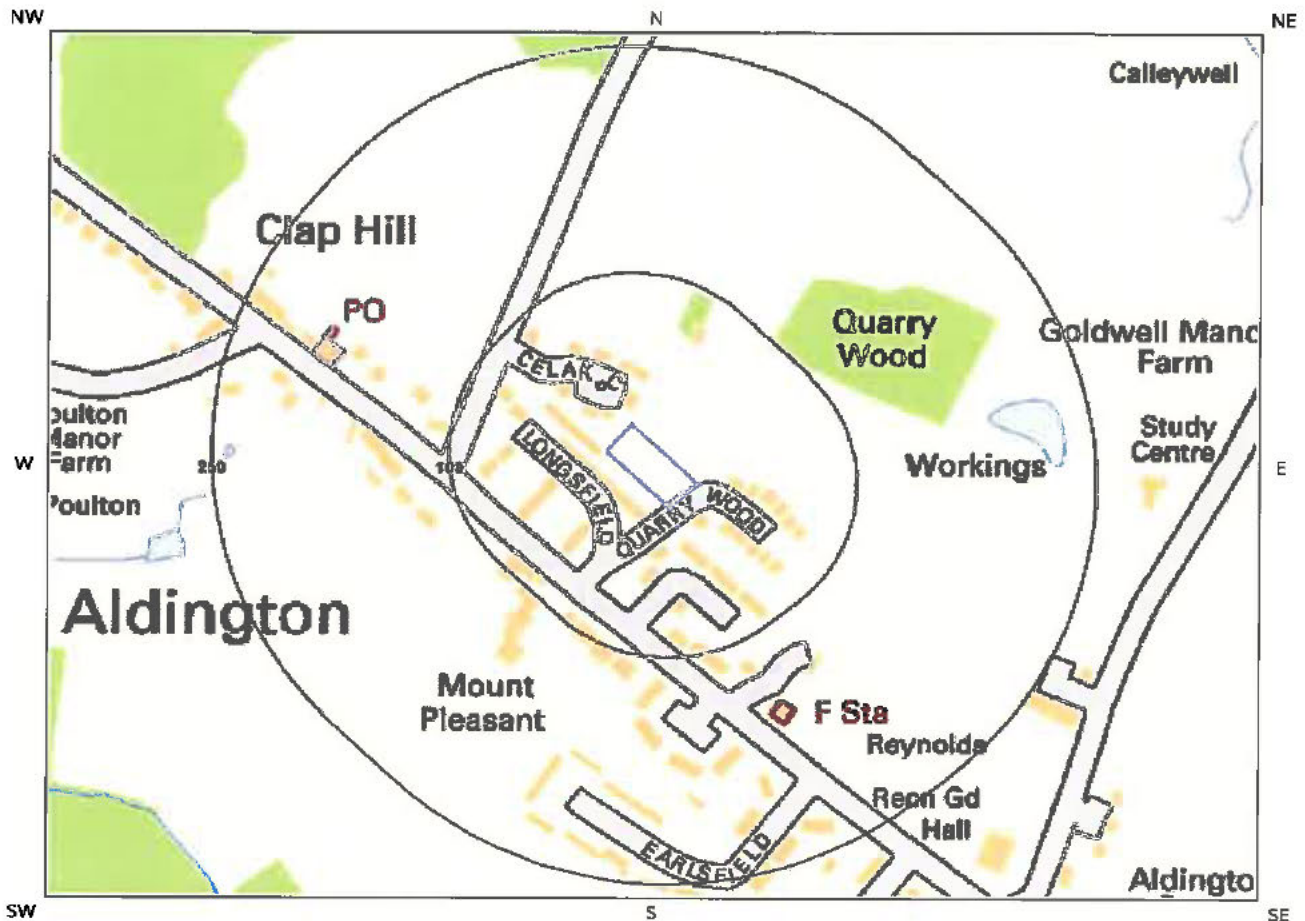


Running Sand Legend

© Crown copyright and database rights 2017.
Ordnance Survey license 100035207.



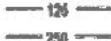


7 Borehole Records Map

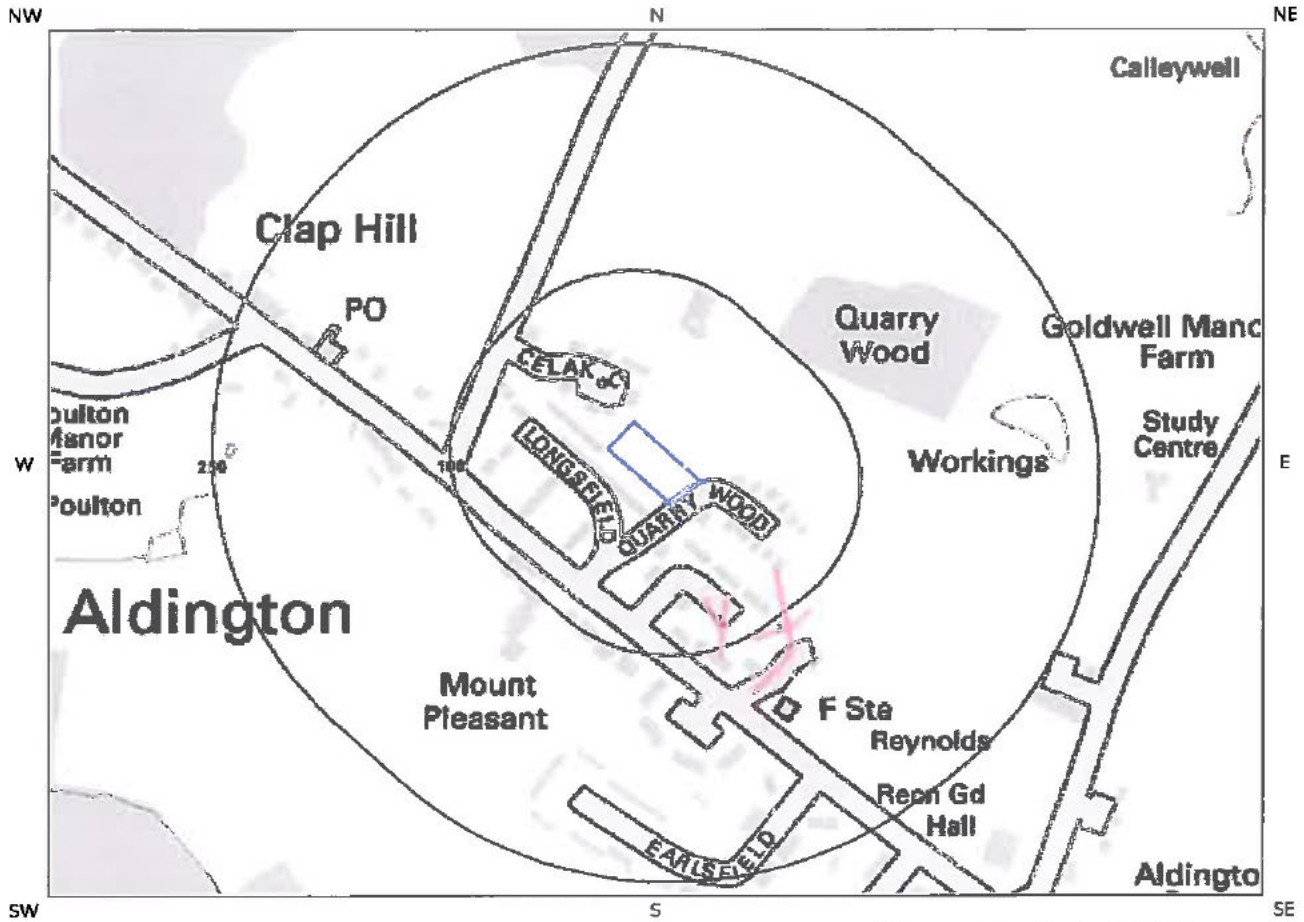


Borehole Records Legend

© Crown copyright and database rights 2017.
Ordnance Survey license 100035207.














-  Site Outline
-  Borehole Locations
-  Search Buffers (m)

9 Railways and Tunnels Map



Railways and Tunnels Legend

© Crown copyright and database rights 2017.
Ordnance Survey license 100035207.
© OpenStreetMapContributors

- | | | |
|---|--|---|
|  Site Outline |  Underground or Partially Underground Railway / Subway System |  Railway Track (OpenStreetMap) |
|  Search Barriers (m) |  Railway Tunnel (OS Mapping) |  High Speed 2 |
|  200 |  Abandoned or Disrupted Railway (OpenStreetMap) |  High Speed 2 Revised Proposed Route |
|  500 |  Railway Track (OS Mapping) |  Crossrail 1 |
| | |  Railway and/or Tunnel Feature from Historical Mapping |

APPENDIX 6

CONCEPTUAL MODEL

CONCEPTUAL MODEL

KEY:

- The Hythe Formation (sandstone and limestone interbedded)
- Hard Cover

First edition following the Desk Study

Soiltec

CLIENT: P Thomson & Associates/Jan Barber Associates

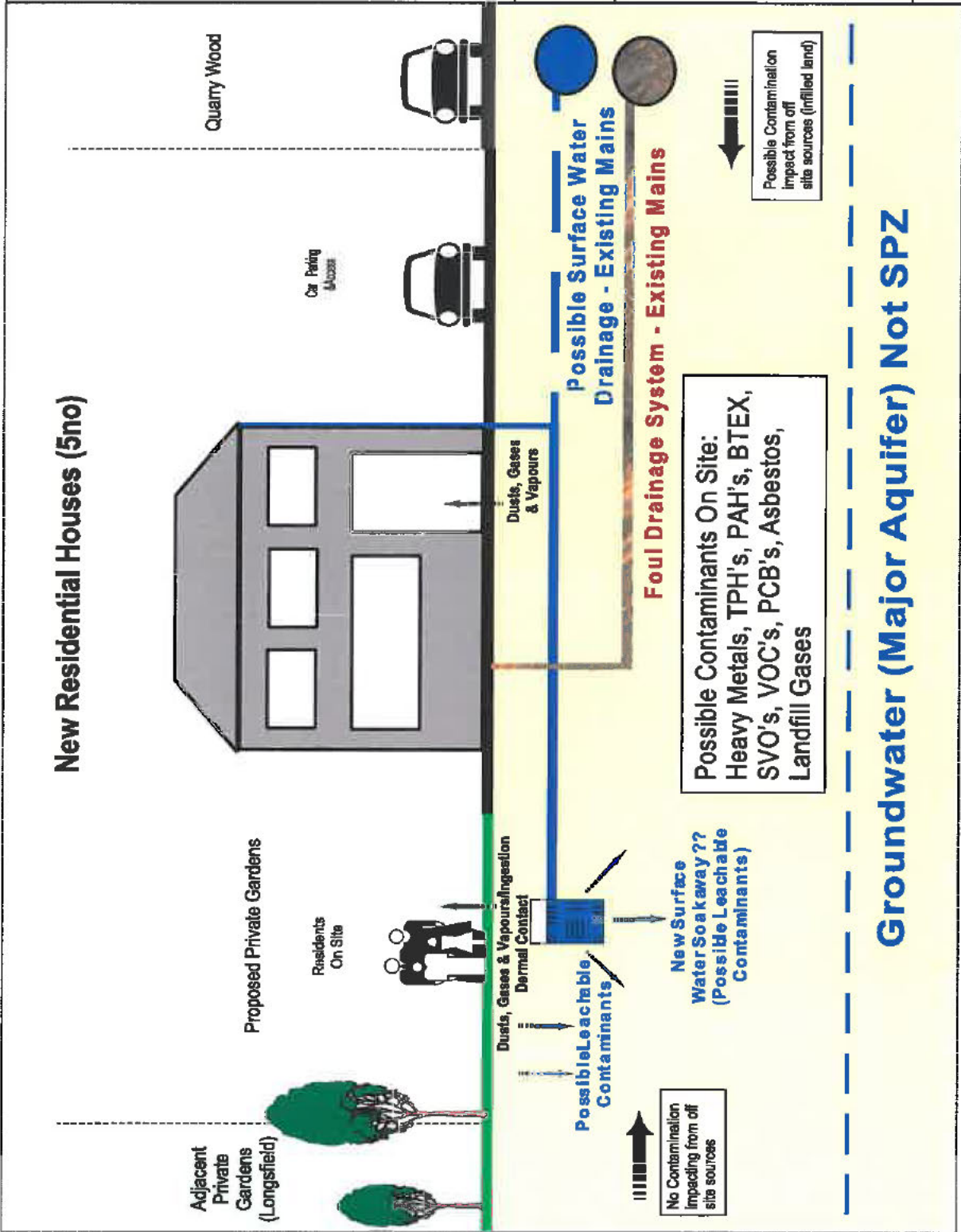
SITE: Land to the Rear of 2-16 Longefield Aidington Near ASHFORD Kent TN25 7DP

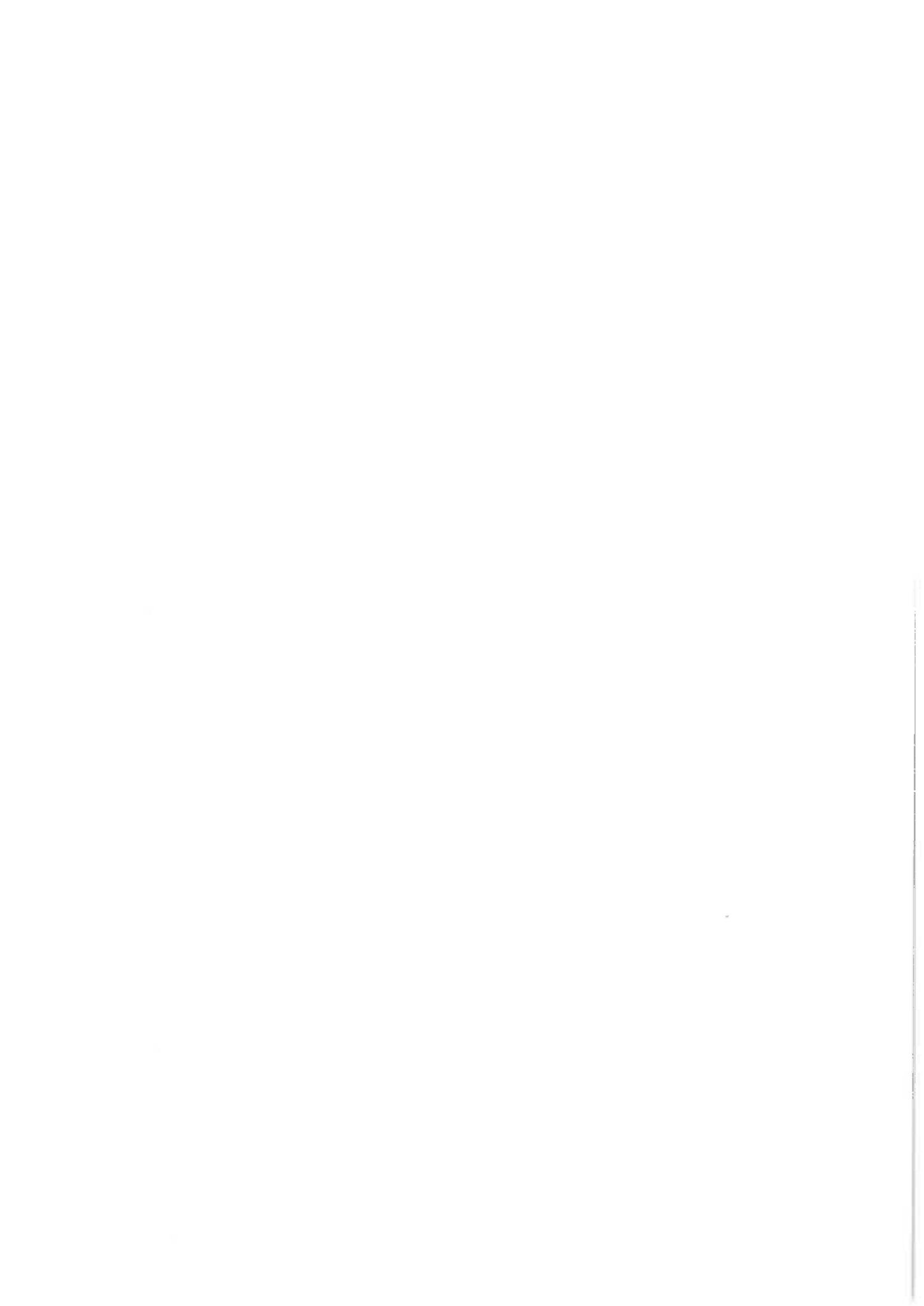
Job No: 07504/23

DATE: 24/03/17

SCALE: N.T.S.

DRAWN: KDH





From: Tanya Lomakin [redacted]@ashford.gov.uk>
Sent: 06 December 2021 12:52
To: Hallett, Bethan
Subject: Aldington TR05972 37393 Contaminated land enquiry
Attachments: Aldington Dec 21.pdf; Aldington Dec 21 Report from 2017.pdf

Follow Up Flag: Follow up
Flag Status: Flagged

CAUTION: This email originated from outside the organisation. Do not click links or open attachments unless you recognise the sender and know the content is safe.

Hello Bethan

Thank you for your enquiry. In answer to your questions for the site

- Summaries of notable, in terms of contamination, sites within the site boundary and within a search area of 250m radius, that Ashford Borough Council are aware of, including Part 2A sites or other important sites that the Council feels that the project should be aware of.

Two pink squares near to the railway line - Electricity production and transformers (relating to the high speed line).

Red hash line – railway line

Areas near to Clap Hill – former sand/gravel quarries, lime kiln, Council depot and landfills. Aldington Quarry operated as a landfill until 1974 and is now a recreational area. Clap Hill Quarry is a registered landfill that has been developed for housing. Ragstone Hollow was infilled for the development of housing, infill material is unknown, however the site of the lime kiln was left as soft landscaping. Aldington Quarry was investigated in the past by Ashford Borough Council. The investigation was concluded when sufficient information was gathered to confirm that no further action was required under Part 11A. Attached is an investigation carried out in 2017 for Longfield TN25 7DP which provides further details of this area..

The area contains a number of residential properties, more recent application do contain a number of land contamination investigations. Further details can be found on the planning portal map viewer <https://newmaps.ashford.gov.uk/EXTPlanningMap/default.aspx?site=EXTIMFPlanning>

- The most recently produced Contaminated Land Strategy, if this is not freely available on your website. Please find attached [Information on definition of and dealing with contaminated land. \(ashford.gov.uk\)](#)

- UXO/UXB records for the site and within a search area of 250m radius. We do not hold a record.
- Groundwater Abstraction records for the site and within a search area of 250m radius. We do not have records.
- A plan of the search area. Please see attached

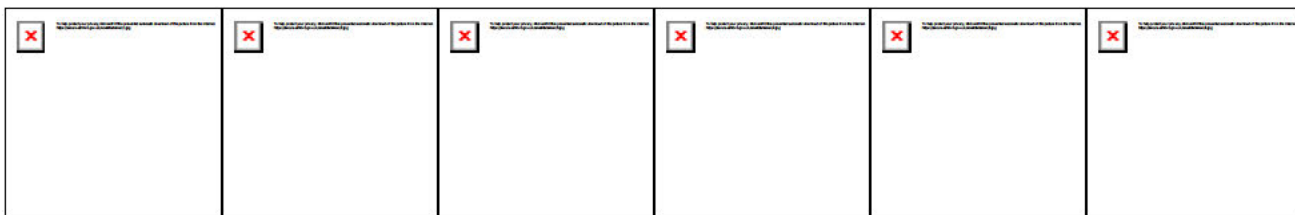
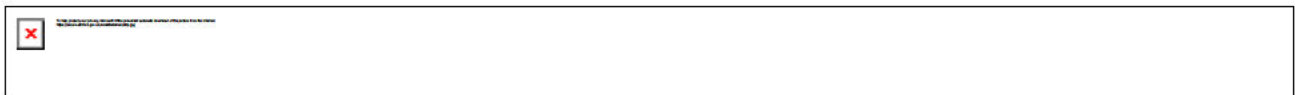
Many thanks and regards

Tanya

Tanya Lomakin | Environmental Health Practitioner



----- This e-mail , including any attachments, is intended for the named addressee(s) only and may contain marked material up to RESTRICTED and should be handled accordingly. Unless you are the named addressee (or authorised to receive it for the addressee) you may not read, copy or use it, or disclose it to anyone else. Unauthorised use, copying or disclosure is strictly prohibited and may be unlawful. Precautions have been taken to ensure that this is a virus free message but recipients are responsible for carrying out their own checks. This Council accepts no responsibility for loss or damage to any hardware, software or data resulting from this e-mail If you have received this transmission in error please contact the sender, and delete the message. Privacy Notice: Whilst fulfilling our obligations as a local authority, we may have interactions with you which results in us receiving and processing your personal data. Our privacy notice, which details how we handle and treat your personal data can be found here: <https://www.ashford.gov.uk/transparency/data-protection/privacy> -----



From: EP Complaints email <Environmental.Protection.Complaints@ashford.gov.uk>
Sent: 03 December 2021 08:46
To: Tanya Lomakin <[REDACTED]@ashford.gov.uk>
Subject: FW: A new Contaminated Land Request Form has been submitted

Tanya Lomakin | Environmental Health Practitioner
Environmental Protection & Licensing
01233 330 323
Ashford Borough Council



----- This e-mail , including any attachments, is intended for the named addressee(s) only and may contain marked material up to RESTRICTED and should be handled accordingly. Unless you are the named addressee (or authorised to receive it for the addressee) you may not read, copy or use it, or disclose it to anyone else. Unauthorised use, copying or disclosure is strictly prohibited and may be unlawful. Precautions have been taken to ensure that this is a virus free message but recipients are

Annex G

Risk Assessment Matrix

Guidance on Contaminated Land Risk Assessment

In the UK, contaminated land is regulated by the planning and development control system and the contaminated land regime set out in Part 2A of the Environmental Protection Act (EPA) 1990.

When considering an application for development, the potential for the land to be contaminated is a material consideration, and the local planning authority should satisfy itself that any contamination is properly assessed and adequately remediated, based on a suitable for use approach. This is to ensure that the land is made suitable for its proposed new use.

Guidance on the investigation of contamination is contained in British Standard 10175: 2011 (+A2-2017) "Investigation of potentially contaminated sites - Code of Practice". It involves an identification of risks due to the presence of contaminants, and an assessment of those risks based on the:

- possible sources of contamination;
- identification of who or what may be affected by the contaminants (the receptors);
- possible pathways by which contaminants may migrate to one or more of the receptors.

A conceptual site model is a representation of the environmental processes that occur on and in the vicinity of the site and its purpose is to identify the potential contamination linkages that exist on the site. The assessment of the significance of these contamination linkages can then be carried out through the risk assessment process.

Since the conceptual site model underpins each stage of contaminated land management, BS10175: 2011 (+A2-2017) suggests that such a model should be developed for every site. Accordingly, the results of the desk study research on the site have been used to identify the source- pathway-receptor relationships that exist on the site before and during redevelopment works.





A conceptual site model is a representation of the environmental processes that occur on and in the vicinity of the site and its purpose is to identify the potential contamination linkages that exist on the site. The assessment of the significance of these contamination linkages can then be carried out through the risk assessment process.

Environmental Risk Assessment Methodology

In line with EA guidance LCRM, plausible source, pathway and receptor linkages have been identified through the Conceptual Site Model (CSM). The information gathered in the CSM can now be used to carry out a Qualitative Risk Assessment (QRA).

The LCRM outlines that for each tier of Risk Assessment the following steps must be taken:

1. Identify the hazard - establish contaminant sources.
2. Assess the hazard - use a source-pathway-receptor (S-P-R) linkage approach to find out if there is the potential for unacceptable risk.
3. Estimate the risk - predict what degree of harm or pollution might result and how likely it is to occur by using the tiered approach to risk assessment.
4. Evaluate the risk - decide whether a risk is unacceptable.

The LCRM states that the assessment must be based on the potential severity that the risk poses to the receptors against the likelihood of it happening. Subsequently, it is necessary to employ a risk assessment matrix, the CIRIA document Contaminated Land Risk Assessment – a guide to good practice C552, 2001 provides a good example of a suitable risk assessment matrices.

In the CIRIA methodology, the sensitivity assessment considers the contaminant-pathway-receptor in conjunction with the contamination linkage concept (described below). This information is then used to classify consequences and the probability of a contamination linkage occurring, affording the level of sensitivity of a given receptor to be established.

Contamination Linkage Concept

In forming a risk assessment for land contamination, there are three essential elements to be given consideration collectively known as a ‘contaminant linkage’:

- A contaminant/source – A substance that is in, on or under the land and has potential to cause harm or to cause pollution of controlled waters.



Table 1 presents the consequences to the receptor of the contaminant linkage being realised. It has four categories, with severe being the most serious and minor being the least serious consequences:

Table 1 – Consequence of Risk Being Realised			
Classification	Category	Definition	Examples (Not necessarily specific to this site)
Severe short-term (acute) risks only	Humans	Short-term (acute) risk to human health likely to result in “significant harm” as defined by the Environment Protection Act 1990, Part 2A.	High concentrations of cyanide on the surface of an informal recreation area.
	Controlled Waters	Short-term risk of pollution (note: Water Resources Act contains no scope for considering significance of pollution) of sensitive water resource.	Major spillage of contaminants from site into controlled water.
	Property	Catastrophic damage to buildings/property.	Explosion causing building collapse (can also equate to a short-term human health risk if buildings are occupied.
	Ecological System	A short-term risk to a particular ecosystem, or organism forming part of such ecosystem.	
Medium chronic (long term) risks; “significant harm”	Humans	Chronic damage to Human Health (“significant harm” as defined in Defra 2006).	Concentrations of a contaminant from site exceed the generic, or site-specific assessment criteria
	Controlled Waters	Pollution of sensitive water resources (note: Water Resources Act contains no scope for considering significance of pollution).	Leaching of contaminants from a site into a major or minor aquifer.
	Ecological System	A significant change in a particular ecosystem	Death of a species within a designated nature reserve.
Mild chronic (long term) risks; fewer sensitive receptors	Controlled Waters	Pollution of non-sensitive water resources.	Pollution of non-classified groundwater
	Property	Significant damage to buildings, structures and services (“significant harm” as defined in Circular on Contaminated Land, Defra, 2006). Damage to sensitive buildings/structures/services	Damage to building rendering it unsafe to occupy (e.g., foundation damage resulting in instability)
	Ecological System	Significant damage to crops. Damage to the environment.	
Minor chronic (long term) risks; mild	Financial project /	Harm, although not necessarily significant harm, which may result in a financial loss, or expenditure to resolve.	
	Humans Property	Non-permanent health effects to human health (easily prevented by means such as personal protective clothing, etc). Easily repairable effects of damage to buildings, structures and services	The presence of contaminants at such concentrations that protective equipment is required during site works. The loss of plants in a landscaping scheme. Discolouration of concrete.



The likelihood of the pollution linkage being realised must take into account the presence of the source and position of the receptor as well as the pathway that connects them. Table 2 overleaf defines the likelihood of the pollution linkage occurring.

TABLE 2: Probability of Risk Being Realised	
Classification	Definition
High Likelihood	There is a contaminant linkage and an event that either appears very likely in the short term and almost inevitable over the long term, or there is evidence at the receptor of harm or pollution.
Likely	There is a contaminant linkage and all the elements are present and in the right place, which means that it is probable that an event will occur. Circumstances are such that an event is not inevitable, but possible in the short term and likely over the long term.
Low Likelihood	There is a contaminant linkage and circumstances are possible under which an event could occur. However, it is by no means certain that even over a longer period such event would take place and is less likely in the shorter term.
Unlikely	There is a contaminant linkage, but circumstances are such that it is improbable that an event would occur even in the very long term.

The potential consequences and the probability of the risk occurring are combined to form the classification of sensitivity matrix, as presented in Table 3a below. It provides a sensitivity category for potential receptors if a pollution linkage exists, allowing the level of sensitivity of a receptor in a particular circumstance can be determined.

TABLE 3a: Risk Classification Matrix					
		Consequence			
		Severe	Medium	Mild	Minor
Probability	High Likelihood	Very High	High	Moderate	Moderate/Low
	Likely	High	Moderate	Moderate/Low	Low
	Low Likelihood	Moderate	Moderate/Low	Low	Very Low
	Unlikely	Moderate/Low	Low	Very Low	Very Low



TABLE 3b: Risk Classification Definitions	
Very High	There is a high probability that severe harm could arise to a designated receptor from an identified hazard, OR there is evidence that severe harm to a designated receptor is currently happening. This risk, if realised, is likely to result in a substantial liability. Urgent investigation (if not undertaken already) and remediation are likely to be required.
High	Harm is likely to arise to a designated receptor from an identified hazard. Realisation of the risk is likely to present a substantial liability. Urgent investigation (if not undertaken already) is required and remedial works may be necessary in the short term and are likely over the longer term.
Moderate	It is possible that harm could arise to a designated receptor from an identified hazard. However, it is either relatively unlikely that such harm would be severe, or if any harm were to occur it is more likely that the harm would be relatively mild. Investigation (if not already undertaken) is normally required to clarify the risk and to determine the potential liability. Some remedial works may be required in the longer term.
Moderate / Low	A notable balance between moderate and low categorisation. The moderate/low interface.
Low	It is possible that harm could arise to a designated receptor from an identified hazard, but it is likely that this harm, if realised, would at worst normally be mild.
Very Low	There is a low possibility that harm could arise to a receptor. In the event of such harm being realised it is not likely to be severe.

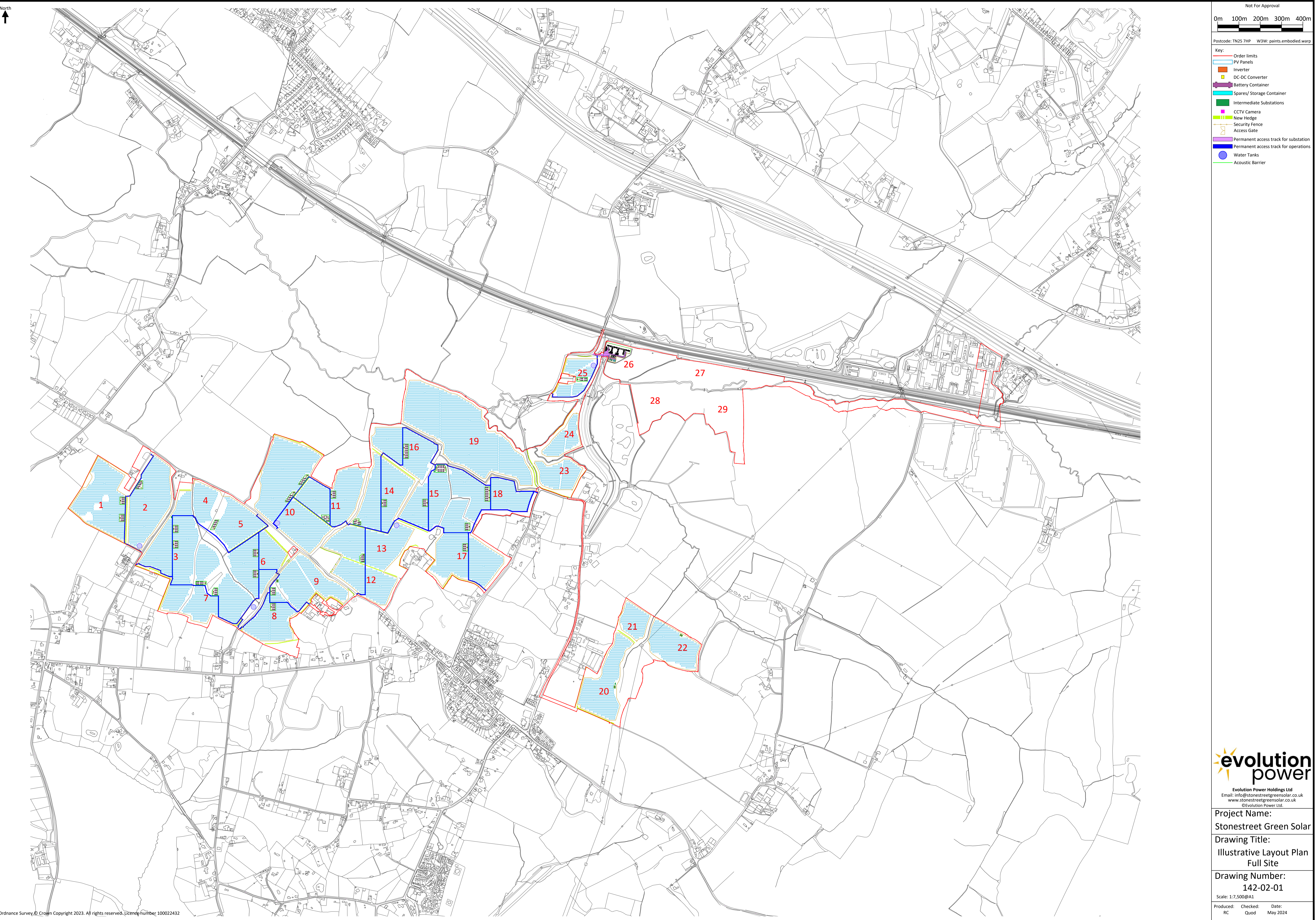
Under each of the contaminant linkage categories, the identified environmental risks have been assessed with regard to a wide range of topics including (where appropriate):

- the 'source-pathway-receptor' concept;
- the behaviour of potential contaminants within the environment;
- environmental processes;
- industrial operations and best practice;
- current environmental legislation;
- the views and practices of the environmental regulators;
- the likelihood of environmental notices, orders or other enforcement action;
- any requirements to remove waste, contaminated or hazardous materials;
- the health and safety of occupiers or neighbours;
- any redevelopment plans for the site; and
- effects on the fabric of buildings caused by contamination.

Drawing

142-02-01 Illustrative Layout Plan

- Key:
- Order limits
 - PV Panels
 - Inverter
 - DC-DC Converter
 - Battery Container
 - Spares/ Storage Container
 - Intermediate Substations
 - CCTV Camera
 - New Hedge
 - Security Fence
 - Access Gate
 - Permanent access track for substation
 - Permanent access track for operations
 - Water Tanks
 - Acoustic Barrier



Evolution Power Holdings Ltd
 Email: info@stonestreetgreensolar.co.uk
 www.stonestreetgreensolar.co.uk
 ©Evolution Power Ltd.

Project Name:
Stonestreet Green Solar

Drawing Title:
**Illustrative Layout Plan
 Full Site**

Drawing Number:
142-02-01

Scale: 1:7,500@A1

Produced: RC Checked: Quod Date: May 2024

STOKE-ON-TRENT

Sir Henry Doulton House
Forge Lane
Etruria
Stoke-on-Trent
ST1 5BD
Tel: +44 (0)1782 276 700

BIRMINGHAM

Two Devon Way
Longbridge Technology Park
Longbridge
Birmingham
B31 2TS
Tel: +44 (0)121 580 0909

BOLTON

41-50 Futura Park
Aspinall Way
Middlebrook
Bolton
BL6 6SU
Tel: +44 (0)1204 227 227

BRISTOL

Temple Studios
Temple Gate
Redcliffe
Bristol
BS1 6QA
Tel: +44 (0)117 203 4477

BURY ST EDMUNDS

Armstrong House
Lamdin Road
Bury St Edmunds
Suffolk
IP32 6NU
Tel: +44 (0)1284 765 210

CARDIFF

Tudor House
16 Cathedral Road
Cardiff
CF11 9LJ
Tel: +44 (0)292 072 9191

CARLISLE

Marconi Road
Burgh Road Industrial Estate
Carlisle
Cumbria
CA2 7NA
Tel: +44 (0)1228 550 575

EDINBURGH

Great Michael House
14 Links Place
Edinburgh
EH6 7EZ
Tel: +44 (0)131 555 3311

GLASGOW

24 St Vincent Place
Glasgow
G1 2EU
Tel: +44 (0)141 428 4499

LEEDS

36 Park Row
Leeds
LS1 5JL
Tel: +44 (0)113 831 5533

LONDON

Third Floor
46 Chancery Lane
London
WC2A 1JE
Tel: +44 (0)207 242 3243

NEWCASTLE UPON TYNE

City Quadrant
11 Waterloo Square
Newcastle upon Tyne
NE1 4DP
Tel: +44 (0)191 232 0943

TRURO

Baldhu House
Wheal Jane Earth Science Park
Baldhu
Truro
TR3 6EH
Tel: +44 (0)187 256 0738

International office:

ALMATY

29/6 Satpaev Avenue
Hyatt Regency Hotel
Office Tower
Almaty
Kazakhstan
050040
Tel: +7(727) 334 1310