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LAND AT FAULD INDUSTRIAL ESTATE, FAULD, TUTBURY

PHASE I SITE APPRAISAL (DESK STUDY)
FOR
MERCER MAJOR PARTNERS LLP

Project Ref:
P8811

Date:
February 2019

Prepared for:
Mercer Major Partners LLP
Blakenhall Park
Barton under Needwood
Burton on Trent
DE13 8AJ

This report has been prepared in accordance with GRM's Accredited Quality Procedures.

If you have any queries regarding this report please contact the project manager in the first instance.

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When required in-house geological, geotechnical, environmental, structural and civil staff helped to produce this document.		
Issue	Description of Revision	Signature
Rev A	Adjusted site boundary	RDH

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APPENDICES

1 INTRODUCTION

1.1 PREAMBLE

GRM Development Solutions Limited (GRM) has been appointed by JVH Planning Consultants Ltd. (Client's Agent) on behalf of Mercer Major Partners LLP (Client) to undertake a Phase I Site Appraisal (desk study). The desk study and site inspection form Phase I of the assessment and allow the geotechnical and geo-environmental setting of the site to be determined and the identification of areas of particular concern that require targeted investigation.

This site appraisal is intended to provide information that will assist decision making by identifying potential ground engineering and contamination issues.

GRM Standard Limitations of Reporting are provided in Appendix A of this report.

The Client proposes to develop the site generally with steel portal frame commercial/industrial buildings, car parking and associated infrastructure. The proposed end-use includes soft landscaping and could also include an attenuation pond. The outline development proposals (Revision F) provided by the Client are presented in Appendix B.

The Client has not informed GRM of any potential development hazards.

1.2 OBJECTIVES OF THE SITE APPRAISAL

The principal aims of the Phase I Site Appraisal (desk study) are as follows:

a) Obtain information, from easily accessible sources, about the soil and groundwater conditions within the area of the site.

b) Determine the possible ground related geotechnical and contamination hazards within the site boundaries that may affect the proposed development.

c) Provide preliminary development recommendations.

d) Provide advice on further works required for the cost-effective reduction of risks to the development and procedures likely to satisfy regulators.

Whilst every effort has been made to pre-empt the likely requirements of the Local Authority and the Environment Agency, they are likely to have specific requirements that will need to be discussed and addressed at a later date.

2 PHASE I DESK STUDY AND SITE OBSERVATIONS

2.1 INFORMATION SOURCES

In addition to the general sources of information listed in Appendix A (i) the Client has supplied the following information that has been used in the assessment of the site:

- the location of the site.
- site usage.
- proposed development layout.
- topographic survey.

2.2 SITE DESCRIPTION

2.2.1 Geographical Setting

The site is located approximately 7.1km north west of Burton on Trent town centre. The National Grid Reference (NGR) for the approximate centre of the site is SK191286. Site Location and Boundary Plans are presented in Appendix C.

The northern boundary is formed by wire fencing adjoining an industrial unit (Specialised Orthotic Services), the western boundary by electric fencing, public footpath and hawthorn hedgerow, the southern boundary by wire fencing, beyond which is an underground storage bunker area and the eastern boundary by several industrial units including RUF UK Ltd and B&B Tractors.

The lowest area of the site is the north eastern corner and the highest point is the south western corner. The topographic survey suggests a gradual slope gradient of approximately 1 in 50.

Vehicular access to the site was made via Fauld Lane to the north of the site.

2.2.2 Site Inspection Observations

The General Site Photographs presented in Appendix D illustrate the salient observations made during a site inspection on 18th February 2019.

The site can be described in three distinct areas; a grazing field occupies the majority of the site, a group of buildings are present in the south eastern area and to the south a triangular segment of land presently used for shipping container storage. The entire site covers an area of approximately 3.4 hectares.

Six brick buildings are located in the eastern area of the site with an access road segregating two of the buildings further east. The roofing for four of the brick buildings are tiled and are of conventional build. One of the easternmost buildings has asbestos cement corrugate roofing with the other roof comprised of a concrete slab. The buildings are primarily used as offices and for firework storage. Stockpiles of brick and concrete rubble were present to the east of the buildings against the site boundary.

Former rail tracks were observed within the access road and are also present close to the entrance off Fauld Lane, 300m north.

The triangular plot of land immediately south of the office buildings is currently used as shipping container storage with tarmac/asphalt and concrete surfacing. Stockpiles of tarmac/asphalt, concrete, brick and potential asbestos containing materials were noted across this area.

The grazing field accounts for the majority of the site area and is predominantly laid to grass. An area (immediately north of the buildings and east of the main field) has been raised by approximately 2-2.5m with topsoil and organic material.

Manhole covers were noted across the site and suggest that a subsurface drainage system is in place across the entire area. A watering trough in the centre of the field was attached to the water mains suggesting that a water supply is located below the field, most likely fed from a main located in the east of the site. BT service plans acquired for the site records an underground cable adjacent to the access road which leads into the buildings either side of the road. An additional cable is recorded crossing the triangular parcel of land leading west towards the storage bunkers. Electricity plans record an underground 11kV cable inside the western boundary of the field and continues into the storage bunkers. An additional 11kV cable is recorded to the east of the buildings below the stockpiles.

Vegetation on the site is limited to the field boundaries comprised of hawthorn hedging and a mature crack willow in the triangular plot of land.

Significant Features identified during site inspection:
Buried utilities (live services) – general site hazard and potential development constraint. **Historic rail tracks** – suggests historical development of site and potential made ground. **Potential asbestos cement sheeting** – potential source of contamination and risk to construction/end users. **Firework storage compound** – potential for explosions and release of chemical associated with firework explosives. **Trees** – deepened foundations in association with cohesive strata. **Existing Buildings** – Potential for buried structures and made ground. **Stockpiles of rubble** – potential sources of contamination. **Raised area (topsoil)** – Potential source of ground gas.

2.3 HISTORICAL DEVELOPMENT OF THE SITE

A review of the available historical Ordnance Survey (OS) maps gives an insight into the development of the site and can highlight potential hazards. Extracts of the maps reviewed are provided in Appendix E.

The summary below identifies the significant features identified on the historical mapping data considered likely to have the potential to affect the site.

Date from and to	Identified On-site Features	Identified Off-site Features
1882 to 1900	The site is recorded as open fields, presumably agricultural. Trees are recorded in the northern area of the site A footpath is recorded to cross the site from the north eastern corner to the centre of the southern boundary and leads off site. A district boundary crosses the south western corner of the site. The eastern boundary of the triangular plot of land, at the south of the site, is recorded as a wooded coppice. The coppice is recorded to have a pit on it.	Surrounding area is recorded to be agricultural land. Ponds are recorded approximately 110m north and 100m south west of the site. Fauld Quarry is located approximately 1km south west of the site.
1900-1924	No significant changes. The pit in the coppice is no longer recorded.	Alabaster and Gypsum Mine recorded approximately 750m south west of site. Plaster and Cement works recorded adjacent to the Fauld Quarry c.1km south west.
1949	Footpath no longer recorded on site.	Plaster and cement works replaced with the Alabaster and Gypsum Mine. Fauld crater (also known as the Hanbury Crater) associated with historical ammunition explosion is recorded approximately 1km south west of the site.
1972	Buildings are recorded in the south eastern area. The triangular plot contains a tank with other structures along the site boundary. A railway line runs from buildings in the east to eh centre of the site, then runs north to the sewage works. A raised A rail track is recorded along the western area of the site and leads to the main access road immediately east of the site. The tracks also lead into the bunkers to the south of the site.	Bunkers are recorded on the land immediately south of the site. Ponds are no longer recorded. An electrical substation is recorded approximately 30m east of the site. A sewage works is recorded 50m north of the site with a track leading into the main area of the site. The area approximately 150m north east of the site has been developed with industrial and commercial warehouse buildings and infrastructure. A ‘camp’ is recorded approximately 250m south of the site.
1994	The rail tracks are no longer recorded. The buildings in the south are recorded as ‘works’ and the tank is still present on site.	The sewage works are no longer recorded. The industrial area is recorded as ‘Fauld Industrial Park’.
2010	The tank is no longer recorded. No other significant changes.	No significant changes.

Significant Features identified on OS Maps:
Nearby gypsum mining – potential for underground workings. **Historical development** – potential for deepened foundations, source of made ground and potential source of contamination and ground gas. **Historic tank** – potential source of contamination. **Nearby industrial site use** – potential sources of contamination. **Backfilled ponds/pits** – potential sources of ground gas.

2.4 ANTICIPATED GEOLOGY

The BGS Geological Sheet for this area shows the site to be underlain by:

- Superficial deposits of Glacial Till comprising clay, silt, sands and gravels, are recorded in the eastern area of the site.
- Solid geology of Mercia Mudstone Group comprising clay and mudstone.

The BGS do not hold boreholes close to the site, however, immediately east of the site the access road cutting shows an outcrop of Mercia Mudstone suggesting that rock is shallow in the area.

Anecdotal information off the Client suggests that the majority of the site is underlain by cohesive material.

The BGS map records a mineral vein approximately 190m south of the site. The mineral vein is likely to be gypsum and alabaster, mined approximately 750m south west of the site. The mine entrances, recorded on the BGS 1:50000 maps are orientated in a southerly direction suggesting that the strata dip to the south. The nearest dip data (c.5km west of the site) confirms this, reporting a dip of 4^{o} to the south.

Made ground can be expected due to the demolition of former buildings and removal of hard standing. Buried sub-structures may also be present.

Significant Features identified from geological data:
Cohesive strata – deepened foundations in association with trees. **Gypsum mineral vein** – potential for underground mine workings. Discussed in full in Section 2.8.2. **Made ground associated with former development** – potential for deepened foundations.

2.5 HYDROGEOLOGICAL INFORMATION

No detailed information regarding the depths to groundwater is available; however, the groundwater level is likely to be subject to seasonal variations.

The Environment Agency has classified the underlying superficial Glacial Till as a Secondary Undifferentiated Aquifer. The Mercia Mudstone Group is recorded as a Secondary B Aquifer.

It is considered likely that the groundwater table will be in the Glacial Till and at the Mercia Mudstone Group interface, with a flow direction towards the River Dove, located approximately 470m north of the site. Deeper groundwater may be present in localised skerry bands within the Mercia Mudstone Group. Hydraulic continuity is not expected between the site and the underlying groundwater table due to the predominantly low permeability cohesive strata indicative of the Mercia Mudstone Group.

There is a groundwater abstraction license approximately 513m south east of the site associated with Major Farming Limited. The license is active (ref: 03/28/33/0094/1/R01) and is recorded for general use related to secondary category. Due to the distance from the site and underlying low permeability strata, the groundwater abstraction license is not considered to be at risk from site derived contamination. The site is not recorded to be within a Source Protection Zone.

Significant Features identified from hydrogeological data:
Underlying Aquifers – considered a low risk from site derived contamination due to predominantly low permeability cohesive strata below the site. **Groundwater abstraction license** – not considered to be at risk due to distance from site and low permeability geology.

2.6 HYDROLOGICAL INFORMATION

Local surface water features include:

- River Dove approximately 470m north of the site flowing to the east. The River Dove is not considered to be at risk from site derived contamination due to the distance from site.
- An inland river is recorded 264m west of the site and follows local field boundaries. Due to the distance from site, the river is not considered to be at risk from site derived contamination.

There are no surface water abstraction licenses within 500m of the site.

There have been no recorded pollution incidents that have affected the controlled waters.

Significant Features identified from hydrological data:
Nearby surface water features – not considered to be at risk due to distance from the site.

2.7 FLOOD RISK

The BGS suggests the site is within an area of potential groundwater flooding related to Superficial Deposits Flooding (shallow unconsolidated sedimentary aquifers overlying unproductive aquifers) and that the confidence level is moderate. A Phase II ground investigation would provide information on the local groundwater regime so that the risk can be assessed by the projects infrastructure engineer. Any risk associated with the groundwater regime should be catered for within the development infrastructure design.

The site is not within 250m of a fluvial floodplain and is therefore at low risk from river flooding.

A flood risk assessment is required for this site as it is over 1ha in size.

Significant Flood Risk Features identified:
Site in excess of 1ha – FRA required. **Potential Groundwater flooding (superficial deposits)** – consideration required during infrastructure design.

2.8 MINING

2.8.1 Coal

The site is not within an area recorded to require a Coal Authority mining report and shallow coal is not recorded to be present, therefore, the risk from coal mining is considered to be negligible.

2.8.2 Gypsum

The historical maps noted a gypsum and alabaster mine approximately 750m south east of the site. Review of the BGS Mineral Resources Map for Staffordshire shows the inferred sub-surface extent of Tutbury Gypsum to extend to the south of the mineral vein outcrop which is located c.190m south west of the site. This is consistent with the general dip of the geology in the area. The underground planning permission area is approximately 300m south west of the site.

Although there is an active gypsum mine within 1km of the site, available information suggests that there is no significant risk from gypsum mining.

Significant Mining Risks:
Nearby gypsum extraction – Not considered to be a risk due to location and dip direction of the vein outcrop.

2.9 QUARRYING

An unspecified pit is recorded on the 1883 map, related to the triangular shaped land to the south of the main site area and may suggest localised non-coal mineral extraction in the area, such as clay.

Significant Quarrying Risks:
Historic pit in southern extent of site – potential for non-coal mineral extraction (i.e. clay).

2.10 MINERAL RESOURCE PROTECTION

A review of the Mineral Safeguarding Areas for Staffordshire has been conducted and has shown that the site is not in the Staffordshire County Council Mineral Safeguarding Area for gypsum and/or sand and gravel extraction and is outside of the 250m buffer zone for new safeguarding areas. It is therefore considered that the risk from mineral extraction below the site is negligible.

Mineral Risk Assessment:
Negligible risk.

2.11 ENVIRONMENTAL INFORMATION

An Environmental Report has been acquired for the site. The full report is presented in Appendix F. A summary of the relevant information not included elsewhere in this report is presented below:

- The site is an area recorded to be an 'area of infilled land' and may be associated with the former development of the site and bunkers close to the site.
- The site is used for the storage of fireworks and has consent of hazardous substances and enforcements.
- The triangular parcel of land south of the main site area is part of a larger COMAH/NIHHS site which includes the bunker structures south west of the site. The site is registered by 'Fireworks World Limited'.
- There are two licensed waste sites within 250m of the site.
    1. The first (148m east) is a recycling treatment facility on the Fauld Industrial Estate and is registered by Europol Group Companies Ltd.
    2. The second, 172m east, is a Skip Hire firm dealing with household, commercial and industrial waste registered by Uttoxeter Skip Hire on the Fauld Industrial Estate.
- There are no recorded landfill sites within 500m of the site.
- The site is part of the Fauld Industrial Estate with uses including:
    - Vehicle repair and servicing garages.
    - Tanks storing fuel and other hydrocarbon based components.
    - Industrial product storage and manufacturers for pumps, compressors, agricultural machinery and goods, construction supplies, firework related products.
    - Mechanical engineers and fabricators.
    - Electricity sub stations.
- There have been no recorded pollutions incidents within 250m of the site boundaries.
- There is a single discharge consent within 250m of the site and is recorded to be a soakaway registered in 2013 94m north of the site associated with the discharge of final/treated effluent.

Significant Features identified from Environmental data:
Nearby industrial uses – potential sources of soil contamination and ground gases. **Firework storage area** – general explosion hazard (off-site).

2.12 ARCHAEOLOGY

Archaeological information has not been sought as part of this desk study and has not been identified as an issue by the Client. Some Local Authorities require at least an initial archaeological appraisal for development sites. GRM can undertake such appraisals if required. Archaeological investigations occasionally reveal ground-related problems from ancient times (prior to the 1st Edition OS maps) and can occasionally cause foundation and contamination development hazards.

Archaeological Hazards:
Not assessed.

2.13 INVASIVE PLANT SPECIES/ECOLOGY

GRM is not a specialist in this topic and has not conducted such a survey; however, we will endeavour to report easily recognisable issues such as Japanese Knotweed, Giant Hogweed, badger setts etc, when seen on site. No such issues were observed during the walkover; however, an ecological specialist should be consulted.

Invasive Plant Species/Ecological Hazards:
None identified.

2.14 RADON ASSESSMENT

The Health and Safety Executive (HSE) requires that if radon concentrations in air exceed 300 Bqm^{-3} in the workplace then mitigation measures may be required to reduce levels. This assessment can only be accurately carried out by undertaking measurements of radon level.

The level of 300 Bqm^{-3} in the workplace is considered to be analogous to the level of 200 Bqm^{-3} in the home, due to the reduced exposure time in the former.

Based on the report 'Radon in Homes in England: 2016 Data Report' (Ref: PHE-CRCE-032) published by Public Health England (PHE), the average radon concentration in dwellings in the Staffordshire area is 38.6Bqm^{-3}, with a highest value of 2800Bqm^{-3}. In the postcode area DE13, the average radon concentration in dwellings is 26Bqm^{-3} and of the 34 dwellings tested, none recorded radon levels in excess of 200 Bqm^{-3}.

Therefore, it is considered that radon protective measures are not required for the proposed commercial development.

Radon Hazard:
No radon protection measures required.

2.15 SUMMARY OF POTENTIAL GEOTECHNICAL/GENERAL HAZARDS

Potential geotechnical/general hazards have been identified in earlier sections and are summarised below.

Potential Hazard	Potential Consequence	Action
Existing buildings	Danger to personnel	Demolition required – Health & Safety guidelines
Live services	Danger to personnel	Inform relevant parties for disconnection / diversion
Previous development on site	Deepened foundations/buried structures	Ground investigation
Recorded to be in-filled ground	Deepened foundations	Ground investigation
Shrinkable clay/trees	Deepened foundations	Ground investigation plasticity testing/tree survey
General explosion hazard	Danger to personnel	Adherence to health and safety procedures
Non-coal mineral extraction in backfilled pit.	Deepened foundations	Ground investigation
Groundwater flooding	General flood risk	Ground investigation and flood risk assessment

Potential sources, pathways and receptors are summarised in the Phase I Conceptual Model in Section 3, which is based on current relevant guidance, the principles of which are set out in Appendix A (iii).

2.16 CONTAMINANTS OF CONCERN

In addition to the general contaminants listed in Appendix A (ii), the following site specific contaminants have been identified:

- Hydrocarbons associated with former tanks in the southern parcel of land.
- Asbestos associated with demolition of existing buildings and asbestos fragments in stockpiled material.
- Chemicals associated with manufacturing of fireworks and subsequent storage, gunpowder etc.

3 PHASE I CONCEPTUAL SITE MODEL

HUMAN HEALTH			
Source	**Pathway**	**Receptor**	**Level of Risk**
Potentially contaminated made ground / fill associated with previous development.	Indoor and outdoor inhalation of soil dust, the ingestion of, and dermal contact with, contaminated soil and soil dust.	End users.	Medium.
Historic tank.		Construction and Maintenance Workers.	
Made ground / fill.	Inhalation of ground gas.	End users.	Very low.
Nearby industrial land uses.			
Asbestos containing materials associated with buildings and stockpiled material.	Inhalation of asbestos fibres.	Construction and Maintenance Workers.	Medium.
Made ground.	Water pipes.	End users.	Low.

CONTROLLED WATERS			
Made ground / fill.	Leaching of contaminants and vertical migration to the groundwater.	Secondary A Aquifers.	Very Low.
Historic above ground tank.			
Made ground / fill.	Leaching of contaminants and lateral migration to surface waters.	Inland river approximately 260m west.	Very low to negligible.
Historic above ground tank.			

4 CONTAMINATION / REMEDIATION RECOMMENDATIONS

The risk from ground contamination for the majority of the site is considered to be very low. Contamination, if present, is likely to be limited to the built up areas in the south and east of the site area where the risk is considered to be moderate.

The risk from ground gas is considered to be very low.

Prior to development a ground investigation will be required, the scope of which is outlined in Section 6. At this stage, based on the desk study information available, it is considered that allowance be made for the following:

- A suitable capping system in soft landscaped areas in the triangular plot in the south and built up areas in the south east.
- Upgraded water pipes (protecta line or similar) in areas of potentially contaminated made ground (i.e. the triangular plot of land and south eastern areas of site).
- Gas protection measures comprising under floor venting may be required for proposed units in the eastern and southern extents of the site.
- Hotspot removal of potential hydrocarbon contamination in area of historic tank within the triangular plot of land.

5 PRELIMINARY GEOTECHNICAL ASSESSMENT

It should be noted that the following comments and recommendations are based on the findings of this desk study which may not give a true indication of a soils actual engineering properties (i.e. stability, mass structure, etc). Prior to development a ground investigation will be required to confirm the initial recommendations outlined below, the scope of which is outlined in Section 6. However, at this stage based on the desk based information available it is considered:

- The ground conditions are likely to comprise cohesive soils. Rock may be present at shallow depth. Deeper made ground is likely to be present in the south east and triangular plot of land.
- The ground conditions below proposed units D and E (development plan revision F) should be suitable for shallow traditional foundations. If larger loadings are required deep pads or piled foundations may be required.
- Proposed units A, B and C are likely to sit above areas of deeper made ground and therefore the use of deep trench, pad or piled foundations should be allowed for.
- At this stage, gas protection measures are not likely to be required for units D and E and therefore a ground bearing floor slab with minimal earthworks should be suitable.
- Due to the potential requirements for gas protection measures below units A, B and C, some degree of earthworks will be required to allow the use of a reinforced, cast in situ ground bearing slab with gas membrane and granular venting layer.
- Foundation designers will need to take account of service tolerances and the influence of trees.

- Overly aggressive ground conditions are not expected and standard concrete should be suitable.
- Given the anticipated geology the adoption of a soakaway drainage system is considered unlikely.
- Slope stability issues are not anticipated, however minor earthworks are likely to regrade the site and retaining features may be required in the final design.
- Given the anticipated geology, deep foundations should remain stable in the short term.
- Given the anticipated geology CBR values of between 2% and 4% are considered likely.

6 FURTHER INVESTIGATION

A Phase II ground investigation is recommended to determine more accurately the effect of the identified hazards on the development. Initially, this should include:

- A ground investigation designed to BS10175:2011 and BS5930:2015 and comprising window sampling and trial pitting will be required to confirm ground conditions and collect samples for analysis. Based on the site area and an investigation on a 50m grid 20No. exploratory holes are envisaged. This may be reduced due to the proposed commercial end-use of the site.
- Chemical analysis of soils followed by risk assessment so that the risk to human health and controlled waters can be determined.
- Based on the Phase I Conceptual Model (Section 3) the ground gas risk has been assessed as very low. A ground gas investigation designed to current guidance will be required to determine the ground gas regime beneath the site and allow any necessary mitigation measures to be recommended. At this stage allowance for four visits over one month should be made to assess potential liabilities.
- Geotechnical soils testing of the founding strata to assess its character and suitable grades of buried concrete.
- Flood Risk Assessment as the site is over 1ha in size.

Following your review of this document, a copy of it should be submitted to the Planning Department of the Local Authority for comment and approval prior to any ground investigation works being undertaken, as this is often a condition of planning.

7 CONCLUSIONS

This Phase I Site Appraisal has shown the site is suitable for the proposed development, assuming compliance with all the recommendations contained within this report.

APPENDIX A

GRM Development Solutions provides multi-disciplinary consultancy services, UK-wide:

- Geotechnical and Geo-environmental Services
- Civil and Infrastructure Services
- Structural Engineering Services
- Construction Management
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GENERAL APPRAISAL COMMENTS

i INFORMATION SOURCES

Where available the following sources have been used for the identification and assessment of potential ground hazards:

- Relevant British Standards
- British Geological Survey (BGS) Geology Map Scale 1:10,000 for local area
- British Geological Survey (BGS) Geology Map Scale 1:50,000/1:63,320
- BGS Memoir
- BGS Borehole Records
- BGS online viewer: http://www.bgs.ac.uk/data/mapViewers/home.html
- Environment Agency Groundwater Vulnerability Maps
- Historical Ordnance Survey (OS) Maps
- Environmental Data Report
- Environment Agency Website: http://www.environment-agency.gov.uk/
- Guidance for the Selection of Water Supply Pipes to be used in Brownfield Sites, UKWIR, 2010.
- Coal Authority Records / Coal Mining Report
- DEFRA/Environment Agency Contaminated Land publications and DoE Industry Profiles
- BRE Guide BR211 (2015), 'Radon: Guidance on protective measures for new buildings'
- HPA-RPD-033 (2007), 'Indicative Atlas of Radon in England and Wales'
- PHE-CRCE-032 (PHE, 2017), Radon in Homes in England: 2016 Data Report
- CIRIA C665 'Assessing risks posed by hazardous ground gases to buildings'
- BS8485:2015, 'Code of Practice for the design of protective measures for methane and carbon dioxide ground gases for new buildings'
- Other technical references used throughout this document are detailed in the text.

ii CONTAMINANTS OF CONCERN

The DoE Industry Profiles are normally used to assess likely contaminants from past land use and potential nearby industrial sources. For land uses where no profile is available, likely contaminants of concern are selected by GRM based on past experience of similar sites, a general screening suite of contaminants covered by CLEA and common contaminants from the Industry Profiles.

- Arsenic
- Cadmium
- Chromium
- Lead
- Mercury
- Selenium
- Copper
- Nickel
- Zinc
- Phenols
- cyanide (total)
- pH
- Water soluble sulphate
- PAH (polycyclic aromatic hydrocarbons)

Asbestos and PCBs are listed in the vast majority of profiles. PCBs are listed as the profiles expect electricity substations and switch boxes on all industrial sites. There is the potential for asbestos containing material to be mixed up with made ground, following any demolition works.

iii CONCEPTUAL MODEL METHODOLOGY

The consideration of contamination is based upon the principles of risk assessment, using the 'source-pathway-receptor' model in order to establish the presence, or potential presence, of a pollutant linkage.

To create a risk, contamination must have the potential to cause harm to susceptible targets or receptors such as humans, the water environment or the built environment. The potential for harm to occur requires three conditions to be satisfied to form a pollutant linkage:

- The presence of substances that may cause harm (SOURCE).
- The presence of a target which may be harmed (RECEPTOR).
- The existence of a plausible migration route between the source and the receptor (PATHWAY).

In the absence of a plausible pollutant linkage there is no risk. Where a potential linkage is identified in order for it not to pose a risk to the identified receptor it must be broken.

iv INTRUSIVE INVESTIGATION SAMPLING METHODOLOGY

The ground investigation (including fieldwork, sampling, monitoring and laboratory analyses) has been designed to identify and assess potential ground related problems and to allow cost effective solutions to be advised. It has been planned on the basis of the desk study, site inspection and the proposed development layout (where available). All fieldwork and soil descriptions were carried out in general accordance with relevant British Standards.

The exploratory holes have been positioned and advanced to depths to determine the general ground/groundwater/gas conditions below the site. A general grid pattern has been adopted, where possible, to provide sufficient information based on the current proposed layout scheme. Some holes have been targeted at particular hazards identified in the Phase I assessment. The resultant exploratory hole density is considered to be commensurate with the complexity of the site conditions and detail of information required for this phase of the investigation.

v GROUND GAS RISK ASSESSMENT METHODOLOGY

Gas monitoring programmes undertaken by GRM are designed to broadly comply with the recommendations outlined in CIRIA Report C665 'Assessing risks posed by hazardous ground gas to buildings' (2007) and BS8576 'Guidance on Investigations for ground gas – Permanent gases and Volatile Organic Compounds (VOCs) (2013).

To assess the risks posed by ground gases such as radon, carbon dioxide and methane, the relevant current guidance has been used. For radon the site has been assessed following the guidelines in 'Radon: guidance on protective measures for new dwellings (BR211: 2015)'. For methane and carbon dioxide the primary guidance document used to determine if protection measures are required is *BS8485:2015 Code of practice for the design of protective measures from methane and carbon dioxide ground gases for new buildings*. This uses hazardous gas flow rates (Q_{hg}), which are gas concentrations multiplied by borehole flow rates, to derive a Gas Flow Rate (GSV) for the site. The gas regime is then determined based on the GSV and other limiting factors such as gas concentrations.

Where flow is not recorded during the monitoring a default flow rate of 0.1l/hr will be used in the assessment to produce a positive result.

vi HUMAN HEALTH RISK ASSESSMENT METHODOLOGY

Guidance contained in the Environment Agency's CLEA Reports has been used to assess the risks posed to human health.

For residential developments that include domestic gardens the default Tier 1 Assessment Criteria (TAC) for 'residential land with plant uptake' are used, i.e. a female with a start age class of one and an end age class of six. All pathways are considered including the consumption of home-grown vegetables.

For residential developments that do not include domestic gardens the default Tier 1 Assessment Criteria (TAC) for 'residential land without plant uptake' are used, i.e. a female with a start age class of

one and an end age class of six. All pathways are considered except the consumption of home-grown vegetables.
For commercial/industrial developments the default Tier 1 Assessment Criteria (TAC) for 'commercial/industrial' are used, i.e. a female with a start age class of sixteen and an end age class of eighteen. All pathways are considered except the consumption of home-grown vegetables.

The TAC used by GRM include Category 4 Screening Levels (C4SLs) published by DEFRA, values calculated by GRM using the CLEA v1.071 risk assessment, and values and Suitable for Use Levels (S4UL) developed by LQM/CIEH. The TAC used in the assessment are selected based on the lowest site specific SOM values returned as part of the chemical analysis.

Where soil chemical analysis results are found to exceed the TAC, Site-Specific Risk Assessments may be undertaken using the CLEA v1.071 risk assessment software using the age classes and pathways described above.

vii RISK TO SITE WORKERS – GENERAL COMMENTS

The risks to site workers are similar to those posed to site end users, although likely to be less severe due to the site workers' shorter exposure to the identified contamination. However, site workers (particularly groundworkers) are more likely to come into direct contact with contaminated soils due to the nature of their work. On this basis ground and construction workers should be provided with basic Personal Protective Equipment based on the site's general health and safety risk assessment, but including as a minimum safety footwear, gloves and overalls.

A site specific risk assessment should be carried out for all hazards identified within the ground investigation in accordance with current health and safety legislation. This assessment should identify any measures required to further reduce risks i.e. providing further Personal Protective Equipment, welfare facilities and if necessary preventing access to certain areas.

Demolition and dismantling of existing structures on the site must be carried out to a safe and acceptable standard, in accordance with current UK guidance and best practice. Whilst not ground related, asbestos and hazardous substances surveys should be conducted prior to any demolition.

Any unusual colours, odours and suspicious ground should be reported immediately to site management and then GRM.

Whilst this appraisal has considered the long-term effects of contamination, GRM can also help during the formulation of Health and Safety documentation, if required.

viii CONTROLLED WATERS RISK ASSESSMENT METHODOLOGY

Where the desk study and fieldwork do not reveal a potential source of contamination no leachate or groundwater testing will be performed. Where a potential source is identified the testing will comprise leachate testing on the material considered most likely to pose a risk, groundwater testing will be undertaken if water is present at shallow depth.

The UK Drinking Water Standards (UKDWS) or Environmental Quality Standards (EQS) are usually adopted for comparison with the leachate/groundwater test results. When the most sensitive receptor is considered to be the aquifer (groundwater) UKDWS will be adopted as the Initial Tier 1 screening values. Where the most sensitive receptor is a surface water feature the EQS values will be used as Initial Tier I Screening values.

ix CONSTRUCTION MATERIALS RISK ASSESSMENT METHODOLOGY

The 'screening levels' adopted for the assessment of risk to construction materials are taken from the following documents:

- UK Water Industry Research (UKWIR) Contamination thresholds for sub-surface water pipes, for the protection of buried pipes.
- Building Research Establishment (BRE) Special Digest SD1 (2005), 'Concrete in Aggressive Ground', for the protection of buried concrete.

x WASTE DISPOSAL, SITE WASTE MANAGEMENT PLANS AND MATERIAL MANAGEMENT PLANS

Under current Waste Management Regulations, waste soil materials produced from the site will require characterisation to enable it to be disposed of correctly.

The chemical analysis results included in this report should be provided to the relevant landfill operators to establish the characterisation of the waste, confirm its suitability for landfill disposal and provide estimated costings. If material is classified as hazardous, then the site will need to be registered with the Environment Agency prior to the movement of the waste. Depending on the receiving landfill's current permit, further chemical analysis, incorporating Waste Acceptance Criteria (WAC) leachate analysis, may be required.

All materials removed from the site will be classified as 'waste' and therefore must be removed by a suitably licensed carrier of waste. This applies whether or not the waste is contaminated. All waste removed to landfill will attract Landfill Tax.

The developer/builder is likely to be classed as the waste producer and therefore, has a duty of care to ensure that all waste is disposed of appropriately. This includes ensuring the waste carrier is licensed and disposes of the waste to a suitably licensed landfill site. They are also required to keep a paper trail from 'cradle to grave' including copies of the waste disposal tickets.

Efficient materials management on site is recommended as it can lead to significant cost savings when compared to the traditional side casting or single stockpile of arisings. GRM can assist in the production of Material Management Plans under the CL:AIRE Definition of Waste: Code of Practice. The DoWCoP enables:

- The direct transfer and re-use of clean naturally occurring soil materials between sites, and
- The re-use of both contaminated and uncontaminated materials on their site of origin and between sites within defined Cluster projects.

GRM can also undertake the role of Qualified Person and submit the DoW CoP project Declaration.

Likewise making the site as volume neutral as possible will reduce the costs of development. Whilst not a statutory requirement, Site Waste Management Plans allow better waste management practices, help to reduce the amount of waste produced and identify best environmental disposal options. Implementing a Site Waste Management Plan (SWMP) can reduce costs (increasing business profits) and maximise resource efficiency.

xi GEOTECHNICAL ASSESSMENT GENERAL COMMENTS

Where finished floor levels of proposed structures have not been provided by the Client, then for the purposes of initial assessment, GRM will assume that finished levels will not vary appreciably from the existing ground levels. If the depths of any underground engineering works (i.e. sewers, pumping stations etc.) are unknown they will not be taken in to account in the assessment and it will be assumed that any such works will not compromise foundation or ground stability.

Should the development proposals or finished levels be different from these assumptions then the comments/recommendations in the Geotechnical Assessment may require revising.

It should be noted that the results of window sampling and/or cable percussive boreholes may not give a true indication of a soils actual engineering properties (i.e. stability, mass structure etc). GRM consider that that prior to development trial pitting should be undertaken to confirm the recommendations in the Geotechnical Assessment.

xii GEOTECHNICAL ASSESSMENT – ENGINEERING GROUND TREATMENT

Near surface soils have the potential to be disturbed by weathering and site traffic. Precautions should always be taken to avoid this, as excessive disturbance may leads to more onerous floor slab designs, road cap thickness and increased amounts of off-site disposal etc.

Near surface soils may need treatment or reinforcing to allow safe movement of construction plant and labour. An assessment by the contractor should be undertaken once the type of machinery/plant needed to complete the development is known.

xiii GEOTECHNICAL ASSESSMENT – EXCAVATIONS

Excavation instability (over-break) can result in damage to existing services or structures (e.g. foundations, roads or boundary walls/fences) both on and off-site, as well as increased foundation concrete costs. In order to minimise this, all excavations deeper than 1.2m deep (or any excavation within 1.5m of any existing structure or service) should be supported. Full support should be provided to the full depth of all near vertically sided excavations in made ground, soft and very soft clays and granular soils. A reduction to intermediate support should be acceptable within firm and stiffer natural clays.

Wherever possible, man entry into excavations should be prevented; however, where this is not possible, entry to, and time spent in, excavations should be kept to a minimum.

The build program should be tailored to reflect the impact that deep excavations through potentially unstable strata can have on adjacent properties, so that they are not undermined.

All excavations on site should be in accordance with HSE guidelines and stability should be practically maintained at all times. Reference should be made to HSE construction information sheet No. 8 (Revision 1) 'Safety in Excavations'.

Care should be taken to ensure that falls from excavation faces do not adversely affect the integrity of foundation concrete.

If contaminated water enters excavations it should be removed and transported to an appropriate treatment facility by a suitably licensed carrier before construction begins.

xiv GEOTECHNICAL ASSESSMENT – SUBSTRUCTURES

Where practicable, existing buried construction should be fully removed; however, if this is not practicable all new foundations should be carried down to fully penetrate it and it should be broken well away from all new structures.

There may be existing structures and/or infrastructure in close proximity to the proposed development. New build foundations may be constructed next to pavements with existing underground services beneath them, or excavations may be required near existing footings associated with adjacent properties. These potential hazards need to be taken into consideration when designing foundations and the groundworker needs to be made aware of their potential impact during the redevelopment works. Foundations close to existing underground services or buildings may require alternative foundation techniques (such as piling) to protect the integrity of these structures.

The contractor for the works should carry them out in such a fashion so as to not cause excessive overbreak, concrete usage or undermine existing buildings/roads/ services that are to be retained.

xv GEOTECHNICAL ASSESSMENT – SOAKAWAYS

Soakaway testing in trial pits by GRM is broadly carried out in accordance with BRE DG 365 (2016). The testing comprises the excavation of a test pit to a suitable depth, and the placement of water into the pit. The level of water present is then monitored over time. For borehole installations, the permeability testing (falling head/rising head) is undertaken in accordance with BS5930.

If it is decided to proceed with the use of soakaway drainage, then the following general points should be noted:

- Soakaways should not be placed so that water can be discharged through potentially contaminated made ground.
- The Environment Agency may require soakaways to be sealed systems such that only roof run off falls to soakaway.

- Interceptors are likely to be required for soakaways for highway drainage. The adopting authority for the highways should be consulted at the earliest opportunity regarding the use of soakaways for highways drainage.
- Consideration of site levels and slopes should be taken into account during the design.
- The construction of all soakaways should be in accordance with the current building regulations.
- Soakaways should not be placed within 5m of a proposed building.
- Placement of soakaways needs to be considered so as to avoid ponding of water down slope.
- The base of a soakaway should not be below the highest recorded water level.
- The Environment Agency prefer 1m of dry soil to be present between the base of a soakaway and the water table to provide attenuation for contamination.

xvi GEOTECHNICAL ASSESSMENT – FOUNDATIONS

If soft or hard spots are encountered during foundation excavation then they should be replaced with suitably compacted material or the footings deepened to suitable strata, to avoid differential settlement.

If strata of differing bearing character (e.g. sand and clay) are encountered at foundation levels within the excavations for a single plot then the excavation depths should be altered as appropriate to ensure the foundations rest on a single stratum, or strata that will not induce differential settlement. Where this is impractical then GRM should be contacted to assess a reinforced concrete detail or an alternative foundation solution (e.g. piles or vibro-replacement).

NOTES ON LIMITATIONS

General

GRM Development Solutions Limited has prepared this report solely for the use of the Client and those parties with whom a warranty agreement had been executed, or with whom an assignment had been agreed. Should any third party wish to use or rely upon the contents of the report, written approval must be sought from GRM Development Solutions Limited; a charge may be levied against such approval.

GRM Development Solutions Limited accepts no responsibility or liability for:

a) the consequences of this document being used for any purpose or project other than for which it was commissioned, and

b) the consequences of this document being used by any third party with whom an agreement has not been executed.

Phase I Environmental Audits/ Desk Studies

The work undertaken to provide the basis of this report comprised a study of available documented information from a variety of sources (including the Client), together with (where appropriate) a brief walk over inspection of the site and meetings and discussions with relevant authorities and other interested parties. The opinions given in this report have been dictated by the finite data on which they are based and are relevant only to the purpose for which the report was commissioned. The information reviewed should not be considered exhaustive and has been accepted in good faith as providing true and representative data pertaining to site conditions. Should additional information become available which may affect the opinions expressed in this report, GRM Development Solutions Limited reserves the right to review such information and as considered necessary and appropriate to modify the opinions accordingly. It should be noted that any risks identified in a Phase 1 report are perceived risks based on the information reviewed; actual risks can only be assessed following a physical investigation of the site.

Phase II Environmental Audits (Contamination Investigations)

The investigation of the site has been carried out to provide sufficient information concerning the type and degree of contamination, ground and groundwater conditions to allow a reasonable risk assessment to be made. The objectives of the investigation have been limited to establishing the risks associated with potential human targets, building materials, and controlled waters.

The amount of exploratory work and chemical testing undertaken has necessarily been restricted by the short timescale available, and the locations of exploratory holes have been restricted to the areas unoccupied by the building(s) on the site and by buried services. A more comprehensive investigation may be required if the site is to be redeveloped as, in addition to risk assessment, a number of important engineering and environmental issues need to be resolved.

For these reasons if costs have been included in relation to site remediation these must be considered as provisional only and must, in any event, be confirmed by a commercial adviser.

The exploratory holes undertaken, which investigate only a small volume of the ground in relation to the size of the site, can only provide a general indication of site conditions. Whilst exploratory testing is intended to gain an accurate representation of the site, the very nature of sampling and testing is such that it cannot ensure that all localised conditions are detected

The risk assessment and opinions provided take in to consideration, inter alia, currently available guidance relating to acceptable contamination concentrations; no liability can be accepted for the retrospective effects of any future changes or amendments to these values.

Phase II Geo-environmental Investigations (Combined Geotechnical and Contamination Investigations)

The investigation of the site has been carried out to provide sufficient information concerning the type and degree of contamination, geotechnical characteristics, and ground and groundwater conditions to provide a reasonable assessment of the environment risks together with engineering and development implications. If costs have been included in relation to site development a commercial adviser must confirm these.

The exploratory holes undertaken, which investigate only a small volume of the ground in relation to the size of the site, can only provide a general indication of site conditions. The opinions provided and recommendations given in this report are based on the ground conditions apparent at the site for each of the exploratory holes. There may be exceptional ground conditions elsewhere on the site which have not been disclosed by this investigation and which have therefore not been taken into account in this report.

The comments made on groundwater conditions are based on observations made at the time the site work was conducted. It should be noted that groundwater levels will vary owing to seasonal, tidal and weather related effects.

The scope of the investigation was selected on the basis of the specific development proposed by the Client and may be inappropriate to another form of development or scheme.

The risk assessment and opinions provided take in to consideration, inter alia, currently available guidance relating to acceptable contamination concentrations; no liability can be accepted for the retrospective effects of any future changes or amendments to these values.

APPENDIX B

GRM Development Solutions provides multi-disciplinary consultancy services, UK-wide:

- Geotechnical and Geo-environmental Services
- Civil and Infrastructure Services
- Structural Engineering Services
- Construction Management
- Site Services

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NOTES

N

D

Pond

Rhino Business Park

C

B

A

E

public footpath Tutbury 34

public footpath Hanbury 44

Post & Mesh Fence Ht 2.2m

Post & Wire Fence Ht 1.3m

Post & Wire Fence Ht 1.7m

Gate House

Development Boundary

Ownership Boundary

approx outline of underground bunker stores

403
25T 1.3

402
8T 1.3

401
1.4

405

406
25T 1.3

407
25T 1.3

Containers

Tarmac

Trees

Security Fence Ht 2.4m

SCHEDULE OF DEVELOPMENT

Unit	Use class	Ground Floor Area	First Floor Area	Parking
A	B1	836 sq m (9,000 sq ft)	836 sq m (9,000 sq ft)	36
B	B1,B2 & B8	1022 sq m (11,000 sq ft)		32
C	B1,B2 & B8	1486 sq m (16,000 sq ft)		37
D	B1,B2 & B8	2936 sq m (31,600 sq ft)		61
E	B8	5000 sq m (53,800 sq ft)		51

Site Area: 2.86Ha (7.08 Acres)

0m 25m 50m

	REVISION	DATE	BY
F	public footpath location indicated	23/04/18	PDR
E	scheme layout updated	20/04/18	PDR
D	development site amended to suit LPA development zone boundary	23/01/17	PDR
C	unit B labelled as 1.4 store	05/01/17	PDR
B	unit F & G labelled as 1.4 store	05/01/17	PDR
A	layout updated to client comments	03/01/17	PDR

building design group

B | D | G

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f: (+44) 01827 52301
e: mail@bdg.uk.com
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CLIENT
Mercer Major Partners LLP

PROJECT
Proposed Industrial Development
Fauld Industrial Estate
Fauld Lane
Tutbury

TITLE
Development Scheme Layout

SCALE @A1	1:500	DATE	14/12/16
DRAWN	PDR	CHECKED	
DRAWING NO.	2968 / 02	STATUS	REVISION F

APPENDIX C

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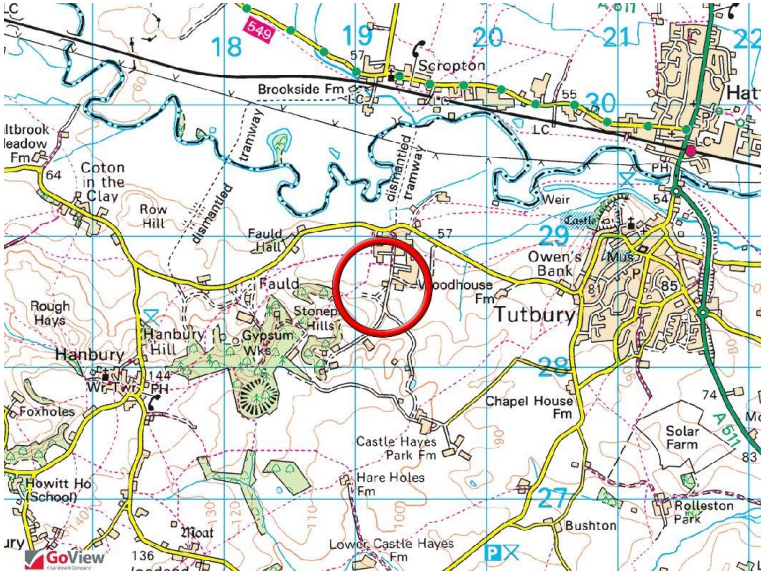

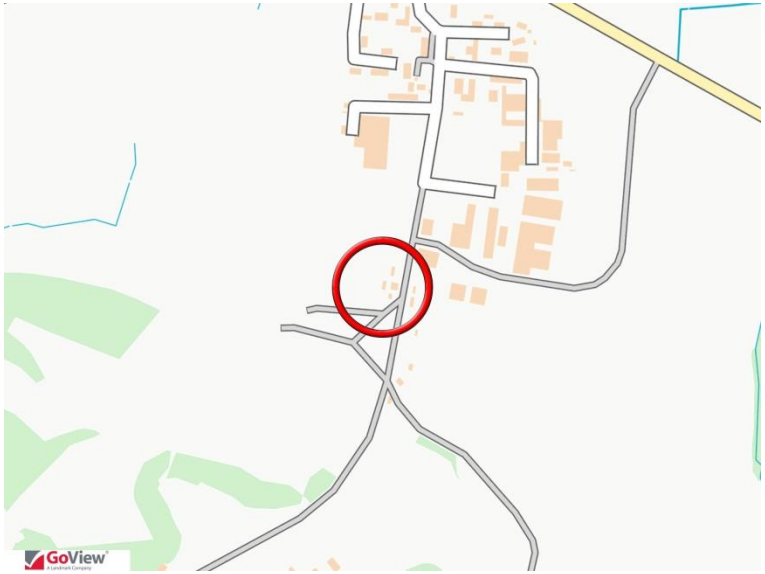

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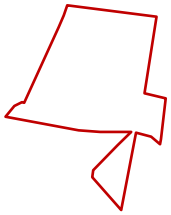

Approximate Site Boundary

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CLIENT:

Mercer Major Partners LLP

PROJECT:

Land at Fauld Industrial Estate, Fauld, Tutbury

TITLE:

Site Location Plan

SCALE@SIZE :	ISSUE:
NTS	FINAL
DESIGN/DRAWN :	DATE:
RDH	February 2019
PROJECT No:	DRAWING No:
P8811	

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NOTES:

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PROJECT:

Land at Fauld Industrial Estate, Fauld, Tutbury

TITLE:

Site Boundary Plan

SCALE@SIZE :	ISSUE:
NTS	FINAL
DESIGN/DRAWN : RDH	DATE: February 2019
PROJECT No: P8811	DRAWING No:

APPENDIX D

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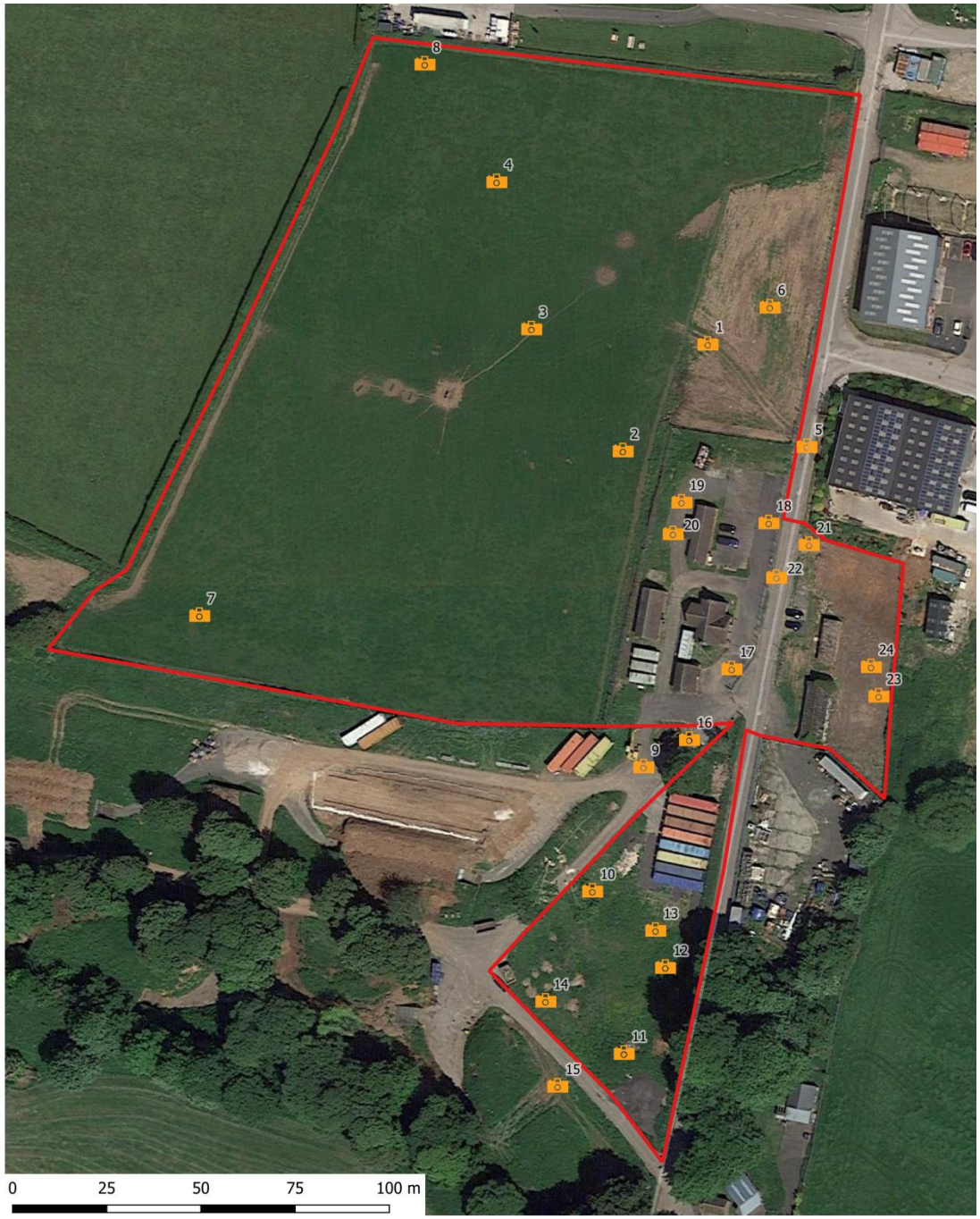

DO NOT SCALE

NOTES:

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CLIENT:

Mercer Major Partners LLP

PROJECT:

Land at Fauld Industrial Estate, Fauld, Tutbury

TITLE:

Site Features/Photographs

SCALE@SIZE :	ISSUE:
NTS	FINAL
DESIGN/DRAWN : RDH	DATE: February 2019
PROJECT No: P8811	DRAWING No:

01

View west from field entrance.

02

View south along field boundary.

03

View south west across field.

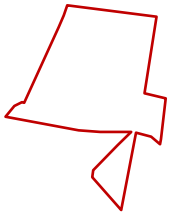
04

View of north western corner of field.

DO NOT SCALE

NOTES:

N



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CLIENT:

Mercer Major Partners LLP

PROJECT:

Land at Fauld Industrial Estate, Fauld, Tutbury

TITLE:

Site Photographs

SCALE@SIZE :	ISSUE:
NTS	FINAL
DESIGN/DRAWN : RDH	DATE: February 2019
PROJECT No: P8811	DRAWING No:

05

Field entrance from Fauld Industrial Estate.

06

View of built up ground on eastern side of field.

07

Exit from field in south western corner.

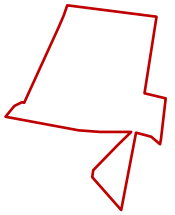
08

Footpath along northern boundary of site.

DO NOT SCALE

NOTES:

N



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CLIENT:

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PROJECT:

Land at Fauld Industrial Estate, Fauld, Tutbury

TITLE:

Site Photographs

SCALE@SIZE :	ISSUE:
NTS	FINAL
DESIGN/DRAWN : RDH	DATE: February 2019
PROJECT No: P8811	DRAWING No:

Crack willow tree in northern part of triangular plot.

View looking west across triangular plot. Stockpiles and bunkers beyond.

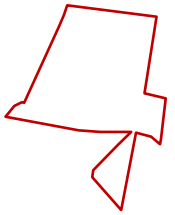
View south along triangular plot showing stockpiles.

View west from triangular plot. Mercia Mudstone exposed in road cutting.

DO NOT SCALE

NOTES:

N



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CLIENT:

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PROJECT:

Land at Fauld Industrial Estate, Fauld, Tutbury

TITLE:

Site Photographs

SCALE@SIZE :	ISSUE:
NTS	FINAL
DESIGN/DRAWN : RDH	DATE: February 2019
PROJECT No: P8811	DRAWING No:

13

Underground chamber in triangular plot.

14

View north along triangular plot.

15

Above ground firework/ammunition bunkers to west of site.

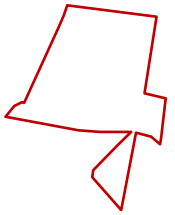
16

View of entrance to site. Looking north east.

DO NOT SCALE

NOTES:

N



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CLIENT:

Mercer Major Partners LLP

PROJECT:

Land at Fauld Industrial Estate, Fauld, Tutbury

TITLE:

Site Photographs

SCALE@SIZE :	ISSUE:
NTS	FINAL
DESIGN/DRAWN : RDH	DATE: February 2019
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17

Site offices and firework storage buildings.
View west.

18

View south along building frontages.

19

View across field to west.

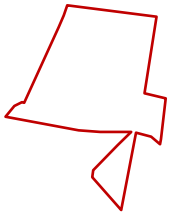
20

Western frontages of storage buildings.

DO NOT SCALE

NOTES:

N



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PROJECT:
Land at Fauld Industrial Estate, Fauld, Tutbury

TITLE:
Site Photographs

SCALE@SIZE :	ISSUE:
NTS	FINAL
DESIGN/DRAWN : RDH	DATE: February 2019
PROJECT No: P8811	DRAWING No:

21

View south along eastern most buildings.

22

Former rail tracks across access road.

23

Asbestos cement corrugate roofing.

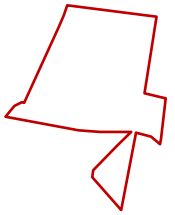
24

Stockpiles to the rear of buildings against the eastern site boundary.

DO NOT SCALE

NOTES:

N



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TITLE:

Site Photographs

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PROJECT No: P8811	DRAWING No:

APPENDIX E

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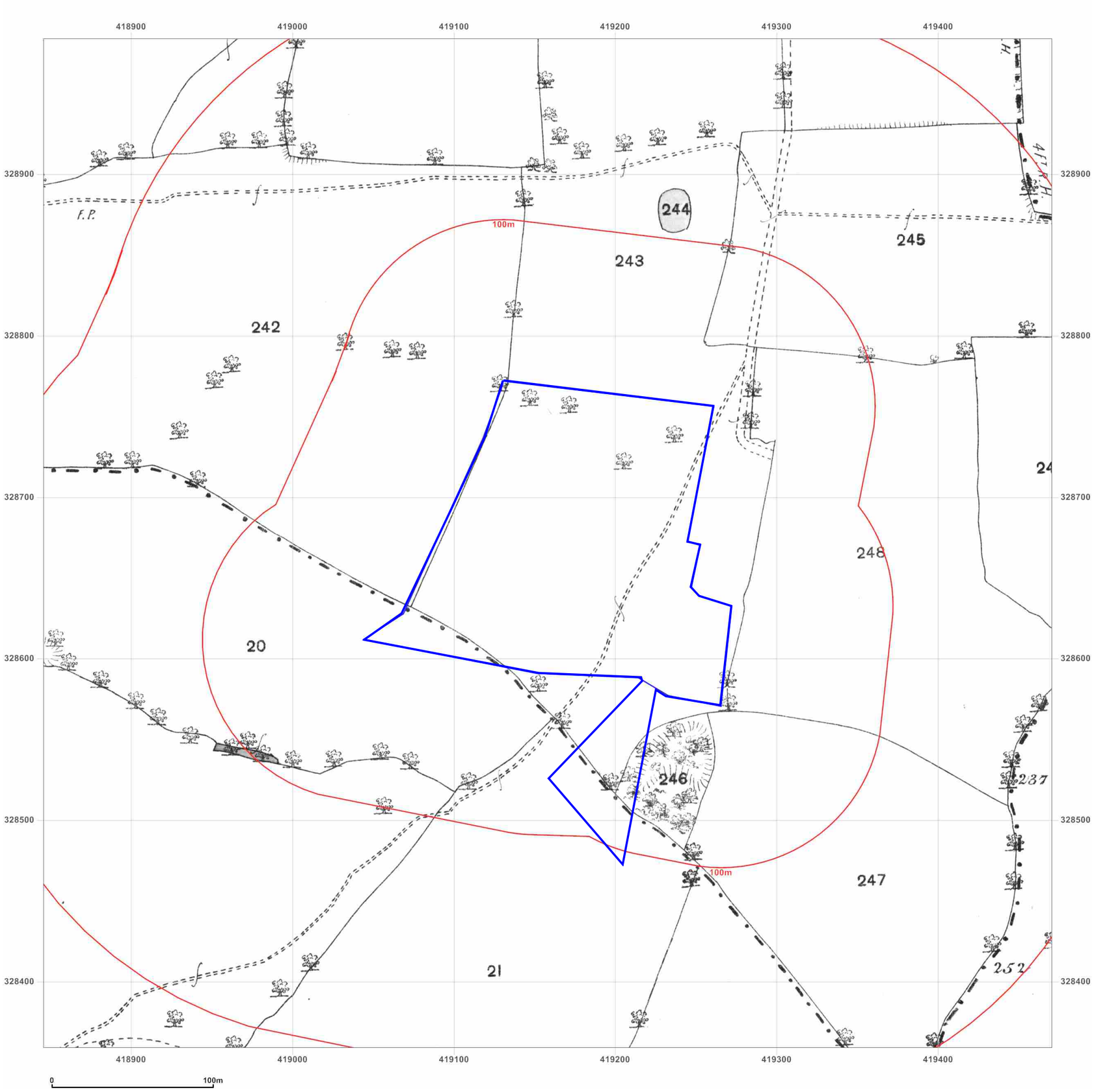

emapsite™

Site Details:

Land at Fauld Industrial Estate,Fauld Lane,Tutbury,DE13 9HS

Client Ref: EMS_526822_708422
Report Ref: EMS-526822_708422
Grid Ref: 419158, 328671

Map Name: County Series

Map date: **1883**

Scale: 1:2,500

Printed at: 1:2,500

N
W E
S

Surveyed 1883
Revised 1883
Edition N/A
Copyright N/A
Levelled N/A

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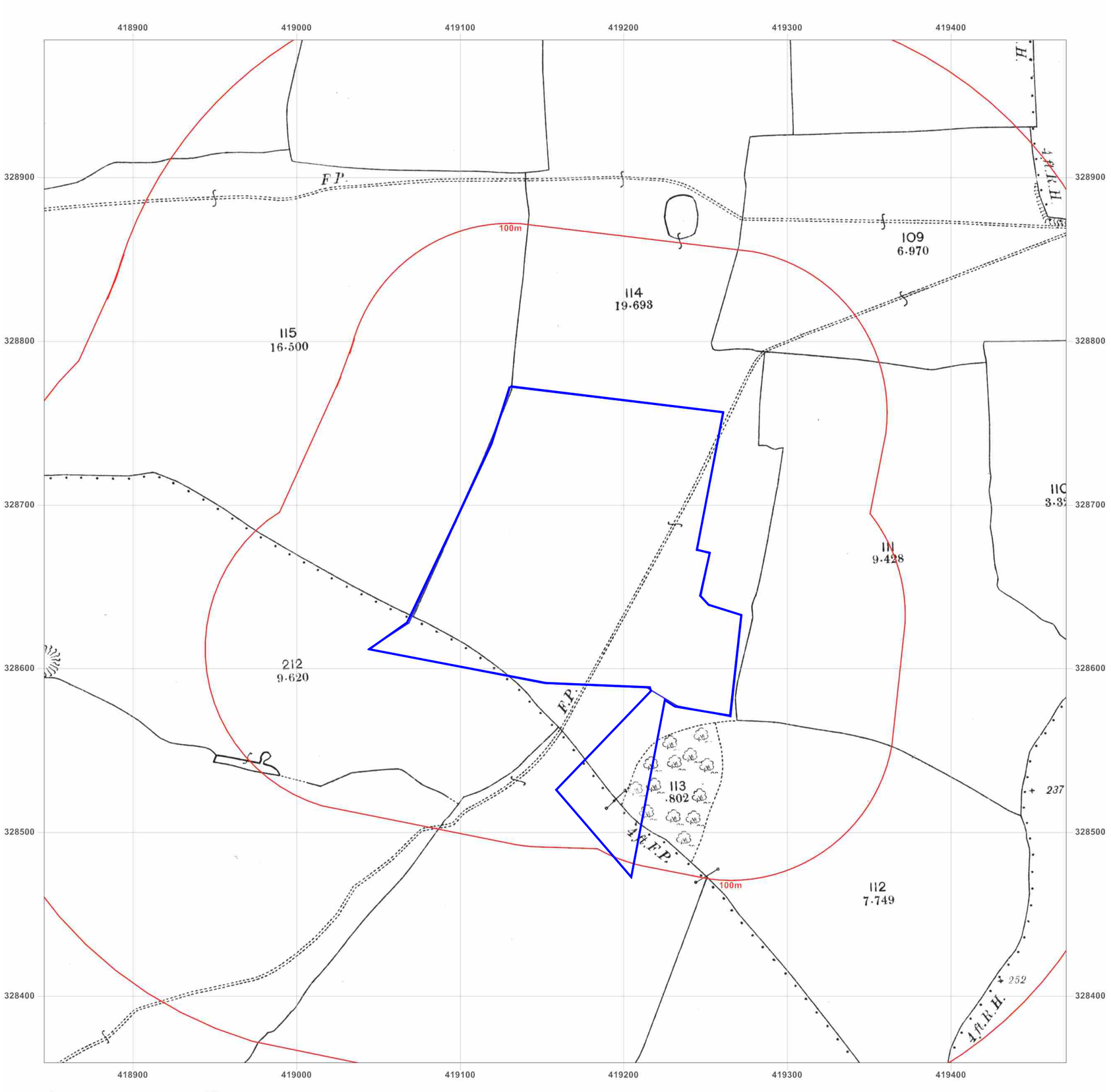
sales@emapsite.com

Production date: 13 February 2019

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf



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Site Details:

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Client Ref: EMS_526822_708422
Report Ref: EMS-526822_708422
Grid Ref: 419158, 328671

Map Name: County Series

Map date: **1901**

Scale: 1:2,500

Printed at: 1:2,500

N
W E
S

Surveyed 1901
Revised 1901
Edition N/A
Copyright N/A
Levelled N/A

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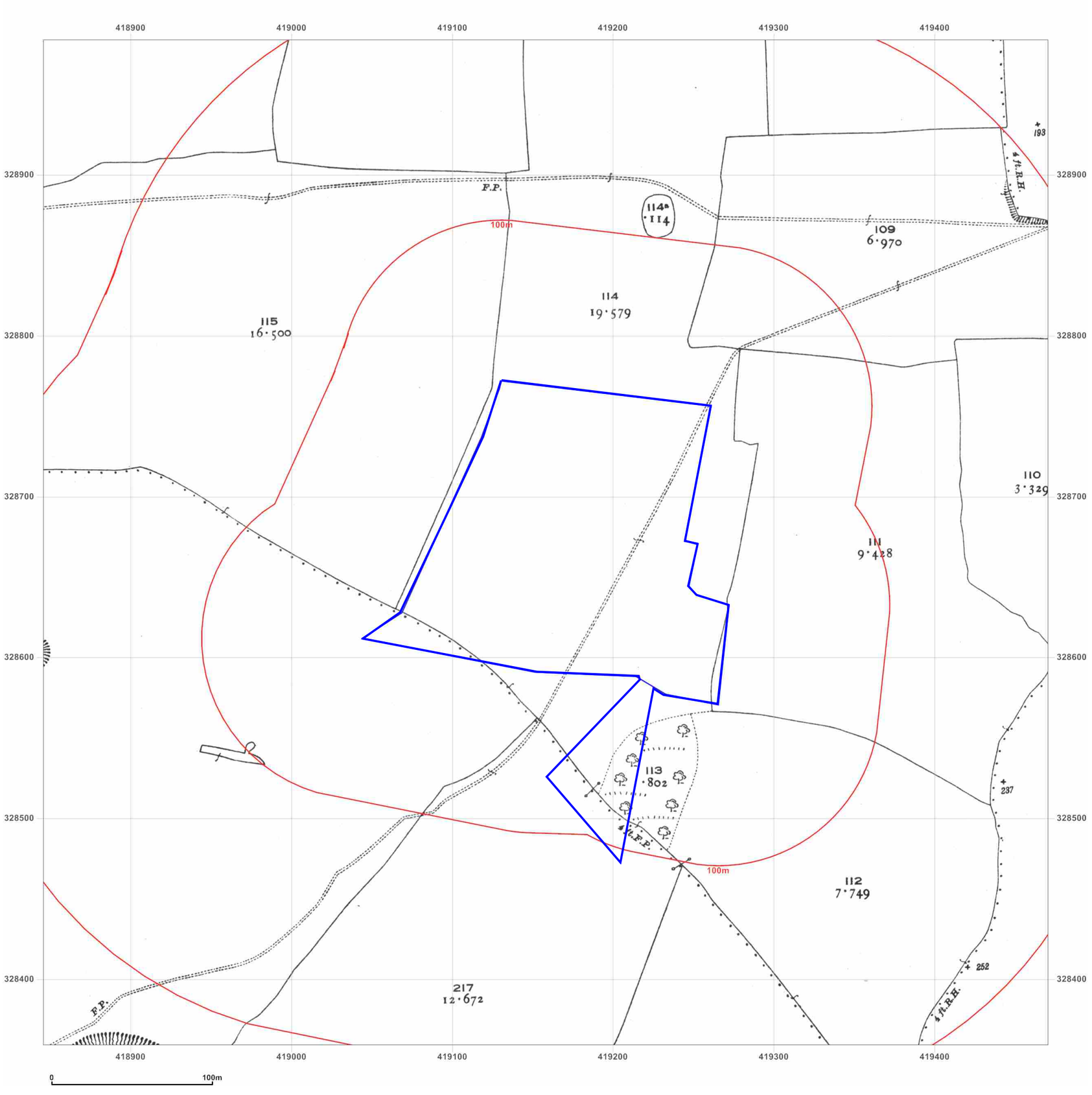

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Site Details:

Land at Fauld Industrial Estate,Fauld Lane,Tutbury,DE13 9HS

Client Ref: EMS_526822_708422
Report Ref: EMS-526822_708422
Grid Ref: 419158, 328671

Map Name: County Series

Map date: **1923**

Scale: 1:2,500

Printed at: 1:2,500

N
W E
S

Surveyed 1923
Revised 1923
Edition N/A
Copyright N/A
Levelled N/A

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Site Details:

Land at Fauld Industrial Estate,Fauld Lane,Tutbury,DE13 9HS

Client Ref: EMS_526822_708422
Report Ref: EMS-526822_708422
Grid Ref: 419158, 328671

Map Name: National Grid

Map date: **1972**

Scale: 1:2,500

Printed at: 1:2,500

N
W E
S

Surveyed 1972
Revised 1972
Edition N/A
Copyright 1973
Levelled 1967

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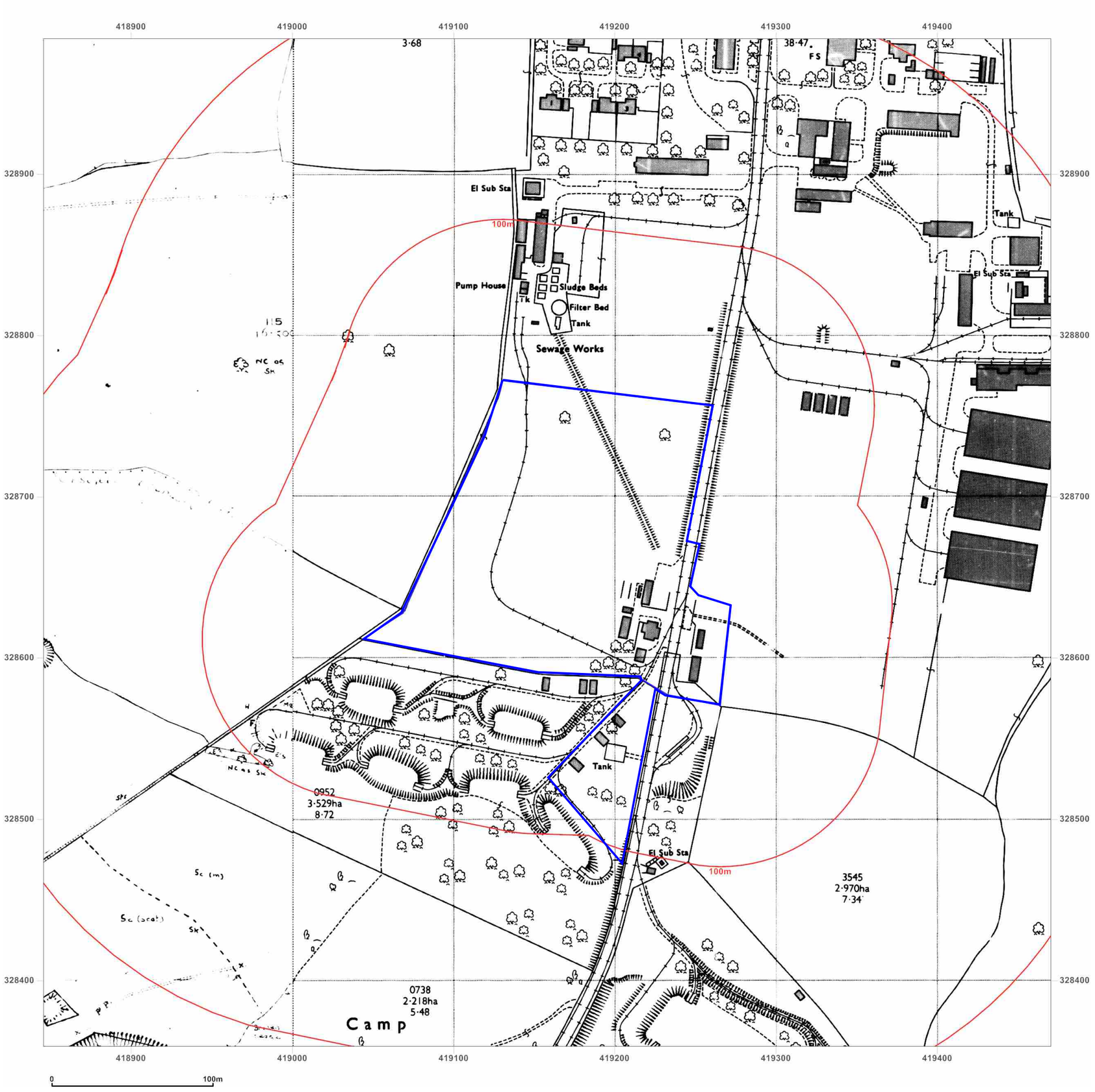
Production date: 13 February 2019

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf



emapsite™

Site Details:

Land at Fauld Industrial Estate,Fauld Lane,Tutbury,DE13 9HS

Client Ref: EMS_526822_708422
Report Ref: EMS-526822_708422
Grid Ref: 419158, 328671

Map Name: National Grid

Map date: **1972-1973**

Scale: 1:2,500

Printed at: 1:2,500

N
W E
S

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 N/A
Levelled N/A

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Site Details:

Land at Fauld Industrial Estate,Fauld Lane,Tutbury,DE13 9HS

Client Ref: EMS_526822_708422
Report Ref: EMS-526822_708422
Grid Ref: 419158, 328671

Map Name: National Grid

Map date: **1994**

Scale: 1:2,500

Printed at: 1:2,500

N
W E
S

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

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APPENDIX F

GRM Development Solutions provides multi-disciplinary consultancy services, UK-wide:

- Geotechnical and Geo-environmental Services
- Civil and Infrastructure Services
- Structural Engineering Services
- Construction Management
- Site Services

Tel: 01283 551249

Fax: 01283 211968

info@grm-uk.com

www.grm-uk.com

EmapSite

Masdar House, 1 Reading Road,
Eversley, RG27 0RP

Groundsure Reference:	EMS-526822_708424
Your Reference:	EMS_526822_708424
Report Date	13 Feb 2019
Report Delivery Method:	Email - pdf

Enviro Insight

Address: Land at Fauld Industrial Estate, Fauld Lane, Tutbury, DE13 9HS,

Dear Sir/ Madam,

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

If you would like further assistance regarding this report then please contact the emapsite customer services team on 0118 9736883 quoting the above report reference number.

Yours faithfully,

emapsite customer services team

Enc.
Groundsure Enviroinsight

Enviro Insight

Address:	**Land at Fauld Industrial Estate, Fauld Lane, Tutbury, DE13 9HS,**
Date:	**13 Feb 2019**
Reference:	**EMS-526822_708424**
Client:	**EmapSite**

NW N NE

W E

SW S SE

Aerial Photograph Capture date:	12-Aug-2015
Grid Reference:	419176,328669
Site Size:	2.89ha

Report Reference: EMS-526822_708424
Client Reference: EMS_526822_708424

Contents Page

Overview of Findings

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

Section 1: Historical Industrial Sites	On-site	0-50	51-250	251-500
1.1 Potentially Contaminative Uses identified from 1:10,000 scale mapping	3	7	8	45
1.2 Additional Information – Historical Tank Database	0	2	2	2
1.3 Additional Information – Historical Energy Features Database	0	0	3	5
1.4 Additional Information – Historical Petrol and Fuel Site Database	0	0	0	0
1.5 Additional Information – Historical Garage and Motor Vehicle Repair Database	0	0	0	0
1.6 Historical military sites	0	0	0	0
1.7 Potentially Infilled Land	2	4	9	28

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

Section 3: Landfill and Other Waste Sites	On-site	0-50m	51-250	251-500	501-1000	1000-1500
3.1 Landfill Sites						
3.1.1 Environment Agency/Natural Resources Wales Registered Landfill Sites	0	0	0	0	0	Not searched
3.1.2 Environment Agency/Natural Resources Wales Historic Landfill Sites	0	0	0	0	1	0
3.1.3 BGS/DoE Landfill Site Survey	0	0	0	0	0	0
3.1.4 Records of Landfills in Local Authority and Historical Mapping Records	0	0	0	0	0	0
3.2 Landfill and Other Waste Sites Findings						
3.2.1 Operational and Non-Operational Waste Treatment, Transfer and Disposal Sites	0	0	0	0	Not searched	Not searched
3.2.2 Environment Agency/Natural Resources Wales Licensed Waste Sites	0	0	5	0	0	0

Section 4: Current Land Use	On-site	0-50m	51-250	251-500
4.1 Current Industrial Sites Data	1	2	21	Not searched
4.2 Records of Petrol and Fuel Sites	0	0	0	0
4.3 National Grid Underground Electricity Cables	0	0	0	0
4.4 National Grid Gas Transmission Pipelines	0	0	0	0

Section 5: Geology	
5.1 Records of Artificial Ground and Made Ground present beneath the study site	None identified
5.2 Records of Superficial Ground and Drift Geology present beneath the study site	Identified
5.3 For records of Bedrock and Solid Geology beneath the study site see the detailed findings section.	

Section 6: Hydrogeology and Hydrology	0-500m
6.1 Records of Strata Classification in the Superficial Geology within 500m of the study site	Identified
6.2 Records of Strata Classification in the Bedrock Geology within 500m of the study site	Identified

	On-site	0-50m	51-250	251-500	501-1000	1000-2000
6.3 Groundwater Abstraction Licences (within 2000m of the study site)	0	0	0	0	6	4
6.4 Surface Water Abstraction Licences (within 2000m of the study site)	0	0	0	0	0	0
6.5 Potable Water Abstraction Licences (within 2000m of the study site)	0	0	0	0	2	0
6.6 Source Protection Zones (within 500m of the study site)	0	0	0	0	Not searched	Not searched
6.7 Source Protection Zones within Confined Aquifer	0	0	0	0	Not searched	Not searched
6.8 Groundwater Vulnerability and Soil Leaching Potential (within 500m of the study site)	0	0	#250GWV #	#500GWV #	Not searched	Not searched

Section 6: Hydrogeology and Hydrology

	0-500m					
	On-site	0-50m	51-250	251-500	501-1000	1000-1500
6.9 Environment Agency/Natural Resources Wales information on river quality within 1500m of the study site	No	No	No	No	No	Yes
6.10 Ordnance Survey MasterMap Water Network entries within 500m of the site	0	0	0	26	Not searched	Not searched
6.11 Surface water features within 250m of the study site	No	No	No	Not searched	Not searched	Not searched

Section 7: Flooding

7.1 Enviroment Agency Zone 2 floodplains within 250m of the study site	None identified
7.2 Environment Agency/Natural Resources Wales Zone 3 floodplains within 250m of the study site	None identified
7.3 Risk of flooding from Rivers and the Sea (RoFRaS) rating for the study site	Very Low
7.4 Flood Defences within 250m of the study site	None identified
7.5 Areas benefiting from Flood Defences within 250m of the study site	None identified
7.6 Areas used for Flood Storage within 250m of the study site	None identified
7.7 Maximum BGS Groundwater Flooding susceptibility within 50m of the study site	Potential at Surface
7.8 BGS confidence rating for the Groundwater Flooding susceptibility areas	Moderate

Section 8: Designated Environmentally Sensitive Sites

	On-site	0-50m	51-250	251-500	501-1000	1000-2000
8.1 Records of Sites of Special Scientific Interest (SSSI)	0	0	0	0	0	0
8.2 Records of National Nature Reserves (NNR)	0	0	0	0	0	0
8.3 Records of Special Areas of Conservation (SAC)	0	0	0	0	0	0
8.4 Records of Special Protection Areas (SPA)	0	0	0	0	0	0
8.5 Records of Ramsar sites	0	0	0	0	0	0
8.6 Records of Ancient Woodlands	0	0	0	0	2	2
8.7 Records of Local Nature Reserves (LNR)	0	0	0	0	0	0
8.8 Records of World Heritage Sites	0	0	0	0	0	0
8.9 Records of Environmentally Sensitive Areas	0	0	0	0	0	0

Section 8: Designated Environmentally Sensitive Sites	On-site	0-50m	51-250	251-500	501-1000	1000-2000
8.10 Records of Areas of Outstanding Natural Beauty (AONB)	0	0	0	0	0	0
8.11 Records of National Parks	0	0	0	0	0	0
8.12 Records of Nitrate Sensitive Areas	0	0	0	0	0	0
8.13 Records of Nitrate Vulnerable Zones	1	0	0	0	1	2
8.14 Records of Green Belt land	0	0	0	0	0	0

Section 9: Natural Hazards

9.1 Maximum risk of natural ground subsidence	Very Low
9.1.1 Maximum Shrink-Swell hazard rating identified on the study site	Very Low
9.1.2 Maximum Landslides hazard rating identified on the study site	Very Low
9.1.3 Maximum Soluble Rocks hazard rating identified on the study site	Negligible
9.1.4 Maximum Compressible Ground hazard rating identified on the study site	Negligible
9.1.5 Maximum Collapsible Rocks hazard rating identified on the study site	Very Low
9.1.6 Maximum Running Sand hazard rating identified on the study site	Very Low
9.2 Radon	
9.2.1 Is the property in a Radon Affected Area as defined by the Health Protection Agency (HPA) and if so what percentage of homes are above the Action Level?	The site is not in a Radon Affected Area, as less than 1% of properties are above the Action Level.
9.2.2 Is the property in an area where Radon Protection are required for new properties or extensions to existing ones as described in publication BR211 by the Building Research Establishment?	No radon protective measures are necessary.

Section 10: Mining

10.1 Coal mining areas within 75m of the study site	None identified
10.2 Non-Coal Mining areas within 50m of the study site boundary	Identified
10.3 Brine affected areas within 75m of the study site	None identified

Using this report

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

1. Historical Industrial Sites

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

2. Environmental Permits, Incidents and Registers

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

3. Landfills and Other Waste Sites

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

4. Current Land Uses

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

5. Geology

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

6. Hydrogeology and Hydrology

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

7. Flooding

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

8. Designated Environmentally Sensitive Sites

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

9. Natural Hazards

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

10. Mining

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

11. Contacts

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

Note: Maps

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

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

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

1. Historical Land Use

Site Outline

250
500
Search Buffers (m)

Historical 1:10,000 and 1:10,560 scale mapping

Industrial Land Use

Potentially Infilled Land

Historical 1:2,500, 1:1,250 and 1:500 scale mapping

Energy Features

Petrol Stations

Historical military sites

Tanks

Garages

1. Historical Industrial Sites

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

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

Records of sites with a potentially contaminative past land use within 500m of the search boundary: 63

ID	Distance [m]	Direction	Use	Date
1S	0	On Site	Sewage Works	1978
2	0	On Site	Railway Sidings	1978
3T	0	On Site	Unspecified Heap	1978
4A	14	S	Unspecified Pit	1882
5U	17	S	Unspecified Heap	1978
6V	17	S	Unspecified Heap	1978
7A	21	S	Unspecified Pit	1978
8	37	NE	Railway Sidings	1978
9M	38	SW	Unspecified Tank	1978
10L	48	N	Unspecified Tank	1978
11W	60	S	Unspecified Ground Workings	1978
12	75	S	Railway Sidings	1978
13P	117	N	Electric Substation	1978
14B	190	W	Unspecified Pit	1882
15B	196	W	Unspecified Pit	1901
16B	196	W	Unspecified Pit	1924
17Y	224	E	Unspecified Pit	1949
18Z	234	S	Unspecified Heap	1978
19H	271	S	Unspecified Commercial/Industrial	1978
20D	275	S	Unspecified Ground Workings	1949
21C	278	SW	Unspecified Heap	1949
22AA	282	S	Unspecified Ground Workings	1901
23C	283	SW	Unspecified Heap	1882
24C	283	SW	Unspecified Heap	1901
25C	283	SW	Unspecified Heap	1924
26D	290	SW	Unspecified Ground Workings	1924
27AB	290	S	Unspecified Heap	1978
28K	300	S	Railway Sidings	1978
29	311	S	Railway Building	1978
30	320	S	Railway Building	1978
31	324	SW	Railway Building	1978

32	325	S	Railway Building	1978
33E	341	S	Railway Sidings	1978
34AC	351	S	Unspecified Heap	1978
35	359	S	Railway Building	1978
36N	371	S	Railway Sidings	1978
37	374	SW	Railway Building	1978
38	381	S	Railway Building	1978
39E	386	S	Railway Building	1978
40F	390	SW	Unspecified Heap	1949
41F	399	SW	Unspecified Pit	1882
42G	405	S	Unspecified Pit	1901
43G	405	S	Unspecified Pit	1924
44	405	S	Railway Building	1978
45G	406	S	Unspecified Pit	1949
46	407	S	Railway Building	1978
47F	407	SW	Unspecified Pit	1901
48F	407	SW	Unspecified Pit	1924
49O	409	S	Unspecified Tank	1978
50AD	411	S	Unspecified Heap	1978
51G	417	S	Unspecified Pit	1882
52AE	440	S	Unspecified Pit	1882
53AF	446	S	Unspecified Heap	1978
54H	447	SW	Railway Building	1978
55I	477	NW	Unspecified Heaps	1949
56J	484	W	Unspecified Pit	1882
57I	485	NW	Unspecified Ground Workings	1901
58I	485	NW	Unspecified Ground Workings	1924
59J	489	W	Unspecified Pit	1949
60K	490	SW	Railway Building	1978
61J	490	W	Unspecified Pit	1901
62J	490	W	Unspecified Pit	1924
63I	492	NW	Unspecified Ground Workings	1882

1.2 Additional Information – Historical Tank Database

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

Records of historical tanks within 500m of the search boundary: 6

ID	Distance (m)	Direction	Use	Date
64L	36	N	Unspecified Tank	1972

65M	40	SW	Unspecified Tank	1972
66	56	N	Unspecified Tank	1972
67	215	NE	Unspecified Tank	1972
68N	383	S	Unspecified Tank	1972
69O	414	SE	Unspecified Tank	1972

1.3 Additional Information – Historical Energy Features Database

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

Records of historical energy features within 500m of the search boundary: 8

ID	Distance (m)	Direction	Use	Date
70	98	S	Electricity Substation	1972
71P	116	N	Electricity Substation	1972
72	205	NE	Electricity Substation	1972
73	434	S	Electricity Substation	1972
74Q	472	SW	Electricity Substation	1994
75Q	474	SW	Electricity Substation	1972
76R	489	N	Electricity Substation	1972
77R	489	N	Electricity Substation	1993

1.4 Additional Information – Historical Petrol and Fuel Site Database

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

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

Database searched and no data found.

1.5 Additional Information – Historical Garage and Motor Vehicle Repair Database

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

Records of historical garage and motor vehicle repair sites within 500m of the search boundary: 0

Database searched and no data found.

1.6 Historical military sites

Certain military installations were not noted on historic mapping for security reasons. Whilst not all military land is necessarily of concern, Groundsure has researched and digitised a number of Ordnance Factories and other military industrial features (e.g. Ordnance Depots, Munitions Testing Grounds) which may be of contaminative concern. This research was drawn from a number of different sources, and should not be regarded as a definitive or exhaustive database of potentially contaminative military installations. The boundaries of sites within this database have been estimated from the best evidence available to Groundsure at the time of compilation.

Records of historical military sites within 500m of the search boundary: 0

Database searched and no data found.

1.7 Potentially Infilled Land

Records of Potentially Infilled Features from 1:10,000 scale mapping within 500m of the study site: 43

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

ID	Distance(m)	Direction	Use	Date
78S	0	On Site	Sewage Works	1978
79T	0	On Site	Unspecified Heap	1978
80A	14	S	Unspecified Pit	1882
81U	17	S	Unspecified Heap	1978
82V	17	S	Unspecified Heap	1978
83A	21	S	Unspecified Pit	1978
84W	60	S	Unspecified Ground Workings	1978
85X	92	SW	Pond	1949
86X	99	SW	Pond	1924
87B	190	W	Unspecified Pit	1882
88B	192	W	Pond	1949
89B	196	W	Unspecified Pit	1924
90B	196	W	Unspecified Pit	1901
91Y	224	E	Unspecified Pit	1949
92Z	234	S	Unspecified Heap	1978
93D	275	S	Unspecified Ground Workings	1949
94C	278	SW	Unspecified Heap	1949
95AA	282	S	Unspecified Ground Workings	1901
96C	283	SW	Unspecified Heap	1882
97C	283	SW	Unspecified Heap	1924
98C	283	SW	Unspecified Heap	1901
99D	290	SW	Unspecified Ground Workings	1924
100AB	290	S	Unspecified Heap	1978
101AC	351	S	Unspecified Heap	1978

102F	390	SW	Unspecified Heap	1949
103F	399	SW	Unspecified Pit	1882
104G	405	S	Unspecified Pit	1901
105G	405	S	Unspecified Pit	1924
106G	406	S	Unspecified Pit	1949
107F	407	SW	Unspecified Pit	1901
108F	407	SW	Unspecified Pit	1924
109AD	411	S	Unspecified Heap	1978
110G	417	S	Unspecified Pit	1882
111AE	440	S	Unspecified Pit	1882
112AF	446	S	Unspecified Heap	1978
113I	477	NW	Unspecified Heaps	1949
114J	484	W	Unspecified Pit	1882
115I	485	NW	Unspecified Ground Workings	1924
116I	485	NW	Unspecified Ground Workings	1901
117J	489	W	Unspecified Pit	1949
118J	490	W	Unspecified Pit	1901
119J	490	W	Unspecified Pit	1924
120I	492	NW	Unspecified Ground Workings	1882

2. Environmental Permits, Incidents and Registers Map

- Site Outline
- Search Buffers (m) 250 / 500
- Recorded Pollution Incident
- Dangerous Substances (List 1)
- Dangerous Substances (List 2)
- Water Industry Referrals
- Licenced Discharge Consents
- Red List Discharge Consents
- RAS 3 & 4 Authorisations
- Part A(1) Authorised Processes and Historic IPC Authorisations
- Part A(2) and Part B Authorised Processes
- COMAH / NIHHS Sites
- Sites Determined as Contaminated Land
- Hazardous Substance Consents and Enforcements

2. Environmental Permits, Incidents and Registers

2.1 Industrial Sites Holding Licences and/or Authorisations

Searches of information provided by the Environment Agency/Natural Resources Wales and Local Authorities reveal the following information:

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

0

Database searched and no data found.

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

0

Database searched and no data found.

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

0

Database searched and no data found.

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

0

Database searched and no data found.

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

0

Database searched and no data found.

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

0

Database searched and no data found.

2.1.7 Records of Category 3 or 4 Radioactive Substances Authorisations:

0

Database searched and no data found.

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

3

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

ID	Distance (m)	Direction	NGR	Details	
1	94	N	419246 328853	Address: UNIT 127-128 FAULD INDUSTRIAL PARK, TUTBURY, BURTON ON TRENT, STAFFORDSHIRE, STAFFORDSHIRE, DE13 9HR Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: EPRZB3336AQ Permit Version: 1	Receiving Water: GROUNDWATER VIA SOAKAWAY Status: NEW ISSUED UNDER EPR 2010 Issue date: 02/07/2013 Effective Date: 02-Jul-2013 Revocation Date: -
2	425	NE	419480 329120	Address: BOUNDARY HOUSE, FAULD, NEAR TUTBURY, STAFFORDSHIRE Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: T/33/35069/S Permit Version: 1	Receiving Water: TRIB OF RIVER DOVE Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: 05/11/1996 Effective Date: 05-Nov-1996 Revocation Date: -
3	479	N	419100 329250	Address: THE SPINNEY & LAND ADJ FAULD LANE, FAULD, TUTBURY, STAFFORDSHIRE, STAFFS, DE6 Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: T/33/35252/S Permit Version: 1	Receiving Water: RIVER DOVE Status: REVOKED (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV ACT 1995) Issue date: 30/01/1998 Effective Date: 30-Jan-1998 Revocation Date: 14/07/2004

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

0

Database searched and no data found.

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

2

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

ID	Distance (m)	Direction	Application Reference Number	NGR	Application Status	Application Date	Address	Details	Details of Enforcement Action
7A	0	On Site	No Details	419221 328630	Approved	No Details	Cosmic Fireworks Ltd, Fauld Ind Est (West Pyro site), Fauld Camp, Tutbury, Burton on Trent, England, DE13 9HS	No Details	Enforcement: No Details Date of Enforcement: No Details Comment: No Details
8B	82	E	No Details	419338 328725	Approved	No Details	Cosmic Fireworks Ltd, Fauld Ind Est (East Pyro site), Tutbury, Burton on Trent, England, DE13 9HS	No Details	Enforcement: No Details Date of Enforcement: No Details Comment: No Details

2.2 Dangerous or Hazardous Sites

Records of COMAH & NIHHS sites within 500m of the study site: 1

The following COMAH & NIHHS Authorisation records provided by the Health and Safety Executive are represented as polygons or buffered points on the Environmental Permits, Incidents and Registers Map:

ID	Distance (m)	Direction	Company	Address	Operational Status	Tier
4	0	On Site	Fireworks World Limited	Fireworks World Limited, West Pyro Site, Fauld Camp, Fauld Industrial Estate, Tutbury, Burton On Trent, Staffordshire, DE13 9HS	Current COMAH Site	COMAH Lower Tier Operator

2.3 Environment Agency/Natural Resources Wales Recorded Pollution Incidents

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

0

Database searched and no data found.

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

0

Database searched and no data found.

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

Records of sites determined as contaminated land under Section 78R of the Environmental Protection Act 1990 are there within 500m of the study site 0

Database searched and no data found.

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3. Landfill and Other Waste Sites Map

Site Outline

250
500
Search Buffers (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

3. Landfill and Other Waste Sites

3.1 Landfill Sites

3.1.1 Records from Environment Agency/Natural Resources Wales landfill data within 1000m of the study site:

0

Database searched and no data found.

3.1.2 Records of Environment Agency/Natural Resources Wales historic landfill sites within 1500m of the study site:

1

The following landfill records are represented as either points or polygons on the Landfill and Other Waste Sites map:

ID	Distance (m)	Direction	NGR	Details	
Not shown	824	SW		Site Address: Queens Pursewood, Fauld, Staffordshire Waste Licence: Yes Site Reference: 5/B/77/0043, 9999/9771, EAST STAFFORDSHIRE 06, Z14 Waste Type: Commercial, Household Environmental Permitting Regulations (Waste) Reference: -	Licence Issue: 09-Jun-1977 Licence Surrendered: Licence Holder Address: - Operator: - Licence Holder: Staffordshire County Council First Recorded: - Last Recorded: -

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

0

Database searched and no data found.

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

0

Database searched and no data found.

3.2 Other Waste Sites

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

0

Database searched and no data found.

3.2.2 Records of Environment Agency/Natural Resources Wales licensed waste sites within 1500m of the study site:

5

The following waste treatment, transfer or disposal sites records are represented as points on the Landfill and Other Waste Sites map:

ID	Distance (m)	Direction	NGR	Details	
2A	148	E	419408 328740	Site Address: Fauld Industrial Estate, Fauld, Tutbury, Burton On Trent, Staffordshire, DE13 9HR Type: Material Recycling Treatment Facility Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: EUR001 EPR reference: - Operator: Europol Group Companies Ltd Waste Management licence No: 42454 Annual Tonnage: 18490.0	Issue Date: 29/09/1993 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued Site Name: Europol Group Companies Ltd Correspondence Address: Fauld Industrial Estate, Fauld, Tutbury, Burton On Trent, Staffordshire, DE13 9HR
3A	148	E	419408 328740	Site Address: Fauld Ind Est, Fauld, Tutbury, Burton On Trent, Staffordshire, DE13 9HR Type: Material Recycling Treatment Facility Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: EUR001 EPR reference: EA/EPR/ZP3991FV/A001 Operator: Europol Group Companies Ltd Waste Management licence No: 42454 Annual Tonnage: 18490.0	Issue Date: 29/09/1993 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Expired Site Name: Europol Group Companies Ltd Correspondence Address: -
4B	172	E	419430 328789	Site Address: 304 A Fauld Ind Est, Fauld Lane, Fauld, Tutbury, Staffordshire, DE13 9HS Type: Household, Commercial & Industrial Waste T Stn Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: UTT001 EPR reference: - Operator: Hibbs Anthony Waste Management licence No: 40201 Annual Tonnage: 3840.0	Issue Date: 09/01/2006 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued Site Name: Uttoxeter Skip Hire Correspondence Address: Unit 304 Fauld Ind Est, Fauld Lane, Fauld, Tutbury, Staffordshire, DE13 9HR
5B	172	E	419430 328789	Site Address: 304 A Fauld Ind Est, Fauld Lane, Fauld, Nr Tutbury, Staffs, DE13 9HS Type: Household, Commercial & Industrial Waste T Stn Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: UTT001	Issue Date: 09/01/2006 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued

ID	Distance (m)	Direction	NGR	Details	
				EPR reference: - Operator: Baines Alvin Waste Management licence No: 40201 Annual Tonnage: 3840.0	Site Name: Uttoxeter Skip Hire Correspondence Address: Unit 304 Fauld Ind Est, Fauld Lane, Fauld, Nr Tutbury, Staffs, DE13 9HR
6B	172	E	419430 328789	Site Address: 304a, Fauld Lane, Fauld, Tutbury, Staffordshire, DE13 9HS Type: Household, Commercial & Industrial Waste T Stn Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: MMW001 EPR reference: EA/EPR/EP3992FY/S003 Operator: Hibbs Antony Waste Management licence No: 40201 Annual Tonnage: 0.0	Issue Date: 09/01/2006 Effective Date: 13/02/2008 Modified: - Surrendered Date: 09/09/2015 Expiry Date: - Cancelled Date: - Status: Surrendered Site Name: Fauld Industrial Estate Correspondence Address: -

4. Current Land Use Map

Site Outline

Search Buffers (m)
250
500

Current Industrial Sites

Petrol & Fuel Sites

Electricity Transmission Cables

Gas Transmission Pipelines

4. Current Land Uses

4.1 Current Industrial Data

Records of potentially contaminative industrial sites within 250m of the study site: 24

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

ID	Distance (m)	Direction	Company	NGR	Address	Activity	Category
1	0	On Site	Works	419215 328653	Staffordshire, DE13	Unspecified Works Or Factories	Industrial Features
2	21	E	R U F UK Ltd	419272 328661	Unit 1 Alnwick Court Castle Point Business Park, Fauld, Burton-on-Trent, Staffordshire, DE13 9BA	Pumps and Compressors	Industrial Products
3	21	E	M H Vehicle Services Ltd	419273 328708	1 Castle View, Fauld, Tutbury, Burton-on-Trent, Staffordshire, DE13 9HW	Vehicle Repair, Testing and Servicing	Repair and Servicing
4	56	S	Tank	419194 328533	Staffordshire, DE13	Tanks (Generic)	Industrial Features
5	67	E	S C Fabrications Ltd	419317 328697	Unit 1 Bamburgh Court Castle Point Business Park, Fauld, Burton-on-Trent, Staffordshire, DE13 9BA	General Construction Supplies	Industrial Products
6	74	N	Specialised Orthotic Services	419187 328840	Unit 127-128 Fauld Industrial Estate, Tutbury, Burton-on-Trent, Staffordshire, DE13 9HS	Disability and Mobility Equipment	Consumer Products
7	81	E	B & B Tractors	419350 328604	Unit 1 Carisbrook Court Castle Point Business Park, Fauld, Burton-on-Trent, Staffordshire, DE13 9BA	Agricultural Machinery and Goods	Industrial Products
8	83	E	Ledwear Ltd	419336 328708	Unit F Rhino Business Park, Fauld, Tutbury, Burton-on-Trent, Staffordshire, DE13 9HR	Workwear	Industrial Products
9	83	N	Fauld Motor Repairs	419148 328854	Unit 125 Fauld Industrial Estate, Fauld, Tutbury, Burton-on-Trent, Staffordshire, DE13 9HS	Vehicle Repair, Testing and Servicing	Repair and Servicing
10	97	S	Electricity Sub Station	419217 328481	Staffordshire, DE13	Electrical Features	Infrastructure and Facilities
11	98	E	Electricity Sub Station	419369 328645	Staffordshire, DE13	Electrical Features	Infrastructure and Facilities
12	101	NE	Fauld Industrial Park	419343 328815	Staffordshire, DE13	Business Parks and Industrial Estates	Industrial Features
13	115	E	Deville Interiors	419371 328719	Unit J Fauld Industrial Estate, Fauld, Tutbury, Burton-on-Trent, Staffordshire, DE13 9HS	General Construction Supplies	Industrial Products
14	121	N	Electricity	419108	Staffordshire, DE13	Electrical Features	Infrastructure and

ID	Distance (m)	Direction	Company	NGR	Address	Activity	Category
			Sub Station	328891			Facilities
15	162	E	Europa Specialist Spares	419411 328816	Unit 307a Fauld Industrial Estate, Tutbury, Burton-on-Trent, Staffordshire, DE13 9HS	Vehicle Parts and Accessories	Motoring
16	167	E	Electricity Sub Station	419428 328757	Staffordshire, DE13	Electrical Features	Infrastructure and Facilities
17A	177	N	Rapid Tractors UK Ltd	419318 328924	Unit 115c Fauld Industrial Estate, Tutbury, Burton-on-Trent, Staffordshire, DE13 9HS	Agricultural Machinery and Goods	Industrial Products
18A	177	N	Sprinhall Plant & Machinery Repairs	419318 328924	Unit 115 Fauld Industrial Estate, Fauld, Tutbury, Burton-on-Trent, Staffordshire, DE13 9HS	Industrial Repairs and Servicing	Repair and Servicing
19	186	NE	Mole Country Stores	419412 328865	Fauld Lane, Tutbury, Burton-on-Trent, Staffordshire, DE13 9HR	Agricultural Machinery and Goods	Industrial Products
20	189	E	Electricity Sub Station	419443 328806	Staffordshire, DE13	Electrical Features	Infrastructure and Facilities
21	197	NE	Central Scaffolding Burton Ltd	419389 328906	Unit 153 Fauld Industrial Estate, Fauld, Tutbury, Burton-on-Trent, Staffordshire, DE13 9HS	Construction and Tool Hire	Hire Services
22	207	E	Bagnalls Engineering Ltd	419455 328829	Unit 306 Fauld Industrial Estate, Fauld, Tutbury, Burton-on-Trent, Staffordshire, DE13 9HS	Mechanical Engineers	Engineering Services
23B	211	NE	B K Y Chemical Solutions Ltd	419446 328857	Fauld Industrial Estate, Tutbury, Burton-on-Trent, Staffordshire, DE13 9HS	Colours, Chemicals and Water Softeners and Supplies	Industrial Products
24B	222	NE	Benwell Fireworks Ltd	419458 328858	Fauld Industrial Estate, Tutbury, Burton-on-Trent, Staffordshire, DE13 9HS	Firework Related Services	Sport and Entertainment Support Services

4.2 Petrol and Fuel Sites

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

Database searched and no data found.

4.3 National Grid High Voltage Underground Electricity Transmission Cables

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

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

Database searched and no data found.

4.4 National Grid High Pressure Gas Transmission Pipelines

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

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

Database searched and no data found.

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5. Geology

5.1 Artificial Ground and Made Ground

Database searched and no data found.

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

5.2 Superficial Ground and Drift Geology

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

Lex Code	Description	Rock Type
TILMP-DMTN	TILL, MID PLEISTOCENE	DIAMICTON

5.3 Bedrock and Solid Geology

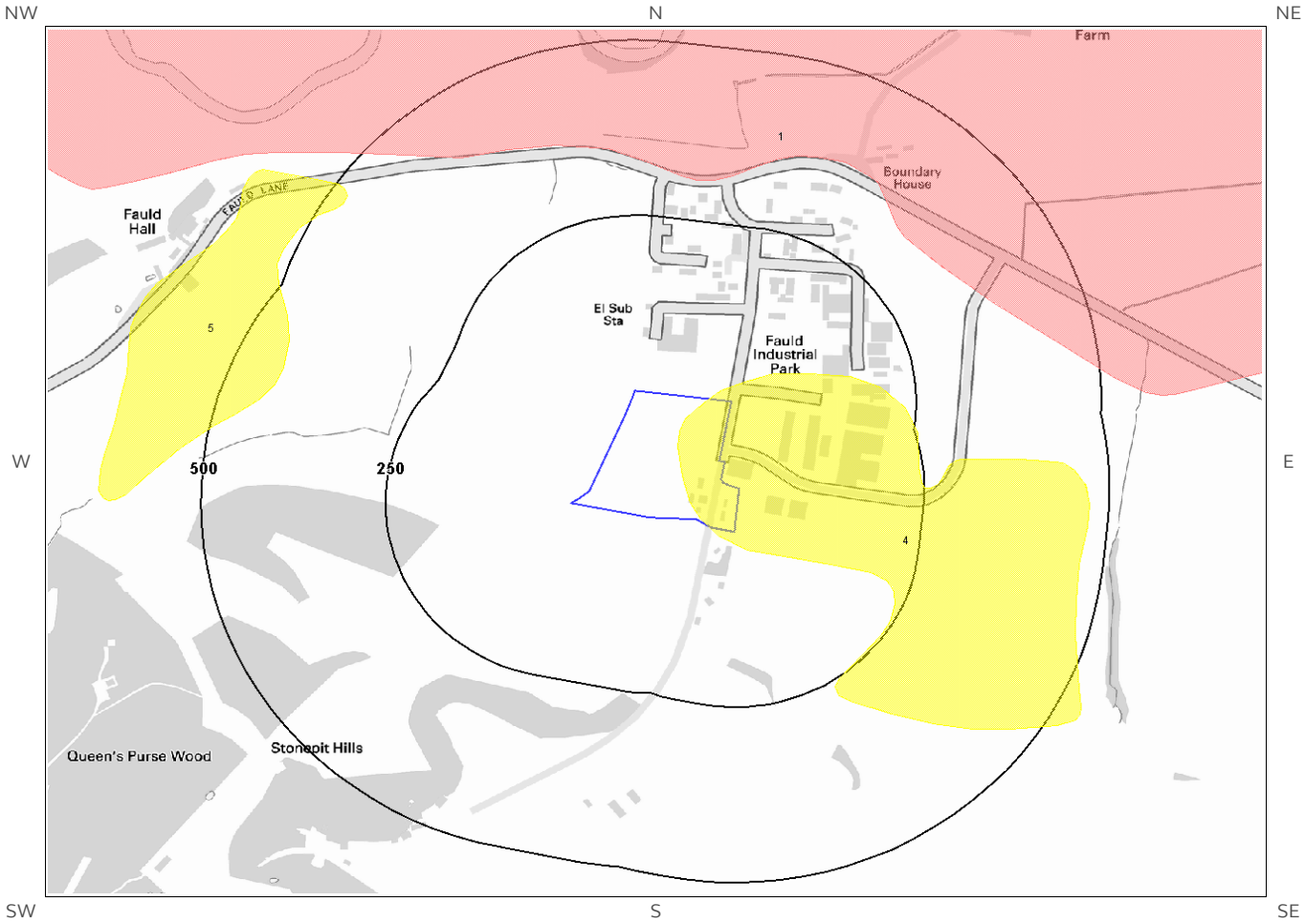
The database has been searched on site, including a 50m buffer.

Lex Code	Description	Rock Type
MMG-MDST	MERCIA MUDSTONE GROUP	MUDSTONE

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

6 Hydrogeology and Hydrology

6a. Aquifer Within Superficial Geology



Site Outline

250
500
Search Buffers (m)

Principal Aquifer

Secondary (A) Aquifer - Permeable Layers

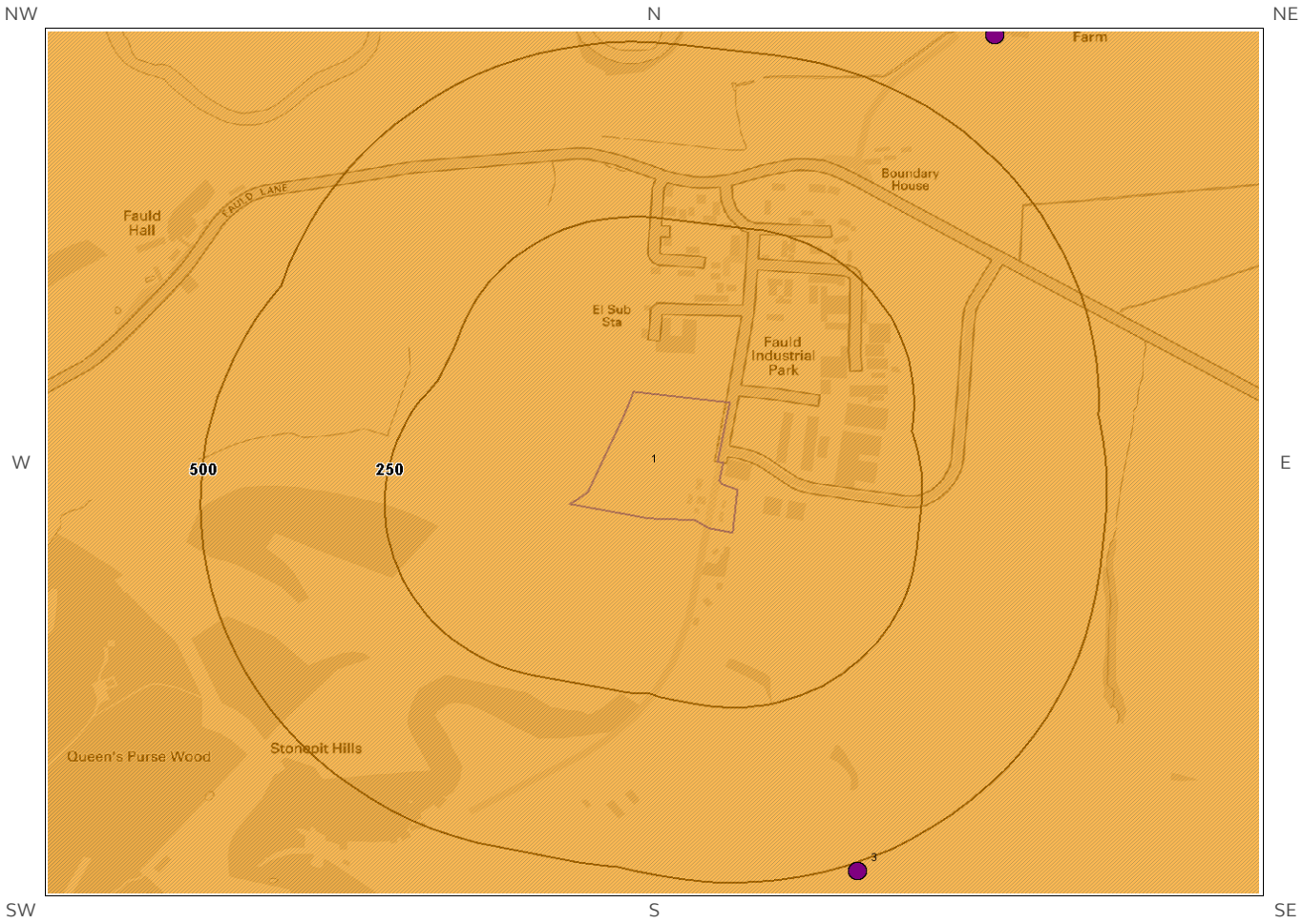
Secondary (B) Aquifer - Lower Permeability Layers

Secondary Aquifer - Undifferentiated Layers

Unproductive

Unknown (lakes and landslip)

6b. Aquifer Within Bedrock Geology and Abstraction Licences



Site Outline

250
500
Search Buffers (m)

Principal Aquifer

Secondary (A) Aquifer - Permeable Layers

Secondary (B) Aquifer - Lower Permeability Layers

Groundwater Abstraction Licence

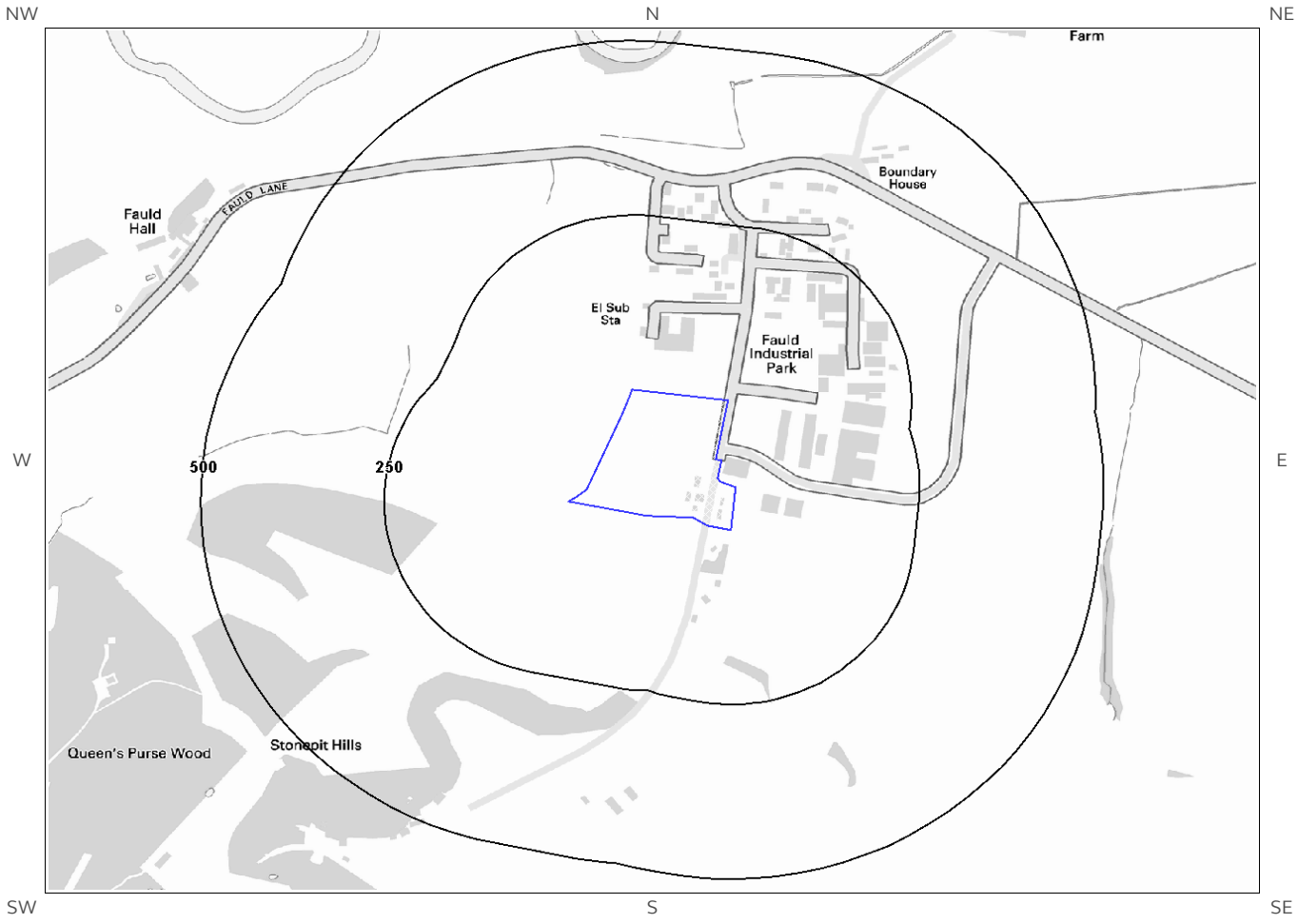
Secondary Aquifer - Undifferentiated Layers

Unproductive

Unknown (lakes and landslip)

Surface Water Abstraction Licence

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



Site Outline

250
500
Search Buffers (m)

Source Protection Zone 1 - Inner Catchment

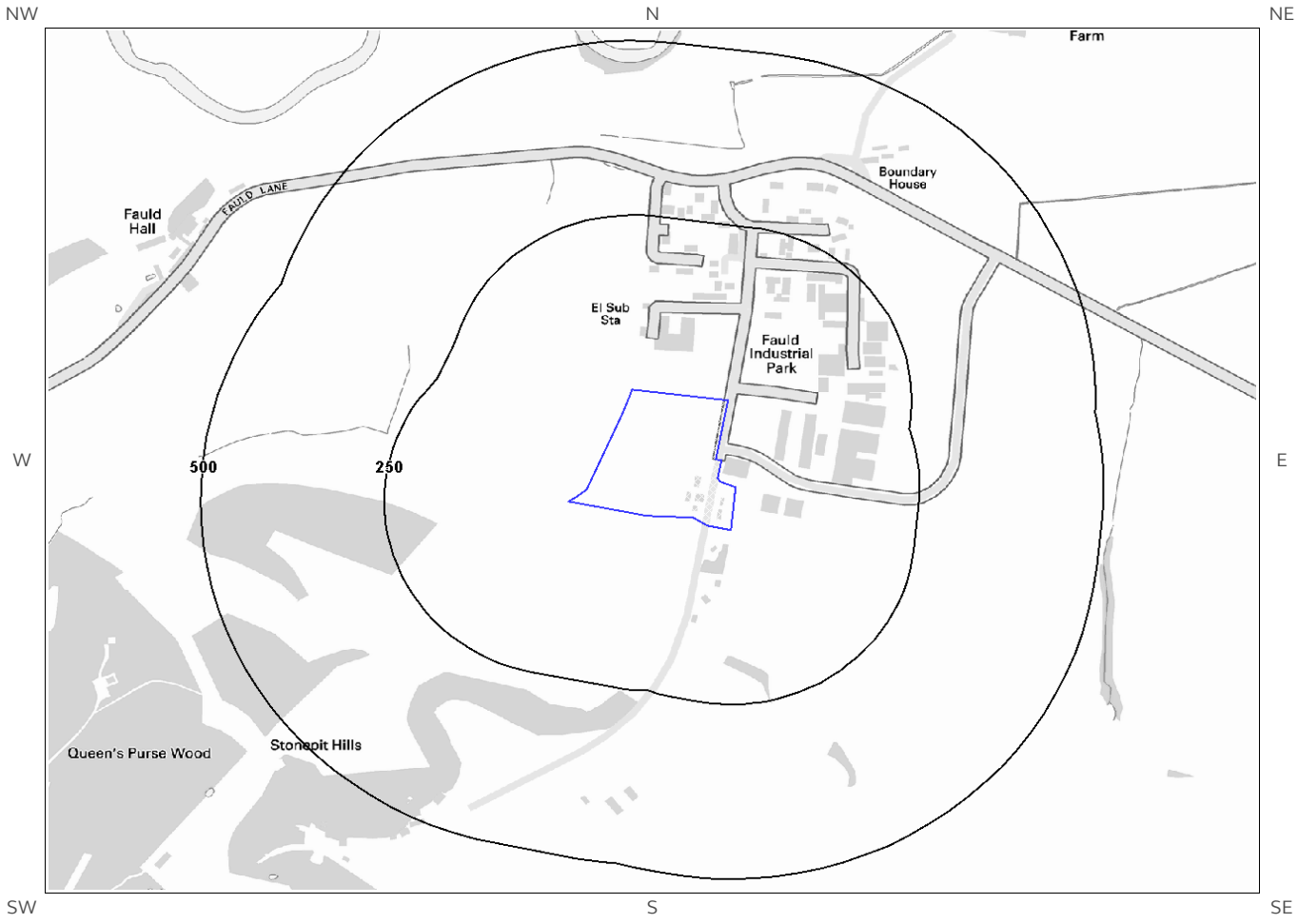
Source Protection Zone 2 - Outer Catchment

Source Protection Zone 3 - Total Catchment

Source Protection Zone 4 - Zone of Special Interest

Potable Water Abstraction Licence

6d. Hydrogeology – Source Protection Zones within confined aquifer



Site Outline

250
500
Search Buffers (m)

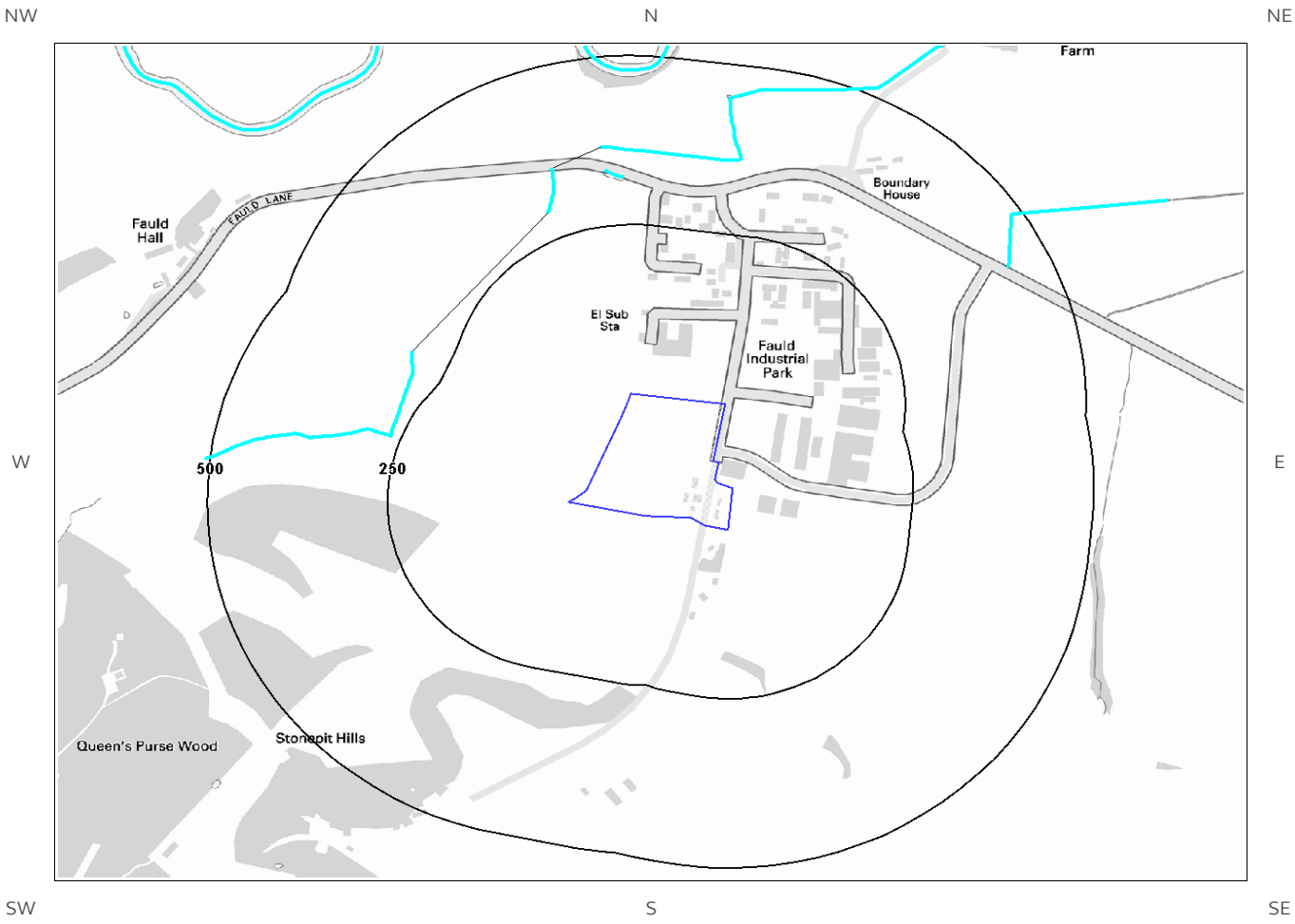
Source Protection Zone 1 - Inner Catchment

Source Protection Zone 2C - Outer Catchment within Confined Aquifer

Source Protection Zone 3C - Total Catchment within Confined Aquifer

Potable Water Abstraction Licence

6e. Hydrology – Watercourse Network and River Quality



Site Outline

250
500
Search Buffers (m)

Tidal River
Inland River
Underground or Elevated Tidal River
Underground or Elevated Inland River
Foreshore
General Quality Assessment: Chemistry

Canal
Underground or Elevated Canal
Lock or Flight of Locks
Lake, Reservoir, or Marsh
Drain or Transfer
General Quality Assessment: Biology

6.Hydrogeology and Hydrology

6.1 Aquifer within Superficial Deposits

Records of strata classification within the superficial geology at or in proximity to the property Yes

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

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

ID	Distance (m)	Direction	Designation	Description
4	0	On Site	Secondary (undifferentiated)	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
1	308	N	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers
5	434	NW	Secondary (undifferentiated)	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type

6.2 Aquifer within Bedrock Deposits

Records of strata classification within the bedrock geology at or in proximity to the property Yes

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

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

ID	Distance (m)	Direction	Designation	Description
1	0	On Site	Secondary B	Predominantly lower permeability layers which may store/yield limited amounts of groundwater due to localised features such as fissures, thin permeablehorizons and weathering. These are generally the water-bearing parts of the former non-aquifers

6.3 Groundwater Abstraction Licences

Groundwater Abstraction Licences within 2000m of the study site — Identified

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

ID	Distance (m)	Direction	NGR	Details	
3	513	S	419433 328086	Status: Active Licence No: 03/28/33/0094/1/R01 Details: General Use Relating To Secondary Category (Medium Loss) Direct Source: Groundwater Midlands Region Point: U/S (MERCIA MUDSTONE) AT CASTLE HAYES PARK, TUTBURY, BURTON Data Type: Point Name: MAJOR FARMING LIMITED	Annual Volume (m^3): 26280 Max Daily Volume (m^3): 72 Original Application No: - Original Start Date: 25/09/2017 Expiry Date: 31/03/2030 Issue No: 1 Version Start Date: 25/09/2017 Version End Date:
4	635	NE	419620 329280	Status: Historical Licence No: 03/28/33/0035 Details: General Farming & Domestic Direct Source: Groundwater Midlands Region Point: FAULD COTTAGE, TUTBURY - WELL Data Type: Point Name: W W TABERNER & SONS	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 12/10/1965 Expiry Date: - Issue No: 101 Version Start Date: 05/12/2000 Version End Date:
Not shown	965	S	419480 327630	Status: Historical Licence No: 03/28/33/0094/1 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Household Direct Source: Groundwater Midlands Region Point: U/S (MERCIA MUDSTONE) AT CASTLE HAYES PARK, TUTBURY, BURTON Data Type: Point Name: MAJOR	Annual Volume (m^3): 11993.9 Max Daily Volume (m^3): 32.86 Original Application No: - Original Start Date: 01/12/2003 Expiry Date: 31/03/2018 Issue No: 1 Version Start Date: 01/04/2008 Version End Date:
Not shown	965	S	419480 327630	Status: Historical Licence No: 03/28/33/0094/1 Details: General Use Relating To Secondary Category (Medium Loss) Direct Source: Groundwater Midlands Region Point: U/S (MERCIA MUDSTONE) AT CASTLE HAYES PARK, TUTBURY, BURTON Data Type: Point Name: MAJOR	Annual Volume (m^3): 11993.9 Max Daily Volume (m^3): 32.86 Original Application No: - Original Start Date: 01/12/2003 Expiry Date: 31/03/2018 Issue No: 1 Version Start Date: 01/04/2008 Version End Date:
Not shown	965	S	419480 327630	Status: Historical Licence No: 03/28/33/0094 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Household Direct Source: Groundwater Midlands Region Point: U/S (MERCIA MUDSTONE) AT CASTLE HAYES PARK, TUTBURY, BURTON Data Type: Point Name: MAJOR	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 14/08/2001 Expiry Date: 31/03/2008 Issue No: 1 Version Start Date: 14/08/2001 Version End Date:
Not shown	965	S	419480 327630	Status: Historical Licence No: 03/28/33/0094 Details: General use relating to Secondary Category (Medium Loss) Direct Source: Groundwater Midlands Region Point: U/S (MERCIA MUDSTONE) AT CASTLE HAYES PARK, TUTBURY, BURTON Data Type: Point Name: MAJOR	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 14/08/2001 Expiry Date: 31/03/2008 Issue No: 1 Version Start Date: 14/08/2001 Version End Date:

ID	Distance (m)	Direction	NGR	Details	
Not shown	1351	N	419400 330100	Status: Historical Licence No: 03/28/33/0024 Details: General Farming & Domestic Direct Source: Groundwater Midlands Region Point: MILLBROOK FARM - WELL Data Type: Point Name: SPELLINGS	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 08/10/1965 Expiry Date: - Issue No: 100 Version Start Date: 27/08/1993 Version End Date:
Not shown	1495	NE	419850 330130	Status: Historical Licence No: 03/28/33/0091 Details: General Farming & Domestic Direct Source: Groundwater Midlands Region Point: HOLLY BANK FARM, SCROPTON - BOREHOLE Data Type: Point Name: BRANDONS POULTRY LTD	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 04/12/1996 Expiry Date: - Issue No: 100 Version Start Date: 04/12/1996 Version End Date:
Not shown	1495	NE	419850 330130	Status: Historical Licence No: 03/28/33/0097 Details: General Farming & Domestic Direct Source: Groundwater Midlands Region Point: HOLLY BANK FARM, SCROPTON - BOREHOLE Data Type: Point Name: Faccenda Foods Limited	Annual Volume (m^3): 150000 Max Daily Volume (m^3): 800 Original Application No: - Original Start Date: 19/09/2003 Expiry Date: 31/03/2018 Issue No: 4 Version Start Date: 28/07/2017 Version End Date:
Not shown	1495	NE	419850 330130	Status: Active Licence No: 03/28/33/0097/R01 Details: General Farming & Domestic Direct Source: Groundwater Midlands Region Point: HOLLY BANK FARM, SCROPTON - BOREHOLE Data Type: Point Name: Faccenda Foods Limited	Annual Volume (m^3): 150000 Max Daily Volume (m^3): 800 Original Application No: - Original Start Date: 01/04/2018 Expiry Date: 31/03/2030 Issue No: 1 Version Start Date: 01/04/2018 Version End Date:

6.4 Surface Water Abstraction Licences

Surface Water Abstraction Licences within 2000m of the study site — None identified

Database searched and no data found.

6.5 Potable Water Abstraction Licences

Potable Water Abstraction Licences within 2000m of the study site — Identified

The following Potable Water Abstraction Licences records are represented as points, lines and regions on the SPZ and Potable Water Abstraction Licences Map (6c):

ID	Distance (m)	Direction	NGR	Details	
Not shown	965	S	419480 327630	Status: Historical Licence No: 03/28/33/0094 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Household Direct Source: Groundwater Midlands Region Point: U/S (MERCIA MUDSTONE) AT CASTLE HAYES PARK, TUTBURY, BURTON Data Type: Point	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 14/08/2001 Expiry Date: 31/03/2008 Issue No: 1 Version Start Date: Version End Date:

ID	Distance (m)	Direction	NGR	Details	
				Name: MAJOR	
Not shown	965	S	419480 327630	Status: Historical Licence No: 03/28/33/0094/1 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Household Direct Source: Groundwater Midlands Region Point: U/S (MERCIA MUDSTONE) AT CASTLE HAYES PARK, TUTBURY, BURTON Data Type: Point Name: MAJOR	Annual Volume (m^3): 11993.9 Max Daily Volume (m^3): 32.86 Original Application No: - Original Start Date: 01/12/2003 Expiry Date: 31/03/2018 Issue No: 1 Version Start Date: Version End Date:

6.6 Source Protection Zones

Source Protection Zones within 500m of the study site — None identified

Database searched and no data found.

6.7 Source Protection Zones within Confined Aquifer

Source Protection Zones within the Confined Aquifer within 500m of the study site — None identified

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

Database searched and no data found.

6.8 Groundwater Vulnerability and Soil Leaching Potential

Environment Agency/Natural Resources Wales information on groundwater vulnerability and soil leaching potential within 500m of the study site — Identified

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

6.9 River Quality

Environment Agency/Natural Resources Wales information on river quality within 1500m of the study site Identified

6.9.1 Biological Quality:

Biological Quality data describes water quality in terms of 83 groups of macroinvertebrates, some of which are pollution sensitive. The results are graded from A ('Very Good') to F ('Bad').

The following Biological Quality records are shown on the Hydrology Map (6e):

ID	Distance (m)	Direction	NGR	River Quality Grade	Biological Quality Grade				
					2005	2006	2007	2008	2009
Not shown	1135	N	419480 329870	River Name: Dove Reach: R. Tean To Foston Bk End/Start of Stretch: End of Stretch NGR	A	A	A	A	A
Not shown	1135	N	419480 329870	River Name: Dove Reach: Foston Bk To R. Trent End/Start of Stretch: Start of Stretch NGR	B	B	A	A	A

6.9.2 Chemical Quality:

Chemical quality data is based on the General Quality Assessment Headline Indicators scheme (GQAHI). In England, each chemical sample is measured for ammonia and dissolved oxygen. In Wales, the samples are measured for biological oxygen demand (BOD), ammonia and dissolved oxygen. The results are graded from A ('Very Good') to F ('Bad').

The following Chemical Quality records are shown on the Hydrology Map (6e):

ID	Distance (m)	Direction	NGR	River Quality Grade	Chemical Quality Grade				
					2005	2006	2007	2008	2009
Not shown	1135	N	419480 329870	River Name: Dove R Reach: R Tean To Foston Bk End/Start of Stretch: End of Stretch NGR	A	A	A	A	A
Not shown	1135	N	419480 329870	River Name: Dove R Reach: Foston Bk To R Trent End/Start of Stretch: Start of Stretch NGR	A	A	A	A	A

6.10 Ordnance Survey MasterMap Water Network

Ordnance Survey MasterMap Water Network entries within 500m of the study site

This watercourse information is provided by Ordnance Survey MasterMap Water Network. The data provides a detailed centre line following the curve of the waterway precisely, so all distances provided in the report should be understood as measurements to the centreline rather than a measurement to the nearest point of the watercourse. Underground watercourses are inferred from entry and exit points so caution is advised in using these to indicate precise locations of underground watercourses when planning site investigation and development.

The following Ordnance Survey MasterMap Water Network records are represented on the Hydrology Map (6e):

ID	Distance/ Direction	Name	Type of Watercourse	Additional Details
1	264 W	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Trent Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
13	264 W	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Trent Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
2	266 NW	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Trent Relationship to Ground Level: Not provided Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
14	266 NW	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Trent Relationship to Ground Level: Not provided Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
3	290 W	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Trent Relationship to Ground Level: Underground Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
15	290 W	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Trent Relationship to Ground Level: Underground Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
4	291 NW	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Trent Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
Not shown	291 NW	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Trent Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
5	296 W	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Trent Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided

ID	Distance/ Direction	Name	Type of Watercourse	Additional Details
17	296 W	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Trent Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
6	321 N	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Trent Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
Not shown	321 N	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Trent Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
7	326 N	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Trent Relationship to Ground Level: Underground Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
Not shown	326 N	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Trent Relationship to Ground Level: Underground Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
8	327 N	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Trent Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
Not shown	327 N	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Trent Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
9	351 N	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Trent Relationship to Ground Level: Not provided Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
Not shown	351 N	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Trent Relationship to Ground Level: Not provided Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
10	358 N	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Trent Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
Not shown	358 N	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Trent Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
11	441 NE	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Trent Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.6
Not shown	441	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Trent Relationship to Ground Level: On ground surface

ID	Distance/ Direction	Name	Type of Watercourse	Additional Details
	NE			Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.6
12	444 N	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Trent Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 2.2
Not shown	444 N	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Trent Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 2.2
13	478 N	River Dove	Inland river not influenced by normal tidal action.	Catchment Area: Trent Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 21.7
Not shown	478 N	River Dove	Inland river not influenced by normal tidal action.	Catchment Area: Trent Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 21.7

6.11 Surface Water Features

Surface water features within 250m of the study site — None identified

Database searched and no data found.

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

Site Outline

100
250
Search Buffers (m)

Zone 2 Floodplain

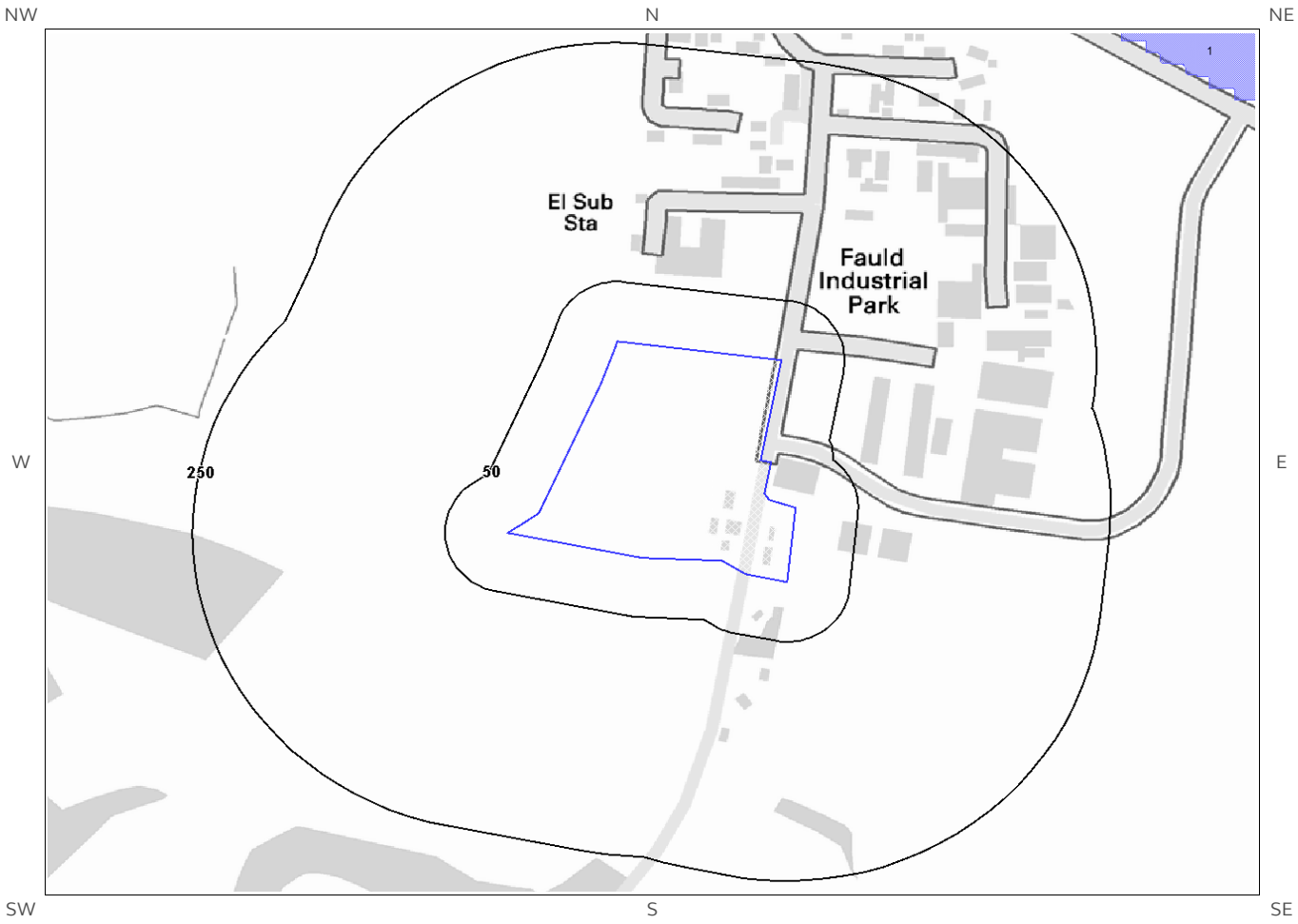
Zone 3 Floodplain

Flood Defences

Area used for Flood Storage

Area Benefiting from Flood Defences

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



Site Outline

100
250
Search Buffers (m)

RoFRaS Rating

Very Low

Low

Medium

High

7 Flooding

7.1 River and Coastal Zone 2 Flooding

Environment Agency/Natural Resources Wales Zone 2 floodplain within 250m — None identified

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

Database searched and no data found.

7.2 River and Coastal Zone 3 Flooding

Environment Agency/Natural Resources Wales Zone 3 floodplain within 250m — None identified

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

Database searched and no data found.

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

Highest risk of flooding onsite — Very Low

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

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

7.4 Flood Defences

Flood Defences within 250m of the study site — None identified

Database searched and no data found.

7.5 Areas benefiting from Flood Defences

Areas benefiting from Flood Defences within 250m of the study site — None identified

7.6 Areas benefiting from Flood Storage

Areas used for Flood Storage within 250m of the study site	None identified

7.7 Groundwater Flooding Susceptibility Areas

7.7.1 British Geological Survey groundwater flooding susceptibility areas within 50m of the boundary of the study site	Identified
Clearwater Flooding or Superficial Deposits Flooding	Superficial Deposits Flooding

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

7.7.2 Highest susceptibility to groundwater flooding in the search area based on the underlying geological conditions

Potential at Surface

Where potential for groundwater flooding to occur at surface is indicated, this means that given the geological conditions in the area groundwater flooding hazard should be considered in all land-use planning decisions. It is recommended that other relevant information e.g. records of previous incidence of groundwater flooding, rainfall, property type, and land drainage information be investigated in order to establish relative, but not absolute, risk of groundwater flooding.

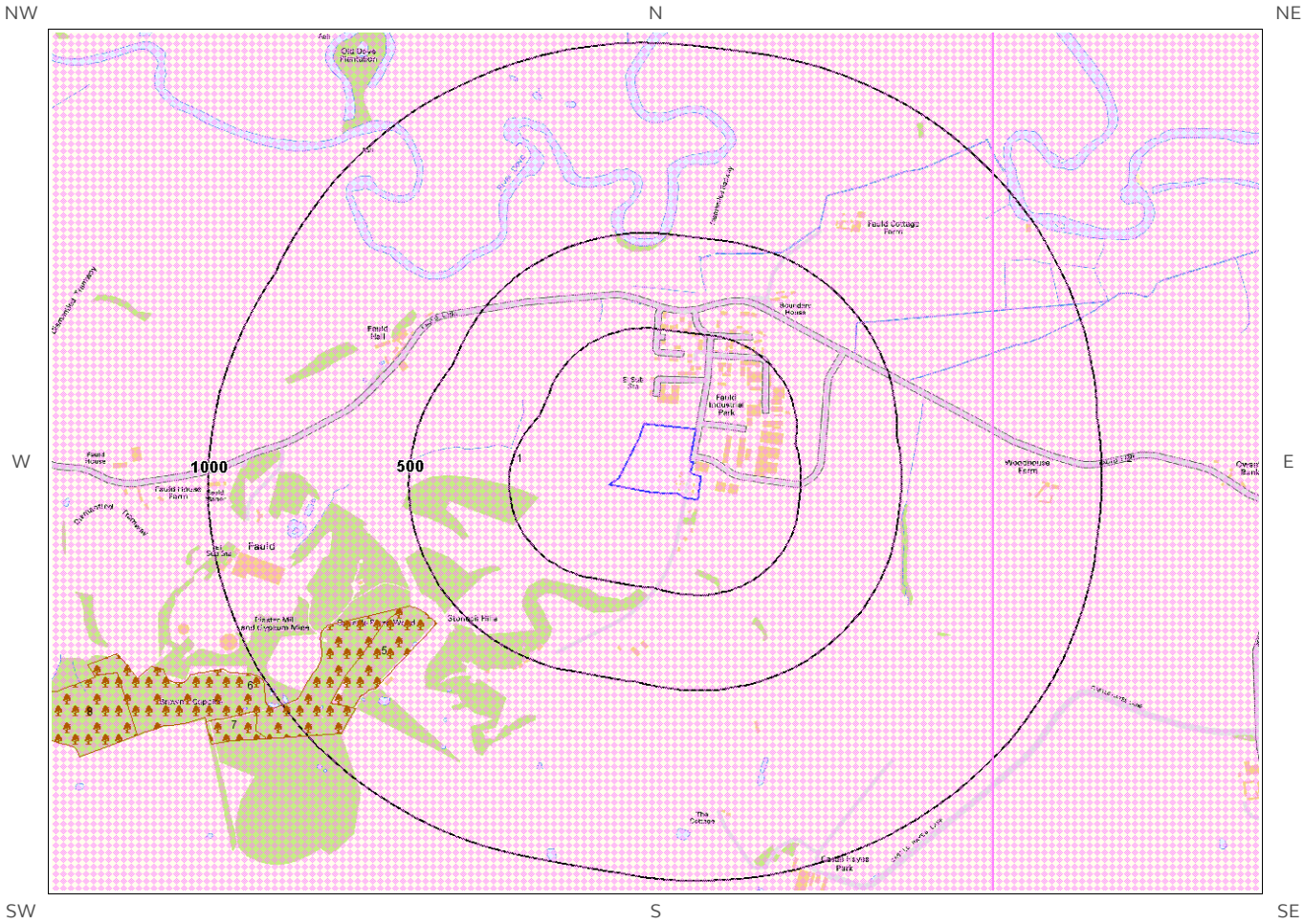
7.8 Groundwater Flooding Confidence Areas

British Geological Survey confidence rating in this result	Moderate

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

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

8. Designated Environmentally Sensitive Sites Map



Site Outline

100 — 250 — Search Buffers (m)

- AONB
- National Park
- SSSI
- Special Protection Areas
- Nitrate Vulnerable Zones
- Green Belt
- Environmentally Sensitive Areas
- Special Areas of Conservation
- World Heritage Sites
- Nitrate Sensitive Areas
- Ancient Woodland
- National Nature Reserve
- Local Nature Reserves
- Ramsar Sites

8. Designated Environmentally Sensitive Sites

Designated Environmentally Sensitive Sites within 2000m of the study site	Identified

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

0

Database searched and no data found.

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

0

Database searched and no data found.

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

0

Database searched and no data found.

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

0

Database searched and no data found.

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

0

Database searched and no data found.

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

4

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

ID	Distance (m)	Direction	Ancient Woodland Name	Data Source
5	564	SW	UNKNOWN	Ancient Replanted Woodland
6	613	SW	UNKNOWN	Ancient Replanted Woodland
7	1066	SW	UNKNOWN	Ancient Replanted Woodland
8	1323	W	UNKNOWN	Ancient Replanted Woodland

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

0

Database searched and no data found.

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

0

Database searched and no data found.

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

0

Database searched and no data found.

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

0

Database searched and no data found.

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

0

Database searched and no data found.

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

0

Database searched and no data found.

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

4

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

ID	Distance (m)	Direction	NVZ Name	Data Source
1	0	On Site	Modified	DEFRA
2	728	E	Modified	DEFRA
Not shown	1228	N	Modified	DEFRA
Not shown	1447	NE	Modified	DEFRA

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

0

Database searched and no data found.

9. Natural Hazards Findings

9.1 Detailed BGS GeoSure Data

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

9.1.1 Shrink Swell

Maximum Shrink-Swell* hazard rating identified on the study site — Very Low

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

Hazard
Ground conditions predominantly low plasticity. No special actions required to avoid problems due to shrink-swell clays. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with shrink-swell clays.

9.1.2 Landslides

Maximum Landslide* hazard rating identified on the study site — Very Low

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

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

9.1.3 Soluble Rocks

Maximum Soluble Rocks* hazard rating identified on the study site — Negligible

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

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

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

9.1.4 Compressible Ground

Maximum Compressible Ground* hazard rating identified on the study site — Negligible

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

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

9.1.5 Collapsible Rocks

Maximum Collapsible Rocks* hazard rating identified on the study site — Very Low

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

Hazard
Deposits with potential to collapse when loaded and saturated are unlikely to be present. No special ground investigation required or increased construction costs or increased financial risk due to potential problems with collapsible deposits.

9.1.6 Running Sand

Maximum Running Sand*[*] hazard rating identified on the study site — Very Low

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

Hazard
Very low potential for running sand problems if water table rises or if sandy strata are exposed to water. No special actions required, to avoid problems due to running sand. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with running sand.

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

9.2 Radon

9.2.1 Radon Affected Areas

Is the property in a Radon Affected Area as defined by the Health Protection Agency (HPA) and if so what percentage of homes are above the Action Level? The site is not in a Radon Affected Area, as less than 1% of properties are above the Action Level.

The radon data in this report is supplied by the BGS/Public Health England and is the definitive map of Radon Affected Areas in Great Britain and Northern Ireland. The dataset was created using long-term radon measurements in over 479,000 homes across Great Britain and 23,000 homes across Northern Ireland, combined with geological data. The dataset is considered accurate to 50m to allow for the margin of error in geological lines, and the findings of this report supercede any answer given in the less accurate Indicative Atlas of Radon in Great Britain, which simplifies the data to give the highest risk within any given 1km grid square. As such, the radon atlas is considered indicative, whereas the data given in this report is considered definitive.

9.2.2 Radon Protection

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

10. Mining

10.1 Coal Mining

Coal mining areas within 75m of the study site — None identified

Database searched and no data found.

10.2 Non-Coal Mining

Non-Coal Mining areas within 50m of the study site boundary — Identified

The following non-coal mining information is provided by the BGS:

Distance (m)	Direction	Name	Commodity	Assessment of likelihood
0.0	On Site	Not available	Vein Mineral	Underground mining is known or considered likely to have occurred within or close to the area. Potential for difficult ground conditions are at a level where they should be considered

Past underground mine workings are probable. These are areas known or suspected to contain underground mining for minerals and/or other materials. In the case of mineral veins these are areas within 500m of mapped mineral veins within which it is likely that mining activities may have occurred and subsidiary veins explored and exploited. It should be noted, however, that there is always the possibility of the existence of other sub-surface excavations, such as wells, cess pits, follies, air raid shelters/bunkers and other military structures etc. that could affect surface ground stability but which are outside the scope of this dataset. However, if in a coalfield area you should still consider a Coal Authority mining search for the area of interest.

10.3 Brine Affected Areas

Brine affected areas within 75m of the study site — None identified
Guidance: No Guidance Required.

Contact Details

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www.coal.gov.uk

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Local Authority
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Phone: 01283 508 000
Web: http://www.eaststaffsbc.gov.uk/
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Standard Terms and Conditions

Groundsure's Terms and Conditions can be viewed online at this link:

https://www.groundsure.com/terms-and-conditions-feb11-2019