Scottish and Southern Electricity Networks (SSEN)

KINTORE TO TEALING 400KV OHL – SECTION C

Geo-environmental Preliminary Risk Assessment

UK0040111.5101 / 004
AUGUST 2025

Scottish and Southern Electricity Networks (SSEN)

KINTORE TO TEALING 400KV OHL – SECTION C

Geo-environmental Preliminary Risk Assessment

PRELIMINARY RISK ASSESSMENT

UK0040111.5101

PROJECT NO. UK0040111.5101

OUR REF. NO. UK0040111.5101 / 004

DATE: AUGUST 2025

WSP

110 Queen Street
Glasgow
G1 3BX

Phone: +44 141 429 3555

WSP.com

QUALITY CONTROL

Issue/revision	First issue	Revision 1
Remarks	Draft for client comment	Final
Date	March 2025	August 2025
Prepared by	Pooja Jangli	Pooja Jangli
Signature		
Checked by	Nick Gilmour	Nick Gilmour
Signature		
Authorised by	Dave Watts	Dave Watts
Signature		
Project number	UK0040111.5101	UK0040111.5101
Report number	UK0040111.5101/004	UK0040111.5101/004

CONTENTS

APPENDICES

APPENDIX A

FIGURES

APPENDIX B

ADDITIONAL INFORMATION

APPENDIX B.1

GROUNDSURE REPORT

APPENDIX B.2

ZETICA UXO MAPS

APPENDIX C

LEGISLATIVE BACKGROUND

APPENDIX D

CIRIA RISK DEFINITIONS

APPENDIX E

GENERAL LIMITATIONS

EXECUTIVE SUMMARY

WSP UK Ltd (WSP) was commissioned by SSE (the 'Client') to undertake a Phase 1 Geo-environmental Preliminary Risk Assessment (PRA) for Section C of the proposed Kintore to Tealing 400 kV Overhead Line (OHL) located between Balrownie and Haughhead (the 'Study Area').

The principal aim of this assessment has been to identify potential risks from soil and groundwater contamination that may affect the proposed development.

The report highlights environmental considerations, predominantly with respect to ground conditions, and was requested to support construction of Over Head Lines (OHL) at Study Area.

Study Findings

The majority of the Study Area currently comprises agricultural land, woodlands, plantations, and vacant land. Additionally, several major roads (B9120, B974 and B966) as well as minor roads intersect the Study Area at various locations.

Historical maps indicate that the Study Area has been predominantly undeveloped since the first available map edition (1862-1863), with some localised historical industrial land uses on and near the Study Area.

The Study Area is underlain by Glaciofluvial superficial deposit overlying bedrock composed of Mudstone and Sandstone. Made Ground is considered to be present underneath major and minor roads which transect the Study Area. The bedrock aquifer is classified as a moderately productive aquifer.

Onsite surface water features include the Cruick Burn (near Little Brechin Wood), the West Water (near the B966 road), the Black Burn (near Landends road) , the River North Esk (near Inveriscandye) and the Dowrie Burn (near the Burnside of Eslie Plantation). All surface water features are classified to have a moderate to high overall water quality by SEPA in 2023.

The preliminary risk assessment identifies a Low risk to human health, with the risk to the water environment considered Low. The risk to buildings and services is also considered to be Low.

Conclusions

The proposed presence of hardstanding reduces the probability of contemporary user exposures at a material frequency should contamination (e.g. heavy metals, TPH, PAH and asbestos) exist in these areas.

Based on the information contained within this report, it is the opinion of WSP that the Study Area represents a **Low risk** with respect to contaminated land.

The risk to receptors from radioactive substances (radium-226) is **Low** however there is significant uncertainty as to the actual presence of radioactive substances on the site. SEPA consider works involving radium-226 contamination at greater than 1.0 Bq/g as a "radioactive substances activity" for which a permit under the Environmental Authorisation (Scotland) Regulations (EASR) may be required. Obtaining an EASR permit from SEPA can take up to four months to be granted and has the potential to lead to significant programme delays if the presence of radioactive contamination is not well understood prior to breaking ground

1 INTRODUCTION

1.1 AUTHORISATION

WSP UK Ltd (WSP) was commissioned by SSE (the 'Client') to undertake a Phase 1 Geo-environmental Preliminary Risk Assessment (PRA) for Section C of the proposed Kintore to Tealing 400 kV Overhead Line (OHL) located between Balrownie and Haughhead (the 'Study Area').

The Study Area boundary follows a linear corridor, extending from the C11K Road in the north to Cruick Water in the south. This corridor traverses a range of geographical features, including woodlands, hills and burns (streams).

1.2 PROJECT BACKGROUND & CONTEXT

WSP understands that the Study Area is a portion of the new Kintore-Tealing 400kV Over Head Line (OHL) connection (the 'proposed development'). The principal aim of this assessment is to assess potential geo-environmental risks associated with the proposed development and provide preliminary commentary on the ground related development constraints for the Study Area in the context of the proposed development.

The Study Area location and proposed development plans are presented in Figure 1 and 2 within **Appendix A**.

1.3 SOURCES OF INFORMATION

This report has been prepared using the information sources as listed below:

- BGS geology viewer accessed on 26 February 2025, available online http://mapapps2.bgs.ac.uk/geoindex/home.html;
- Groundsure report reference GS-9WG-7ZB-ZT6-IOW and GS-ZYW-SD5-GII-U8P (historical maps) dated 17 February 2025 (presented as **Appendix B.1**);
- Mining Remediation Authority Map viewer accessed on 26 February 2025 through https://datamine-cauk.hub.arcgis.com/
- UK Radon interactive map viewer accessed on 26 February 2025 http://www.ukradon.org/information/ukmaps;
- Online environmental data available on the Scotland Environment website accessed 26 February 2025 Map | Scotland's environment web ;
- Scottish Environment Protection Agency (SEPA) Water Environment Hub accessed on 26 February 2025 through Water Classification Hub (sepa.org.uk);
- Zetica UXO Assessment Risk Maps accessed on 26 February 2025 https://zeticauxo.com/downloads-and-resources/risk-maps/ (**Appendix B.2**);
- Legislative Background (**Appendix C**); and
- Contaminated Land Risk Assessment CIRIA 552 (Tables included in **Appendix D**).

1.4 LEGISLATIVE CONTEXT AND GUIDANCE

The assessment was undertaken in the legislative context of:

- Part 2A of The Environmental Protection Act (1990).
- National Planning Policy Framework (NPPF) (Chapter 9C).

The following good practice and statutory guidance was considered, and the assessment was undertaken in general accordance with:

- Environment Agency 'Land Contamination Risk Management (LCRM)', 2023.
- CIRIA 'Assessing Risks Posed by Hazardous Ground Gases to Buildings', C665 (2007).
- British Standard 'Investigation of Potentially Contaminated Sites – Code of Practice', BS EN 10175:2011 + A2: 2017.
- Defra 'Environmental Protection Act 1990: Part 2A Contaminated Land Statutory Guidance', PB13735 (2012).
- Scottish Government Planning Advice Note 33 (PAN 33).

1.5 LIMITATIONS

The report is addressed to and may be relied upon by SSEN, as "the Client" within the meaning given to that phrase within the agreement and subject to the terms and conditions contained therein.

This report has been completed with regard to generally accepted consulting practices and may not be relied upon by any other party without the explicit written agreement of WSP. No other third-party warranty, expressed or implied, is made as to the professional advice included in this report. This report must be used in its entirety.

Unless WSP has actual knowledge to the contrary, WSP has assumed the correctness and completeness of third-party information supplied and shall have no liability in respect of any inaccuracy, defect or omission in any information or materials provided, anecdotally or otherwise, by the Client or any other third party to WSP. WSP does not assume any liability for misrepresentation of information or for items not visible, accessible, present or supplied at the time of the study.

The general limitations to the nature of the assessment are outlined in **Appendix E**.

2 ENVIRONMENTAL SETTING

2.1 STUDY AREA DETAILS

Pertinent Study Area details are summarised in Table 2-1. Study Area location and proposed development plans are presented in Figures 1 and 2, included in **Appendix A**.

Table 2-1 – Study Area Details

Aspect	Details
Study Area address	Study Area centred at Newesk, Aberdeenshire, Scotland, DD9 7XB
National Grid Reference	Easting: 362832, Northing: 767927 (approximate Study Area centre)
Study Area Setting and Surrounding Area	The Study Area is set within a predominantly rural / agricultural setting.
Study Area Size (approximate)	472 Hectares

2.2 STUDY AREA DESCRIPTION

The Study Area boundary follows a linear corridor, extending from the C11K Road in the north to Cruick Water in the south.

Key water bodies across the route include the Black Burn (northern part of Study Area near Landends road), Dowrie Burn (northern part of Study Area near Burnside of Eslie Plantation), Black Burn (central part of the Study Area near Gawloch), River North Esk (central part of the Study Area near Inveriscandye, West Water (south central portion of the Study Area near B966 road) and Cruick water (southern portion of the Study Area neat Little Brechin Wood).

A number of wooded areas are within the Study Area boundary, including the Burnside of Eslie Plantation, Lady Jane's Plantation, Drumhendry Plantation, Inverury Wood, Capo Plantation, Bankhead Wood, Little Brechin Wood and Belliehill Wood. The boundary intersects several major roads (B9120, B974 and B966) as well as minor roads across the Study Area at various locations.

2.2.1 OFFSITE

The Study Area is bound by agricultural fields to the north, south, east and west.

2.3 PUBLISHED GEOLOGY

The following geological sequence is anticipated on and in the vicinity of the Study Area based on British Geological Survey (BGS) 1:10,000 scale (Sheet NO67SE Solid and Drift edition) geological maps, 1:50,000 scale (Sheet 57E - Montrose, Solid and Drift Edition, 1:50:000, Sheet 66E - Banchory, Solid and Drift Edition, 1:50:000 and Sheet 57W – Forfar, Solid and Drift Edition, 1:50:000) geological maps and the Groundsure report:

Table 2-2 – Summary of Published Geology

Geological Unit	Estimated Thickness (based on historical boreholes)	Location along the route	Description
Made Ground			
Worked Ground (Undivided)	Unknown	The Study Area is likely underlain by Made Ground where several roads cross the Study Area at various locations.	
Superficials			
Alluvium	Unknown	Mapping indicates the presence of this superficial deposit where the Study Area boundary intersects with Landends road, the Dowrie Burn, River North Esk, the West Water and the Cruick Water.	Soft to firm consolidated, compressible silty clay.
Mill of Forest Till Formation	Unknown	Mapping indicates this superficial deposit is present at the northern most part of the Study Area (near B9120 road) and extended till Drumhendry plantation. In the southernmost part of the Study Area, it extends from Aucheanreoch till the Cruick water.	Sandy diamicton, red-brown with clasts predominantly of Devonian rocks.
Ury Silts Formation	Unknown	Mapping indicates the presence of this superficial deposit where the Study Area boundary intersects with B9120 road.	Laminated silt and clay, generally red-brown.
Glaciofluvial sheet deposits	Unknown	Mapping indicates this superficial deposit is present in the central portion of the Study Area (near Drumhendry Plantation extending till Capo Plantation), the southern portion of the Study Area (near West Water till Auchenreoch).	Sand and gravel, locally with lenses of silt, clay or organic material.
Bedrock			
Cromlix Mudstone Formation	Unknown	Mapping indicates this bedrock is present beneath the majority of the Study Area and starts from the C11K road till the Cruick Water.	Characteristically soft, bright red to dull brownish-red, maroon or purplish-brown, fine-grained silty sandstones, sandy siltstones, siltstones and mudstones

Geological Unit	Estimated Thickness (based on historical boreholes)	Location along the route	Description
Teith Sandstone Formation	Unknown	Mapping indicates this bedrock is present to the east of the northern most part of the Study Area (near Burn of Eslie Plantation) and extends till Causewayend.	A reddish-brown, grey, purple and brown, cross-bedded sandstone.
Central Scotland Late Carboniferous Tholeiitic Dyke Swarm	Unknown	Mapping indicates this bedrock is present near the River North Esk.	N/A

BGS Borehole Logs

Two BGS borehole logs (BGS website: www.bgs.ac.uk/data/boreholescans) are recorded for the Study Area. (BGS website: NO67SE1 and NO67SE3).

The geology recorded from the borehole is summarised as below:

Table 2-3 – Summary of Borehole Geology

Borehole ID	Geological Unit	Thickness in m (based on historical boreholes)	Description
NO67SE1 (located onsite at the western boundary of the site near Newhouse close to Burnside of Eslie Plantation)	Topsoil	0.1	Topsoil
	Mill of Forest Till Formation	40.2	Red Sandy Clay and Stones; Red Clayey Sand and Stones; Red Clayey Sand; Red Sandy Clay; Red Sandy Clay with Sandstone ribs; Red Sandstone; Red Sandstone (Clayey); Red Marly Sandstone
NO67SE3 (located onsite at the eastern boundary of the site near Newhouse close to Little Thomton Wood)	Topsoil	0.3	Topsoil
	Mill of Forest Till Formation	37.7	Reddish Sandy Clay and Stones; Reddish Clayey Sand; Reddish Sandy Clay and Stones; Red Marl (Soft); Red Marl (Firmer); Red Marl and Sandstone Ribs; Red Marl (Broken); Red Marl; Red Flakes; Red Marly Flakes; Red Flakes (Broken); Red Marl.

2.4 MINING

Reference to the Mining Remediation Authority (MRA) Interactive Map Viewer online indicated that the site does not lie within a Coal Mining Reporting Area.

2.5 GROUNDWATER QUALITY

In accordance with the Water Framework Directive, the Scottish Environment Protection Agency (SEPA) maintains its quality classification of the water environment following River Basin Management Planning (RBMP). This information is available on SEPA's Water Environment Hub (https://www.sepa.org.uk/data-visualisation/water-classification-hub/). The following groundwater quality information is available for the site:

Table 2-4 – Groundwater Quality Summary

Waterbody Name	Type	Local Authority	Overall Classification	Comments
North Esk Sand and Gravel (ID: 150803)	Bedrock	Aberdeenshire Council	Poor	2023 Classification
Laurencekirk (ID: 150653)	Bedrock	Aberdeenshire Council	Good	2023 Classification

Drinking Water Protection Zones are not defined in Scotland. Following SEPA's position, all Scotland's groundwater bodies are designated as Drinking Water Protected Areas (DWPAs) and therefore their associated groundwater resource potential must be protected.

2.6 GROUNDWATER VULNERABILITY

The BGS Groundwater Vulnerability Map of Scotland, scale 1:625,000 (1988) reports vulnerability in terms of the thickness of the overlying superficial deposits. Groundsure's digitised mapping of this reference reports the geological classifications of the site as a Moderately productive aquifer (Arbuthnott-Garvock Group), in which flow is virtually all through fractures and other discontinuities.

Additionally, SEPA's Water Environment Hub (https://map.environment.gov.scot/sewebmap/) also provides the following contemporary 'Aquifer Classification' for the bedrock aquifer.

Table 2-5 – Groundwater Vulnerability Summary

Rock Unit	Character	Flow Mechanism	Summary
Arbuthnott-Garvock Group	Moderately productive aquifer	Flow is virtually all through fractures and other discontinuities	Sandstones, in places flaggy, with siltstones, mudstones and conglomerates and interbedded lavas, locally yield moderate amounts of groundwater.

2.7 WATER ABSTRACTIONS

WSP contacted the Aberdeenshire Council and SEPA via email on 05 March 2025 regarding water abstraction records held relating to the site. At the time of writing, no response has been received from the above-mentioned sources for the site. Should any response be received, an updated report will be provided.

2.8 HYDROLOGY

According to the Groundsure report, there are five inland rivers present onsite and they are described as following:

- The Cruick Burn (ID: 5712) near Little Brechin Wood is classified to have an overall water quality of 'High' in the year 2023 according to SEPA's Water Classification Hub.
- The West Water (ID: 5713) near B966 road is classified to have an overall water quality of 'High' in the year 2023 according to SEPA's Water Classification Hub.
- The Black Burn (ID: 5711), near Landends road is classified to have an overall water quality of 'Good' in the year 2023 according to SEPA's Water Classification Hub.
- River North Esk (ID: 5701), near Inveriscandye is classified to have an overall water quality of 'Good to Moderate' in the year 2023 according to SEPA's Water Classification Hub.
- Dowrie Burn (ID: 5707), near Burnside of Eslie Plantation is classified to have an overall water quality of 'Moderate' in the year 2023 according to SEPA's Water Classification Hub.

2.9 FLOODING

According to the Groundsure Report, the majority of the site is at negligible risk from coastal flooding. However, the northern, mid and southern part of the site, near Gallow Hill, Cleary Wood, Capo Plantation and Little Brenchin Wood, is identified as being at risk of flooding from river and surface water greater than 1.0m in a 1 in 30-year event.

According to the Groundsure Report, the majority of the site is at moderate risk from groundwater flooding.

2.10 SENSITIVE SURROUNDING LAND USES

The Groundsure report indicates that few environmentally designated sensitive land uses are recorded onsite and within 500m of the site boundary:

Table 2-6 – Sensitive Surrounding Land Uses

Type	Description
Sites of Special Scientific Interest (SSSI)	Offsite: North Esk and West Water Palaeochannels located 384m south-west of the site.
Designated ancient woodland	Onsite: Bankhead Wood, Inverury Wood, Pitgarvie/l. Thornton Wd, Greenbottom Wood, Capo Plantation, Cleary Wood, Little Brechin Wood, Keeper's/belliehill Woods and a few unknown varieties are recorded to be present onsite. Offsite: Balrownie Wood, Woodside Plantation and a few unknown varieties are located within 500m of the site.
Listed Buildings	Offsite: Mill of Cruick located 42m south-west, West Water Bridge – Inchbare located 179m south-west and Balrownie Bridge located 184 m south-west of the site.
Scheduled Ancient Monuments	Onsite: Mill of Balrownie -,ring ditch and Westside - barrows Offsite: Westside - unenclosed settlement located 63m south-west of the Study Area.

2.11 ENVIRONMENTAL SENSITIVITY

Overall, the Study Area setting is considered to be of moderate sensitivity, due to the following:

- Presence of 'High, Good and Moderate' quality surface water feature within 250m;
- Presence of a 'poor' quality moderately productive bedrock aquifer underlying the Study Area;
- Presence of residential land uses within 250m; and,
- Presence of designated ancient woodland, SSSI, Listed Buildings and Scheduled Ancient Monuments on and adjacent to the Study Area.

3 STUDY AREA AND SURROUNDING AREA HISTORY

A review of historical Ordnance Survey (OS) maps has been undertaken to identify potential former sources of contamination and sensitive receptors. The historical OS maps reviewed are provided within the Groundsure report in **Appendix C.1,** and pertinent findings are summarised below.

3.1 ONSITE

3.1.1 ONSITE HISTORICAL MAPPING

The earliest available mapping, dating from 1862 to 1863, shows the Study Area as undeveloped land, remaining unchanged until 1963.

- In the 1867 and 1901 maps, several unnamed roads were recorded running across the Study Area. Additionally, in 1901, a stone cist and several heaps were identified to the north of the southern portion of the Study Area.
- The 1862–1863 map indicates the presence of a woollen mill located to the east of the south-central portion of the Study Area.
- In the 1927–1928 map, rises were identified in the centre of the central portion of the Study Area.
- A sand and gravel quarry, along with conveyors and drains, was recorded in the southeast of the central portion of the Study Area on the 1977 map.
- An airfield was identified in the northwest of the central portion of the Study Area in 1955. It was renamed RAF Edzell on the 1977 map.
- The 1863–1864 map identifies three wells and a north-south trending drain south of the northern portion of the Study Area, near Cowieshill.
- A mill dam was recorded in the central portion of the northern section of the Study Area on the 1863–1864 map.
- In the 1927–1928 map, rises and a drain were identified to the southwest of the northern portion of the Study Area.

3.1.2 ONSITE REGULATORY INFORMATION

A review of the Groundsure report for the Study Area has reported the following potentially contaminative land uses (some of which are not identified on historical mapping):

- Woollen mill located on site circa1862,
- Timber yard located on site circa 1977,
- Sand pit located on site circa 1863,
- Sand and gravel quarries located on site circa 1977,
- Unspecified ground workings were noted in 1901.

3.2 OFFSITE

3.2.1 OFFSITE HISTORICAL MAPPING

Offsite features identified are listed below with their distance located from the Study Area:

- In 1863, an old dam with ruins and drains connected to Cruick Water, a sluice, Coru Mill, and the Mill of Cruick were recorded east of the southern portion of the Study Area. The Mill of Balrownie was also identified to the north of this area from 1863 to 2010.

- A dam and a sluice were recorded northeast of the southern portion of the Study Area, near Auchenreoch, on the 1862–1863 map.
- The old dam with ruins recorded in 1863 was no longer present on the 1901 map.
- A tank was identified east of the southern portion of the Study Area in 1927. A hydraulic ram and another tank were recorded in the same area between 1922 and 1927.
- On the 1862–1863 map, old spinning mills, a stone cist, and a church were recorded south of the West Water in the south-central portion of the Study Area.
- The 1901 map identified two springs, one near Stracathro Church and another east of Witches Kirn, as well as a mill dam, a corn mill, Inchbare Station, and the West Bridge south of the south-central portion of the Study Area.
- A well and a spring were recorded southeast of the central portion of the Study Area near Capo in the 1862–1863 map.
- The 1901 map identified rises to the east and southeast of the central portion of the Study Area.
- A dam was recorded east of the Study Area, and a stone-cut feature was found in the southeast portion in the 1901 map.
- Primrosehill Brick and Tile Works, along with a well to the east and a spring to the southeast of the central portion of the Study Area, were identified in 1863.
- A curling pond and a spring to the southeast, along with an old gravel pit to the southwest of the central portion of the Study Area, were recorded in 1901.
- A dam was noted to the northwest of the central portion of the Study Area on the 1901–1904 map.
- A sand and gravel quarry with conveyors and drains was recorded southeast of the central portion of the Study Area in 1977.
- In 1977, paper salvage stores, a quarry, and a timber yard were identified southwest of the central portion of the Study Area.
- School Craft was recorded east of the central portion of the Study Area in the 1928 map and later marked as a store on the 1977 map.
- Craigmoston Mains Pump was identified west of the northern portion of the Study Area in the 1927–1928 map.
- A gravel pit was recorded northwest of the northern portion of the Study Area in 1927–1928.
- A tennis court was identified east of the northern portion of the Study Area on the 1978 map.

3.2.2 OFFSITE REGULATORY INFORMATION

A review of the Groundsure report for the Study Area has recorded a number of historical tanks (not recorded on historical mapping). The closest offsite unspecified tanks were located 128m to the northeast, 147m and 203m southwest of the Study Area.

4 REGULATORY INFORMATION

4.1 GROUNDSURE REGULATORY INFORMATION SUMMARY

Table 4-1 – Regulatory Information Summary

Groundsure Feature	Onsite	0-50m	50-250m	250-500m	Details
Historical Industrial Land Uses	9	6	13	19	See Section 3
Historical Tanks	0	0	4	0	See Section 3
Historical Energy Features	0	0	0	0	N/A
Historical Garages	0	0	0	0	N/A
Active or Recent Landfill	0	0	0	0	N/A
Historical Landfill Sites	0	0	0	0	N/A
Licenced Waste Sites	0	0	0	0	N/A
Historical Waste Sites	0	0	0	0	N/A
Recent Industrial Land Uses	3	0	9	0	Industrial land uses onsite relate to Rosehill Timber Ltd, Peterson container and storage activity and Gas Governor Station. Closest offsite industrial land uses relate to electrical features 87m south of the Study Area.
Current or Recent Petrol Stations	0	0	0	0	N/A
Gas Pipelines	2	0	0	0	Gas pipelines identified onsite are owned by National Grid, named as Aberdeen to Kirriemuir.
Control of Major Accident Hazards (COMAH)	0	0	0	0	N/A
Hazardous Substances Storage/Use	0	0	0	0	N/A

Groundsure Feature	Onsite	0-50m	50-250m	250-500m	Details
Part A(1), IPPC and Historic IPC Authorisations	0	0	0	1	The nearest offsite feature is located 360m southwest and relates to D Ramsay & Son for PPC(A) - Intensive Agriculture (Pig and Poultry) with License reference PPC/A/1016762.
Pollution Inventory Substances	0	0	0	1	N/A
Pollution Inventory Waste Transfers	0	0	0	0	N/A
Part B Authorisations	0	0	1	0	The nearest offsite feature is located 61m southeast, related to Rosehill Timber – PPC(B) timber activities with License reference PPC/E/0030 060.

The distance for all the features was calculated from the approximate centre of the Study Area at co-ordinates (362832, 767927)
***Note:** The features listed in the table above have been derived from the data provided in the Groundsure Report and may not be present on the historical map.*

4.2 RADON GAS

Based on the Groundsure report and UK Radon interactive map (https://www.ukradon.org/information/ukmaps) the majority of the Study Area lies within a non-probability radon area where less than 1% of homes are estimated to be at or above the Action level. The maximum radon potential ranges between 1% - 3% are recorded at the central and south central parts of the Study Area. Given the proposed land use, no radon protection measures are considered necessary for the Study Area.

4.3 UNEXPLODED ORDNANCE

Zetica Risk Maps indicate that the Study Area is located in an area of low risk in regard to unexploded ordnance (**Appendix B**).

The UXO Risk Map for the Study Area is included in **Appendix B.2.**

4.4 RADIUM

A section of the proposed OHL alignment runs through the former RAF Edzell. RAF Edzell was initially established during the First World War and reactivated in 1940 as a Royal Air Force station. During World War II, it functioned primarily as an aircraft maintenance and storage facility, holding up to 800 aircraft in reserve. It also supported training operations, including flying instructor schools and beam approach training flights.

Following its post-war use for gliding and limited RAF operations, the site was placed under care and maintenance in 1957. In 1960, RAF Edzell was leased to the United States Navy, becoming a key node in the global High Frequency Direction Finding (HFDF) network. The base monitored electromagnetic signals and supported Cold War intelligence operations, with up to 3,000 personnel stationed there at its peak.

RAF Edzell was decommissioned in 1996, with formal closure following in 1997. After closure, the site was sold for civilian use. Residential quarters were redeveloped, and proposals emerged for large-scale housing and community infrastructure. The airfield remains partially intact, with some original buildings repurposed for industrial and residential use.

The site was listed by the Scottish Environment Protection Agency (SEPA) in 2012 among a dozen former military locations in Scotland suspected of radioactive contamination, primarily due to historic disposal practices involving radium-tipped aircraft dials.

A site visit by a WSP representative was undertaken in April 2025. During the walkover, the site was noted to comprise of a mixture of grassed fields and commercial buildings with no evidence of historic disposal operations.

SEPA consider works involving radium-226 contamination at greater than 1.0 Bq/g as a “radioactive substances activity” for which a permit under the Environmental Authorisation (Scotland) Regulations (EASR) may be required. Obtaining an EASR permit from SEPA can take up to four months and has the potential to lead to significant programme delays if the presence of radioactive contamination is not well understood.

5 INITIAL CONCEPTUAL SITE MODEL

5.1 INTRODUCTION

This section of the report presents the characteristics of the Study Area and provides a systematic indication of the risks to enable uncertainties and further assessment needs or other actions to be identified. It draws on the information presented in earlier sections of the report to identify plausible contaminant-pathway-receptor contaminant linkages. Details regarding the legislative framework for this assessment are presented within **Appendix C**.

5.2 POTENTIAL SOURCES

Based on information (as presented in section 3 and section 4.1) reviewed as part of this desk study and findings of the Study Area inspection, the following potential sources of contamination have been identified:

Onsite

- Contamination resulting from current and historical land use. (Made Ground, wooden mill, airfield, timber yard, sand pits, sand and gravel quarries and cuttings etc)
- Ground gases (Superficial deposits, old gravel pits, refuse heap, sand pits and historical unspecified quarries).

Offsite

- Made Ground associated with development adjacent to the Study Area.
- Stockpiles of topsoil / Made Ground located adjacent to Study Area boundary.
- Contamination associated with offsite historical land uses.

Based on the above potential sources, the following contaminants may be present within the Study Area:

- Heavy metals, polycyclic aromatic hydrocarbons (PAHs), petroleum hydrocarbons (TPH), volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), polychlorinated biphenyls (PCBs), Per- and polyfluoroalkyl substances (PFAS), chlorinated solvents, pesticides, nitrates, phosphates, sulphates, sulphides, cyanides, radioactive material (radium-226) and asbestos
- Ground gases associated with Made Ground, including methane, carbon dioxide, carbon monoxide, hydrogen sulphide, and oxygen-deficient air, as well as potential landfill gases and radon.

5.3 POTENTIAL RECEPTORS

In the context of the proposed redevelopment, the following potential receptors were identified:

Human Health

- Future and current site occupiers/visitors (maintenance workers);
- Adjacent site users;
- Construction workers and below ground maintenance workers.

Water Environment

- Bedrock aquifer (Arbuthnott-Garvock Group)
- Surface water (The Cruick Burn, the West Water, the Black Burn, River North Eska md the Dowrie Burn)

Property

- Foundations and below ground structures.

5.4 POTENTIAL CONTAMINANT PATHWAYS

Relevant potential pathways are considered to include:

- Direct contact, ingestion or inhalation of soil-bound contaminants/dust;
- Direct inhalation of asbestos fibres within soils;
- Inhalation of vapours associated with soil/groundwater contamination;
- Migration of leachable/mobile contamination laterally and vertically through granular soils;
- Ground gas migration, inhalation and accumulation.

5.5 PLAUSIBLE CONTAMINANT LINKAGES

Table 5-1 provides an evaluation of those potential contaminant linkages considered to be plausible given our current Study Area understanding.

Table 5-1 – Plausible Contaminant Linkages

Potential Source	Exposure Pathway	Receptor	Probability of Exposure	Consequence of Exposure	Risk	Plausibility of Pathway
Contaminants associated with adjacent land uses Contaminants include inorganic and organic contaminants, ground gases, radioactive materials (radium-226) and asbestos.	Inhalation, ingestion and dermal contact	Human health risks, including current and future site users, groundworkers	Unlikely	Medium	Low	Site users may be exposed to potential contaminants via direct dermal contact, ingestion and inhalation, or hazardous ground gases. As no enclosed spaces are included in the proposed development, the risk from ground gases is considered low. The principal human health risk is likely to be from contaminants within the soils and groundwater due to potentially contaminated Made Ground. Significant Made Ground is not expected to be encountered on most of the Study Area due to the lack of historical development, although it is noted that some historical industrial development has occurred on certain parts of the Study Area and the surrounding area. In the event of below ground works, site workers may be exposed to subsurface contamination should it exist. Yet it is generally accepted as both reasonable and an expectation that future construction workers would adopt appropriate procedures to manage health and safety risks on the assumption that a risk exists.
	Migration via infiltration into groundwater	Groundwater within superficial and bedrock deposits Surface water	Low likelihood	Mild	Low	The presence of hardstanding would be limited to the overhead line (OHL) tower bases which should impede the infiltration of precipitation and reduce the potential for leaching and off-site migration of any contamination. Given the current / historical use of the Study Area, the potential for legacy contaminants to migrate to the underlying bedrock aquifer is considered to be low.
		Site foundations	Unlikely	Medium	Low	Aggressive ground conditions may affect any proposed building foundations and underground pipes. With any new development, planning would be required, and such would require a site investigation, which would need to assess whether any mitigation was required.

5.6 PRELIMINARY CONTAMINANT LINKAGE ASSESSMENT

Based on consideration of the Study Area conditions, the environmental setting of the Study Area and the level of information currently available for the Study Area, potential plausible contaminant linkages have been identified. These are based on an assumed proposed industrial or commercial end use.

The terms describing Probability and Consequence are referenced from the CIRIA 552 document. Tables 6.3, 6.4 and 6.5 from CIRIA 552 are provided for reference in **Appendix D**.

5.7 PRELIMINARY RISK CLASSIFICATION FOR THE STUDY AREA

Based on the contaminant linkage assessment completed for the Study Area in consideration of its proposed use, the following risk classifications have been determined:

- With respect to human health, the risks have been assessed as **Low**;
- With respect to surface waters, the risks from the Study Area have been assessed as **Low;**
- With respect to groundwater, the risks from the Study Area have been assessed as **Low**; and
- With respect to buildings and services, the Study Area is classified as **Low.**

6 CONCLUSIONS AND RECOMMENDATIONS

6.1 CONCLUSIONS

The potential for legacy ground contamination in shallow soils is considered possible based on historical onsite and offsite uses.

The principal risks are considered to be to the current and future site users. However, the presence of hardstanding reduces the probability of contemporary user exposures at a material frequency should such contamination exist in these areas.

Based on the information contained within this report, it is the opinion of WSP that the Study Area represents a **Low risk** with respect to contaminated land liabilities.

The risk to receptors from radioactive substances (radium-226) is **Low** however there is significant uncertainty as to the actual presence of radioactive substances on the site. SEPA consider works involving radium-226 contamination at greater than 1.0 Bq/g as a "radioactive substances activity" for which a permit under the Environmental Authorisation (Scotland) Regulations (EASR) may be required. Obtaining an EASR permit from SEPA can take up to four months to be granted and has the potential to lead to significant programme delays if the presence of radioactive contamination is not well understood prior to breaking ground.

6.2 RECOMMENDATIONS

The presence or absence of radioactive materials on the site should be clarified in advance of any intrusive works, including ground investigation, by undertaking a radiological walkover survey in accordance with the SEPA document "*Guidance on monitoring for heterogeneous radium-226 sources resulting from historic luminising or waste disposal sites*". The walkover survey should be targeted at areas of the proposed development that intersect the former RAF Edzell site.

Based on the above, an intrusive ground investigation is recommended to confirm the anticipated ground conditions and enable further assessment of the above constraints.

The ground investigation should be undertaken in accordance with BS5930 and BS10175 and should be designed and scoped to provide further understanding / confirmation of the following:

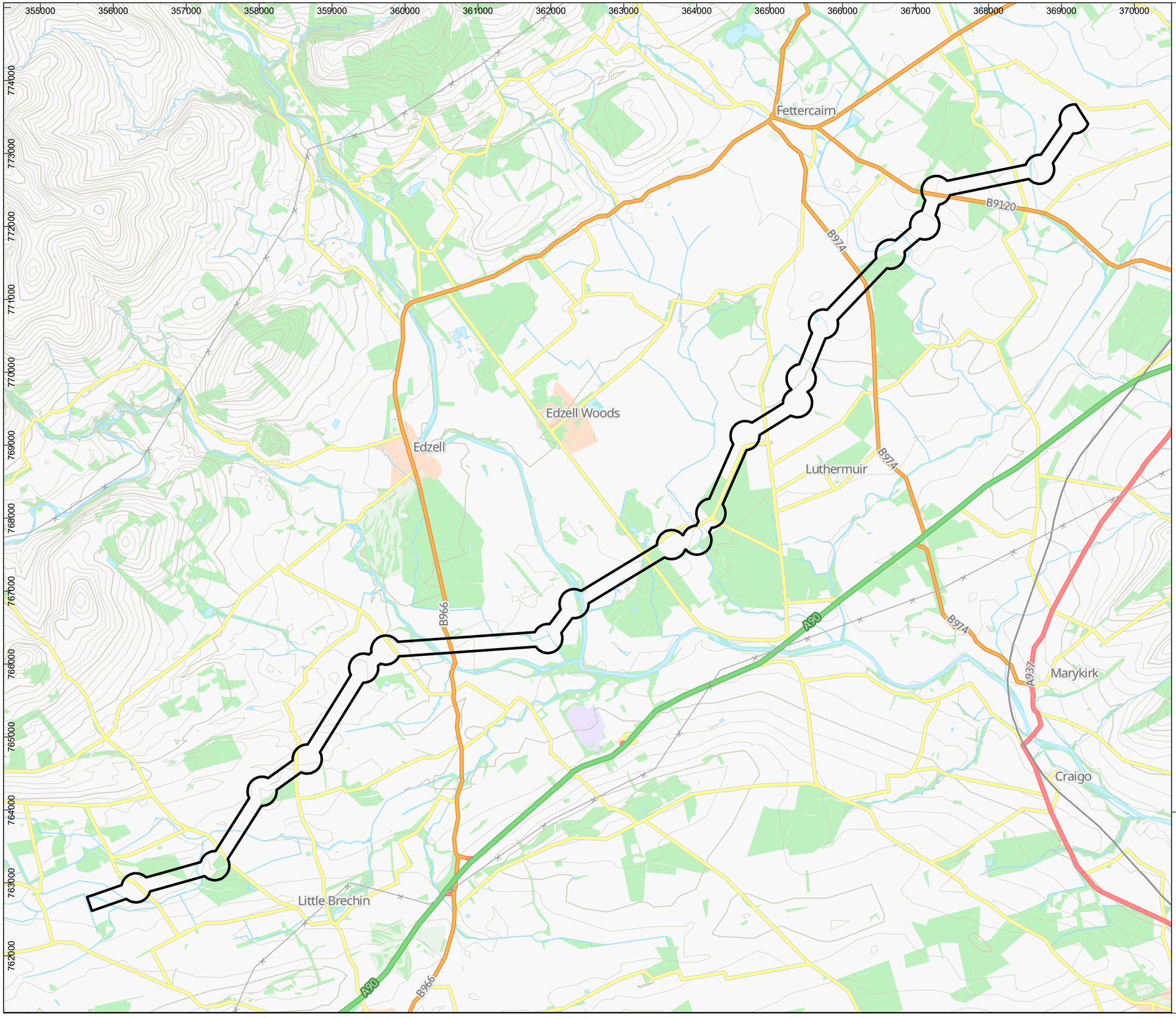
- Extent and characteristics of contamination on soils and groundwater;
- Risks to future site users and the wider environment; and
- Any resultant liabilities to the vendor.

Should the Study Area use change then the contents of this report should be revisited in ensuring that the land is made suitable for any new use.

Please note: this summary forms part of WSP's Phase I Geoenvironmental Preliminary Risk Assessment (ref.: UK0040111.5101 / 004). Under no circumstances is it to be used as an independent document.

Appendix A

FIGURES



Key

Section C

0 500 1,000 1,500 2,000 2,500 3,000m

Scale at A3: 1:50,000

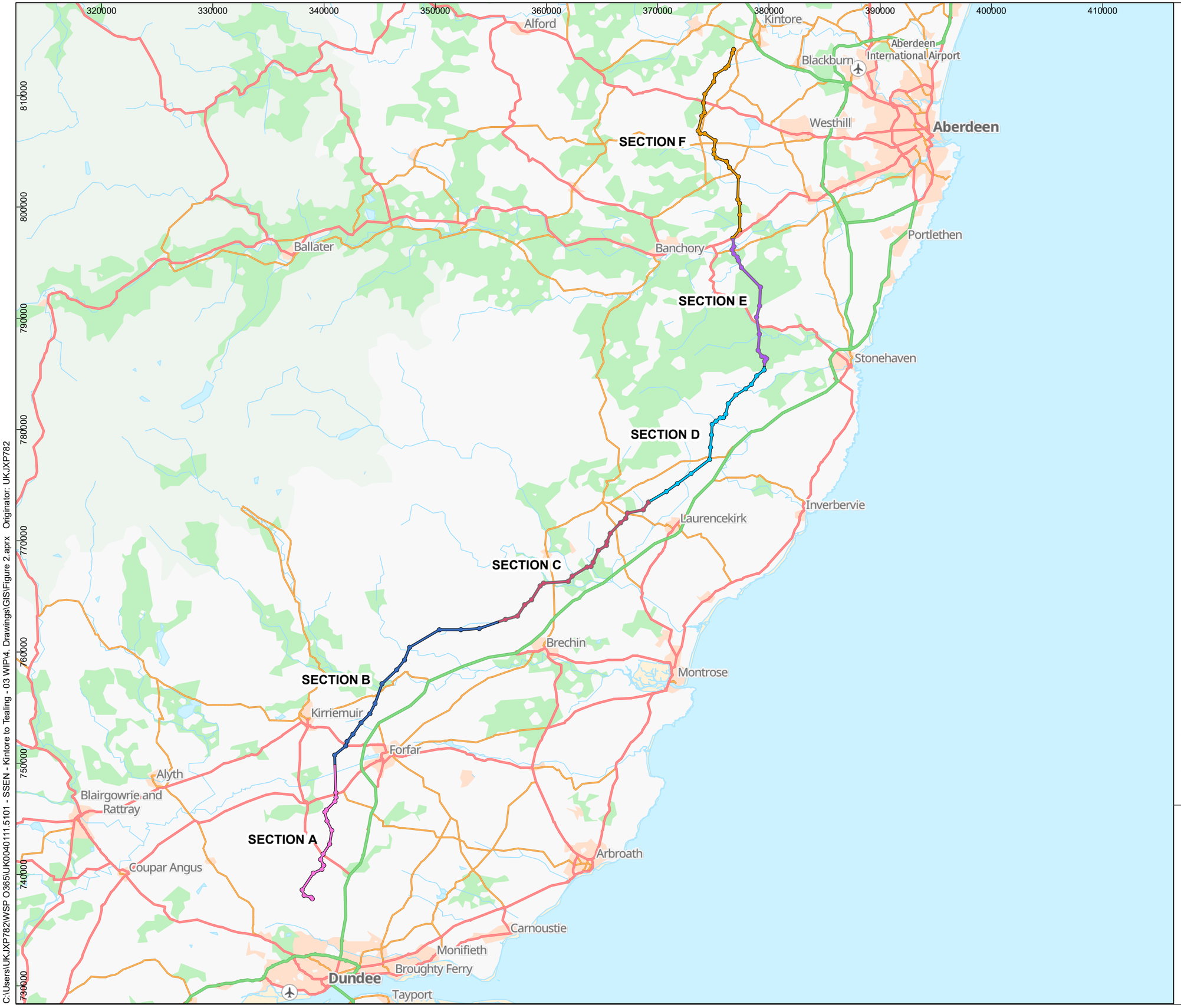
Kintore-Tealing 400kV Overhead Line (OHL) Connection

Figure 1
Site location plan

February 2025

C:\Users\UKJXP782\WSP O365\UK0040111.5101 - SSEN - Kintore to Tealing - 03 WIP\4. Drawings\GIS\Figure 1 Section D.aprx Originator: UKJXP782

Figure 1 Section D.aprx



Key

- Section F
- Section E
- Section D
- Section C
- Section B
- Section A

0 5 10 15 20km

Scale at A3: 1:325,000

Kintore-Tealing 400kV Overhead Line (OHL) Connection

Figure 2
Proposed development plan

February 2025

C:\Users\UKJXP782\WSP O365\UK0040111.5101 - SSEN - Kintore to Tealing - 03 WIP\4. Drawings\GIS\Figure 2.aprx Originator: UKJXP782

Figure 2.aprx

Appendix B

ADDITIONAL INFORMATION

Appendix B.1

GROUNDSURE REPORT

Groundsure LOCATION INTELLIGENCE

Enviro+Geo Insight

Section C

Order Details

Date: 04/09/2025

Your ref: P110439UK001

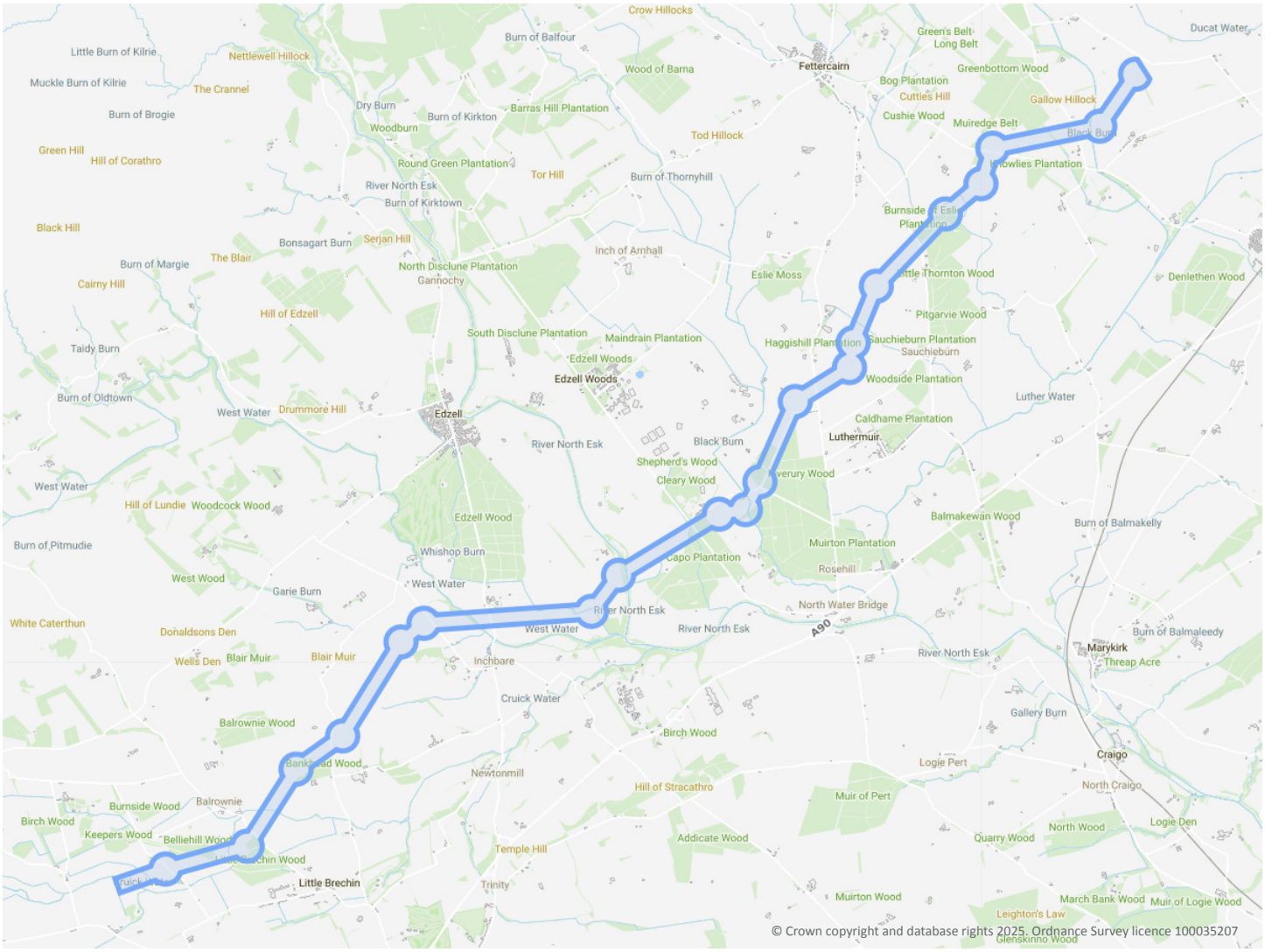
Our Ref: WSP-M6I-1X7-C6S-SQE

Site Details

Location: 362832 767927

Area: 472.2 ha

Authority: Angus Council ↗, Aberdeenshire Council ↗



Contact us with any questions at:
info@groundsure.com ↗
01273 257 755

Certified B Corporation

Summary of findings

Page	Section	Past land use >	On site	0-50m	50-250m	250-500m	500-2000m
12 >	1.1 >	Historical industrial land uses >	9	6	13	19	-
14 >	1.2 >	Historical tanks >	0	0	4	0	-
15	1.3	Historical energy features	0	0	0	0	-
15	1.4	Historical petrol stations	0	0	0	0	-
15	1.5	Historical garages	0	0	0	0	-
16	1.6	Historical military land	0	0	0	0	-
Page	Section	Past land use - un-grouped >	On site	0-50m	50-250m	250-500m	500-2000m
17 >	2.1 >	Historical industrial land uses >	9	9	16	22	-
20 >	2.2 >	Historical tanks >	0	0	4	0	-
20	2.3	Historical energy features	0	0	0	0	-
20	2.4	Historical petrol stations	0	0	0	0	-
20	2.5	Historical garages	0	0	0	0	-
Page	Section	Waste and landfill	On site	0-50m	50-250m	250-500m	500-2000m
22	3.1	Active or recent landfill	0	0	0	0	-
22	3.2	Historical landfill (BGS records)	0	0	0	0	-
22	3.3	Historical landfill (LA/mapping records)	0	0	0	0	-
22	3.4	Licensed waste sites	0	0	0	0	-
22	3.5	Historical waste sites	0	0	0	0	-
Page	Section	Current industrial land use >	On site	0-50m	50-250m	250-500m	500-2000m
23 >	4.1 >	Recent industrial land uses >	3	0	7	-	-
24 >	4.2 >	National Geographic Database (NGD) - Current or recent tanks >	0	0	8	-	-
25	4.3	Current or recent petrol stations	0	0	0	0	-
25	4.4	Electricity cables	0	0	0	0	-
25 >	4.5 >	Gas pipelines >	2	0	0	0	-
25	4.6	Sites determined as Contaminated Land	0	0	0	0	-
26	4.7	Control of Major Accident Hazards (COMAH)	0	0	0	0	-

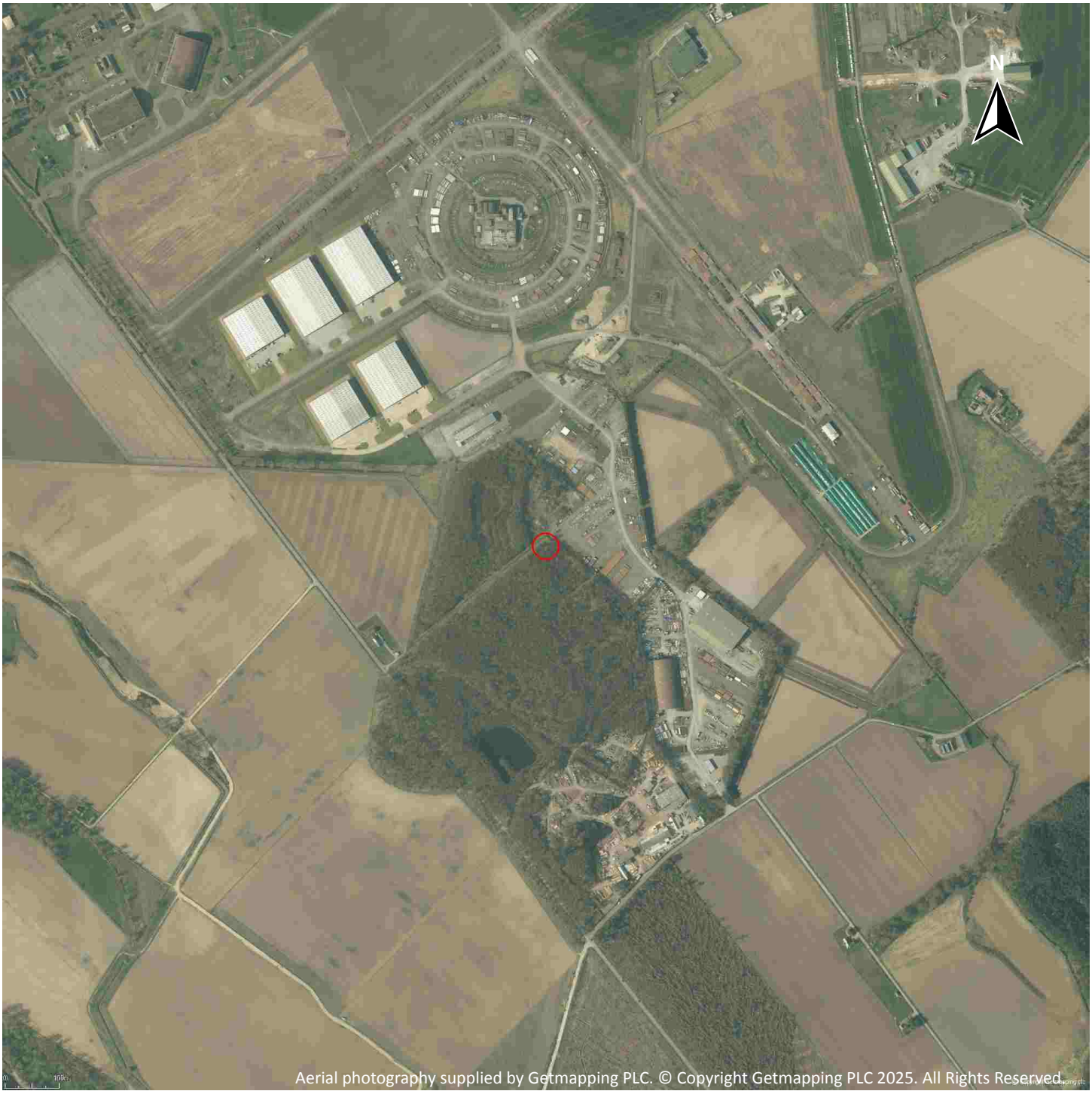
26	4.8	Regulated explosive sites	0	0	0	0	-
26	4.9	Hazardous substance storage/usage	0	0	0	0	-
26 >	4.10 >	Part A(1), IPPC and Historic IPC Authorisations >	0	0	0	1	-
27 >	4.11 >	Part B Authorisations >	0	0	1	0	-
27 >	4.12 >	Pollution inventory substances >	0	0	0	1	-
28	4.13	Pollution inventory waste transfers	0	0	0	0	-
28	4.14	Pollution inventory radioactive waste	0	0	0	0	-
Page	Section	Hydrogeology >	On site	0-50m	50-250m	250-500m	500-2000m
29 >	5.1 >	Superficial aquifer >	Identified (within 500m)				
31 >	5.2 >	Bedrock aquifer >	Identified (within 500m)				
Page	Section	Hydrology >	On site	0-50m	50-250m	250-500m	500-2000m
33 >	6.1 >	Water Network (OS MasterMap) >	78	29	144	-	-
53 >	6.2 >	Surface water features >	1	16	65	-	-
Page	Section	River flooding >					
54 >	7.1 >	River flooding >	1 in 30 year, Greater than 1.0m (within 50m)				
Page	Section	Coastal flooding					
56	8.1	Coastal flooding	Negligible (within 50m)				
Page	Section	Surface water flooding >					
57 >	9.1 >	Surface water flooding >	1 in 30 year, Greater than 1.0m (within 50m)				
Page	Section	Groundwater flooding >					
59 >	10.1 >	Groundwater flooding >	Moderate (within 50m)				
Page	Section	Environmental designations >	On site	0-50m	50-250m	250-500m	500-2000m
60 >	11.1 >	Sites of Special Scientific Interest (SSSI) >	0	0	0	1	2
61	11.2	Conserved wetland sites (Ramsar sites)	0	0	0	0	0
61	11.3	Special Areas of Conservation (SAC)	0	0	0	0	0
61	11.4	Special Protection Areas (SPA)	0	0	0	0	0
61	11.5	National Nature Reserves (NNR)	0	0	0	0	0
62	11.6	Local Nature Reserves (LNR)	0	0	0	0	0
62 >	11.7 >	Designated Ancient Woodland >	11	1	3	4	43

64	11.8	Biosphere Reserves	0	0	0	0	0
65	11.9	Forest Parks	0	0	0	0	0
65	11.10	Marine Conservation Zones	0	0	0	0	0
Page	Section	**Visual and cultural designations >**	On site	0-50m	50-250m	250-500m	500-2000m
66	12.1	World Heritage Sites	0	0	0	-	-
67	12.2	Area of Outstanding Natural Beauty	0	0	0	-	-
67	12.3	National Parks	0	0	0	-	-
67 >	**12.4 >**	**Listed Buildings >**	0	1	2	-	-
68	12.5	Conservation Areas	0	0	0	-	-
68 >	**12.6 >**	**Scheduled Ancient Monuments >**	2	0	1	-	-
68	12.7	Registered Parks and Gardens	0	0	0	-	-
Page	Section	**Agricultural designations >**	On site	0-50m	50-250m	250-500m	500-2000m
69 >	**13.1 >**	**Agricultural Land Classification >**	Grade 3.2 (within 250m)				
Page	Section	**Geology 1:10,000 scale >**	On site	0-50m	50-250m	250-500m	500-2000m
71 >	**14.1 >**	**10k Availability >**	Identified (within 500m)				
72 >	**14.2 >**	**Artificial and made ground (10k) >**	1	0	1	0	-
73 >	**14.3 >**	**Superficial geology (10k) >**	5	0	2	1	-
74	14.4	Landslip (10k)	0	0	0	0	-
75 >	**14.5 >**	**Bedrock geology (10k) >**	2	0	1	0	-
76 >	**14.6 >**	**Bedrock faults and other linear features (10k) >**	2	0	4	3	-
Page	Section	**Geology 1:50,000 scale >**	On site	0-50m	50-250m	250-500m	500-2000m
77 >	**15.1 >**	**50k Availability >**	Identified (within 500m)				
78 >	**15.2 >**	**Artificial and made ground (50k) >**	0	0	1	0	-
79	15.3	Artificial ground permeability (50k)	0	0	-	-	-
80 >	**15.4 >**	**Superficial geology (50k) >**	11	1	1	2	-
81 >	**15.5 >**	**Superficial permeability (50k) >**	Identified (within 50m)				
82	15.6	Landslip (50k)	0	0	0	0	-
82	15.7	Landslip permeability (50k)	None (within 50m)				
83 >	**15.8 >**	**Bedrock geology (50k) >**	5	1	0	0	-

84 >	15.9 >	Bedrock permeability (50k) >	Identified (within 50m)				
84 >	15.10 >	Bedrock faults and other linear features (50k) >	1	0	0	1	-
Page	Section	**Boreholes** >	On site	0-50m	50-250m	250-500m	500-2000m
86 >	16.1 >	BGS Boreholes >	0	0	2	-	-
Page	Section	**Natural ground subsidence** >					
88 >	17.1 >	Shrink swell clays >	Low (within 50m)				
90 >	17.2 >	Running sands >	Low (within 50m)				
92 >	17.3 >	Compressible deposits >	Moderate (within 50m)				
94 >	17.4 >	Collapsible deposits >	Very low (within 50m)				
95 >	17.5 >	Landslides >	Low (within 50m)				
97 >	17.6 >	Ground dissolution of soluble rocks >	Negligible (within 50m)				
Page	Section	**Mining and ground workings** >	On site	0-50m	50-250m	250-500m	500-2000m
99 >	18.1 >	BritPits >	0	0	3	3	-
101 >	18.2 >	Surface ground workings >	13	2	24	-	-
103	18.3	Underground workings	0	0	0	0	0
103	18.4	Underground mining extents	0	0	0	0	-
103	18.5	Historical Mineral Planning Areas	0	0	0	0	-
103 >	18.6 >	Non-coal mining >	5	0	1	0	3
105	18.7	JPB mining areas	None (within 0m)				
105	18.8	The Coal Authority non-coal mining	0	0	0	0	-
105	18.9	Researched mining	0	0	0	0	-
105	18.10	Mining record office plans	0	0	0	0	-
106	18.11	BGS mine plans	0	0	0	0	-
106	18.12	Coal mining	None (within 0m)				
106	18.13	Brine areas	None (within 0m)				
106	18.14	Gypsum areas	None (within 0m)				
106	18.15	Tin mining	None (within 0m)				
107	18.16	Clay mining	None (within 0m)				
Page	Section	Ground cavities and sinkholes	On site	0-50m	50-250m	250-500m	500-2000m

108	19.1	Natural cavities	0	0	0	0	-
108	19.2	Mining cavities	0	0	0	0	0
108	19.3	Reported recent incidents	0	0	0	0	-
108	19.4	Historical incidents	0	0	0	0	-
Page	Section	**Radon** >					
110 >	**20.1** >	**Radon** >	Between 1% and 3% (within 0m)				
Page	Section	**Soil chemistry** >	On site	0-50m	50-250m	250-500m	500-2000m
112 >	**21.1** >	**BGS Estimated Background Soil Chemistry** >	130	43	-	-	-
118	21.2	BGS Estimated Urban Soil Chemistry	0	0	-	-	-
119	21.3	BGS Measured Urban Soil Chemistry	0	0	-	-	-
Page	Section	**Railway infrastructure and projects** >	On site	0-50m	50-250m	250-500m	500-2000m
120	22.1	Underground railways (London)	0	0	0	-	-
120	22.2	Underground railways (Non-London)	0	0	0	-	-
121	22.3	Railway tunnels	0	0	0	-	-
121	22.4	Historical railway and tunnel features	0	0	0	-	-
121	22.5	Royal Mail tunnels	0	0	0	-	-
121 >	**22.6** >	**Historical railways** >	1	0	1	-	-
122	22.7	Railways	0	0	0	-	-
122	22.8	Crossrail 2	0	0	0	0	-
122	22.9	HS2	0	0	0	0	-

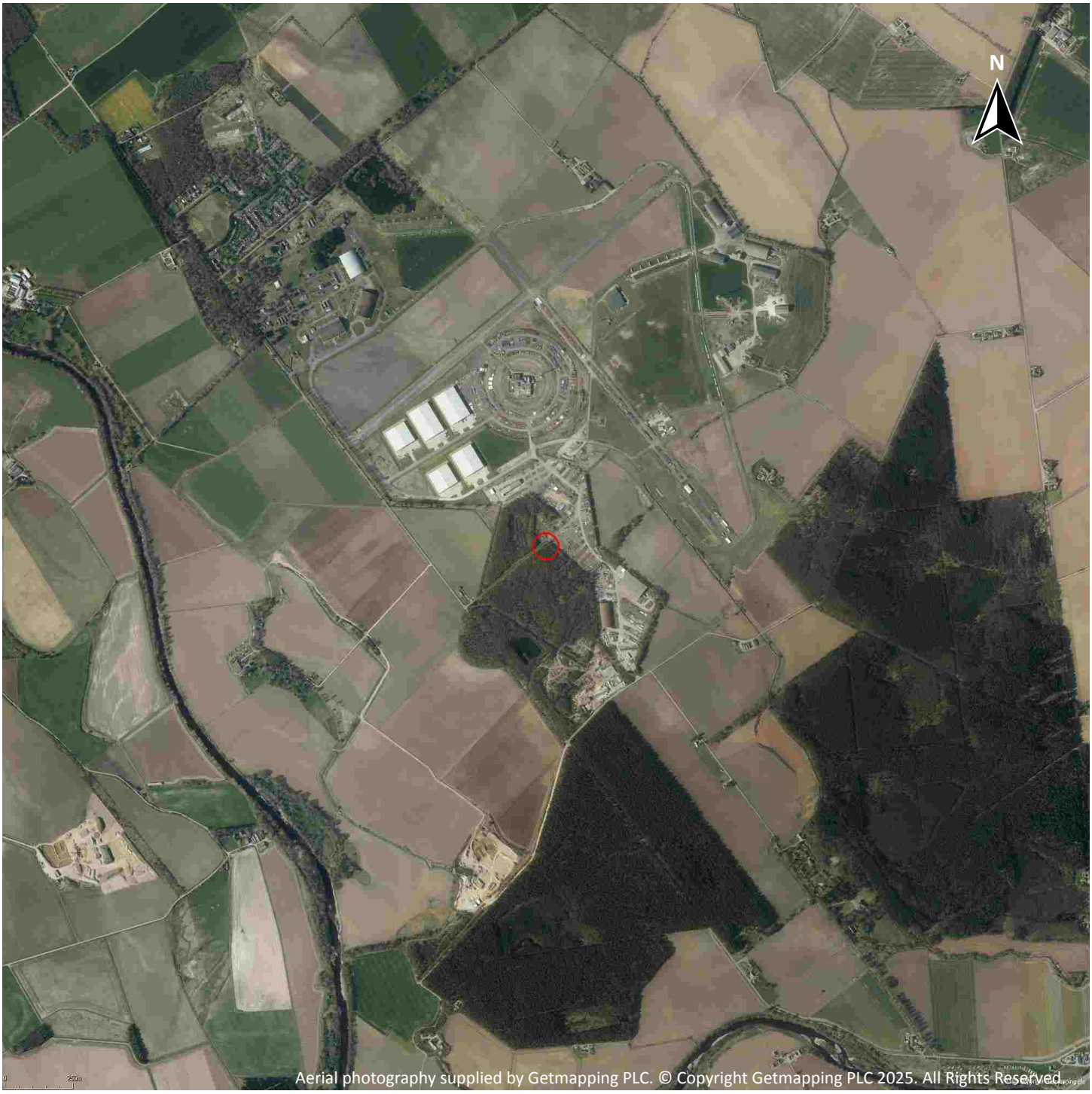
Recent aerial photograph



Capture Date: 21/04/2023

Site Area: 472.2ha

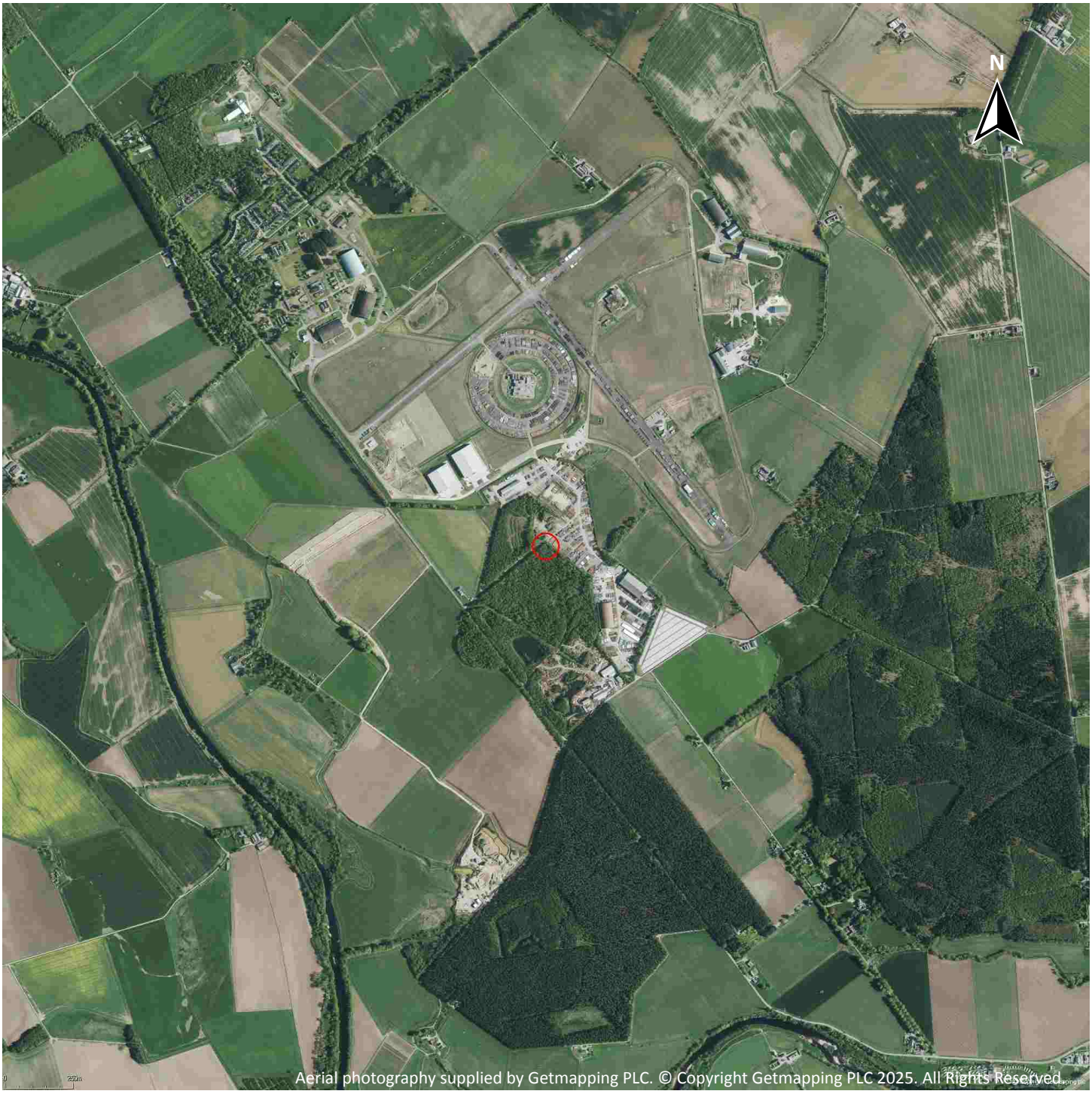
Recent site history - 2020 aerial photograph



Capture Date: 24/04/2020

Site Area: 472.2ha

Recent site history - 2013 aerial photograph



Capture Date: 25/05/2013

Site Area: 472.2ha

Recent site history - 2008 aerial photograph

Capture Date: 22/09/2008

Site Area: 472.2ha

Recent site history - 2007 aerial photograph

Capture Date: 02/10/2007

Site Area: 472.2ha

1 Past land use

Site Outline

Search buffers in metres (m)

Historical industrial land uses

Historical tanks

1.1 Historical industrial land uses

Records within 500m	47

Potentially contaminative land use features digitised from historical Ordnance Survey mapping at 1:10,000 and 1:10,560 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use map on **page 12 >**

ID	Location	Land use	Dates present	Group ID
1	**On site**	**Airfield**	**1955**	**472010**

ID	Location	Land use	Dates present	Group ID
2	**On site**	**Wooden Mill**	**1862**	**475683**
3	**On site**	**Timber Yard**	**1977**	**475949**
4	**On site**	**Sand Pit**	**1863**	**479063**
5	**On site**	**Sand Pit**	**1863**	**479064**
6	**On site**	**Sand and Gravel Quarries**	**1977**	**479194**
7	**On site**	**Unspecified Ground Workings**	**1901**	**481346**
A	**On site**	**Cuttings**	**1904**	**485080**
A	**On site**	**Cuttings**	**1955**	**488991**
B	1m SE	Unspecified Mill	1955	473411
8	21m NW	Paper Salvage Stores	1977	472967
9	27m NW	Gravel Pit	1977	484082
10	28m SE	Smithy	1863 - 1901	497994
B	41m SE	Corn Mill	1863 - 1927	496650
11	49m S	Unspecified Mill	1862	473485
C	56m NW	Old Gravel Pit	1904	501080
C	61m NW	Unspecified Pit	1928 - 1955	497095
C	62m NW	Old Gravel Pit	1901	489204
C	66m NW	Unspecified Pit	1922	487062
C	66m NW	Old Gravel Pit	1904	495722
C	69m NW	Sand Pit	1863	479062
D	145m NW	Unspecified Tank	1904	477558
D	146m NW	Corn Mill	1862	473754
E	198m W	Refuse Heap	1978	475289
14	202m SE	Brick and Tile Works	1863	479570
E	203m W	Gravel Pit	1928 - 1955	491476
16	240m SE	Gravel Pit	1977	484079
17	245m S	Cuttings	1955	474223
F	266m S	Corn Mill	1922	498526

ID	Location	Land use	Dates present	Group ID
F	267m S	Unspecified Disused Mill	1955	473077
18	271m NW	Corn Mill	1863	473838
19	295m S	Gravel Pit	1977	484081
F	296m S	Corn Mill	1904	499757
F	297m S	Corn Mill	1901	494324
F	297m S	Corn Mill	1927	497896
20	313m S	Cuttings	1862	474059
F	313m S	Smithy	1862 - 1901	487937
F	315m S	Smithy	1904	492662
21	327m NW	Unspecified Pit	1977	480313
22	362m SE	Store	1977 - 1992	501227
23	369m NW	Smithy	1863 - 1901	496397
24	389m NW	Old Gravel Pit	1901	471963
25	417m N	Sand Pit	1862	479044
G	439m S	Unspecified Mill	1955	473428
26	457m SE	Gravel Pit	1977	484080
27	470m S	Sand and Gravel Pit	1977	474020
G	484m S	Sawmill	1977	499496

This data is sourced from Ordnance Survey / Groundsure.

1.2 Historical tanks

Records within 500m	**4**

Tank features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use map on **page 12 >**

ID	Location	Land use	Dates present	Group ID
12	128m S	Unspecified Tank	1976	65111
D	147m NW	Unspecified Tank	1904	64024
13	181m NW	Tanks	1974	63027
15	203m S	Unspecified Tank	1969	64099

This data is sourced from Ordnance Survey / Groundsure.

1.3 Historical energy features

Records within 500m	0

Energy features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey / Groundsure.

1.4 Historical petrol stations

Records within 500m	0

Petrol stations digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey / Groundsure.

1.5 Historical garages

Records within 500m	0

Garages digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey / Groundsure.

1.6 Historical military land

Records within 500m	0

Areas of military land digitised from multiple sources including the National Archives, local records, MOD records and verified other sources, intelligently grouped into contiguous features.

This data is sourced from Ordnance Survey / Groundsure / other sources.

2 Past land use - un-grouped

Site Outline

Search buffers in metres (m)

Historical industrial land uses

Historical tanks

2.1 Historical industrial land uses

Records within 500m	56

Potentially contaminative land use features digitised from historical Ordnance Survey mapping at 1:10,000 and 10,560 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use - un-grouped map on **page 17 >**

ID	Location	Land Use	Date	Group ID
1	On site	Timber Yard	1977	475949
2	On site	Airfield	1955	472010
3	On site	Unspecified Ground Workings	1901	481346

ID	Location	Land Use	Date	Group ID
4	**On site**	**Wooden Mill**	**1862**	**475683**
5	**On site**	**Sand Pit**	**1863**	**479063**
6	**On site**	**Sand Pit**	**1863**	**479064**
7	**On site**	**Sand and Gravel Quarries**	**1977**	**479194**
A	**On site**	**Cuttings**	**1904**	**485080**
A	**On site**	**Cuttings**	**1955**	**488991**
B	1m SE	Unspecified Mill	1955	473411
8	21m NW	Paper Salvage Stores	1977	472967
9	27m NW	Gravel Pit	1977	484082
C	28m SE	Smithy	1901	497994
C	34m SE	Smithy	1863	497994
B	41m SE	Corn Mill	1927	496650
B	41m SE	Corn Mill	1901	496650
B	41m SE	Corn Mill	1863	496650
10	49m S	Unspecified Mill	1862	473485
D	56m NW	Old Gravel Pit	1904	501080
D	56m NW	Old Gravel Pit	1904	501080
D	61m NW	Unspecified Pit	1955	497095
D	62m NW	Unspecified Pit	1928	497095
D	62m NW	Old Gravel Pit	1901	489204
D	66m NW	Unspecified Pit	1922	487062
D	66m NW	Old Gravel Pit	1904	495722
D	69m NW	Sand Pit	1863	479062
E	145m NW	Unspecified Tank	1904	477558
E	146m NW	Corn Mill	1862	473754
F	198m W	Refuse Heap	1978	475289
13	202m SE	Brick and Tile Works	1863	479570
F	203m W	Gravel Pit	1928	491476

ID	Location	Land Use	Date	Group ID
F	207m W	Gravel Pit	1955	491476
15	240m SE	Gravel Pit	1977	484079
16	245m S	Cuttings	1955	474223
G	266m S	Corn Mill	1922	498526
G	267m S	Unspecified Disused Mill	1955	473077
17	271m NW	Corn Mill	1863	473838
18	295m S	Gravel Pit	1977	484081
G	296m S	Corn Mill	1904	499757
G	297m S	Corn Mill	1927	497896
G	297m S	Corn Mill	1901	494324
19	313m S	Cuttings	1862	474059
G	313m S	Smithy	1901	487937
G	313m S	Smithy	1862	487937
G	315m S	Smithy	1904	492662
20	327m NW	Unspecified Pit	1977	480313
H	362m SE	Store	1992	501227
H	362m SE	Store	1977	501227
I	369m NW	Smithy	1901	496397
I	369m NW	Smithy	1863	496397
21	389m NW	Old Gravel Pit	1901	471963
22	417m N	Sand Pit	1862	479044
J	439m S	Unspecified Mill	1955	473428
23	457m SE	Gravel Pit	1977	484080
24	470m S	Sand and Gravel Pit	1977	474020
J	484m S	Sawmill	1977	499496

This data is sourced from Ordnance Survey / Groundsure.

2.2 Historical tanks

Records within 500m	4

Tank features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use - un-grouped map on **page 17 >**

ID	Location	Land Use	Date	Group ID
11	128m S	Unspecified Tank	1976	65111
E	147m NW	Unspecified Tank	1904	64024
12	181m NW	Tanks	1974	63027
14	203m S	Unspecified Tank	1969	64099

This data is sourced from Ordnance Survey / Groundsure.

2.3 Historical energy features

Records within 500m	0

Energy features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey / Groundsure.

2.4 Historical petrol stations

Records within 500m	0

Petrol stations digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey / Groundsure.

2.5 Historical garages

Records within 500m	0

Garages digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey / Groundsure.

3 Waste and landfill

3.1 Active or recent landfill

Records within 500m	0

Active or recently closed landfill sites under Scottish Environment Protection (SEPA) regulation.

This data is sourced from the Scottish Environment Protection Agency.

3.2 Historical landfill (BGS records)

Records within 500m	0

Landfill sites identified on a survey carried out on behalf of the DoE in 1973. These sites may have been closed or operational at this time.

This data is sourced from the British Geological Survey.

3.3 Historical landfill (LA/mapping records)

Records within 500m	0

Landfill sites identified from Local Authority records and high detail historical mapping.

This data is sourced from the Ordnance Survey/Groundsure and Local Authority records.

3.4 Licensed waste sites

Records within 500m	0

Active or recently closed waste sites under Scottish Environment Protection Acency (SEPA) regulation.

This data is sourced from the Scottish Environment Protection Agency.

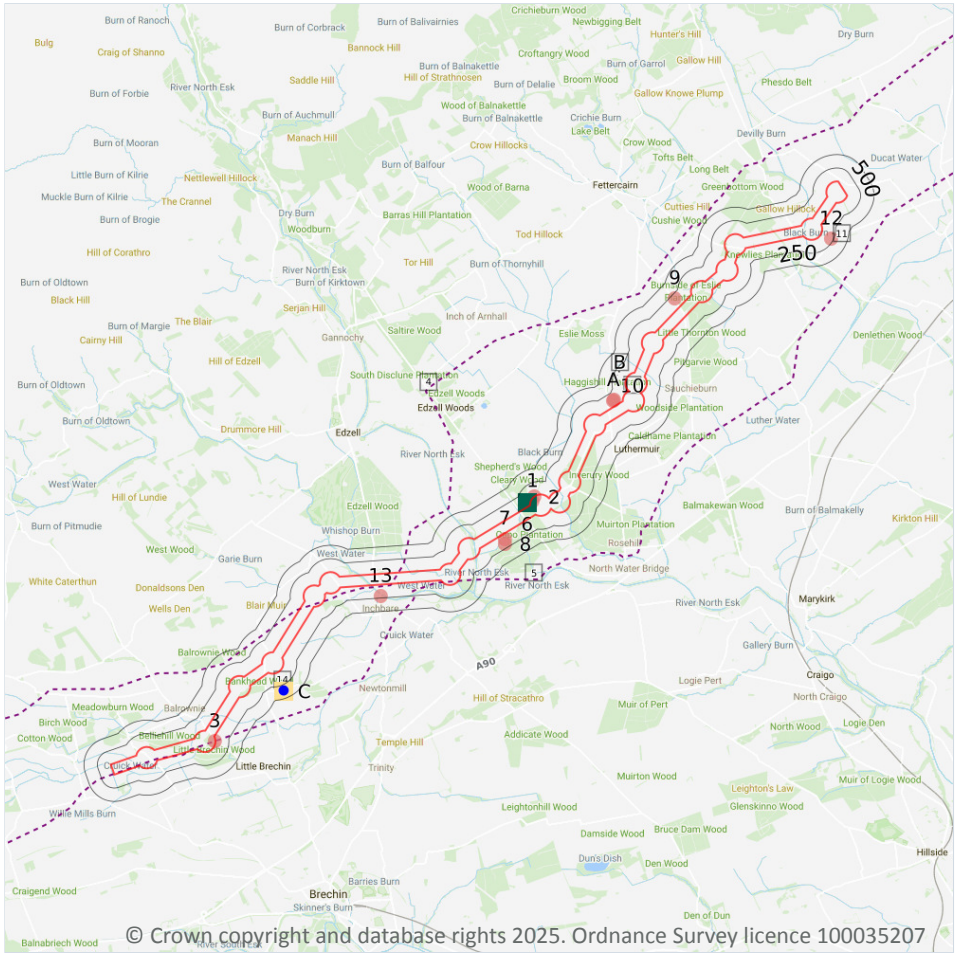
3.5 Historical waste sites

Records within 500m	0

Waste site records derived from Local Authority planning records and high detail historical mapping.

This data is sourced from Ordnance Survey/Groundsure and Local Authority records.

4 Current industrial land use



4.1 Recent industrial land uses

Records within 250m	10

Current potentially contaminative industrial sites.

Features are displayed on the Current industrial land use map on **page 23 >**

ID	Location	Company	Address	Activity	Category
1	**On site**	**Rosehill Timber Ltd**	**Clearie Moor Sawmill, Laurencekirk, Kincardineshire, AB30 1RQ**	**Wood Products Including Charcoal, Paper, Card and Board**	**Industrial Products**
2	**On site**	**Peterson**	**North Water Bridge, Laurencekirk, Kincardineshire, AB30 1RQ**	**Container and Storage**	**Transport, Storage and Delivery**

ID	Location	Company	Address	Activity	Category
3	**On site**	**Gas Governor Station**	**Angus, DD9**	**Gas Features**	**Infrastructure and Facilities**
7	87m SE	Electricity Sub Station	Kincardineshire, AB30	Electrical Features	Infrastructure and Facilities
A	107m NW	Silo	Kincardineshire, AB30	Hoppers and Silos	Farming
A	107m NW	Silo	Kincardineshire, AB30	Hoppers and Silos	Farming
8	169m SE	Breedon Aggregates	Capo Quarry, Edzell Woods, Kincardineshire, AB30 1RQ	Unspecified Quarries Or Mines	Extractive Industries
9	175m NW	Adler & Allan Ltd	New House 4 Gourdon Small Holdings, Laurencekirk, Kincardineshire, AB30 1PT	Fuel Distributors and Suppliers	Household, Office, Leisure and Garden
12	211m SE	Slurry Bed	Kincardineshire, AB30	Waste Storage, Processing and Disposal	Infrastructure and Facilities
13	215m S	Gas Governor	Angus, DD9	Gas Features	Infrastructure and Facilities

This data is sourced from Ordnance Survey.

4.2 National Geographic Database (NGD) - Current or recent tanks

Records within 250m	**8**

Current or recent tanks identified from the Ordnance Survey NGD.

Features are displayed on the Current industrial land use map on **page 23 >**

ID	Location	Tank description	Activity	Date first identified
B	172m NW	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	19/09/2015
B	173m NW	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	19/09/2015
B	173m NW	Open Storage Tank	Commercial Activity: Distribution Or Storage	19/09/2015
10	176m W	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	19/04/2022
B	183m NW	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	19/09/2015
B	183m NW	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	19/09/2015
11	198m E	Open Storage Tank	Commercial Activity: Distribution Or Storage	26/10/2005
14	246m SE	Buried Open Storage Tank	Commercial Activity: Distribution Or Storage	01/05/2011

This data is sourced from Ordnance Survey.

4.3 Current or recent petrol stations

Records within 500m	0

Open, closed, under development and obsolete petrol stations.

This data is sourced from Experian.

4.4 Electricity cables

Records within 500m	0

High voltage underground electricity transmission cables.

This data is sourced from National Grid.

4.5 Gas pipelines

Records within 500m	2

High pressure underground gas transmission pipelines.

Features are displayed on the Current industrial land use map on **page 23 >**

ID	Location	Pipe Name	Details	
4	**On site**	**ABERDEEN TO KIRRIEMUIR**	**Pipe Number: -** **Pipeline Safety Regulations Number: -** **Ownership: National Grid** **Maximum Operating Pressure (Bar): -**	**Pipeline Diameter (mm): 900** **Wall Thickness (mm): -** **Year of commission: Not specified** **Abandonment Status: Not abandoned**
5	**On site**	**ABERDEEN TO KIRRIEMUIR**	**Pipe Number: -** **Pipeline Safety Regulations Number: -** **Ownership: National Grid** **Maximum Operating Pressure (Bar): -**	**Pipeline Diameter (mm): 900** **Wall Thickness (mm): -** **Year of commission: Not specified** **Abandonment Status: Not abandoned**

This data is sourced from National Grid.

4.6 Sites determined as Contaminated Land

Records within 500m	0

Contaminated Land Register of sites designated under Part 2a of the Environmental Protection Act 1990.

This data is sourced from Local Authority records.

4.7 Control of Major Accident Hazards (COMAH)

Records within 500m	0

Control of Major Accident Hazards (COMAH) sites. This data includes upper and lower tier sites, and includes a historical archive of COMAH sites and Notification of Installations Handling Hazardous Substances (NIHHS) records.

This data is sourced from the Health and Safety Executive.

4.8 Regulated explosive sites

Records within 500m	0

Sites registered and licensed by the Health and Safety Executive under the Manufacture and Storage of Explosives Regulations 2005 (MSER). The last update to this data was in April 2011.

This data is sourced from the Health and Safety Executive.

4.9 Hazardous substance storage/usage

Records within 500m	0

Consents granted for a site to hold certain quantities of hazardous substances at or above defined limits in accordance with the Planning (Hazardous Substances) Regulations 2015.

This data is sourced from Local Authority records.

4.10 Part A(1), IPPC and Historic IPC Authorisations

Records within 500m	1

Records of Part A installations regulated for the release of substances to the environment.

Features are displayed on the Current industrial land use map on **page 23 >**

ID	Location	Address	Operator	Processes undertaken	License reference
C	360m S	Brathinch Farm, By Brechin, Angus	D Ramsay & Son	PPC(A) - Intensive Agriculture (Pig and Poultry)	PPC/A/1016762

This data is sourced from the Scottish Environment Protection Agency.

4.11 Part B Authorisations

Records within 500m	1

Records of Part B installations regulated for the release of substances to the environment.

Features are displayed on the Current industrial land use map on **page 23 >**

ID	Location	Address	Operator	Processes undertaken	License reference
6	61m W	Rosehill Timber, Laurencekirk --- Clearymoor Sawmill, Rosehill, Northwaterbridge, Laurencekirk AB30 IQD	Rosehill Timber	Timber activities	PPC/E/0030060

This data is sourced from the Scottish Environment Protection Agency.

4.12 Pollution inventory substances

Records within 500m	1

The pollution inventory (substances) includes reporting on annual emissions of certain regulated substances to air, controlled waters and land. A reporting threshold for each substance is also included. Where emissions fall below the reporting threshold, no value will be given. The data is given for the most recent complete year available.

Features are displayed on the Current industrial land use map on **page 23 >**

ID: C, Location: 361m S, Permit: -
Operator: Brathinch Farm
Activity: -
Address: Brathinch Farm, Brathinch, By Brechin, Angus -
Sector: Intensive livestock production and aquaculture, Sub-sector: -
Releases:

Route	Substance	Reporting threshold (kg)	Quantity (kg)
Air	Ammonia	1000	8415.599
Air	Methane	10000	17392.5

This data is sourced from the Environment Agency and the Scottish Environment Protection Agency.

4.13 Pollution inventory waste transfers

Records within 500m	0

The pollution inventory (waste transfers) includes reporting on annual transfers and recovery/disposal of controlled wastes from a site. A reporting threshold for each waste type is also included. Where releases fall below the reporting threshold, no value will be given. The data is given for the most recent complete year available.

This data is sourced from the Environment Agency and the Scottish Environment Protection Agency.

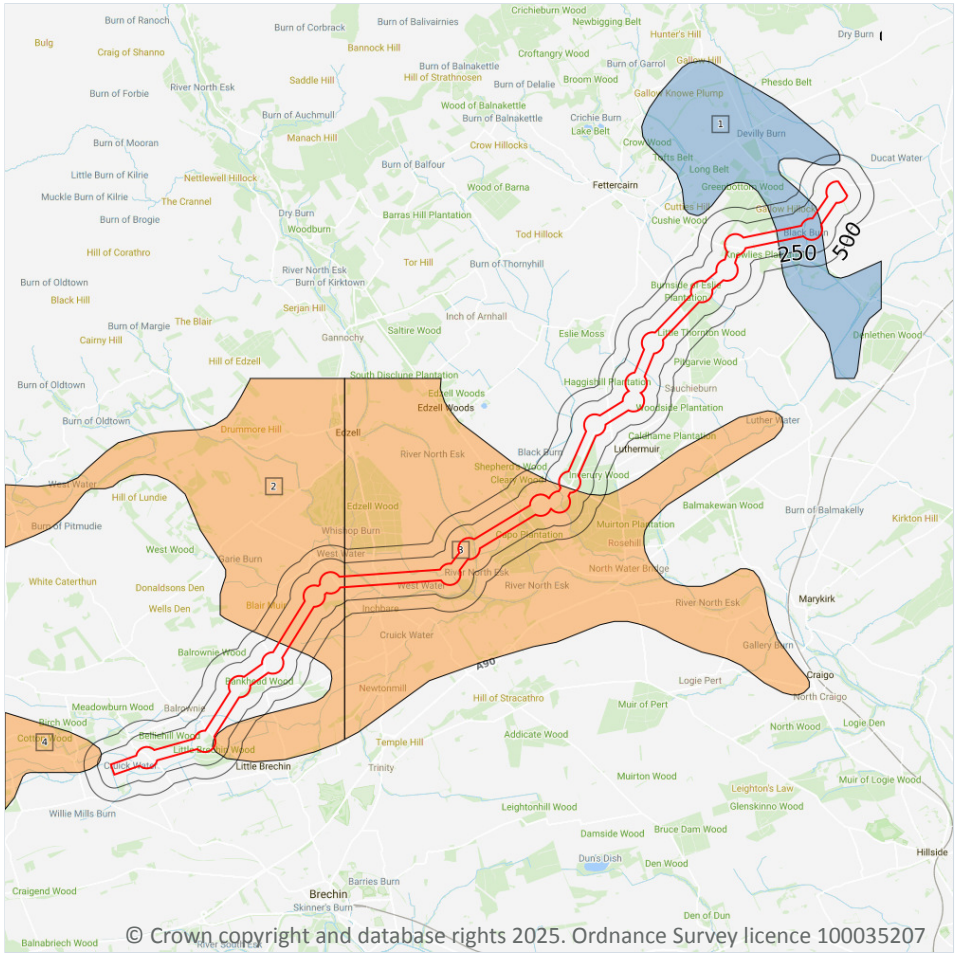
4.14 Pollution inventory radioactive waste

Records within 500m	0

The pollution inventory (radioactive wastes) includes reporting on annual releases of radioactive substances from a site, including the means of release. Where releases fall below the reporting threshold, no value will be given. The data is given for the most recent complete year available.

This data is sourced from the Environment Agency and the Scottish Environment Protection Agency.

5 Hydrogeology - Superficial aquifer



Site Outline

Search buffers in metres (m)

Limited or local potential

Locally important - intergranular

5.1 Superficial aquifer

Records within 500m	4

Records of groundwater classification within superficial geology.

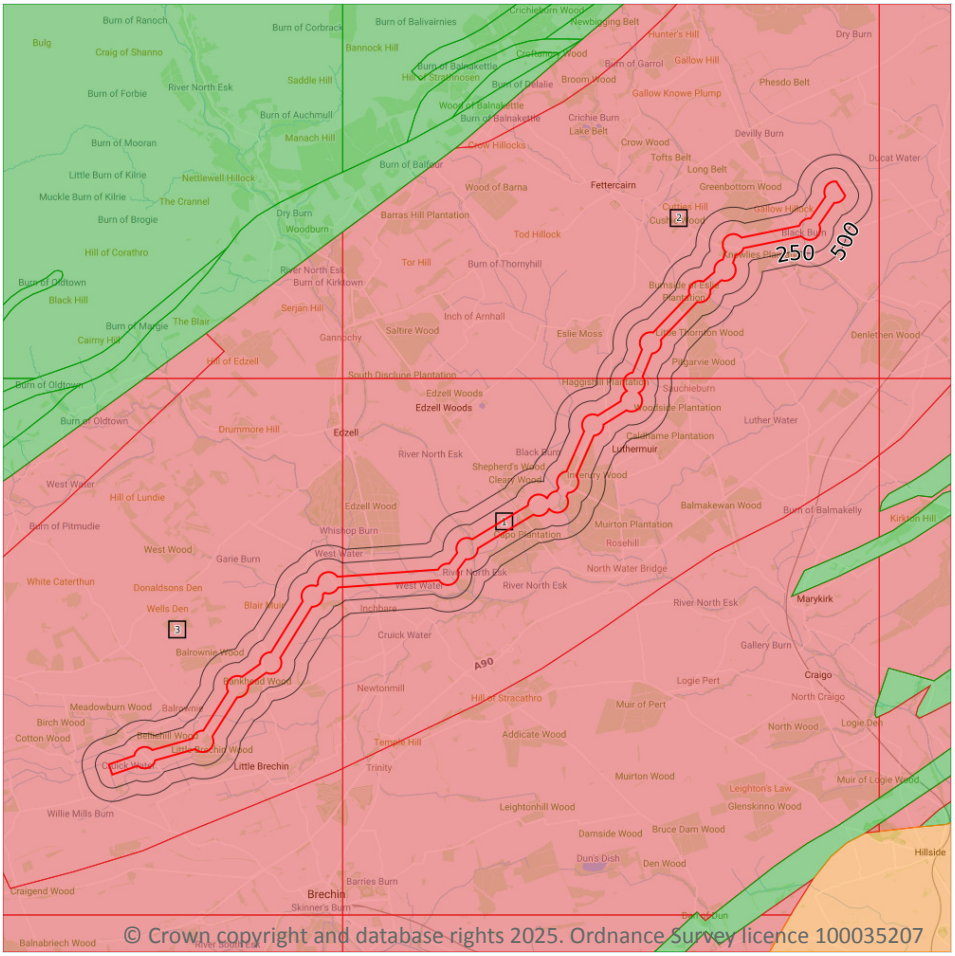
Features are displayed on the Hydrogeology map on **page 29 >**

ID	Location	Description	Type	Rock description
1	On site	Concealed aquifers, aquifers of limited potential, regions without significant groundwater	Concealed aquifers; aquifers with limited or local potential	Quaternary Coastal and Fluviatile Alluvium
2	On site	Aquifers in which intergranular flow is significant	Locally important aquifers	Quaternary Sands and Gravels

ID	Location	Description	Type	Rock description
3	**On site**	**Aquifers in which intergranular flow is significant**	**Locally important aquifers**	**Quaternary Sands and Gravels**
4	213m NW	Aquifers in which intergranular flow is significant	Locally important aquifers	Quaternary Sands and Gravels

This data is sourced from the British Geological Survey.

Bedrock aquifer



© Crown copyright and database rights 2025. Ordnance Survey licence 100035207

Site Outline

Search buffers in metres (m)

- Highly productive - fissures/discontinuities
- Highly productive - intergranular
- Moderately productive - fissures/discontinuities
- Moderately productive - intergranular
- Low productive - fissures/discontinuities
- Low productive - intergranular
- No significant groundwater

5.2 Bedrock aquifer

Records within 500m	3

Records of groundwater classification within bedrock geology.

Features are displayed on the Bedrock aquifer map on **page 31 >**

ID	Location	Description	Flow	Summary	Rock description
1	**On site**	**Moderately productive aquifer**	**Flow is virtually all through fractures and other discontinuities**	**Sandstones, in places flaggy, with siltstones, mudstones and conglomerates and interbedded lavas locally yield up to 12 L/s in parts of Strathmore.**	**STRATHMORE GROUP**

ID	Location	Description	Flow	Summary	Rock description
2	**On site**	**Moderately productive aquifer**	**Flow is virtually all through fractures and other discontinuities**	**Sandstones, in places flaggy, with siltstones, mudstones and conglomerates and interbedded lavas locally yield up to 12 L/s in parts of Strathmore.**	**STRATHMORE GROUP**
3	**On site**	**Moderately productive aquifer**	**Flow is virtually all through fractures and other discontinuities**	**Sandstones, in places flaggy, with siltstones, mudstones and conglomerates and interbedded lavas locally yield up to 12 L/s in parts of Strathmore.**	**STRATHMORE GROUP**

This data is sourced from the British Geological Survey.

6 Hydrology

6.1 Water Network (OS MasterMap)

Records within 250m	251

Detailed water network of Great Britain showing the flow and precise central course of every river, stream, lake and canal.

Features are displayed on the Hydrology map on **page 33 >**

ID	Location	Type of water feature	Ground level	Permanence	Name
1	**On site**	**Inland river not influenced by normal tidal action.**	**On ground surface**	**Watercourse contains water year round (in normal circumstances)**	**Cruick Water**

ID	Location	Type of water feature	Ground level	Permanence	Name
2	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Cruick Water
3	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Cruick Water
4	On site	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
5	On site	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
6	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
7	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
8	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	West Water
9	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Black Burn
10	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	River North Esk
11	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Whishop Burn
12	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	River North Esk
13	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	River North Esk
14	On site	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	Whishop Burn

ID	Location	Type of water feature	Ground level	Permanence	Name
15	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Whishop Burn
16	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Whishop Burn
17	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	River North Esk
18	On site	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
19	On site	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
20	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Black Burn
21	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Dowrie Burn
22	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Dowrie Burn
23	On site	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
24	On site	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
A	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
B	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
B	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-

ID	Location	Type of water feature	Ground level	Permanence	Name
C	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
D	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
E	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
F	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
G	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
H	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
I	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
J	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
K	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
L	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
M	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
N	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
O	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-

ID	Location	Type of water feature	Ground level	Permanence	Name
P	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
Q	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
R	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
S	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
T	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
U	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
V	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
W	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
X	On site	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
X	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
Y	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	River North Esk
Y	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	River North Esk
Y	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	River North Esk

ID	Location	Type of water feature	Ground level	Permanence	Name
Z	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
AA	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
AB	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
AC	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
AD	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
AE	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
AE	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
AF	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
AG	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
AH	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
AI	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
AJ	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
AK	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-

ID	Location	Type of water feature	Ground level	Permanence	Name
AL	**On site**	**Inland river not influenced by normal tidal action.**	**On ground surface**	**Watercourse contains water year round (in normal circumstances)**	**-**
AL	**On site**	**Inland river not influenced by normal tidal action.**	**Underground**	**Watercourse contains water year round (in normal circumstances)**	**-**
AL	**On site**	**Lake, loch or reservoir.**	**On ground surface**	**Watercourse contains water year round (in normal circumstances)**	**-**
AL	**On site**	**Inland river not influenced by normal tidal action.**	**Underground**	**Watercourse contains water year round (in normal circumstances)**	**-**
AL	**On site**	**Inland river not influenced by normal tidal action.**	**On ground surface**	**Watercourse contains water year round (in normal circumstances)**	**-**
AM	**On site**	**Inland river not influenced by normal tidal action.**	**Underground**	**Watercourse contains water year round (in normal circumstances)**	**-**
AM	**On site**	**Inland river not influenced by normal tidal action.**	**On ground surface**	**Watercourse contains water year round (in normal circumstances)**	**-**
AN	**On site**	**Inland river not influenced by normal tidal action.**	**On ground surface**	**Watercourse contains water year round (in normal circumstances)**	**-**
AO	**On site**	**Inland river not influenced by normal tidal action.**	**On ground surface**	**Watercourse contains water year round (in normal circumstances)**	**-**
AP	**On site**	**Inland river not influenced by normal tidal action.**	**On ground surface**	**Watercourse contains water year round (in normal circumstances)**	**-**
AQ	**On site**	**Inland river not influenced by normal tidal action.**	**On ground surface**	**Watercourse contains water year round (in normal circumstances)**	**-**
AR	**On site**	**Inland river not influenced by normal tidal action.**	**On ground surface**	**Watercourse contains water year round (in normal circumstances)**	**-**
AU	4m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-

ID	Location	Type of water feature	Ground level	Permanence	Name
N	6m SE	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
AV	11m SW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
AW	12m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
N	14m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
AX	15m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
40	18m N	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
41	20m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Cruick Water
N	20m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
N	20m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
AY	21m N	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
N	22m SE	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
N	25m SE	Lake, loch or reservoir.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
AZ	26m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-

ID	Location	Type of water feature	Ground level	Permanence	Name
BA	26m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
BB	33m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
42	34m S	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
BC	35m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
43	36m N	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
BD	37m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
BC	39m SE	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
BE	41m N	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	River North Esk
BE	41m N	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	River North Esk
BF	44m N	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
BG	46m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
BH	47m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
45	47m W	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-

ID	Location	Type of water feature	Ground level	Permanence	Name
BI	49m SE	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
BJ	49m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
46	51m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Cruick Water
BI	53m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
47	58m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
AZ	58m NW	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
BK	61m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
BL	61m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
49	61m SE	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
BM	63m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
BN	63m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Cruick Water
50	64m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Cruick Water
BO	64m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-

ID	Location	Type of water feature	Ground level	Permanence	Name
BI	65m SE	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
BI	69m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
BP	70m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
BQ	71m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
BQ	71m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
51	71m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	West Water
BR	71m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
BS	71m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
BT	73m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
BT	73m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
BU	74m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
BQ	76m NW	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
52	79m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-

ID	Location	Type of water feature	Ground level	Permanence	Name
BV	80m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Willie Mills Burn
BW	81m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
BX	81m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
54	82m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Black Burn
BN	84m S	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	Willie Mills Burn
55	84m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Cruick Water
BN	84m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Willie Mills Burn
56	88m NW	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
BE	88m N	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	River North Esk
BY	90m S	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
BY	91m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
BZ	95m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
CA	103m N	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-

ID	Location	Type of water feature	Ground level	Permanence	Name
57	105m NW	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
AT	108m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Black Burn
CB	109m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
58	111m N	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
CC	111m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
59	111m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Cruick Water
CD	111m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
CE	112m N	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
CF	114m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
61	116m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
62	116m SE	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
BS	117m S	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
63	117m N	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	River North Esk

ID	Location	Type of water feature	Ground level	Permanence	Name
CG	119m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
CH	119m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
64	123m NE	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
CI	124m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
CJ	124m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
65	126m SE	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
BT	126m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
66	127m N	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
CK	127m NE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
CL	129m N	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
67	130m S	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
CM	130m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
68	131m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Cruick Water

ID	Location	Type of water feature	Ground level	Permanence	Name
CN	132m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
CO	133m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
CP	136m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
69	138m N	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	West Water
71	144m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Cruick Water
72	146m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
CQ	146m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
CR	154m N	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
CR	154m N	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
CR	155m N	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
CS	155m N	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
BZ	159m SE	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
BZ	163m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-

ID	Location	Type of water feature	Ground level	Permanence	Name
76	165m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	West Water
77	166m N	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
CT	168m N	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
78	171m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	West Water
79	171m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
CP	174m NW	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
CP	183m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
CU	187m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Buttery Burn
CP	187m NW	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
CV	188m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Willie Mills Burn
CP	189m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
CW	190m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	West Water
CX	190m N	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-

ID	Location	Type of water feature	Ground level	Permanence	Name
CY	191m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
80	194m SE	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
81	195m S	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
DA	196m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
CZ	196m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
DB	199m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
DC	200m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
DA	200m E	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
DD	202m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
DE	202m NW	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
DF	206m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
82	209m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	West Water
CW	209m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	West Water

ID	Location	Type of water feature	Ground level	Permanence	Name
DG	210m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	West Water
DG	210m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	West Water
DG	213m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	West Water
83	214m NW	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
DG	216m SW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	West Water
DH	217m S	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
DI	218m NW	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
DG	220m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	West Water
DG	220m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	West Water
DJ	220m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
DG	221m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	West Water
85	222m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Black Burn
DK	222m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-

ID	Location	Type of water feature	Ground level	Permanence	Name
DL	222m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
DI	223m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
DL	223m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
DM	224m S	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
87	226m N	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	West Water
DN	226m N	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
DG	226m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	West Water
DM	227m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
DH	227m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
DK	228m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Whishop Burn
DK	231m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Whishop Burn
DO	231m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
88	234m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Black Burn

ID	Location	Type of water feature	Ground level	Permanence	Name
89	234m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
DP	235m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
DQ	237m N	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	River North Esk
DQ	237m N	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	River North Esk
90	239m N	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	Whishop Burn
DG	240m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	West Water
DG	240m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	West Water
DR	241m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
DS	241m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
DG	245m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	West Water
DT	245m N	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Whishop Burn
DU	247m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
DV	248m N	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-

ID	Location	Type of water feature	Ground level	Permanence	Name
91	249m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
92	249m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Dowrie Burn
DW	249m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-

This data is sourced from the Ordnance Survey.

6.2 Surface water features

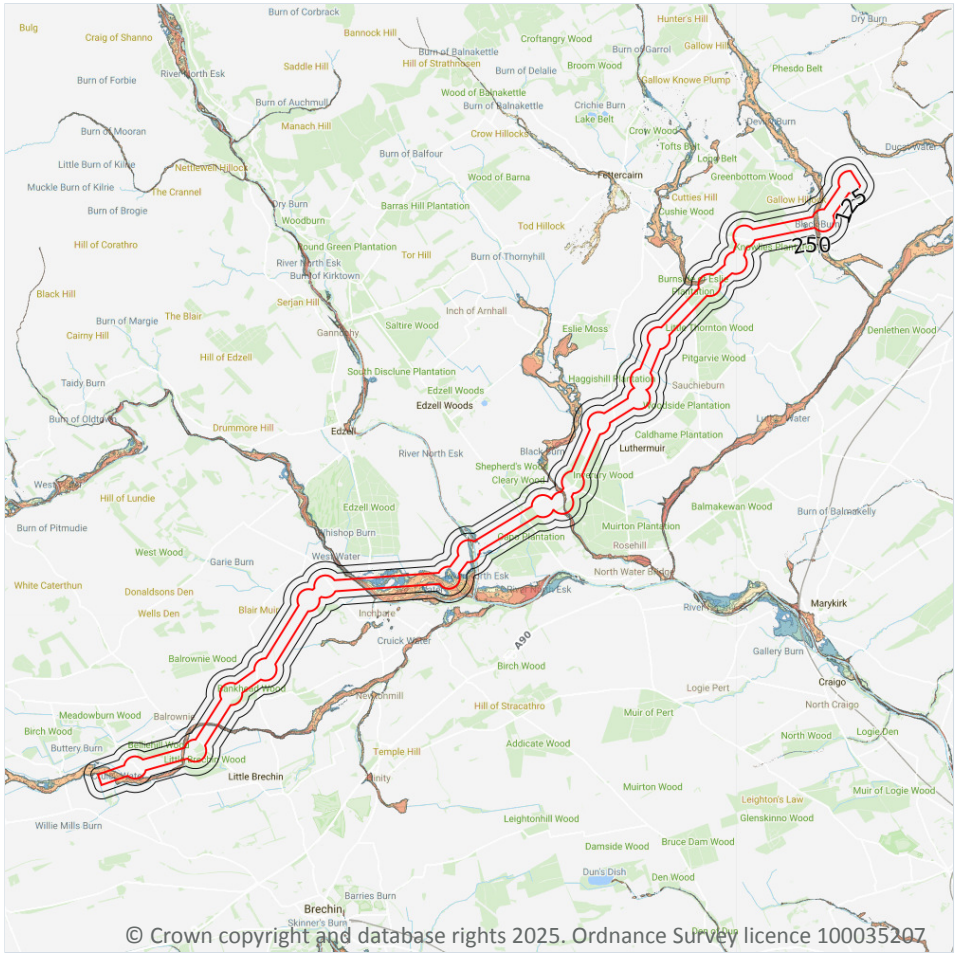
Records within 250m	**82**

Covering rivers, streams and lakes (some overlap with OS MasterMap Water Network data in previous section) but additionally covers smaller features such as ponds. Rivers and streams narrower than 5m are represented as a single line. Lakes, ponds and rivers or streams wider than 5m are represented as polygons.

Features are displayed on the Hydrology map on **page 33 >**

This data is sourced from the Ordnance Survey.

7 River flooding



Site Outline

Search buffers in metres (m)

1 in 1000 return period
- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

1 in 250 return period
- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

1 in 100 return period
- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

1 in 30 return period
- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

7.1 River flooding

Highest risk on site	**1 in 30 year, Greater than 1.0m**
Highest risk within 50m	**1 in 30 year, Greater than 1.0m**

This is an assessment of flood risk for rivers in Scotland produced using modelled data, provided by Ambiental Risk Analytics. It also takes account of flood defence information provided by the Scottish Environment Protection Agency (SEPA). It shows the chance of flooding from rivers presented in the following categories:

- 1 in 30 year (3.33%)
- 1 in 100 year (1%)

- 1 in 250 year (0.4%)
- and 1 in 1,000 year (0.1%)

The data shown on the map and in the table above shows the highest likelihood of flood events happening at the site. Lower likelihood events may have greater flood depths and hence a greater potential impact on a site. The table below shows the maximum flood depths for a range of return periods for the site.

Features are displayed on the River flooding map on **page 54 >**

Return period	Maximum modelled depth
1 in 1000 year	Greater than 1.0m
1 in 250 year	Greater than 1.0m
1 in 100 year	Greater than 1.0m
1 in 30 year	Greater than 1.0m

This data is sourced from Ambiental Risk Analytics.

8 Coastal flooding - Coastal flooding

8.1 Coastal flooding

Highest risk on site	**Negligible**
Highest risk within 50m	**Negligible**

This is an assessment of coastal flood risk in Scotland produced using modelled data, provided by Ambiental Risk Analytics. It also takes account of flood defence information provided by the Scottish Environment Protection Agency (SEPA). It shows the chance of coastal flooding presented in the following categories:

- 1 in 30 year (3.33%)
- 1 in 100 year (1%)
- 1 in 250 year (0.4%)
- and 1 in 1,000 year (0.1%)

The data shown on the map shows the highest likelihood of flood events happening at the site. Lower likelihood events may have greater flood depths and hence a greater potential impact on a site. The table below shows the maximum flood depths for a range of return periods for the site.

Return period	Maximum modelled depth
1 in 1000 year	Negligible
1 in 250 year	Negligible
1 in 100 year	Negligible
1 in 30 year	Negligible

This data is sourced from Ambiental Risk Analytics.

9 Surface water flooding

Site Outline

Search buffers in metres (m)

1 in 1000 return period
- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

1 in 250 return period
- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

1 in 100 return period
- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

1 in 30 return period
- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

9.1 Surface water flooding

Highest risk on site	**1 in 30 year, Greater than 1.0m**
Highest risk within 50m	**1 in 30 year, Greater than 1.0m**

Ambiental Risk Analytics surface water (pluvial) FloodMap identifies areas likely to flood as a result of extreme rainfall events, i.e. land naturally vulnerable to surface water ponding or flooding. This data set was produced by simulating 1 in 30 year, 1 in 100 year, 1 in 250 year and 1 in 1,000 year rainfall events. Modern urban drainage systems are typically built to cope with rainfall events between 1 in 20 and 1 in 30 years, though some older ones may flood in a 1 in 5 year rainfall event.

Features are displayed on the Surface water flooding map on page 57 >

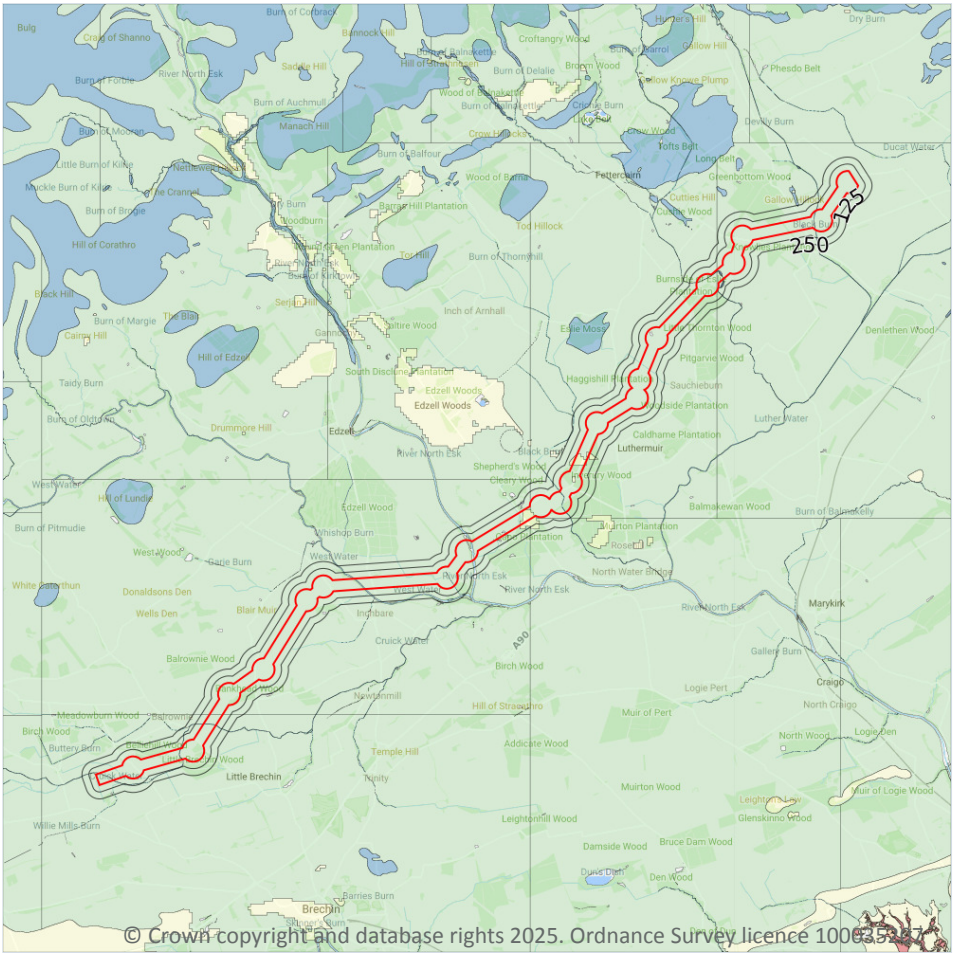
The data shown on the map and in the table above shows the highest likelihood of flood events happening at the site. Lower likelihood events may have greater flood depths and hence a greater potential impact on

a site. The table below shows the maximum flood depths for a range of return periods for the site.

Return period	Maximum modelled depth
1 in 1000 year	Greater than 1.0m
1 in 250 year	Greater than 1.0m
1 in 100 year	Greater than 1.0m
1 in 30 year	Greater than 1.0m

This data is sourced from Ambiental Risk Analytics.

10 Groundwater flooding



Site Outline

Search buffers in metres (m)

High

Moderate - High

Moderate

Low

Negligible

10.1 Groundwater flooding

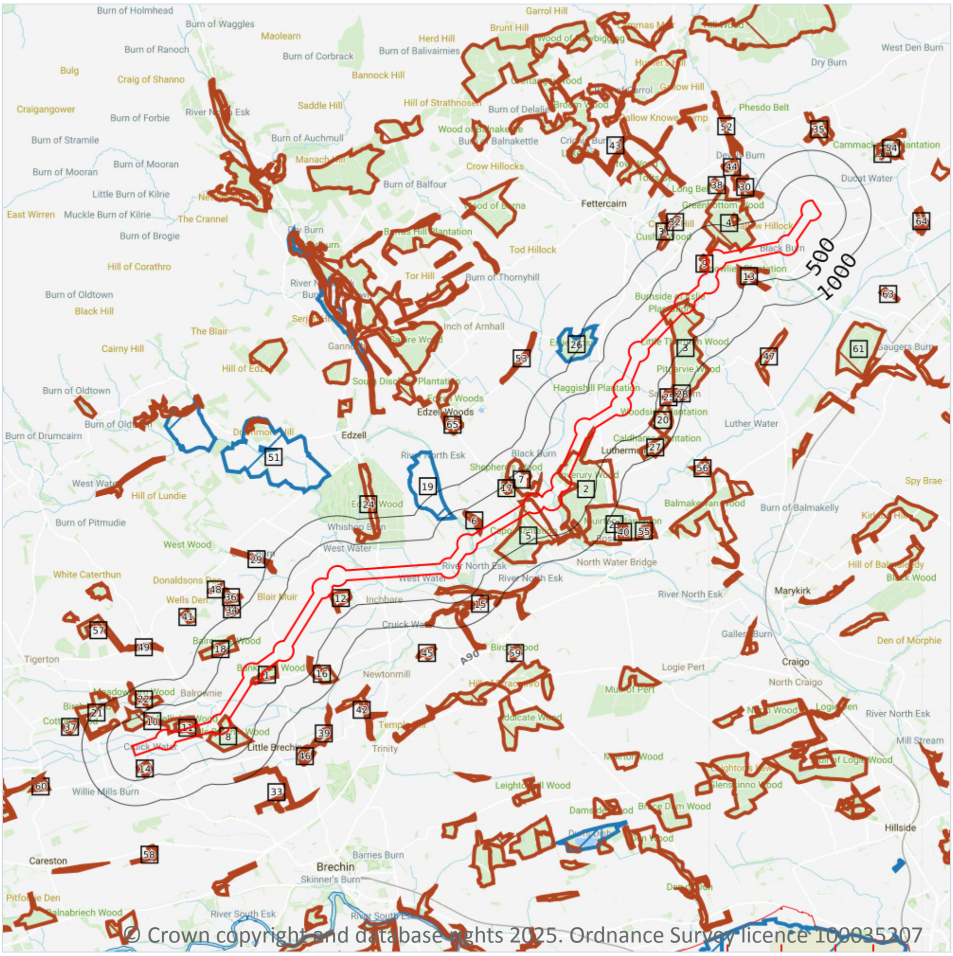
Highest risk on site	**Moderate**
Highest risk within 50m	**Moderate**

Groundwater flooding is caused by unusually high groundwater levels. It occurs when the water table rises above the ground surface or within underground structures such as basements or cellars. Groundwater flooding tends to exhibit a longer duration than surface water flooding, possibly lasting for weeks or months, and as a result it can cause significant damage to property. This risk assessment is based on a 1 in 100 year return period and a 5m Digital Terrain Model (DTM).

Features are displayed on the Groundwater flooding map on **page 59 >**

This data is sourced from Ambiental Risk Analytics.

11 Environmental designations



Site Outline

Search buffers in metres (m)

- Sites of Special Scientific Interest (SSSI)
- Conserved wetland sites (Ramsar sites)
- Special Areas of Conservation (SAC)
- Special Protection Areas (SPA)
- National Nature Reserves (NNR)
- Local Nature Reserves (LNR)
- Designated Ancient Woodland

11.1 Sites of Special Scientific Interest (SSSI)

Records within 2000m **3**

Sites providing statutory protection for the best examples of UK flora, fauna, or geological or physiographical features. Originally notified under the National Parks and Access to the Countryside Act 1949, SSSIs were re-notified under the Wildlife and Countryside Act 1981. Improved provisions for the protection and management of SSSIs were introduced by the Countryside and Rights of Way Act 2000 (in England and Wales) and (in Scotland) by the Nature Conservation (Scotland) Act 2004 and the Wildlife and Natural Environment (Scotland) Act 2010.

Features are displayed on the Environmental designations map on page 60 >

ID	Location	Name	Data source
19	384m NW	North Esk and West Water Palaeochannels	NatureScot

ID	Location	Name	Data source
26	684m W	Eslie Moss	NatureScot
51	1601m N	North Esk and West Water Palaeochannels	NatureScot

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

11.2 Conserved wetland sites (Ramsar sites)

Records within 2000m	0

Ramsar sites are designated under the Convention on Wetlands of International Importance, agreed in Ramsar, Iran, in 1971. They cover all aspects of wetland conservation and wise use, recognizing wetlands as ecosystems that are extremely important for biodiversity conservation in general and for the well-being of human communities. These sites cover a broad definition of wetland; marsh, fen, peatland or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, and even some marine areas.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

11.3 Special Areas of Conservation (SAC)

Records within 2000m	0

Areas which have been identified as best representing the range and variety within the European Union of habitats and (non-bird) species listed on Annexes I and II to the Directive. SACs are designated under the EC Habitats Directive.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

11.4 Special Protection Areas (SPA)

Records within 2000m	0

Sites classified by the UK Government under the EC Birds Directive, SPAs are areas of the most important habitat for rare (listed on Annex I to the Directive) and migratory birds within the European Union.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

11.5 National Nature Reserves (NNR)

Records within 2000m	0

Sites containing examples of some of the most important natural and semi-natural terrestrial and coastal ecosystems in Great Britain. They are managed to conserve their habitats, provide special opportunities for scientific study or to provide public recreation compatible with natural heritage interests.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

11.6 Local Nature Reserves (LNR)

Records within 2000m	0

Sites managed for nature conservation, and to provide opportunities for research and education, or simply enjoying and having contact with nature. They are declared by local authorities under the National Parks and Access to the Countryside Act 1949 after consultation with the relevant statutory nature conservation agency.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

11.7 Designated Ancient Woodland

Records within 2000m	62

Ancient woodlands are classified as areas which have been wooded continuously since at least 1600 AD. This includes semi-natural woodland and plantations on ancient woodland sites. 'Wooded continuously' does not mean there is or has previously been continuous tree cover across the whole site, and not all trees within the woodland have to be old.

Features are displayed on the Environmental designations map on **page 60 >**

ID	Location	Name	Woodland Type
1	**On site**	**Bankhead Wood**	**Long-Established (of plantation origin)**
2	**On site**	**Inverury Wood**	**Long-Established (of plantation origin)**
3	**On site**	**Pitgarvie/l. Thornton Wd**	**Long-Established (of plantation origin)**
4	**On site**	**Greenbottom Wood**	**Long-Established (of plantation origin)**
5	**On site**	**Capo Plantation**	**Long-Established (of plantation origin)**
6	**On site**	**Unknown**	**Long-Established (of plantation origin)**
7	**On site**	**Cleary Wood**	**Long-Established (of plantation origin)**
8	**On site**	**Little Brechin Wood**	**Long-Established (of plantation origin)**
9	**On site**	**Unknown**	**Long-Established (of plantation origin)**
10	**On site**	**Keeper's/belliehill Woods**	**Long-Established (of plantation origin)**
11	**On site**	**Keeper's/belliehill Woods**	**Long-Established (of plantation origin)**
12	11m SE	Unknown	Long-Established (of plantation origin)
13	123m S	Unknown	Long-Established (of plantation origin)
14	191m S	Unknown	Long-Established (of plantation origin)

ID	Location	Name	Woodland Type
15	204m S	Unknown	Long-Established (of plantation origin)
16	312m E	Unknown	Long-Established (of plantation origin)
17	320m NW	Unknown	Long-Established (of plantation origin)
18	361m NW	Balrownie Wood	Long-Established (of plantation origin)
20	477m SE	Woodside Plantation	Long-Established (of plantation origin)
21	507m NW	Birch Wood; The Willows	Long-Established (of plantation origin)
22	517m NW	Burnside Wood	Long-Established (of plantation origin)
23	517m E	Muirton Plantation	Long-Established (of plantation origin)
24	544m N	Edzell Wood	Long-Established (of plantation origin)
25	618m E	Unknown	Long-Established (of plantation origin)
27	746m SE	Cauldhame Plantation	Long-Established (of plantation origin)
28	779m E	Pitgarvie/I. Thornton Wd	Ancient (of semi-natural origin)
29	798m W	Unknown	Long-Established (of plantation origin)
30	834m W	Unknown	Long-Established (of plantation origin)
31	840m NW	Unknown	Long-Established (of plantation origin)
32	880m NW	Unknown	Long-Established (of plantation origin)
33	931m S	Unknown	Long-Established (of plantation origin)
34	999m NW	Unknown	Long-Established (of plantation origin)
35	1147m N	Unknown	Long-Established (of plantation origin)
36	1159m NW	Unknown	Long-Established (of plantation origin)
37	1163m W	Cotton Wood	Long-Established (of plantation origin)
38	1186m N	Unknown	Long-Established (of plantation origin)
39	1218m SE	Unknown	Long-Established (of plantation origin)
40	1239m E	Unknown	Long-Established (of plantation origin)
41	1367m NW	Unknown	Long-Established (of plantation origin)
42	1374m SE	Unknown	Long-Established (of plantation origin)
43	1382m NW	Broom/crow Wood	Long-Established (of plantation origin)
44	1399m NW	Unknown	Long-Established (of plantation origin)

ID	Location	Name	Woodland Type
45	1411m S	Unknown	Long-Established (of plantation origin)
46	1481m E	Unknown	Long-Established (of plantation origin)
47	1497m S	Unknown	Long-Established (of plantation origin)
48	1533m NW	Unknown	Long-Established (of plantation origin)
49	1591m N	Unknown	Long-Established (of plantation origin)
50	1600m NE	Cammackmuir Plantation	Long-Established (of plantation origin)
52	1612m NW	Unknown	Long-Established (of plantation origin)
53	1616m NW	Maindrain Plantation	Long-Established (of plantation origin)
54	1622m NE	Cammackmuir Plantation	Long-Established (of plantation origin)
55	1659m SE	Unknown	Long-Established (of plantation origin)
56	1670m SE	Unknown	Long-Established (of plantation origin)
57	1770m NW	Unknown	Long-Established (of plantation origin)
58	1833m S	Unknown	Long-Established (of plantation origin)
59	1837m SE	Birch Wood	Long-Established (of plantation origin)
60	1842m W	Unknown	Long-Established (of plantation origin)
61	1847m SE	Denlethen Wood	Long-Established (of plantation origin)
62	1874m W	Duns Wood	Long-Established (of plantation origin)
63	1876m SE	Unknown	Long-Established (of plantation origin)
64	1894m E	Haulkerton Plantation	Long-Established (of plantation origin)
65	1898m NW	Unknown	Long-Established (of plantation origin)

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

11.8 Biosphere Reserves

Records within 2000m	0

Biosphere Reserves are internationally recognised by UNESCO as sites of excellence to balance conservation and socioeconomic development between nature and people. They are recognised under the Man and the Biosphere (MAB) Programme with the aim of promoting sustainable development founded on the work of the local community.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

11.9 Forest Parks

Records within 2000m	0

These are areas managed by the Forestry Commission designated on the basis of recreational, conservation or scenic interest.

This data is sourced from the Forestry Commission.

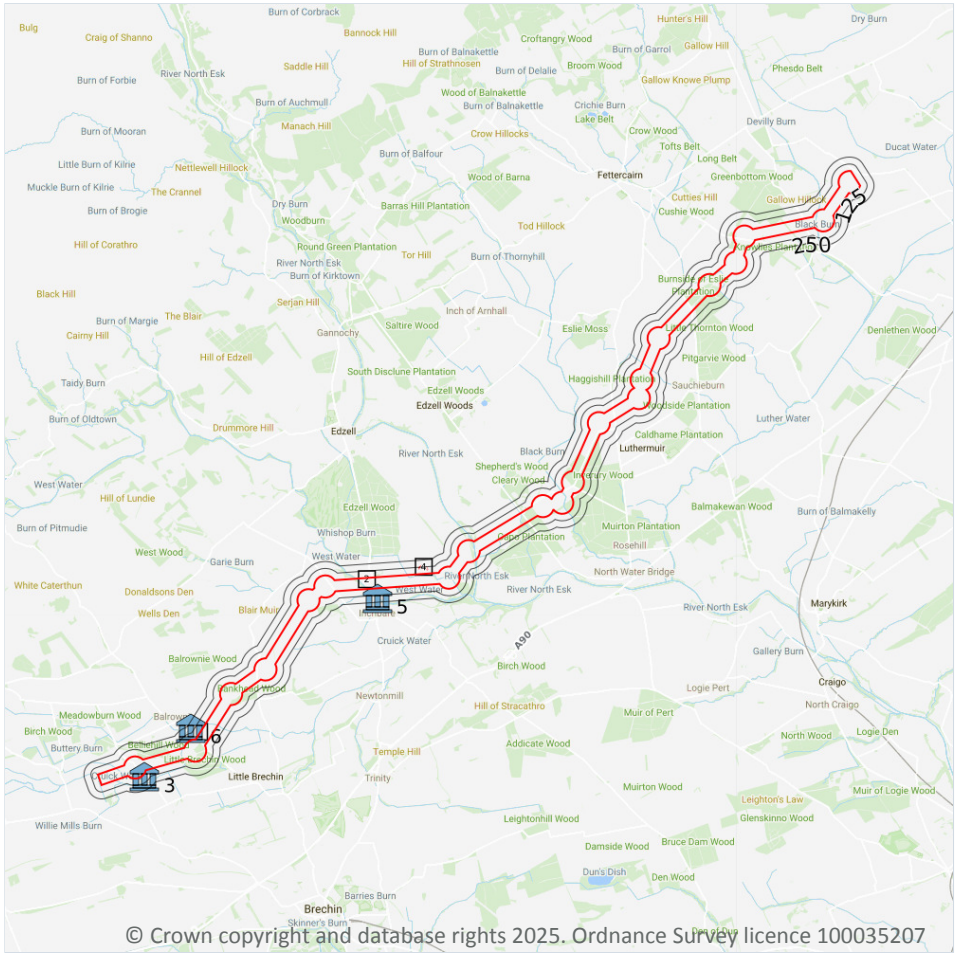
11.10 Marine Conservation Zones

Records within 2000m	0

A type of marine nature reserve in UK waters established under the Marine and Coastal Access Act (2009). They are designated with the aim to protect nationally important, rare or threatened habitats and species.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

12 Visual and cultural designations



Site Outline

Search buffers in metres (m)

- Listed buildings
- Conservation areas
- Conservation areas - no data
- National Parks
- Areas of Outstanding Natural Beauty
- Registered parks and gardens
- Scheduled Monuments
- World Heritage Sites

12.1 World Heritage Sites

Records within 250m	0

Sites designated for their globally important cultural or natural interest requiring appropriate management and protection measures. World Heritage Sites are designated to meet the UK's commitments under the World Heritage Convention.

This data is sourced from Historic England, Cadw and Historic Environment Scotland.

12.2 Area of Outstanding Natural Beauty

Records within 250m	0

Areas of Outstanding Natural Beauty (AONB) are conservation areas, chosen because they represent 18% of the finest countryside. Each AONB has been designated for special attention because of the quality of their flora, fauna, historical and cultural associations, and/or scenic views. The National Parks and Access to the Countryside Act of 1949 created AONBs and the Countryside and Rights of Way Act, 2000 added further regulation and protection. There are likely to be restrictions to some developments within these areas.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

12.3 National Parks

Records within 250m	0

In England and Wales, the purpose of National Parks is to conserve and enhance landscapes within the countryside whilst promoting public enjoyment of them and having regard for the social and economic well-being of those living within them. In Scotland National Parks have the additional purpose of promoting the sustainable use of the natural resources of the area and the sustainable social and economic development of its communities. The National Parks and Access to the Countryside Act 1949 established the National Park designation in England and Wales, and The National Parks (Scotland) Act 2000 in Scotland.

This data is sourced from Natural England, Natural Resources Wales and the Scottish Government.

12.4 Listed Buildings

Records within 250m	3

Buildings listed for their special architectural or historical interest. Building control in the form of 'listed building consent' is required in order to make any changes to that building which might affect its special interest. Listed buildings are graded to indicate their relative importance, however building controls apply to all buildings equally, irrespective of their grade, and apply to the interior and exterior of the building in its entirety, together with any curtilage structures.

Features are displayed on the Visual and cultural designations map on **page 66 >**

ID	Location	Name	Grade	Reference Number	Listed date
3	42m SE	Mill Of Cruick, Angus	B	351672	11/06/1971
5	179m S	West Water Bridge, Inchbare, Angus	B	351764	11/06/1971
6	184m NW	Balrownie Bridge, Angus	C	351673	15/01/1980

This data is sourced from Historic England, Cadw and Historic Environment Scotland.

12.5 Conservation Areas

Records within 250m	0

Local planning authorities are obliged to designate as conservation areas any parts of their own area that are of special architectural or historic interest, the character and appearance of which it is desirable to preserve or enhance. Designation of a conservation area gives broader protection than the listing of individual buildings. All the features within the area, listed or otherwise, are recognised as part of its character. Conservation area designation is the means of recognising the importance of all factors and of ensuring that planning decisions address the quality of the landscape in its broadest sense.

This data is sourced from Historic England, Cadw and Historic Environment Scotland.

12.6 Scheduled Ancient Monuments

Records within 250m	3

A scheduled monument is an historic building or site that is included in the Schedule of Monuments kept by the Secretary of State for Digital, Culture, Media and Sport. The regime is set out in the Ancient Monuments and Archaeological Areas Act 1979. The Schedule of Monuments has c.20,000 entries and includes sites such as Roman remains, burial mounds, castles, bridges, earthworks, the remains of deserted villages and industrial sites. Monuments are not graded, but all are, by definition, considered to be of national importance.

Features are displayed on the Visual and cultural designations map on **page 66 >**

ID	Location	Ancient monument name	Reference number
1	**On site**	**Mill of Balrownie,ring ditch 200m SE of**	**-**
2	**On site**	**Westside, barrows 115m SW of Westerly**	**-**
4	63m N	Westside, unenclosed settlement 620m E of Westside Cottages	-

This data is sourced from Historic England, Cadw and Historic Environment Scotland.

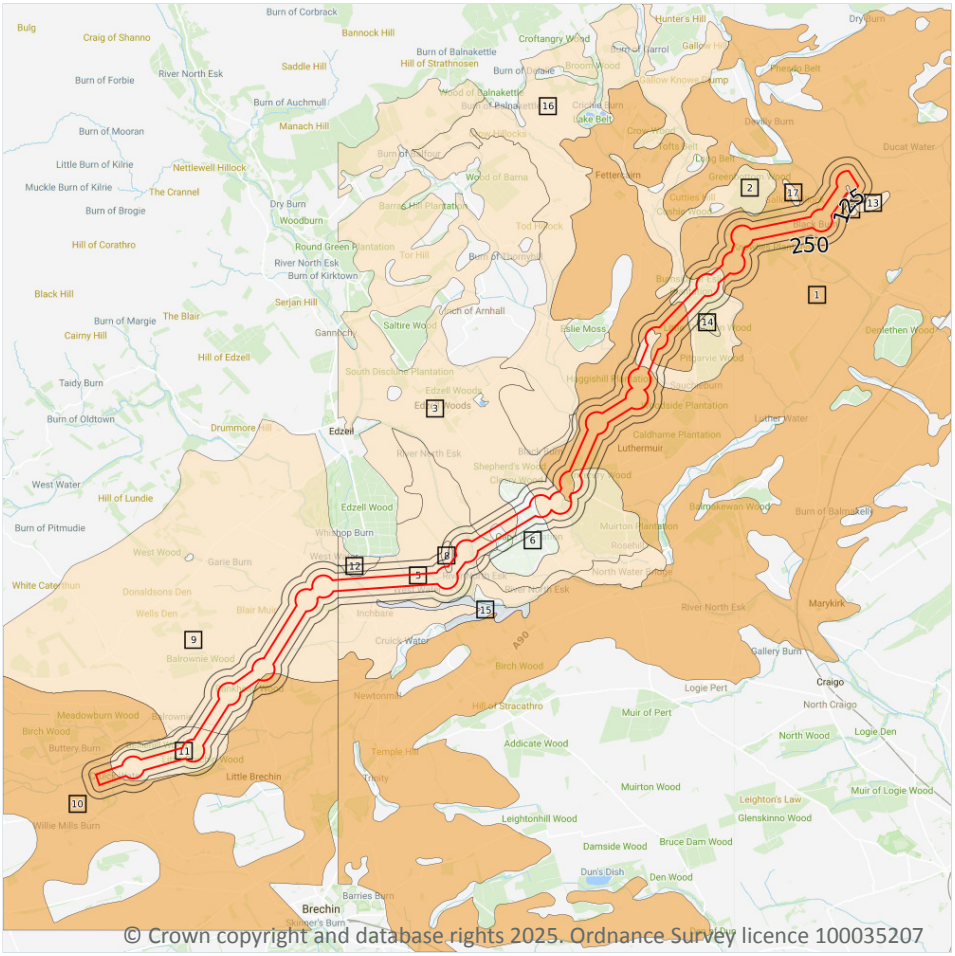
12.7 Registered Parks and Gardens

Records within 250m	0

Parks and gardens assessed to be of particular interest and of special historic interest. The emphasis being on 'designed' landscapes, rather than on planting or botanical importance. Registration is a 'material consideration' in the planning process, meaning that planning authorities must consider the impact of any proposed development on the special character of the landscape.

This data is sourced from Historic England, Cadw and Historic Environment Scotland.

13 Agricultural designations



13.1 Agricultural Land Classification

Records within 250m	16

Classification of the quality of agricultural land taking into consideration multiple factors inclusing climate, physical geography and soil properties. It should be noted that the categories for the grading of agricultural land are not consistent across England, Wales and Scotland.

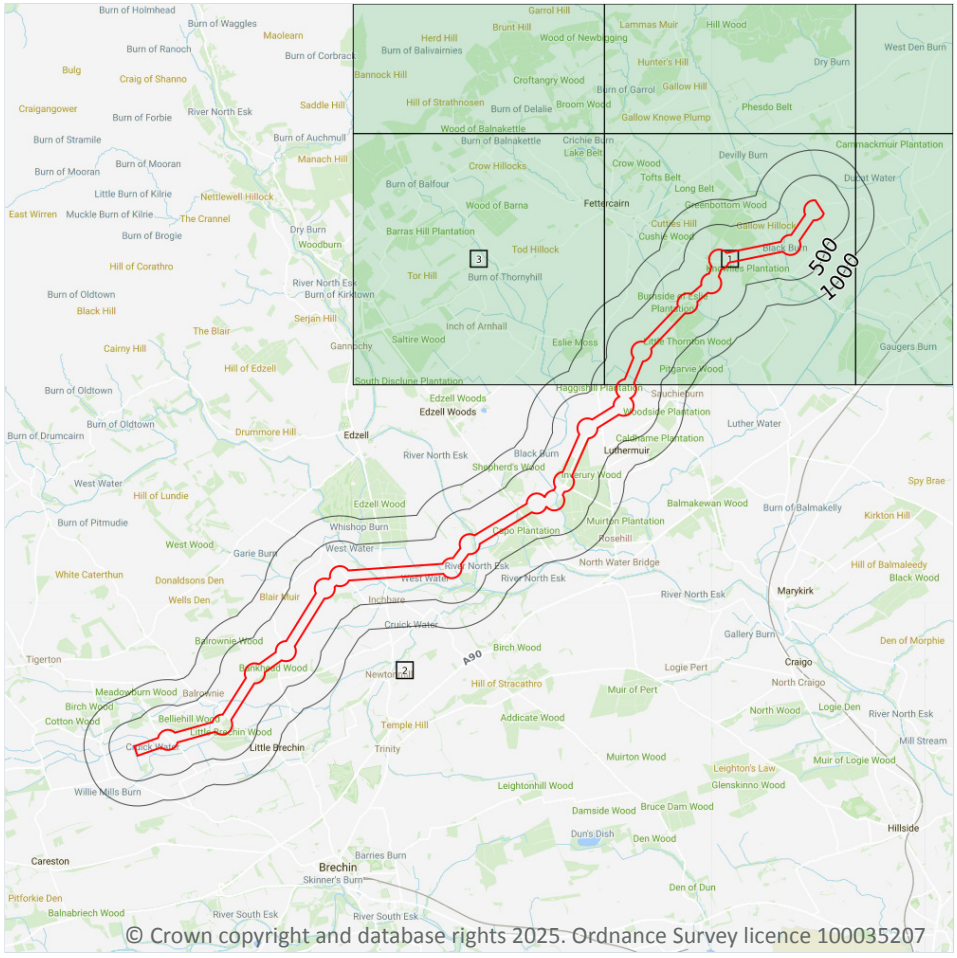
Features are displayed on the Agricultural designations map on **page 69 >**

ID	Location	Classification	Description
1	On site	Grade 2	Land Suited to Arable Cropping
2	On site	Grade 3.1	Land Suited to Arable Cropping
3	On site	Grade 3.2	Land Suited to Arable Cropping

ID	Location	Classification	Description
4	**On site**	**Grade 3.1**	**Land Suited to Arable Cropping**
5	**On site**	**Grade 3.1**	**Land Suited to Arable Cropping**
6	**On site**	**Grade 4.1**	**Land Suited to Arable Cropping**
8	**On site**	**Grade 3.2**	**Land Suited to Arable Cropping**
9	**On site**	**Grade 3.2**	**Land Suited to Arable Cropping**
10	**On site**	**Grade 2**	**Land Suited to Arable Cropping**
11	**On site**	**Grade 3.1**	**Land Suited to Arable Cropping**
12	40m N	Grade 3.2	Land Suited to Arable Cropping
13	139m SE	Grade 3.2	Land Suited to Arable Cropping
14	196m SE	Grade 3.2	Land Suited to Arable Cropping
15	214m S	Grade 5.2	Land Suited only to Improved Grassland and Rough Grazings
16	219m NW	Grade 3.1	Land Suited to Arable Cropping
17	232m N	Grade 3.2	Land Suited to Arable Cropping

This data is sourced from the James Hutton Institute.

14 Geology 1:10,000 scale - Availability



Site Outline

Search buffers in metres (m)

Full coverage

Partial coverage

No coverage

14.1 10k Availability

Records within 500m **3**

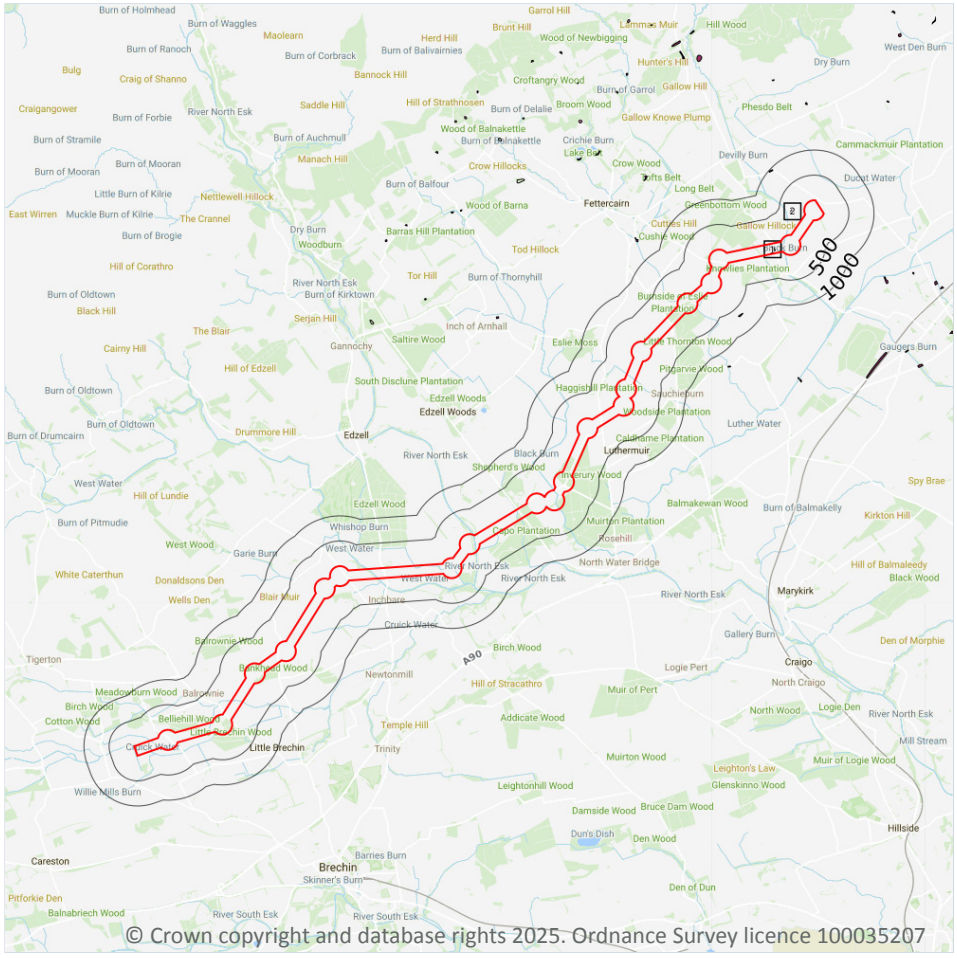
An indication on the coverage of 1:10,000 scale geology data for the site, the most detailed dataset provided by the British Geological Survey. Either 'Full', 'Partial' or 'No coverage' for each geological theme.

Features are displayed on the Geology 1:10,000 scale - Availability map on **page 71 >**

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	**On site**	**Full**	**Full**	**Full**	**No coverage**	**NO67SE**
2	**On site**	**No coverage**	**No coverage**	**No coverage**	**No coverage**	**NoCov**
3	240m W	Full	Full	Full	No coverage	NO67SW

This data is sourced from the British Geological Survey.

Geology 1:10,000 scale - Artificial and made ground



Site Outline

Search buffers in metres (m)

- Reclaimed ground
- Made ground
- Worked ground
- Infilled ground
- Disturbed ground
- Landscaped ground

14.2 Artificial and made ground (10k)

Records within 500m	2

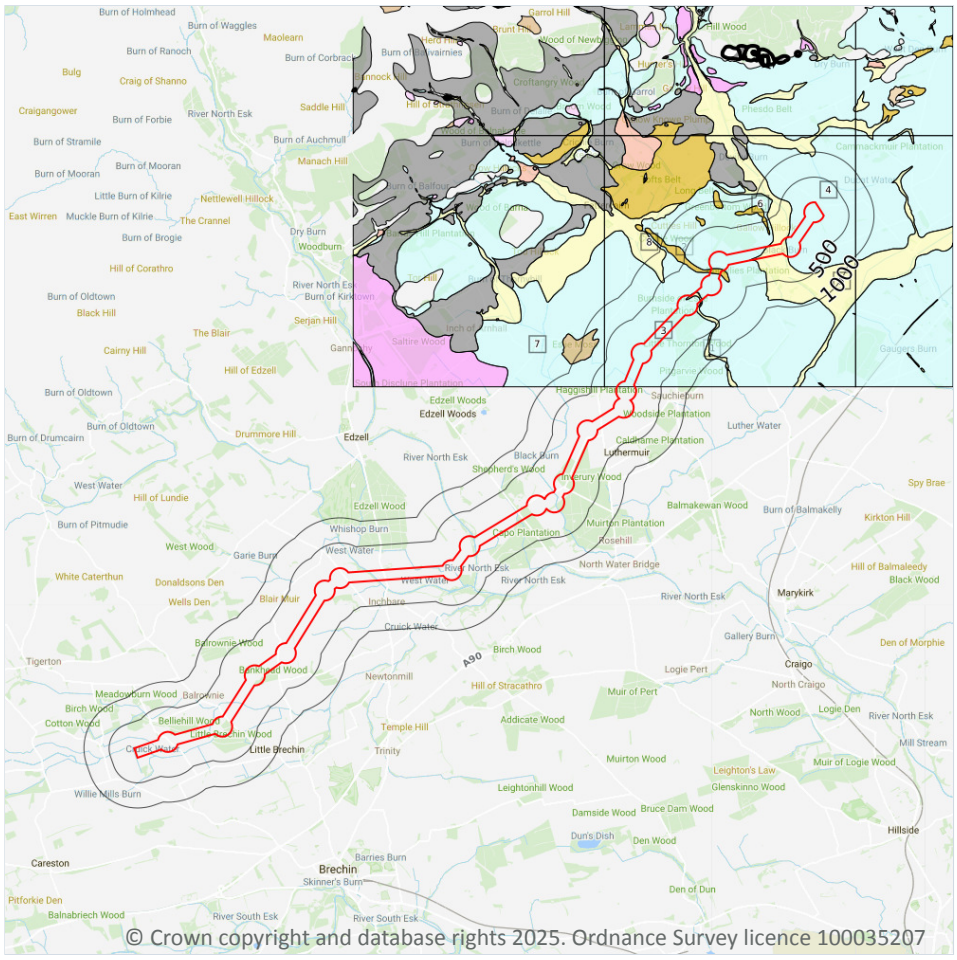
Details of made, worked, infilled, disturbed and landscaped ground at 1:10,000 scale. Artificial ground can be associated with potentially contaminated material, unpredictable engineering conditions and instability.

Features are displayed on the Geology 1:10,000 scale - Artificial and made ground map on **page 72 >**

ID	Location	LEX Code	Description	Rock description
1	**On site**	**MGR-ARTDP**	**Made Ground (Undivided)**	**Artificial Deposit**
2	203m W	WGR-VOID	Worked Ground (Undivided)	Void

This data is sourced from the British Geological Survey.

Geology 1:10,000 scale - Superficial



Site Outline

Search buffers in metres (m)

Landslip (10k)

Superficial geology (10k)
Please see table for more details.

14.3 Superficial geology (10k)

Records within 500m	8

Superficial geological deposits at 1:10,000 scale. Also known as 'drift', these are the youngest geological deposits, formed during the Quaternary. They rest on older deposits or rocks referred to as bedrock.

Features are displayed on the Geology 1:10,000 scale - Superficial map on **page 73 >**

ID	Location	LEX Code	Description	Rock description
1	On site	ALV-XCZSV	Alluvium - Clay, Silt, Sand And Gravel	Clay, Silt, Sand And Gravel
2	On site	USI-XCZS	Ury Silts Formation - Clay, Silt And Sand	Clay, Silt And Sand
3	On site	MFT-DMTN	Mill Of Forest Till Formation - Diamicton	Diamicton
4	On site	MFT-DMTN	Mill Of Forest Till Formation - Diamicton	Diamicton

ID	Location	LEX Code	Description	Rock description
5	**On site**	**ALV-XCZSV**	**Alluvium - Clay, Silt, Sand And Gravel**	**Clay, Silt, Sand And Gravel**
6	226m N	USI-XCZS	Ury Silts Formation - Clay, Silt And Sand	Clay, Silt And Sand
7	240m W	MFT-DMTN	Mill Of Forest Till Formation - Diamicton	Diamicton
8	461m NW	ALV-XCZSV	Alluvium - Clay, Silt, Sand And Gravel	Clay, Silt, Sand And Gravel

This data is sourced from the British Geological Survey.

14.4 Landslip (10k)

Records within 500m	**0**

Mass movement deposits on BGS geological maps at 1:10,000 scale. Primarily superficial deposits that have moved down slope under gravity to form landslips. These affect bedrock, other superficial deposits and artificial ground.

This data is sourced from the British Geological Survey.