Fair Isle Harbour Improvement Works

A.6 Phase 1 Contamination report

On behalf of **Shetland Isle Council (SIC)**

Shetland Islands Council

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For and on behalf of Stantec UK Limited				

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1 Introduction

1.1 Preamble

1.1.1 Stantec UK Limited (Stantec) has been commissioned by Shetland Island Council (the Client) (SIC), to undertake a Preliminary Risk Assessment Desk Study Report on ground conditions (previously known as a Phase 1 Land Contamination Desk Study) in support of the proposed improvements to the existing ferry port at North Haven, Fair Isle.

1.1.2 The Site is the existing ferry port (including part of North Haven Bay) located on Fair Isle's eastern coastline (hereafter referred to as "the Site") and an additional (separate) smaller triangular shaped parcel of land to the west (hereafter, where appropriate, referred to as the "proposed temporary laydown area"). Therefore, this Preliminary Risk Assessment Desk Study covers the land and marine parts of the study area.

1.1.3 The Site is irregular in shape, covers approximately 2.5 hectares (ha) and is currently used as a ferry port providing a connection to Grutness port in Shetland. The Site location is illustrated on **Figure 1** and a Site description is provided in **Section 2.2** below. The proposed site layout plan is presented on **Figure 2,** which shows the land based areas and marine wet port areas of the Site.

1.1.4 This report presents the findings of the desk study research carried out, preliminary information on Tier 1 (preliminary/qualitative) contamination risk and ground stability. No site walkover was undertaken as part of this study.

1.1.5 At the outset of this study, Stantec was informed by the Client that the Site had not been subject to desk-based or intrusive ground investigations previously.

1.1.6 This is a Preliminary Risk Assessment Desk Study Report on Ground Conditions and is limited in scope focussing on land contamination and ground stability.

1.2 Objective

1.2.1 The objective of this report is to review readily available information in the public domain to identify and assess the existing ground conditions on the Site and in the immediate surrounding area. It also aims to identify potential geoenvironmental and land stability hazards that may require management as well as potential constraints to the proposed residential development.

1.2.2 The report includes preliminary advice on the ground and groundwater conditions at the Site. Guidance on the use of this report is presented in a note after the text of this report.

1.2.3 The principal planning objective is to identify unacceptable risks to human health, buildings and other property and the natural and historical environment from the potential contaminated condition of the land so that appropriate action can be considered and taken to address those risks.

1.2.4 Further information on the requirements the Scottish Government and the current National Planning Framework (NPF) in respect of ground conditions is presented in our guide entitled Stantec Guide: Methodology for Assessment of Land Contamination (Scotland), a copy of which is presented in **Appendix A**.

1.3 Proposed Development

1.3.1 SIC is progressing the Fair Isle Ferry Replacement Project to replace the existing vessel, which is approaching the end of its life and does not meet modern standards. The berthing site at Fair Isle will be upgraded to facilitate the new ferry.

1.3.2 SIC intends to submit a full planning application and associated marine license applications seeking approval to enhance the existing ferry port at Fair Isle comprising:

- A new quay structure to be formed between the northern end of the existing quay and the existing breakwater and returning along the length of the breakwater;
- A new linkspan (a type of drawbridge) to facilitate the new roll on – roll off (Ro-Ro) vessel, and associated control room;
- The existing breakwater is to be increased in size and height to provide greater shelter to the new quay structure and linkspan berth;
- Dredging to provide a sufficient water depth for new vessel around the proposed quay extension and linkspan;
- Repairs and re-fendering of the existing finger pier aligning structure to accommodate the new vessel;
- Substantial enlargement of existing noust (a boat shaped hollow where the ferry is dry docked), with room for a new access road up one side of the parked vessel, and a steel access steps;
- Construction of a new winch house building to accommodate a new winch and standby winch;
- Replacement of the existing cradle and slipway to accommodate the increased size of the new vessel; and
- New lighting will extend along the rear of the extended quay to the north of the existing quay.

1.3.3 Key construction activities (not in chronological order) will include the following:

- Noust expansion, existing winch house demolition;
- New slipway construction;
- New winch house construction, winch installation and commissioning;
- Pier structure repaired;
- Breakwater extended and height increased;
- Solid quay constructed to form new linkspan berth; and
- Linkspan installed and commissioned

1.3.4 Additional details in relation to the construction of the key features is provided below.

- The linkspan will be a ‘Type A’ linkspan, the same as that used at various other ferry terminals operated by SIC. A Type A linkspan is typically 14m in length and 5.5 m wide at the nose.
- The cradle will be dimensioned to suit the chosen vessel (vessel max. 24m in length and approximately 11m in width).
- The slipway length will be confirmed based on results of a bathymetry survey and vessel specifications. The existing slipway will become obsolete, but it is anticipated that the concrete foundations for this will be left in place. The new slipway will overlap with the existing one. This will be wider to allow use by the larger vessel. The general location of the noust will be unchanged but it is being substantially enlarged in two directions.
- In order to upgrade the cradle and slipway, the existing cradle and associated mechanical equipment will be replaced. The extension to the slipway is likely to be a reinforced concrete structure above water and steel structure below water. Existing substructure will be re-used where possible. The cradle will be a steel structure and will operate on steel rails that will be positioned on the slipway, similar to existing. The centreline of the slipway and noust will be offset from its current position.

- The linkspan deck is a new structure and will be fabricated off-site. The linkspan deck will be towed to site and installed on the newly constructed linkspan support structures alongside the breakwater once the new quay extension has been constructed.
- The dredging method will be determined from the results of the Ground Investigation and the materials that are encountered. Where sands / silts are to be dredged, an excavator will likely be used to dredge the seabed material to the required depth. If rock is to be dredged, the quality of the rock will determine whether an excavator can be used to 'rip' the rock from the seabed or if an alternative method will be used.

1.4 Report Contents

1.4.1 This report presents a desk study, which comprises the following:

- A desk-based study of published and readily available public information in general accordance with LC:RM (2020) and BS10175:2011+A2:2017.
- A Tier 1 Preliminary Risk Assessment (PRA), which is a qualitative assessment of geoenvironmental information to develop an outline conceptual model of the site.
- A preliminary ground stability appraisal.
- The report includes preliminary advice on the ground and groundwater conditions at the Site.

1.4.2 Information on the methodology adopted by Stantec is presented below and guidance on the use of this report is provided in **Section 8**.

1.5 Methodology

1.5.1 Only desk based research has been carried out, a Site walkover with direct inspection of the Site was not carried out. This report presents a review of the acquired information and gives comments with respect to potential constraints on foundation and general site infrastructure design and construction. Further information on the approach adopted by Stantec in the Stantec Guide: Methodology for Assessing Land Contamination, a copy of which is presented in **Appendix A**.

Ground Conditions – Contamination

1.5.2 The underlying principle is the evaluation of pollutant linkages to assess whether the presence of a source of contamination could potentially lead to harmful consequences. A pollutant linkage consists of the following three elements:

- A source of contamination or hazard that has the potential to cause harm or pollution;
- A pathway for the hazard to move along / generate exposure; and
- A receptor which has the potential to be affected by the hazard.

1.5.3 For each potential pollutant linkage identified the risk is estimated through consideration of the magnitude of the potential consequences and the likelihood or probability of an event occurring.

Ground Conditions – Ground Stability

1.5.4 A preliminary assessment of potential ground instability issues has been undertaken based on research and walkover information. Available published geological information has been obtained and reviewed, together with data acquired from public databases.

1.6 Sources of Information

1.6.1 The following publicly available sources of information were used in the preparation of this report:

- Groundsure was commissioned to provide an Groundsure Enviro+Geo Insight Report (ref GS-9395811) including historical maps and environmental data searches, presented in its entirety in **Appendix B**;
- Geology maps and borehole records held by the British Geological Survey (BGS) accessed via their website and Geological Survey of Scotland 1:63,360/1:50,000 geological map series;
- Scottish Environment Protection Agency (SEPA) Water Environment Hub and Water Classification Hub was reviewed for surface and groundwater quality;
- A review of the BRE Report BR211 (2015) Radon: Protective measures for new buildings (including supplementary advice for extensions, conversions and refurbishment projects);
- Review of the Natural Cavity and Artificial non-coal (underground) mining cavity databases managed and enhanced by Stantec;
- Review of risk map records of Regional Unexploded Bomb Risk held and review of preliminary reports carried out by Zetica UXO;
- Review of historical planning records on Shetland Islands Council online planning portal;
- Review of historical aerial photography accessed via Google Earth Pro;
- Scotland's Environment Map was consulted regarding significant environmental features and historical structures; and
- Communication and requests for environmental information pertinent to the Site were made to SIC and SEPA. Regulator correspondence is presented in **Appendix C**.

1.7 Previous Investigations

1.7.1 Stantec were not made aware of any desk-based or ground investigations having been carried out at the Site previously. The Client has not provided any reports relating to the Site.

2 Site Setting

2.1 Site Location

2.1.1 The Fair Isle Ferry Berth is located within the harbour at North Haven, on the north-east of the island. The nearest post code is ZE2 9JU and the central grid reference is HZ 22498 72527. A Site location plan is presented as **Figure 1**.

2.2 General Description

2.2.1 The Site is situated in a remote setting located on Fair Isle's eastern coast about 1.5 km east north east of Fair Isle's airport terminal building. It currently comprises a ferry terminal complete with pier and breakwater, a temporary laydown area and part of North Haven Bay. It is bounded to the north by the Atlantic Ocean (North Haven bay), to the east by rocky coastline, to the south by a sandy beach and to the west by North Haven bay. The total plan area of the Site is approximately 2.45 ha.

2.2.2 The existing pier is approximately 40 m in length, to allow the ferry to moor alongside. The pier is connected to hardstanding and a berth to the north which is approximately 60 m in length.

2.2.3 The harbour is sheltered from the east and west by high rocky cliffs, notionally sheltered from the south by an isthmus (narrow strip of land between North Haven and Bu Ness peninsula), and to the north by a rock armoured breakwater, approximately 80 m in length and 25 m in width. However, northerly conditions cause significant wave motion at the berth and therefore a noust (refer to **Insert 1** below) is used to house the vessel overnight.

Insert 1: Existing Noust at Fair Isle

2.2.4 The proposed temporary laydown area is Included within the application Site covering approximately 0.08 ha. This is separate from the main ferry terminal area and is intended, at the time of writing, to be used as a temporary storage area for quarried rock stockpiles. The rock will come from the widening of the noust area and proposed dredging of North Haven Bay, close to the new quay, which will permit clearance for the new larger ferry. The rock stockpiles are currently understood to be subsequently added to the existing breakwater and to be used as underlay for the new quayside. The temporary laydown area is currently set to grass, which is periodically grazed by sheep.

2.2.5 There are seven buildings within 250 m of the Site which are all uninhabited and used for storage. Existing harbour facilities comprise of the following:

- 60 m long berthage with 3.60 m water depth (at Mean Low Water Springs MLWS);
- 14m wide general cargo apron and storage building behind;
- single track access road with limited space for parking;
- finger pier aligning structure, slipway (1:10 nominal slope), cradle, noust and winch-house; and
- A waste disposal area (two sealed skips and wheelie bins) behind the pier.

2.2.6 Fuel cubes are periodically delivered to the island (refer to **Insert 2** below) and are craned off the ferry onto the existing quayside. These fuel cubes appear to be self-contained units and their contents likely used by island residents. The process of how the fuel is transferred and/or decanted is unknown.

Insert 2: Fuel cubes on existing quayside

2.2.7 Recent field observations from a representative of Mott MacDonalds (currently working onsite) state that "*the existing quay at Fair Isle appears impermeable and surface water just drains off over the edge into the sea*." Stantec generally agrees, however, considers the brick/ block paviour hard standing shown in **Insert 2** to be permeable i.e., seepages are likely to occur between the blocks. The underlying sub base fill is likely sandy (permeable), however, there may also be an underlying membrane – the specifications of which are unknown.

2.2.8 The Mott MacDonald representative also stated that '*there is an area of ponded water where the quay has settled slightly*." Given the age of the existing ferry port, it is unlikely that an interceptor exists. Moreover, the Mott MacDonald representative was not aware of any.

2.3 Topography

2.3.1 A topographic survey was available by Mott MacDonald. The existing quay area of the Site lies at about 3.0 m Ordnance Datum (OD), bounded by a cliff to the east which sharply rises up to about 11 m OD. The base of the noust is 4.63 m OD at its highest point, sloping downwards to the pier area at about 1.90 m OD.

2.3.2 The proposed temporary laydown area to the west was not included as part the topographic survey area. According to the BGS digital terrain map (BGS, 2023a), this part of the Site appears generally flat at about 7m OD.

3 Environmental Setting

3.1 Introduction

3.1.1 The information from published and publicly available information sources is summarised below and is used to provide context for the ground stability appraisal in **Section 4** and identify potential receptors in the Tier 1 PRA presented in **Section 5**.

3.2 Geological Setting

3.2.1 The following sources have been reviewed to provide information on the geological setting.

Review of Published Geology

3.2.2 The 1:50,000 scale geological mapping series Scotland, Southern Shetland, Sheet 126 and parts of 123 & 124 Drift (BGS, 1978a) and Solid (BGS, 1978b) indicate the following geological sequence underlying the Site:

- **Superficial Deposits**: No superficial deposits are indicated for the main Ferry Berth area. Bedrock is indicated to be at or near the ground surface. Given the site setting, very shallow skeletal coastal soils are anticipated in this part of the Site.

  The BGS indicates the superficial soils underlying the proposed temporary laydown area to be Marine Beach Deposits (MBD) mainly comprising gravel, sand and silt.

- **Solid Geology**: Bu Ness Sandstone Formation (BNG) of the Mid Devonian Epoch is identified as underlying the main Ferry Berth area. The BGS describes this formation to generally comprise grey to buff red-stained arkosic sandstone, pebbly grit and conglomerate, siltstone and mudstone. A fault line trending north to south passes through the middle of North Haven Bay, close to the western edge of the Site. The BNG is recorded to be about 200 m thick.

  The Observatory Sandstone Formation (OBG) of the Early Devonian Epoch is indicated by the mapping to underly the proposed temporary laydown area. The BGS describes this formation to generally comprise sandstone with thick beds of dolomitic siltstone and mudstone. The OBG is recorded to be about 950 m thick.

Historical BGS Boreholes

3.2.3 The BGS archive does not contain borehole records on or within the Site boundaries. There is only one borehole record (HZ27SW1) on the island situated approximately 1.7 km to the south west. This borehole was for the Fair Isle Water Supply and was drilled in 1998. Further details were not publicly available.

3.3 Geomorphological Setting

3.3.1 Geodiversity can be defined as "*The natural range (diversity) of geological (rocks, minerals, fossils), geomorphological (landforms, topography, physical processes), soil and hydrological features. It includes their assemblages, structures, systems and contributions to landscapes*" (Gray, 2013).

3.3.2 These protected sites include geological Sites of Special Scientific Interest (SSSIs), National Nature Reserves (NNRs) and Local Geodiversity Sites (LGS) (formerly known as RIGS - Regionally Important Geological and Geomorphological Sites). No such features have been identified onsite or within 100 m, which is generally considered the likely extent of influence.

3.3.3 According to Scotland's Environment Map, there is a Geological Conservation Review Site (GCRS) named Sloagar is located nearby, offsite at about 90 m to the east, no further details were given. The noust area is anticipated to be extended eastwards towards the GCRS i.e., bedrock is to be excavated in an easterly direction. However, due to the GCRS's offsite location at approximately 90 m to the east, the proposed development is considered to have no effect on the GCRS.

3.4 Geochemical Setting

Ground Gases

Natural Soil Gas – Radon

3.4.1 The Groundsure Report and UK Health Security Agency (UHSA) UK maps (UKradon, 2022) of radon indicates the Site is in an area where the property is in a low probability radon area, as less than 1% of homes are above the action level. Radon protection measures are not required for the construction of new dwellings or extensions (BRE, 2015). Radon is not identified as a potential human health hazard.

Made Ground and Landfills

3.4.2 The Groundsure dataset does not identify any recorded landfill sites nor waste sites onsite or within at least 500 m.

3.4.3 Made Ground, including infilled ground, has the potential to generate ground gases depending on the nature, composition and thickness of the material. The BGS does not record any artificial ground onsite or within the vicinity (BGS, 2023a). Some localised Made Ground is anticipated underlying the existing hard standing associated with the existing quay and noust areas as well as under existing access roads although this is not considered to represent a potential ground gas risk.

Historical Structures

3.4.4 Two small buildings were shown to be present on the proposed temporary laydown area during the 1970s, however, they were absent from this part of the Site from the early 2000s. Made Ground associated with these may still be present and the completeness of demolition works is uncertain i.e., foundations and/ or potential basements may still be present onsite. The localised potential presence of Made Ground (and implications in terms of contamination and ground stability) will need to be confirmed through ground investigation.

Mine Gas

3.4.5 There are no records of mines (coal or non-coal) onsite or within 500 m of the Site.

BGS Estimated Soil Chemistry

3.4.6 The Groundsure Report reports the estimated soil chemistry on the Site (based on BGS Estimated Soil Chemistry values) to be:

- Arsenic: <15 mg/kg
- Cadmium: <1.8 mg/kg
- Chromium: 60 - 90 mg/kg
- Lead: <100 mg/kg
- Nickel: 15 - 30 mg/kg

3.4.7 None of the estimated background metal concentrations noted above have the potential to exceed published evaluation criteria for the most conservative land use scenario (residential with the consumption of home grown produce). Note that the BGS estimated soil chemistry data assume that the soils present are 'natural'.

3.5 Hydrogeological Setting

3.5.1 The following table summarises information regarding hydrogeology and groundwater vulnerability based on available information.

Table 3.1 Summary of Hydrogeology and Groundwater Vulnerability Related Information

Item and Source	Details
Aquifer Classification Groundsure Report, SEPA, Scotland's Environment and the BGS (1988) Hydrogeological Map of Scotland 1:625,000 scale	According to SEPA's water classification hub for groundwaters, no superficial aquifer was shown. The Groundsure Report records the superficial permeability of the Site as Moderate to Very High with flow type listed as 'Intergranular'. The Site is shown to be underlain by the Fair Isle groundwater (ID 150424) bedrock aquifer. This has been classified by SEPA in 2020 as Good in terms of overall status for both quantitative and chemical status. The Groundsure Report states this to be a moderately productive aquifer with flow virtually all through fractures and other discontinuities, yielding small amounts of groundwater. Bedrock permeability is recorded by Groundsure as generally Moderate with flow type listed as 'Facture'. The bedrock aquifer is recorded by the BGS to be locally important with flow dominantly in fissures and other discontinuities in the Lower and Middle Old Red Sandstone.
Depth to Groundwater	Unknown.
Groundwater Flow Direction Judgement	Generally anticipated to follow local topography, with flow expected towards North Haven Bay.
Groundwater Abstraction Groundsure Report, Local Authority, SEPA	The Groundsure Report does not provide information on abstractions. On historical mapping dated 1878, a 'Well' is shown marginally offsite to the south. From the beginning of the 20th century, it is not shown presumed to be infilled. The BGS borehole record (HZ27SW1) situated approximately 1.7 km to the south west is indicated to have been drilled for the Fair Isle Water Supply in 1998. Based on this information, it is presumed that groundwater is being extracted for human consumption and possibly irrigation. Further details on the borehole were not publicly available. Confirmations have been requested from SEPA and SIC, however, the responses are still awaited at the time of writing.
Groundwater Vulnerability Judgement	Considered to be of potentially High vulnerability due to shallow skeletal soils and Marine Beach Deposits judged to be of a high leaching potential i.e., little ability to attenuate diffuse pollution and in which non-

Item and Source	Details
	absorbed diffuse source pollutants and liquid discharges will percolate rapidly. The underlying deeper rock aquifer comprises permeable fractured strata.
Groundwater Flood Risk* Groundsure Report	The highest risk onsite is a Low risk of groundwater flooding as indicated by the Groundwater Flooding mapping on p29 of the Groundsure Report.
Nitrate Vulnerable Zones (NVZ) NVZ, 2015	There are no NVZs onsite or in the vicinity of the Site.
Drinking Water Protected Area (groundwater) https://www.gov.scot/publications/drinking-water-protected-areas-scotland-river-basin-district-maps/	The Site is located in a groundwater drinking water protected area.
* The scope of this report does not include a flood risk assessment.	

3.6 Hydrological Setting

3.6.1 The following table summarises the information regarding hydrology.

Table 3.2 Summary of Surface Water Related Information

Item and Provenance	Description
Features Groundsure Report and SEPA (https://www.sepa.org.uk/data-visualisation/water-environment-hub/)	The Groundsure Report records no surface water features on site. The closest is recorded offsite 30 m to the southwest. This appears to be a field drain, which drains into South Haven bay. According to SEPA's water environment hub map, there are no rivers, burns or streams onsite. The Burn of Vatstrass is shown, located offsite approximately 600 m to the south west. This burn is not classified by SEPA. North Haven Bay is a coast water body (ID: 200245) that bounds the Site. This has been classified by SEPA in 2021 as Good in terms of overall status. The western part of the Site comprises North Haven bay, which is connected to the Atlantic Ocean.
Abstractions Groundsure Report, SEPA, Local Authority	The Groundsure Report does not provide any information on abstractions. Confirmation of possible water abstractions has been requested from SEPA and SIC, however, responses are still awaited at the time of writing.
Discharge Consents Groundsure Report	The Groundsure Report does not provide any information on discharge consents.
Drinking Water Protected Area (Surface Water) https://www.gov.scot/publications/drinking-water-protected-areas-scotland-river-basin-district-maps/	The Site is not located in a surface water drinking water protected area.
River Flood Risk* Groundsure, SEPA	The Groundsure Report states that the risk of river, surface water and coastal flooding is negligible. Stantec generally agrees. However, it should be noted that the online SEPA flood hazard maps indicates there might be some nearby offsite coastal flooding on the lower lying areas of ground on

Item and Provenance	Description
	the isthmus of land connecting Bu Ness peninsula to the mainland of Fair Isle. This is not shown to inundate/ effect the proposed temporary laydown area nor the Site. The breakwater defence on the northern boundary was created to provide some protection from strong northerly swells which propagate into North Haven bay.
* The scope of this report does not include a flood risk assessment.	

3.6.2 Given the close proximity of the coastal waters to the Site, the risk assessment will consider surface coastal water as a receptor.

3.7 Archaeological Setting and Property – Building Effect

3.7.1 A preliminary appraisal of readily available sources of information has been undertaken to determine whether archaeological settings and property requires consideration within the ground condition assessment. The statement regarding the archaeological setting does not purport to be an archaeological risk assessment which might require a separate commission.

3.7.2 There is one scheduled monument onsite, the North Haven Crane located on the edge of the old pier formerly used by the Fair Isle ferry at NGR 22509 72497 (HS, 2023). The crane, which is a small hand-operated crane, was designated on 23/12/1996 (HS, 2023). The crane itself and the surface of the pier into which it is set: an estimated circle of 5 m diameter, for the scheduled area (HS, 2023). The monument is of national importance as a unique survival of a once ubiquitous type of pre-mechanisation harbour equipment (HS, 2023).

3.7.3 There is one Category C Listed Building neighbouring the proposed temporary laydown area, the North Haven Storehouse located at NGR HZ 22334 72447 (HS, 2023). The Storehouse was Listed on 26/03/1997 and is a gabled flagstone rubble storehouse of rectangular shape (HS, 2023). It is a valuable survivor of conventional Shetland building practice and an important member of the bods still surviving in Shetland (HS, 2023).

3.7.4 Given that there is one scheduled monument onsite and a neighbouring listed building, property (buildings) is identified as a receptor and is carried forward for further consideration in this assessment.

3.8 Ecological Setting and Property – Animal or Crop Effect

3.8.1 A preliminary appraisal of readily available sources of information has been undertaken to determine whether ecology as a resource requires consideration within a ground condition assessment. The statement regarding ecological systems does not purport to be an ecological risk assessment which might require a separate commission.

3.8.2 Information on the ecological setting and areas of environmental sensitivity has been obtained from the Groundsure Report, NatureScot and Scotland's Environment map. The site (excluding the pier and the man-made breakwater) is a Special Area of Conservation (SAC), a Site of Special Scientific Interest (SSSI), an Area of Outstanding Natural Beauty (AONB) and a European Diploma Area. The entire Site is a Special Protection Area (SPA). There are no non-statutory designated sites (such as local nature reserves or wildlife sites) onsite or in the vicinity of the Site.

3.8.3 The seas around Fair Isle are designated as a Marine Protected Area for Demonstration & Research (MPA(DR)), NatureScot code 10499 (NatureScot, 2023). It is the only MPA(DR) in Scotland and was designated on 09 November 2016. The principal aim of this MPA(DR) is to demonstrate and research the use of an ecosystem approach towards environmental

monitoring of seabirds and mobile marine species, including factors which may influence their populations.

3.8.4 The land use at the moment does not appear to be used for crops. However, the grass covered proposed temporary laydown area is used to periodically graze sheep.

3.8.5 Based on the above information, ecology is identified as a receptor and is carried forward for further consideration in this assessment.

4 Land Use Information (Hazard Identification)

4.1 Introduction

4.1.1 Land use is used to inform the hazard identification element of the Tier 1 PRA (contamination). This section presents a summary of the current and historical land uses on the Site and in the immediate surrounding area as identified from historical Ordnance Survey (OS) mapping records and aerial images provided by Groundsure (LIG, 2021). A Site walkover inspection was not undertaken as part of this commission and subsequent study. Copies of the extracts from the current and historical OS maps are presented in **Appendix B**.

4.1.2 The historical review of the Site was supplemented by Google Earth historical aerial imagery available for the area. No comment was made on maps or aerial photographs that provide no additional information compared to the ones discussed in the section below.

4.2 Current Land Use

Onsite

4.2.1 The Site is currently used as a vehicle transfer ferry port taking passengers and vehicles to and from Shetland. The land use is primarily hardstanding along the pier tops, adjoining vehicle turning areas and connecting road. The remaining land use is grass covered areas used for grazing sheep, this includes the proposed temporary laydown area.

Offsite

4.2.2 North Haven Bay to the north and west. Connecting the main Site area to the separate proposed temporary laydown area is a sandy isthmus with a road atop and a slipway leading northward into North Haven Bay from the road. Small buildings exist along the road, there uses are unclear. To the east and south lies undeveloped rural coastal land, used for grazing sheep.

4.2.3 Two buildings bound the south west of the proposed temporary laydown area, and presently, Stantec understands that they are used as stores. It has not been established what is actually stored within these buildings.

4.3 Review of Historical Mapping

4.3.1 The historical land use of the Site and surrounding area has been obtained from reviewing historical Ordnance Survey (OS) maps and historical building plans supplied by Groundsure (G, 2023), which is presented in **Appendix B**. Furthermore, open source historical maps have been accessed from Historic Environment Scotland (HES, 2023).

4.3.2 The available historical OS map editions cover the period between 1878 and 2023, inclusive. Extracts of relevant mapping are in **Extract 1** below. A summarised review from available mapping and aerial photography of the historical features both onsite and in the vicinity follows within **Table 4.1** below.

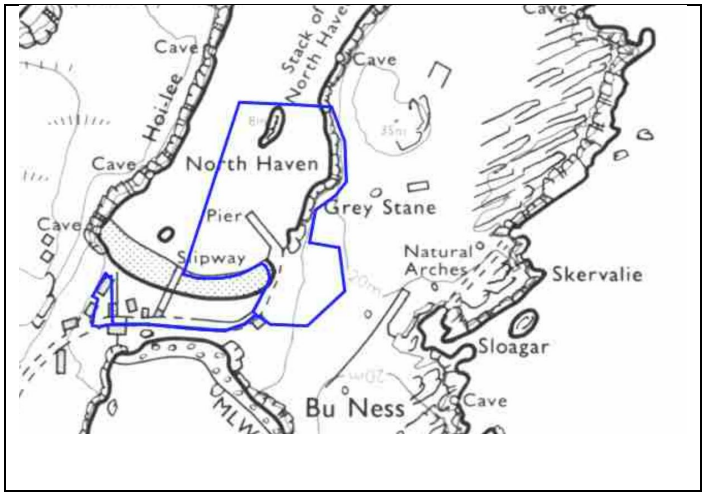
Table 4.1 Summary of Historical Land Uses

Dates/ Sources	Onsite	Offsite
1:10,560 – 1878	Shown as the natural coastline of North Haven bay. The Stack of North Haven (rocky outcrop) is	Bounded to the north by the mouth of North Haven bay, to the east by Bu Ness peninsula, to the south by a shingle/sandy isthmus

Dates/ Sources	Onsite	Offsite
	situated towards the centre of the bay (north west corner of the Site). A small rectangular shaped inlet exists along the intertidal rocky foreshore presumed to be a dock for very small watercraft.	and South Haven bay. A small square shaped building is shown on the isthmus connecting the mainland to Bu Ness peninsula. A 'Well' is shown marginally offsite to the south. To the west lies North Haven bay and Hoill Lee peninsula.
1:10,560 – 1900	The Site is now labelled as 'Pier', however, no significant further changes observed.	Marginally offsite 'Well' is no longer shown. A second small square shaped building is shown, bounding the south western tip of the Site. This is presumed to be some sort of store associated with the 'Pier'. To the east lies a circular shaped object labelled as 'Grey Stane'.
1:10,000 – 1973	A finger shaped Pier structure is shown jutting out into North Haven bay and two buildings are shown onsite in the proposed temporary laydown area, see **Extract 1**. No further significant changes observed.	One square shaped and one rectangular shaped object are shown to the east, located a top Bu Ness peninsula. These separate objects maybe sheepfolds. To the south east lies a linear structure (possible track/ roadway) leading down to Sloager inlet (a possible nature harbour) on the east coast of Bu Ness peninsula, see **Extract 1**. A 'Slipway' lies close to the south western point of the Site. It is located on the northern site of the isthmus and juts out northwards into North Haven bay.
1:10,000 – 2001	Shown to contain a breakwater along the northern boundary (the Stack of North Haven is now connected to Bu Ness peninsula) and a quay towards the centre. A road links into the south western corner. A small square shaped building is shown in the south eastern corner, presumed to be the winch house/ noust for the ferry. The two buildings in the proposed temporary laydown area are no longer shown. No above ground structures are shown in the proposed temporary laydown area.	No significant changes observed.

Dates/ Sources	Onsite	Offsite
Aerial Photography 2008	Some surface disturbance of the ground in the proposed temporary laydown area but due to the resolution, no further observations were possible.	No significant changes observed.
1:10,000 – 2010	Labelled as 'Ferry Terminal'. No further significant changes observed.	No significant changes observed.
Aerial Photography 2016	A greyish white rectangular object is located on the proposed temporary laydown area but due to the resolution, no further observations were possible.	No significant changes observed.

4.3.3 In summary, the majority of the Site has remained principally undeveloped according to the historical maps from 1878 through until the early 1970s when the Site became a pier with some small buildings. During this time two buildings were shown on the proposed temporary laydown area. By the early 2000s, these two buildings were not shown and a breakwater along the northern boundary and a quay had been constructed, a noust for the ferry and a link road to the south were also constructed. No further significant changes were observed from the available mapping record.



Extract 1: Of historical Ordnance Survey plan published in 1973, showing site development and offsite points of interest. Source map scale 1:10,000 (source: G, 2023)

4.4 Review of Historical Imagery on Google Earth

4.4.1 Google Earth aerial imagery available from 2008 to 2023 has been reviewed. There is no additional information relating to onsite land use.

4.5 Review of Database Searches

4.5.1 Information on the industrial setting of the Site is presented in the Groundsure Report (GLI, 2023) and reproduced in **Appendix B**. The results of the database searches provided in the Groundsure report relating to land-use are summarised in the following table and discussed in the following sections.

Table 4.2 Summary of Environmental Database Searches

Data Type	Number on Site (1)	Number within 250 m of Site (1)
Waste Regulation		
Landfill Sites	0 (0)	0 (0)
Licensed Waste Management Facilities	0 (0)	0 (0)
Statutory Permits/Authorisations		
Pollution Prevention and Control(2)	0 (0)	0 (0)
Radioactive Substance Authorisations	0 (0)	0 (0)
Planning Hazardous Substances	1 (0)	0 (0)
COMAH Sites(3)	0	0
NIHHS Sites(4)	0	0
Recorded Pollution / Potential Pollution		
Substantiated Pollution Incidents	0	0
Contaminated Land (5)	0	0
Potential Contaminative Uses		
Fuel Stations	0	0
Trade Directory	(6)	(6)

Note: 1) Numbers in brackets denotes number of authorisations, licenses or permits that are lapsed, revoked, cancelled, superseded, defunct, surrendered, not applicable, inactive, withdrawn or not yet started.
2) Includes Integrated Pollution Controls, Integrated Pollution Prevention and Control, Local Authority Integrated Pollution Prevention and Control and Local Authority Pollution Prevention and Control permits.
3) COMAH denotes Control of Major Accident Hazards
4) NIHHS denotes Notification of Installations Handling Hazardous Substances
5) Sites determined as Contaminated Land under Part 2A of the Environmental Protection Act
6) Not supplied within Groundsure Report

Planning Hazardous Substances

4.5.2 The Groundsure Report has a record for hazardous substance storage/ usage onsite. The application status is listed as 'Historical Consent' held by SIC for Fair Isle Pier. No further details were provided.

Recent Industrial Land Uses

4.5.3 The Groundsure Report records two potentially contaminative industrial sites on the study area. The first relates to the Fair Isle Shetland Ferry Terminal and the second to the slipway. The terminal is the existing quay itself and potentially a very small building. Some unloading of fish may take place at the port. Whilst the moorings and unloading activities are not known to Stantec, it is considered that these two records are not a source of potentially significant contamination.

4.6 Planning Portal

4.6.1 A review of planning records pertinent to the Site held by Shetland Island Council was undertaken via their online planning portal on 03 March 2023. The search returned no planning application for the site other than the one planning application that this report is supporting.

4.7 Review of Unexploded Bomb Risk Map

4.7.1 The free online Unexploded Ordnance (UXO) risk mapping provided by Zetica does not cover Fair Isle.

4.7.2 Stantec commissioned Zetica in January 2023 to undertake a Pre-Desk Study Assessment (PDSA) (Zetica, 2023) for the Site, presented as **Appendix D**. This was to help determine whether further research would be necessary to understand the UXO hazard onsite.

4.7.3 According to the PDSA, North Haven Harbour was identified as a WWII Strategic Target, however, there was no identified pre-WWII and WWII Military Activity on or Affecting the Site and that WWI Bombing was not identified on the Site nor was Interwar Military Activity (Zetica, 2023).

4.7.4 During WWII North Haven Military Camp was established on land encroaching on to the southern part of the Site consisting of 16 huts, likely associated with the Royal Air Force (RAF) radar station located offsite at Ward Hill. No readily available records have been found to indicate that military training took place on the Site, although Shetland was a closed military area during WWII, meaning that training activities could take place anywhere on the islands (Zetica, 2023).

4.7.5 Zetica state that "during WWII the Site was located in the Landward Area (LA) of Zetland, which officially recorded 72 High Explosive (HE) bombs with a bombing density of 0.2 bombs per 405 hectares (ha)," (Zetica, 2023). Zetica recommended that a detailed desk study be undertaken to assess, and potentially zone, the UXO hazard level for the Site.

4.7.6 Prior to the PSDA, Mott MacDonald commissioned Zetica to undertake a UXO Desk Study & Risk Assessment for the Site (Zetica, 2021). The key finding of this more detailed desk study report was that "No significant sources of Unexploded Ordnance (UXO) hazard have been identified" and the Site was considered by Zetica to have a low UXO hazard level (Zetica, 2021).

4.7.7 The coverage of Zetica's 2021 desk study report does not include the proposed temporary laydown area.

4.8 Consultation with Regulators

4.8.1 A request for environmental information has been submitted to Shetland Island Council and SEPA relating to the Site. Responses are still awaited at the time of writing. Requests for information from the regulators are included in **Appendix C**.

4.9 Internet Searches Using Site Address and Postcode

4.9.1 Internet searches using the postcode did not reveal additional information relating to ground conditions.

5 Ground Stability Appraisal

5.1 Introduction

5.1.1 An assessment of potential geological hazards that may give rise to instability or adverse foundation or construction conditions as supplied by the BGS from their National Geoscience Information Service (NGIS) is presented in the Groundsure report (G, 2023) reproduced in **Appendix B**. The generic assessment in the Groundsure report is generated automatically based on digital geological maps and the scope and the accuracy is limited by the methods used to create the dataset and is therefore only indicative for the search area.

5.1.2 The information contained in the Groundsure report has been reviewed and, where considered necessary, reassessed considering the specific information available for the Site with the potential hazards being rated as very low, low, moderate, high or very high with due regard to the criteria given by the BGS property hazard rating system. The Stantec assessment of the potential for geological hazards to be present on the Site is summarised below.

5.2 Mining (Past, Present and Proposed)

Preliminary Coal Mining Assessment

5.2.1 There are no coal mining records onsite (GLI, 2023) and therefore review and assessment of risks from such past activities has not been undertaken.

Preliminary Non-coal Mining Assessment

5.2.2 The Site is within an area of sporadic underground mining of restricted extent that may have occurred, and the commodity type is listed as Vein Mineral (GLI, 2023).

5.2.3 According to the BGS Geo Index (BGS, 2023b), there are no non-coal mining plans available for the Site and the surrounding area.

5.3 Natural and Mining Cavities

5.3.1 The National Natural and Mining (non-coal) Cavities Databases, maintained and updated by Stantec, have been searched for relevant natural and mining cavity records.

Natural Cavities

5.3.2 The Stantec Natural Cavities Database does not contain any records of natural cavities within at least 1 km of the Site.

5.3.3 The Groundsure Report records three offsite caves within 250 m of the Site, the nearest of which is located offsite about 60 m to the north on at the mouth of North Haven bay. Offsite Bu Ness peninsula to the east and Hoill Lee peninsula to the west are both shown to contain further caves and/or natural arches.

Mining Cavities

5.3.4 The Groundsure Report (GLI, 2023) indicates no man-made mine cavities within at least 1 km. The Stantec Mining Cavities Database does not include any records on the Site or in close proximity.

5.3.5 The lack of records by itself does not disqualify their existence entirely, however, based on the expected ground conditions, historical records and Site settings, it is considered that the presence of mining cavities is unlikely.

5.4 Surface Ground Workings

5.4.1 According to the Groundsure Report, there are no records of historical pits onsite and two records of surface ground workings onsite. Both records have been identified from Ordnance Survey mapping and upon closer inspection represent natural caves. The entrances of which are both located offsite.

5.4.2 Record 'A' is a cave across the other side of North Haven Bay from the Site i.e., well offsite and record 'B' is situated offsite to the north of the study area's proposed temporary laydown area.

5.4.3 Whilst there is a possibility that these caves may have been backfilled, this is unlikely given the extremely remote island setting and lack of modern development in the surrounding area.

5.5 Potential for Compressible Ground Stability Hazards

5.5.1 The ground conditions are such that layers of very soft compressible materials such as organic clay or peat are not expected to be present. Therefore, it is considered that the compressible ground stability hazard potential will be **Very Low**.

5.5.2 However, possible localised Made Ground deposits of unknown origin, depth and composition likely lie beneath the existing quay and potentially on and around the two former buildings on the proposed temporary laydown area. Individually, these separate areas of possible Made Ground have the potential to be compressible in nature. Moreover, field observations from a Mott MacDonald representative have indicated that "*there is an area of ponded water where the quay has settled slightly*."

5.5.3 On this basis Stantec recommends a **Low** to **Moderate** hazard potential for compressible Made Ground is adopted for the proposed temporary laydown area and the existing quay area.

5.6 Potential for Running Sand Stability Hazards

5.6.1 The ground conditions for the majority of the Site are such that there is expected to be no substantial potential for internal erosion associated with groundwater flows into excavations below the water table. However, within the south eastern corner of the proposed temporary laydown area the underlying superficial deposits are shown to be Marine Beach Deposits. It is therefore considered that the running sands hazard potential will be **Moderate** in this area.

5.7 Potential Shrinking or Swelling Clay Stability Hazards

5.7.1 The near-surface soils present on the Site are not expected to have a medium or high volume change potential. Therefore, it is considered that the shrinking or swelling clay stability hazard potential will be **Very Low**.

5.7.2 Depending on the potential presence, composition and/ or thickness of any Made Ground onsite, the above hazard assessment may not be applicable.

5.8 Potential for Ground Dissolution Stability Hazards

5.8.1 The ground conditions are not considered to be susceptible to the development of natural cavities as a result of dissolution. Therefore, it is considered that the ground dissolution stability hazard potential will be **Very Low**.

5.9 Potential for Landslide Ground Stability Hazards

5.9.1 Superficial soils across the Site are anticipated to be shallow with bedrock at or near to the ground surface. Therefore, it is considered that the landslide ground stability hazard potential will be **Very Low**.

5.9.2 It is noted that the existing quay side is backed onto a steep cliff face and the existing ferry noust basin is carved out of the bedrock, again, with steep sides. The angle, height and structural integrity of these steep rock slopes and/or cliff faces has not been assessed and therefore, the above hazard assessment may not be applicable. Wire retaining mesh exists anchored onto the rock face behind the quay.

5.10 Potential Adverse Foundation Conditions

5.10.1 The majority of the Site is underlain by the Bu Ness Sandstone Formation and the Observatory Sandstone Formation underlies the proposed temporary laydown area. Generally shallow skeletal coastal soils are anticipated with potential slightly deeper areas of Marine Beach deposits on the proposed temporary laydown area. Localised areas of Made Ground of unknown origin, depth and composition potentially exist although these are not anticipated to be of a significant thickness.

5.10.2 The nature and extent of the strata at the Site have not been determined. In due course a ground investigation will be required to inform detailed foundation and infrastructure design.

5.10.3 The ground stability assessment has identified that the potential for adverse foundation conditions is generally overall **Very Low** to **Low**. Where Made Ground could be encountered, there exists a **Low** to **Moderate** compressible ground hazard potential and where Marine Beach Deposits could be encountered, there exists a **Moderate** running sands hazard potential.

5.10.4 In order to minimise this **Moderate** potential risk, ground investigation and testing will be needed, and if necessary, foundations will need to be designed to accommodate the movement or be taken to a depth where the likelihood of damaging movement is low.

5.11 Slope Stability

5.11.1 Steep slopes exist around the ferry noust basin and the existing quay backs onto a cliff face according to the available topographical survey and available site photographs (refer to **Inserts 1** and **2**). The soils within these areas are expected to be very shallow.

5.11.2 The noust basin has been carved out of the bedrock. Both the cliff face (of bedrock) and the noust basin have become partially vegetated over time and appear stable. The cliff face beside the existing quay has wire retaining mesh across it to prevent possible rockfall. Collectively, the risk of major slope stability or landslide hazard being present is considered to be **Low**.

5.11.3 However, the structure integrity of the bedrock is not known and some fracturing both vertically and laterally is visible on exposed slope and cliff faces.

6 Land Contamination Risk Assessment

6.1 Approach and Outline Conceptual Model

6.1.1 The land contamination risk assessment presented in this chapter is a Tier 1 PRA, which uses published information. A summary of the guidance for the assessment of land contamination and the approach developed and adopted by Stantec is presented in **Appendix A**.

6.1.2 A conceptual model identifies the types and locations of potential contamination sources, the identification of potential receptors and the identification of potential transport/migration pathways.

6.1.3 Guidance requires a risk assessment to include the following steps:

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

6.1.4 The findings for each step are summarised in the following subsections.

6.2 Hazard Identification (Sources of Contamination)

Naturally Occurring Geochemical Hazards

6.2.1 Radon has not been identified as a naturally occurring ground gas requiring gas protection measures. The estimated natural soil chemistry information (GLI, 2023) does not indicate the presence of elevated concentrations of metals.

Potential Sources of Contamination and Contaminants of Concern

6.2.2 The Site land use comprises an active ferry terminal with potential localised areas of anticipated Made Ground. The adjacent land uses currently comprise sheep grazed coastal grasslands and North Haven Bay.

6.2.3 **Onsite**: The potential for significant contamination to be present associated with the historical and current onsite land uses is considered to be **Low** (See Table 6.1 below).

6.2.4 **Offsite**: The potential for offsite contamination to be present, based on the past and current land uses of the neighbouring land, is considered to be **Very Low**.

6.2.5 The indicative criteria for classifying hazards from **Very Low** to **Very High** are presented in Table 1 of **Appendix A**.

6.2.6 The sources of potential contamination (SPCs) identified and associated contaminants of concern (COC) are presented in **Table 6.1** below.

Table 6.1 Sources of Potential Contamination

SPC Reference	Description and (Hazard Score)*	Contaminants of Concern (COC)
1	Onsite: Made Ground associated with historical construction of the existing quay, noust, roadway and two former buildings on the proposed temporary laydown area (2)	Asbestos, heavy metals, inorganics, polycyclic aromatic hydrocarbons (PAHs), petroleum hydrocarbons, sulphates and possible ground gases (carbon dioxide and methane). The purpose, and therefore contaminative potential, of the buildings on the proposed temporary laydown area from the 1970's to the early 2000s (when they were no longer present) is unknown, however, they are unlikely to warrant more than a 'moderate' hazard score.
2	Onsite: fuel cubes - their storage, use and method of fuel decantation/ transfer possible leading to accidental leaks and spillages. (2)	Total petroleum hydrocarbons, benzene, toluene, ethylbenzene and xylene (BTEX) and Methyl tert-butyl ether (MTBE)

*hazard score from the methodology in **Appendix A**

6.2.7 The hazard scores used in the table above are based on the contaminative potential of these land uses as established in Table 1 of the Stantec Methodology in **Appendix A**.

6.3 Hazard Assessment

6.3.1 To determine whether the identified hazards pose a risk it is necessary to identify the presence of potential receptors and pathways by which these receptors can be exposed to the hazard.

Identification of Potential Pathways

6.3.2 Potential hazards require a pathway connecting the source (if present) to potential receptors to impact upon the receptors. These pathways are capable of conveying the potential contaminants identified. Pathways may be anthropogenic (artificial) or natural.

6.3.3 Anthropogenic pathways are artificial routes capable of conveying contaminants and include such routes as surface water drains, high permeability backfill materials, poorly consolidated Made Ground, foundations, and persons disturbing contamination sources in such a way as to liberate contaminants.

6.3.4 The potential for contamination (if present) within the anticipated onsite Made Ground (if present) to leach or migrate via groundwater flow across the Site is considered to be of a low likelihood. The potential for contaminated onsite Made Ground (if present) to be ingested, inhaled or absorbed by humans is considered to be of low likelihood.

6.3.5 The potential for contamination (if present) related to potential leaks and/or spills from the onsite receipt and handling of the fuel cubes to migrate via surface water runoff across the Site to the sea is considered to be likely.

6.3.6 Table 3 of the methodology presented in **Appendix A** describes the possible pathways for each receptor type.

Receptor Identification

6.3.7 Potential receptors identified by this assessment and determination of the sensitivity/value are presented in **Table 6.2** below.

Table 6.2 Potential Receptors

Receptor	Comment	Receptor Sensitivity
Human Health - Current Users	The Site is currently a ferry terminal and a grassed parcel of land used for grazing. Users are transient. There are no residential properties onsite or in the vicinity. A winch house exists currently accommodating the winch used to pull the existing ferry out of the water.	4
Human Health – Future Users	Transient users of the ferry terminal.	4
Human Health - Neighbours	Temporary users of the uninhabited storage buildings in the surrounding area.	4
Human Health - Construction Workers	temporarily present during construction phase and potential future maintenance workers.	4
Water Environment (Groundwater – Shallow and Deep)	According to SEPA's water classification hub for groundwaters, no superficial aquifer was shown. Not applicable. The Fair Isle bedrock groundwater aquifer (SEPA water quality Good), which is moderately productive with moderate permeability	3
Water Environment (Surface Water)	North Haven Bay (SEPA overall water quality status of Good)	4
Property – Buildings onsite	The onsite scheduled monument of the North Haven Crane and commercial buildings onsite i.e., the winch house.	3
Property – Buildings offsite	There is one Category C Listed Building neighbouring the proposed temporary laydown area, the North Haven Storehouse located at NGR HZ 22334 72447 (HS, 2023). Further uninhabited storage buildings in the surrounding area.	3
Property – Animals/Crop	The proposed temporary laydown area is grazed periodically by sheep.	1
Ecological Systems	Designated ecology onsite and surrounding the study area. The site is a Special Area of Conservation (SAC), a Site of Special Scientific Interest (SSSI), an Area of Outstanding Natural Beauty (AONB) and a European Diploma Area. The entire Site is a Special Protection Area (SPA). The seas around the study area designated as a Marine Protected Area for Demonstration & Research (MPA(DR)), the only one in Scotland.	5

6.4 Risk Estimation

6.4.1 When there is a pollutant linkage (and therefore some measure of risk) it is necessary to determine whether further action is required. Risk estimation involves predicting the likely consequence (what degree of harm the receptor might suffer) and the probability that the consequences will arise (how likely the outcome is given the likely scale of contamination and the probability of exposure).

6.4.2 Preliminary risk estimation is based on the evaluation of available data, which has been summarised and presented in this report. Without actual data from physical site investigation work, there is always a degree of uncertainty regarding the actual presence of potentially harmful contamination. Based on the current and known historical land uses, the potential for the Site to be affected by contamination (if present) is considered overall to be **Low**.

6.4.3 The tables in **Appendix E** presents the classification of risk, which is a combination of consequence and probability for each potential pollutant linkage identified for the sources in **Table 6.2** above.

- Human health (onsite transient current users) – transient port operators, fishermen, maintenance workers all associated with the ferry terminal and island residence/ visitors walking across the Site may come into direct contact with soils. However, this is unlikely and risk to current onsite current users is therefore **Very Low**.

- Human health (onsite future users) – the anticipated development is the upgrading of the existing ferry terminal. Future users are likely to be transient port operators, fishermen, maintenance workers and island residence/ visitors. The risk to future users is estimated to be **Very Low**.

- Human health (neighbouring sites) – the risk to offsite users such as the adjacent transient users of the uninhabited properties is estimated to be **Very Low**.

- Human health (construction workers) – although ground and construction workers are likely to disturb the ground and therefore come into direct contact with potential contamination in soils (either via inhalation, ingestion and dermal contacts), it is presumed that such work will be undertaken with an understanding of the potential for contamination with safe working practices put in place to mitigate risks. Furthermore, exposure to soils will likely be short term. On this basis, the risk to construction workers is estimated to be **Low**.

- Groundwater – The bedrock aquifer is moderately productive with moderate permeability, classified by SEPA as Good. The risk to groundwaters is anticipated to be **Low**.

- Surface Water – North Haven bay forms part of the Site and the study area has a variety of ecological designations. The risk of direct runoff from the existing pier or discharges from pipes to the sea is estimated as **Moderate**.

- Property (buildings onsite and offsite) – the risk to properties is anticipated to be **Low**.

- Ecological Systems – despite the high sensitivity of the numerous surrounding ecological systems, the risk to these has been estimated to be **Low**.

- Property (animal/crop) – the risk to animals and agricultural land is anticipated to be **Very Low**.

6.4.4 The definitions of probability and consequence are in Table 4 and Table 5 of **Appendix A** (respectively).

6.4.5 Possible pollutant linkages are determined using professional judgement. If a linkage is considered plausible with some associated risk, even if estimated to be low, it is considered that this represents a potentially ‘unacceptable risk’ and therefore requires further consideration. Risk reduction can be achieved through implementation of remediation or mitigation measures or through further tiers of assessment following collection of site-specific data.

6.5 Risk Evaluation

6.5.1 In the absence of mitigation, possible pollutant linkages have been identified for current and future site users, neighbours, construction workers, surface water, groundwater, buildings, ecological systems and animal/ crops.

6.5.2 The Tier 1 Risk Assessment has demonstrated that the estimated geoenvironmental risks for the Site as a whole are generally **Very Low**. However, **Moderate** estimated geoenvironmental risks for the Site with the potential to cause harm to the surface water environment (North Haven bay) are associated with the potential direct runoff of leaks/spills of potential contaminants from the existing quay and/or pipes into the sea.

6.5.3 The ground conditions and soil chemistry are unknown. Therefore, prior to development the Site should be subjected to an intrusive ground investigation to determine and assess the actual soil characteristics and the presence of Made Ground.

6.5.4 A soil screening exercise is recommended in conjunction with a ground investigation across the Site with a higher density of samples in possible localised Made Ground locations (should these be encountered).

6.5.5 The Contractor will be made aware of the likely discrete areas of possible Made Ground. The Contractor will prepare documents (risk assessment and method statements (RAMS) and implement measures to address the requirements of health and safety legislation, such as the Construction (Design and Management) Regulations (CDM 2015). The following good practice and hygiene measures are typically implemented on development sites and assumed to be the minimum:

- Designated eating and drinking area(s) and these are kept clean (free of dirt / dust).
- Provision of hand washing facilities.
- Toolbox box talks, induction awareness and regular refresher talks.

7 Conclusions and Recommendations

7.1 Conclusions

7.1.1 Upgrading of the existing ferry terminal is proposed. It is anticipated that the work will principally include a new quay structure, a linkspan drawbridge, increasing the size of the existing breakwater, some dredging of the seabed, pier repairs, enlargement of the noust, construction of a new winch house and slipway replacement.

7.1.2 The study area currently comprises the existing quay area and a grassy proposed temporary laydown area located to the west. This separate western parcel of land is currently earmarked to become a proposed temporary laydown area for rock generated from the noust enlargement and possible dredging arisings. The intention is to re-use the rock for the construction of the new quay and the enlarging of the existing breakwater.

7.1.3 Ground levels across the study area are generally flat i.e., the existing quay area, however this area backs onto a cliff, which rises very steeply. The noust also has steep rock slopes.

7.1.4 On review of the historical mapping and aerial imagery, the majority of the Site has remained principally undeveloped according to the historical maps from 1878 through until the early 1970s when the Site became a pier with some small buildings. During this time two buildings were shown on the proposed temporary laydown area. By the early 2000s, these two buildings were not shown and a breakwater along the northern boundary and a quay were constructed. A noust for the ferry and a link road to the south were also constructed. No further significant changes were observed onsite through until present day.

7.1.5 Soils across the majority of the study area are anticipated to be very shallow. According to the Groundsure Report, the Site is indicated to be partially underlain by Marine Beach Deposits. The Bu Ness Sandstone Formation is indicated to underly the majority of the study area with the Observatory Sandstone Formation underlying the proposed temporary laydown area.

7.1.6 However, no site-specific ground investigation is known to have been undertaken at the Site and there are no local BGS borehole records, so the actual ground conditions are unknown.

7.1.7 Stantec commissioned Zetica to carry out a Pre-Desk Study Assessment, which concluded that a detailed desk study be undertaken to assess, and potentially zone, the UXO hazard level for the Site.

7.1.8 Mott MacDonald commissioned Zetica to undertake a UXO Desk Study & Risk Assessment for the Site. The key finding of the more detailed desk study report was that no significant sources of UXO hazard were identified and that the Site was considered by Zetica to have a low UXO hazard level. Stantec notes that Zetica's detailed desk study report does not include the proposed temporary laydown area.

Geoenvironmental

7.1.9 Given the Site history, soils across the majority of the Site are not expected to be affected by considerable contamination. Locally the Site may be impacted by contamination associated with accidental leaks/ spills from the transient fuel cubes. There is the potential for Made Ground to be present beneath developed areas (the quay side and former buildings in the lay down area) however given the limited site development history and the sites location, Made Ground present is not anticipated to be highly contaminated.

7.1.10 There is no previous ground investigation information for the Site and as such there is a degree of uncertainty regarding the actual ground conditions.

7.1.11 The assessed contamination risks associated with the anticipated ground conditions have identified potential pollutant linkages using the information on potential sources (contaminant

types), receptors and exposure pathways. The worst case estimated risk for the Site as a whole is generally **Very Low**. However, an estimated **Moderate** risk exists for potential runoff of accidental leaks/ spills into the sea from the existing quay and/or discharge pipes.

7.1.12 Overall, given the relatively low level of risk, it is anticipated that if there is requirement to carry out Phase 2 geoenvironmental intrusive investigations, these can be satisfactorily dealt with by incorporation of a suitable condition in granted Planning Consent.

7.1.13 It is considered highly unlikely that the local planning authority will designate the Site as Contaminated Land under Part IIA of the Environmental Protection Act 1990.

Geotechnical

7.1.14 The ground stability assessment has identified that the potential for adverse foundation conditions is generally overall **Very Low** to **Low**. However, where localised Made Ground could be encountered, there exists a **Low** to **Moderate** compressible ground hazard potential and where Marine Beach Deposits could be encountered, there exists a **Moderate** running sands hazard potential.

7.1.15 In order to minimise this **Moderate** potential risk, ground investigation and testing will be needed, and if necessary, foundations will need to be designed to accommodate the movement or be taken to a depth where the likelihood of damaging movement is low.

7.1.16 The existing noust basin has been carved out of the bedrock. Both the cliff face (of bedrock) and the noust basin have become partially vegetated over time. Moreover, the cliff face beside the existing quay has wire retaining mesh across it to prevent possible rockfall. Collectively, the risk of major slope stability or landslide hazard being present is considered to be **Low**.

7.1.17 Given the anticipated shallow depth of the near surface natural soils, the use of infiltration drainage is considered to not be suitable for the discharge of surface water at the Site. However, ground permeability should be determined and verified during the ground investigation.

7.2 Uncertainties and Data Gaps

7.2.1 Whilst the information used in this assessment is considered suitable for purpose, no recent or development specific ground investigation data is available, therefore the actual ground conditions beneath the Site are unknown at the time of writing. There is a reasonable level of confidence that the information presented in this report provides a good understanding of the likely ground conditions and enables identification of potential risks. However, further work is recommended to refine the Conceptual Model for the Site and reduce uncertainty.

7.2.1 SEPA and SIC have been contacted for environmental information about the Site. At the time of writing, responses are still awaited.

7.2.2 There is uncertainty about the existence of a potential interceptor at the Site, however, it is presumed that water simply runs off the existing quayside into the sea.

7.2.3 Two buildings were shown on the proposed temporary laydown area. The completeness of the demolition of these in unknown. It is unclear if these former buildings had basements, and/ or if their foundations are still present or not. The area is currently earmarked as a proposed temporary laydown area for excess rock.

7.2.4 The UXO status of the proposed temporary laydown area is not known as this has been omitted from previous Zetica UXO detailed threat assessment (MM, 2021).

7.2.5 The proposed temporary laydown area was not included as part the recent topographic survey.

7.3 Recommendations

7.3.1 It is considered that given the Site setting and the proposed development there are unlikely to be risks which require management across the site.

7.3.2 It is possible that basic mitigation measures including such as health and safety for construction workers and removal of any impacted soils could be required as part of the redevelopment of the Site.

7.3.3 Should any ground disturbance take place in the currently proposed temporary laydown area then it may be prudent extend Zetica's UXO survey to include this area.

8 Essential Guidance for Report Readers

8.1.1 This report has been prepared within an agreed timeframe and to an agreed budget that will necessarily apply some constraints on its content and usage. The remarks below are presented to assist the reader in understanding the context of this report and any general limitations or constraints. If there are any specific limitations and constraints, they are described in the report text.

8.1.2 The opinions and recommendations expressed in this report are based on statute, guidance, and best practice current at the time of its publication. Stantec UK does not accept any liability whatsoever for the consequences of any future legislative changes or the release of subsequent guidance documentation, etc. Such changes may render some of the opinions and advice in this report inappropriate or incorrect and the report should be returned to us and reassessed if required for re-use after one year from date of publication. Following delivery of the report, Stantec has no obligation to advise the Client or any other party of such changes or their repercussions.

8.1.3 Some of the conclusions in this report may be based on third party data. No guarantee can be given for the accuracy or completeness of any of the third-party data used. Historical maps and aerial photographs provide a “snapshot” in time about conditions or activities at the site and cannot be relied upon as indicators of any events or activities that may have taken place at other times.

8.1.4 The conclusions and recommendations made in this report and the opinions expressed are based on the information reviewed and/or the ground conditions encountered in exploratory holes and the results of any field or laboratory testing undertaken. There may be ground conditions at the site that have not been disclosed by the information reviewed or by the investigative work undertaken. Such undisclosed conditions cannot be taken into account in any analysis and reporting.

8.1.5 It should be noted that this report is a land condition assessment and does not purport to be an ecological, flood risk or archaeological survey and additional specific surveys may be required.

8.1.6 This report has been written for the sole use of the Client stated at the front of the report in relation to a specific development or scheme. The conclusions and recommendations presented herein are only relevant to the scheme or the phase of project under consideration. This report shall not be relied upon or transferred to any other party without the expressed written authorisation of Stantec. Any such party relies upon the report at its own risk.

8.1.7 The interpretation carried out in this report is based on scientific and engineering appraisal carried out by suitably experienced and qualified technical consultants based on the scope of our engagement. We have not taken into account the perceptions of, for example, banks, insurers, other funders, lay people, etc., unless the report has been prepared specifically for that purpose. Advice from other specialists may be required such as the legal, planning and architecture professions, whether specifically recommended in our report or not.

8.1.8 Public or legal consultations or enquiries, or consultation with any Regulatory Bodies (such as the Scottish Environmental Protection Agency (SEPA) or Local Authority) have taken place only as part of this work where specifically stated.

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Figures

Appendix A Stantec Guide: Methodology for Assessment of Land Contamination (Scotland)

Stantec Guide: Methodology for Assessment of Land Contamination (Scotland)

1 INTRODUCTION

This document defines the approach adopted by Stantec in relation to the assessment of land contamination in Scotland. The aim is for the approach to (i) be systematic and objective, (ii) provide for the assessment of uncertainty and (iii) provide a rational, consistent, transparent framework.

When preparing our methodology we have made reference to various technical guidance documents and legislation referenced in Section 7 of which the principal documents are (i) Contaminated Land Statutory Guidance (Scottish Executive, 2006), (ii) online guidance Land Contamination: Risk Management (LCRM) accessed from GOV.UK which (in England) is expected to replace the Contaminated Land Research (CLR) Report 11: Model Procedures for the Management of Contamination CLR 11 (EA 2004)*****, (iii) Contaminated land risk assessment: A guide to good practice (C552) (CIRIA 2001), (iv) Scottish Planning Policy (SPP 2014) and Planning Advice Note 33, Development of Contaminated Land (PAN 33), (v) BS 10175: 11+A2:2017 Investigation of potentially contaminated sites – Code of practice, and (vi) the series of British Standards on Soil Quality BS 18400.

***At the time of writing there has been no formal decision about the adoption of LCRM over CLR 11 in Scotland. Until such a time that a decision is made, Stantec has opted to work to LCRM in Scotland. It should be noted that LCRM is currently due to be revised following consultation and CLR 11 is achieved.**

2 DEALING WITH LAND CONTAMINATION

Government policy on land contamination aims to prevent new contaminated land from being created and promotes a risk-based approach to addressing historical contamination. With regard to historical contamination, regulatory intervention is held in reserve for land that meets the legal definition and cannot be dealt with through any other means, including through planning. Land is only considered to be "contaminated land" in the legal sense if it poses an unacceptable risk.

UK legislation on contaminated land is principally contained in Part 2A of the Environmental Protection Act, 1990 (which was inserted into the 1990 Act by section 57 of the Environment Act 1995). Part 2A was introduced in Scotland on 14 July 2000 and provides a risk-based approach to the identification and remediation of land where contamination poses an unacceptable risk to human health or the environment. The Model Procedures for the Management of Land Contamination (CLR 11), were developed to provide the technical framework for applying a risk management process when dealing with land affected by contamination. The process involves identifying, making decisions on, and taking appropriate action to deal with land contamination in a way that is consistent with government policies and legislation within the UK. The approach, concepts and principles for land contamination management promoted by LCRM are applied to the determination of planning applications. The guidance given in LC:RM follows the same principles.

Other legislative regimes may also provide a means of dealing with land contamination issues, such as the regimes for waste, water, environmental permitting, and environmental damage.

Further, the law of statutory nuisance may result in contaminants being unacceptable to third parties whilst not attracting action under Part 2A or other environmental legislation.

2.1 Part 2A

The Regulations and Statutory Guidance that accompanied the Act, include the Contaminated Land (Scotland) Regulations 2005 and the Contaminated Land Statutory Guidance (for Scotland) 2006.

Part 2A defines contaminated land as "*land which appears to the Local Authority in whose area it is situated to be in such a condition that, by reason of substances in, on or under the land that significant harm is being caused, or there is a significant possibility that such harm could be caused, or pollution of controlled waters* (known as "the water environment" in Scotland) *is being, or likely to be, caused* (Significant Harm of other receptors including human health (SPOSH) and Significant Possibility of Significant Pollution (SPOSP))".

Harm is defined as "*harm to the health of living organisms or other interference with the ecological systems of which they form part, and in the case of man, includes harm to his property*".

Part 2A provides a means of dealing with unacceptable risks posed by land contamination to human health and the environment, and under the guidance enforcing authorities should seek to find and deal with such land. It states that "*under Part 2A the starting point should be that land is not contaminated land unless there is reason to consider otherwise. Only land where unacceptable risks are clearly identified, after a risk assessment has been undertaken in accordance with the Guidance, should be considered as meeting the Part 2A definition of contaminated land"*. Further the guidance makes it clear that *"regulatory decisions should be based on what is reasonably likely, not what is hypothetically possible".*

The overarching objectives of the Government's policy on contaminated land and the Part 2A regime are:

"(a) To identify and remove unacceptable risks to human health and the environment.
(a) To seek to ensure that contaminated land is made suitable for its current use.
(b) To ensure that the burdens faced by individuals, companies and society as a whole are proportionate, manageable and compatible with the principles of sustainable development".

The enforcing authority may need to decide whether and how to act in situations where decisions are not straight forward, and where there is uncertainty. "*In so doing, the authority should use its judgement to strike a reasonable balance between: (a) dealing with risks raised by contaminants in land and the benefits of remediating land to remove or reduce those risks; and*

(b) the potential impacts of regulatory intervention including financial costs to whoever will pay for remediation, health and environmental impacts of taking action, property blight, and burdens on affected people". The authority is required to "*take a precautionary approach to the risks raised by contamination, whilst avoiding a disproportionate approach given the circumstances of each case".* The aim is "*that the regime produces net benefits, taking account of local circumstances*".

The guidance recognises that *"normal levels of contaminants in soils should not be considered to cause land to qualify as contaminated land, unless there is a particular reason to consider otherwise".*

Normal levels are quoted as:

"a) natural presence of contaminants' such as from underlying geology *'that have not been shown to pose an unacceptable risk to health and the environment*

b) …low level diffuse pollution, and common human activity…"

Similarly, the guidance states that significant pollution of the water environment is required for land to be considered contaminated and the "*fact that substances are merely entering water"* or "*where discharge from land is not discernible at a location immediately downstream"* does not constitute contaminated land.

To help achieve a more targeted approach to identifying and managing contaminated land in relation to the risk (or possibility) of harm to human health, the revised Statutory Guidance (in England and Wales) presented a new four category system for considering land under Part 2A, ranging from Category 4, where there is no risk that land poses a significant possibility of significant harm (SPOSH), or the level of risk is low, to Category 1, where the risk that land poses a SPOSH is unacceptably high.

For land that cannot be readily placed into Categories 1 or 4 further assessment is required. If there is a sufficiently strong case that the risks are of sufficient concern to cause significant harm/pollution or have the significant possibility of significant harm/pollution the land is to be placed into Category 2. If the concern is not met land is considered Category 3.

The technical guidance clearly states that the currently published Soil Guidance Value's (SGV's) and Generic Assessment Criteria (GAC's) represent *"cautious estimates of level of contaminants in soils"* which should be considered *"no risk to health or, at most, a minimal risk"*. These values do not represent the boundary between categories 3 and 4 and "*should be considered to be comfortably within Category 4".*

At the end of 2013 technical guidance in support of Defra's revised Statutory Guidance (SG) was published and then revised in 2014 (CL:AIRE 2014) which provided:

- A methodology for deriving C4SLs for four generic land-uses comprising residential, commercial, allotments and public open space; and
- A demonstration of the methodology, via the derivation of C4SLs for six substances – arsenic, benzene, benzo(a)pyrene, cadmium, chromium (VI) and lead.

In addition to the C4SLs, CIEH/LQM published Suitable 4 Use Levels (S4ULs) for 82 substances in 2015.

At the time of writing, it is understood that the acceptance of C4SLs and S4ULs is at the discretion of Scottish Local Authorities, but that these criteria are likely to be accepted in Tier 2 screening providing adequately justified. For more detail on assessment criteria, please refer to the Stantec document entitled "Rationale for Selection of Evaluation Criteria Used in Tier 2 (Generic) Land Contamination Risk Assessment (Scotland)".

2.2 Planning

The Local Authority Planning Department is responsible for the control of development, and in doing so it has a duty to take account of all material considerations, including contamination. Government guidance is provided in Planning Advice Note 33, Development of Contaminated Land (PAN 33).

PAN 33 defines the potential characteristics of contaminated land and describes the 'Source, Pathway, Receptor' model (See Section 3, below for more detail).

The level at which contamination is deemed to be unacceptable, or, gives rise to adverse effects under a planning context has not been identified but is envisaged to be more precautionary than the level required to determine land as contaminated under Part 2A.

A site containing contaminants may not be likely to cause significant harm in its current use, but if a different use were proposed, then the potential for significant harm may be enhanced.

The principal planning objective is to ensure that any unacceptable risks to human health, buildings and other property and the natural and historical environment from the contaminated condition of the land are identified so that appropriate action can be considered and taken to address those risks. In order to grant planning permission, the Local Authority (LA) has to be satisfied that there is sufficient information about the condition of the land, its impacts and the availability of viable remedial options.

A key distinction between the Soil Guideline Values (SGVs) and the C4SLs is the level of risk that they describe. As described by the Environment Agency (2009a):

"SGVs are guidelines on the level of long-term human exposure to individual chemicals in soil that, unless stated otherwise, are tolerable or pose a minimal risk to human health."

Note that it is understood that the acceptance of C4SLs and S4ULs is at the discretion of Scottish Local Authorities (see the last paragraph in Section 2.1 for more information).

2.3 Building Control

The building control department of the local authority or private sector approved inspectors are responsible for the operation and enforcement of the Building (Scotland) Regulations 2004 to protect the health, safety and welfare of people in and around buildings. This requires the protection of buildings and associated land from the effects of contamination, to be applied (non-exclusively) in all changes of use from commercial or industrial premises, to residential property.

3 APPROACH

As with CLR11 the guidance given in LC:RM presents three stages of risk management:

(a) Stage 1 - Risk Assessment;
(b) Stage 2 - Options Appraisal; and
(c) Stage 3 - Remediation.

Each stage has three tiers. The three tiers of Stage 1 Risk Assessment are:

- Tier 1 - Preliminary Risk Assessment (PRA) - first tier of RA that develops the outline conceptual model (CM) and establishes whether there are any potentially unacceptable risks.
- Tier 2 - Generic Quantitative Risk Assessment (GQRA) - carried out using generic assessment criteria and assumptions to estimate risk.
- Tier 3 - Detailed Quantitative Risk Assessment (DQRA) - carried out using detailed site-specific information to generate Site Specific Assessment Criteria (SSAC) as risk evaluation criteria.

For each tier of a Stage 1 - Risk Assessment you must:

1. Identify the hazard - establish contaminant sources.

2. Assess the hazard - use a source-pathway-receptor (S-P-R) pollutant linkage approach to find out if there is the potential for unacceptable risk.

3. Estimate the risk - predict what degree of harm or pollution might result and how likely it is to occur.

4. Evaluate the risk - decide whether a risk is unacceptable.

A Stantec Preliminary Investigation report normally comprises a desk study, walkover site reconnaissance and preliminary risk assessment (PRA). The project specific proposal defines the actual scope of work which might include review of ground investigation data in which case the report includes a GQRA.

Risk estimation involves identifying the magnitude of the potential consequence (taking into account both the potential severity of the hazard and the sensitivity of the receptor) and the magnitude of the likelihood i.e. the probability (taking into account the presence of the hazard and the receptor and the integrity of the pathway). This approach is promoted in current guidance such as R&D 66 (NHBC 2008).

For a PRA, Stantec's approach is that if a pollution linkage is identified then it represents a potentially unacceptable risk which either (1) remediation / direct risk management or (2) progression to further tiers of risk assessment (GQRA and DQRA) requiring additional data collection and enabling refinement of the CM using the site specific data.

4 IDENTIFICATION OF POLLUTANT LINKAGES AND CONCEPTUAL MODEL (CM)

For all Tiers the underlying principle to ground condition assessment is the identification of *pollutant linkages* in order to evaluate whether the presence of a source of contamination could potentially lead to harmful consequences. A pollutant linkage consists of the following three elements:

- A source/hazard – a substance or situation which has the potential to cause harm or pollution;
- A pathway – a means by which the hazard moves along / generates exposure; and
- A receptor/target – an entity which is vulnerable to the potential adverse effects of the hazard.

The *Conceptual Model* identifies the types and locations of potential contaminant sources/hazards and potential receptors and potential migration/transportation pathway(s). The CM is refined through progression to further tiers of risk assessment (GQRA and DQRA) requiring additional data collection.

4.1 Hazard Identification

A hazard is a substance or situation that has the potential to cause harm. Hazards may be chemical, biological or physical.

In a PRA the potential for hazards to be present is determined from consideration of the previous or ongoing activities on or near to the site in accordance with the criteria presented in the **Table 1**.

Based on the land use information Contaminants of Potential Concern (COPC) are identified. The COPC direct the scope of the collection of site-specific data and the analytical testing selected for subsequent Tiers.

At Tier 2 the site-specific data is evaluated using appropriate published assessment criteria (refer to Stantec document entitled Rationale for the Selection of Evaluation Criteria for a Generic Quantitative Risk Assessment (GQRA)). In general, published criteria have been developed using highly conservative assumptions and therefore if the screening criterion is not exceeded (and if enough samples from appropriate locations have been analysed) then the COPC is eliminated as a potential Hazard. It should be noted that exceedance does not necessarily indicate that a site is contaminated and/or unsuitable for use only that the COPC is retained as a potential Hazard. Published criteria are generated using models based on numerous and complex assumptions. Whether or not these assumptions are appropriate or sufficiently protective requires confirmation on a project by project basis. Manipulation of the default assumptions would normally form part of a Tier 3 Detailed Quantitative Risk Assessment (DQRA).

When reviewing or assessing site specific data Stantec utilise published guidance on comparing contamination data with a critical concentration (CL:AIRE/CIEH 2008) which presents a structured process for employing statistical techniques for data assessment purposes.

4.2 Receptor and Pathway Identification

For all Tiers the potential receptors (for both on site and adjoining land) that will be considered are:

- Human Health – including current and future occupiers, construction and future maintenance workers and neighbouring properties/third parties;
- Ecological Systems; *1
- The Water Environment *2 – including surface water and groundwater;
- Property - Animal or Crop (including timber; produce grown domestically, or on allotments, for consumption; livestock; other owned or domesticated animals; wild animals which are the subject of shooting or fishing rights); and
- Property – Buildings (existing and proposed) (including any structure or erection, and any part of a building including any part below ground level, but does not include plant or machinery comprised in a building, or buried services such as sewers, water pipes or electricity cables including archaeological sites and ancient monuments).

*1 International or nationally designated sites (as defined in the statutory guidance (Defra Circular 04/12)) "in the local area" will be identified as potential ecological receptors. A search radius of 1, 2 or 5km will be utilised depending on the site specific circumstances (see also pathway identification). The Environment Agency has published an ecological risk assessment framework (EA 2008) which promotes (as opposed to statutorily enforces) consideration of additional receptors to include locally protected sites and protected or notable species. These additional potential receptors will only be considered if a Phase 1 habitat survey, undertaken in accordance with guidance (JNCC 1993), is commissioned and the data provided to Stantec. It should be noted that without such a survey the Tier 1 risk assessment may conclude that the identification of potential ecological receptors is inconclusive (refer to Stantec Specification for Phase 1).

*2 the definition of "pollution of controlled water" was amended by the introduction of the Water Environment and Water Services (Scotland) Act 2003. The water environment is defined as all surface water, groundwater and wetlands. For the purposes of Part 2A groundwater does not include waters above the saturated zone and our assessment does not therefore address perched water other than where development causes a pathway to develop.

If a receptor is taken forward for further assessment it will be classified in terms of its sensitivity, the criteria for which are presented in **Table 2**. Table 2 has been generated using descriptions of environmental receptor importance/value given in various guidance documents including R&D 66 (NHBC 2008) and Transport Analysis Guidance (based on DETR 2000). Human health and buildings classifications have been generated by Stantec using the attribute description for each class.

The exposure pathway and modes of transport that will be considered are presented in **Table 3**.

4.3 Note Regarding Ecological Systems

The Environment Agency (EA) has developed an ecological risk assessment framework which aims to provide a structured approach for assessing the risks to ecology from chemical contaminants in soils (EA 2008). In circumstances where contaminants in water represent a potential risk to aquatic ecosystems then risk assessors will need to consider this separately.

The framework consists of a three-tiered process:

- Tier 1 is a screening step where the site soils chemical data is compared to a soil screening value (SSV)
- Tier 2 uses various tools (including surveys and biological testing) to gather evidence for any harm to the ecological receptors
- Tier 3 seeks to attribute the harm to the chemical contamination

Tier 1 is preceded by a desk study to collate information about the site and the nature of the contamination to assess whether pollutant linkages are feasible. The framework presents ten steps for ecological desk studies and development of a CM as follows.

1 Establish Regulatory Context
2 Collate and Assess Documentary Information
3 Summarise Documentary Information
4 Identify Potential Contaminants of Concern
5 Identify Likely Fate Transport of Contaminants
6 Identify Potential Receptors of Concern
7 Identify Potential Pathways of Concern
8 Create a Conceptual Model
9 Identify Assessment and Measurement Endpoints
10 Identify Gaps and Uncertainties

The information in a standard PRA covers Steps 1 to 4 inclusive. Step 5 considers fate and transport of contaminants and it should be noted that our standard report adopts a simplified approach considering only transport mechanisms. A simplified approach has also been adopted in respect of Steps 6 and 7 receptors (a detailed review of the ecological attributes has not been undertaken) and pathways (a food chain assessment has not been undertaken). Step 9 is outside the scope of our standard PRA.

It should be noted that the PRA report will present an assessment for ecological systems (where identified as a receptor for a land contamination assessment) considering the viability of the mode of transport given the site-specific circumstances and not specific pathways. The PRA may conclude that the risk to potential ecological receptors is inconclusive.

4.4 Note regarding the Water Environment

The water environment is rivers, estuaries, coastal waters, lakes and groundwater, but not perched waters.

The EU Water Framework Directive (WFD) aims to protect and enhance the quality of surface freshwater, groundwater and dependent ecosystems, estuaries and coastal waters. The WFD was transposed into UK law in 2003 (Statutory Instruments 2003). Member

states must aim to reach good chemical and ecological status as defined in the Directive by 2015.

The EU Groundwater Daughter Directive (GWDD) was enacted by the Groundwater Regulations (2009), which were subsumed by the Water Environment and Water Services (Scotland) Act 2003 ("the WEWS Act") which provides essential clarification including on the four objectives specifically for groundwater quality in the WFD:

- Achieve 'Good' groundwater chemical status by 2015, commonly referred to as 'status objective';
- Achieve Drinking Water Protected Area Objectives;
- Implement measures to reverse any significant and sustained upward trend in groundwater quality, referred to as 'trend objective'; and
- Prevent or limit the inputs of pollutants into groundwater, commonly referred to as 'prevent or limit' objectives

The Water Act 2003 (Commencement No.11) Order 2012 amends the test for 'contaminated land' which relates to water pollution so that pollution of controlled waters (known as "the water environment" in Scotland) must now be "significant" to meet the definition of contaminated land.

River Basin Management Plans (RBMP) have been developed by SEPA for the River Basin Districts in Scotland.

These RBMP's establish the current status of waters within the catchments of the respective Districts and the current status of adjoining waters identified. As part of a Tier 2 risk assessment water quality data is screened against the WFD assessment criteria. Compare to the RBMP's current status of waters for the catchment under consideration would form part of a Tier 3 assessment.

5 RISK ESTIMATION

Risk estimation classifies what degree of harm might result to a receptor (defined as consequence) and how likely it is that such harm might arise (probability).
At Tier 1 the consequence classification is generated by multiplying the hazard classification score and the receptor sensitivity score. This approach follows that presented in the republished R&D 66 (NHBC 2008).

The criteria for classifying probability are set out in **Table 4** and have been taken directly from Table 6.4 CIRIA C552 (CIRIA 2001). Probability considers the integrity of the exposure pathway.

The consequence classifications detailed in **Table 5** have been adapted from Table 6.3 presented in C552 and R&D 66 (Annex 4 Table A4.3).

The Tier 1 risk classification is estimated for each pollutant linkage using the matrix given in **Table 6** which is taken directly from C552 (Table 6.5).
Subsequent Tiers refine the CM through retention or elimination of potential hazards and pollutant linkages.

6 RISK EVALUATION

Evaluation criteria are the parameters used to judge whether particular harm or pollution needs further assessment or is unacceptable. The evaluation criteria used will depend on:

- the reasons for doing the risk assessment and the regulatory context such as Part 2A
- the CM and pollutant linkages present
- any criteria set by regulators
- any advisory requirements such as from Public Health England (Public Heath Scotland will become operational in 2020 and consequentially this guidance may be updated to incorporate any new/changes to requirements)
- the degree of confidence and precaution required
- the level of confidence required to judge whether a risk is unacceptable
- how you've used or developed more detailed assessment criteria in the later tiers of risk assessment
- the availability of robust scientific data
- how much is known - for example, about the pathway mechanism and how the contaminants affect receptors
- any practical reasons such as being able to measure or predict against the criteria

In order to put the Tier 1 risk classification into context the likely actions are described in **Table 7** which is taken directly from Table 6.6 of C552 (CIRIA 2001).

7 REFERENCES

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The EU Groundwater Daughter Directive (2006/118/EC).

The EU Water Framework Directive (2000/60/EC).

The Scotland River Basin District (Status) Directions 2014.

The Water Act 2003 (Commencement No.11) Order 2012.

The Water Environment and Water Services (Scotland) Act 2003.

Table 1: Indicative Criteria for Classifying Hazards / Potential for Generating Contamination

Classification/Score	Potential for generating contamination/gas based on land use
Very Low 1	Land Use: residential, retail or office use, agriculture Contamination: limited Gas generation potential: soils with low organic content
Low 2	Land Use: recent small scale industrial and light industry Contamination: locally slightly elevated concentrations Gas generation potential: soils with high organic content (limited thickness)
Moderate 3	Land Use: railway yards, collieries, scrap yards, engineering works Contamination: possible widespread slightly elevated concentrations and locally elevated concentrations Gas generation potential: dock silt and substantial thickness of organic alluvium/peat
High 4	Land Use: heavy industry, non-hazardous landfills Contamination: possible widespread elevated concentrations Gas generation potential: shallow mine workings, pre-1960's landfill
Very High 5	Land Use: Hazardous waste landfills, gas works, chemical works Contamination: Likely widespread elevated concentrations Gas generation potential: Landfill post-1960

"Greenfield" is land which has not been developed or used for commercial agriculture (no use of agrochemicals) – without a source/hazard this are no plausible pollutant linkages and therefore no risk.

Table 2: Criteria for Classifying Receptor Sensitivity/Value

Classification/Score	Definition
Very Low 1	Receptor of limited importance • Groundwater: Very Low productivity and / or SEPA overall classification Poor • Surface water: Water body within 25m or eliminate and/or SEPA overall classification Bad • Ecology: No local designation • Buildings: Replaceable • Human health: Unoccupied/limited access
Low 2	Receptor of local or county importance with potential for replacement • Groundwater: Low productivity and / or SEPA overall classification Poor • Surface water: Immediately adjacent and/or SEPA overall classification Poor • Ecology: Local designations and local habitat resources • Buildings: Local value • Human health: Minimum score 4 where human health identified as potential receptor
Moderate 3	Receptor of local or county importance with potential for replacement • Groundwater: Moderate productivity and / or SEPA overall classification Good • Surface water: Immediately adjacent and/or SEPA overall classification Moderate • Ecology: County wildlife sites, National Scenic Areas (NSA) • Buildings: Area of Historic Character or proposed new buildings* • Human health: Minimum score 4 where human health identified as potential receptor
High 4	Receptor of country or regional importance with limited potential for replacement • Groundwater: High productivity and / or SEPA overall classification Good with no known abstractions • Surface water: Immediately adjacent and/or SEPA classification overall Good • Ecology: Nationally designated sites i.e. Site of Special Scientific Interest (SSSI), National Nature Reserve (NNR), Marine Protected Areas (MPA), Marine Consultation Areas (MCAs) and other relevant designations • Buildings: Conservation Area • Human health: Minimum score 4 where human health identified as potential receptor
Very High 5	Receptor of national or international importance • Groundwater: High productivity and / or SEPA overall classification Good with known existing or proposed abstractions • Surface water: Water body onsite and/or SEPA overall classification High • Ecology: Internationally designated sites such as Special Areas of Conservation (SAC and candidates), Special Protection Areas (SPA and potentials) or wetlands of international importance (RAMSAR) • Buildings: World Heritage Site • Human health: Residential, open spaces and uses where children are present

* Minimum score 3 where a new building is proposed

Table 3: Exposure Pathway and Modes of Transport

Receptor	Pathway	Mode of transport
Human health	Ingestion	Fruit or vegetable leaf or roots
		Contaminated water
		Soil/dust indoors
		Soil/dust outdoors
	Inhalation	Particles (dust / soil) – outdoor
		Particles (dust / soil) - indoor
		Vapours - outdoor - migration via natural or anthropogenic pathways
		Vapours - indoor - migration via natural or anthropogenic pathways
	Dermal absorption	Direct contact with soil
		Direct contact with waters (swimming / showering)
		Irradiation
Groundwater	Leaching	Gravity / permeation
	Migration	Natural – groundwater as pathway Anthropogenic (e.g. boreholes, culverts, pipelines etc.)
Surface Water	Direct	Runoff or discharges from pipes
	Indirect	Recharge from groundwater
	Indirect	Deposition of windblown dust
Buildings	Direct contact	Sulphate attack on concrete, hydrocarbon corrosion of plastics
	Gas ingress	Migration via natural or anthropogenic paths
Ecological systems	See Notes	Runoff/discharge to surface water body
	See Notes	Windblown dust
	See Notes	Groundwater migration
	See Notes	At point of contaminant source
Animal and crop	Direct	Wind blown or flood deposited particles / dust / sediments
	Indirect	Plants via root up take or irrigation. Animals through watering
	Inhalation	By livestock / fish - gas / vapour / particulates / dust
	Ingestion	Consumption of vegetation / water / soil by animals

Table 4: Classification of Probability

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

Table 5: Classification of Consequence (score = magnitude of hazard Table 1 and sensitivity of receptor Table 2)

Classification / Score	Examples
Severe **17 - 25** **(3 out of 25 outcomes)**	Human health effect - exposure likely to result in "significant harm" as defined in the Defra (2012) Part 2A Statutory Guidance [1]. Water environment effect - short-term risk of pollution (note: Water Resources Act contains no scope for considering significance of pollution) of sensitive water resource. Equivalent to EA Category 1 incident (persistent and/or extensive effects on water quality leading to closure of potable abstraction point or loss of amenity, agriculture or commercial value. Major fish kill. Ecological effect - short-term exposure likely to result in a substantial adverse effect. Catastrophic damage to crops, buildings or property
Medium **11 - 16** **(7 out of 25 outcomes)**	Human health effect - exposure could result in "significant harm" [1]. Water environment effect - equivalent to EA Category 2 incident requiring notification of abstractor Ecological effect - short-term exposure may result in a substantial adverse effect. Damage to crops, buildings or property
Mild **4 - 9** **(7 out of 25 outcomes)**	Human health effect - exposure could result in "significant harm" [1]. Water environment effect - equivalent to EA Category 3 incident (short lived and/or minimal effects on water quality). Ecological effect - unlikely to result in a substantial adverse effect. Minor damage to crops, buildings or property. Damage to building rendering it unsafe to occupy (for example foundation damage resulting in instability).
Minor **1 - 4** **(8 out of 25 outcomes)**	No measurable effect on humans. Protective equipment is not required during site works. Equivalent to insubstantial pollution incident with no observed effect on water quality or ecosystems. Repairable effects to crops, buildings or property. The loss of plants in a landscaping scheme. Discolouration of concrete.

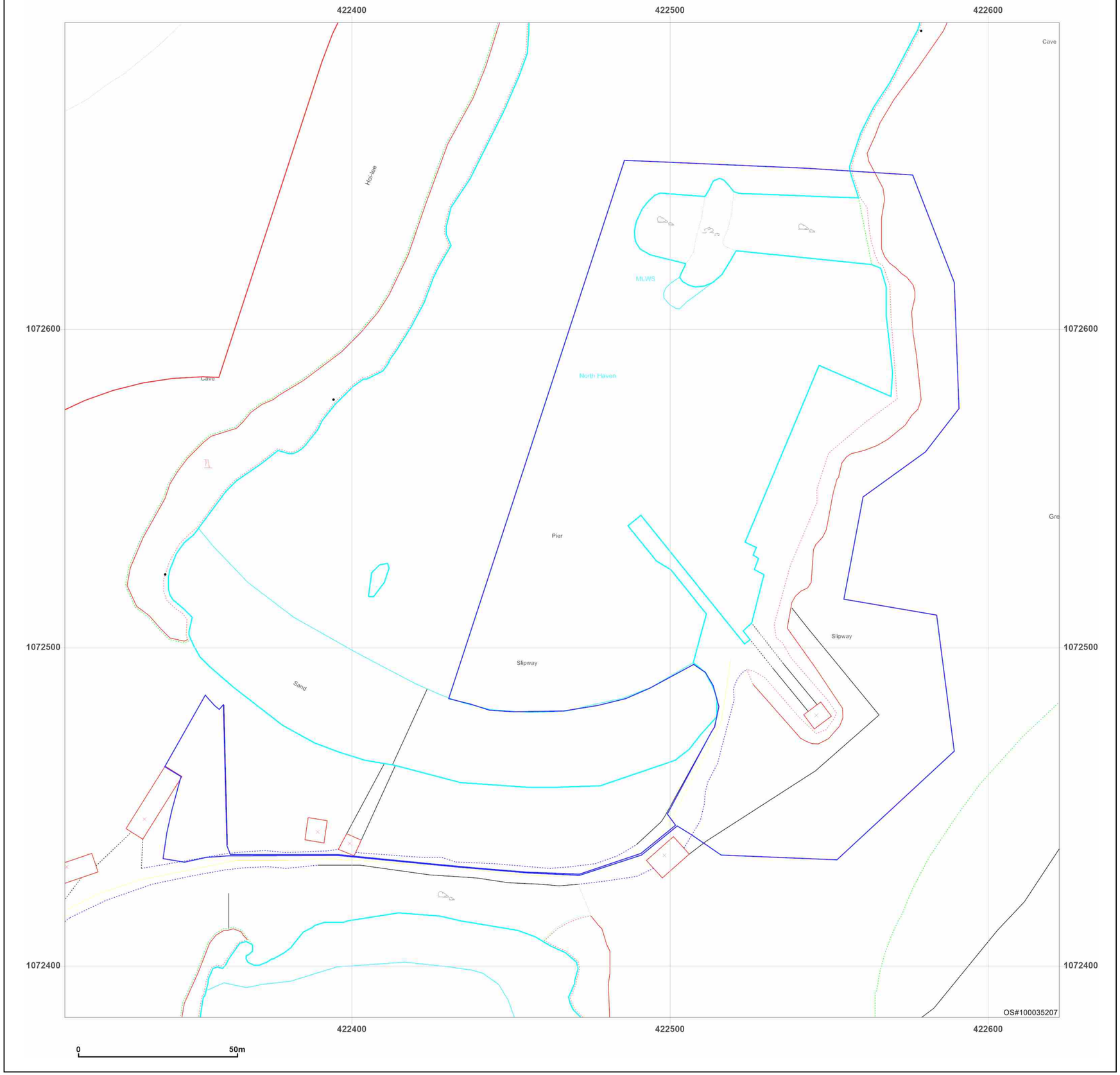
Note [1]: Significant harm includes death, disease, serious injury, genetic mutation, birth defects or impairment of reproductive function. The local authority may also consider other health effects to constitute significant harm such as physical injury; gastrointestinal disturbances; respiratory tract effects; cardio-vascular effects; central nervous system effects; skin ailments; effects on organs such as the liver or kidneys; or a wide range of other health impacts. Whether or not these would constitute significant harm would depend on the seriousness of harm including impact on health, quality of life and scale of impact.

Table 6: Classification of Risk (Combination of Consequence Table 5 and Probability Table 4)

	Consequence			
Probability	***Severe***	***Medium***	***Mild***	***Minor***
High likelihood	Very high	High	Moderate	Low
Likely	High	Moderate	Moderate/Low	Low
Low likelihood	Moderate	Moderate/Low	Low	Very low
Unlikely	Low	Low	Very low	Very low

Table 7: Description of Risks and Likely Action Required

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



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Site Details:

North Haven, Fair Isle, ZE2 9JU

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Report Ref: GS-9395810
Grid Ref: 422466, 1072540

Map Name: LandLine
Map date: **2003**
Scale: 1:1,250
Printed at: 1:1,250

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2003

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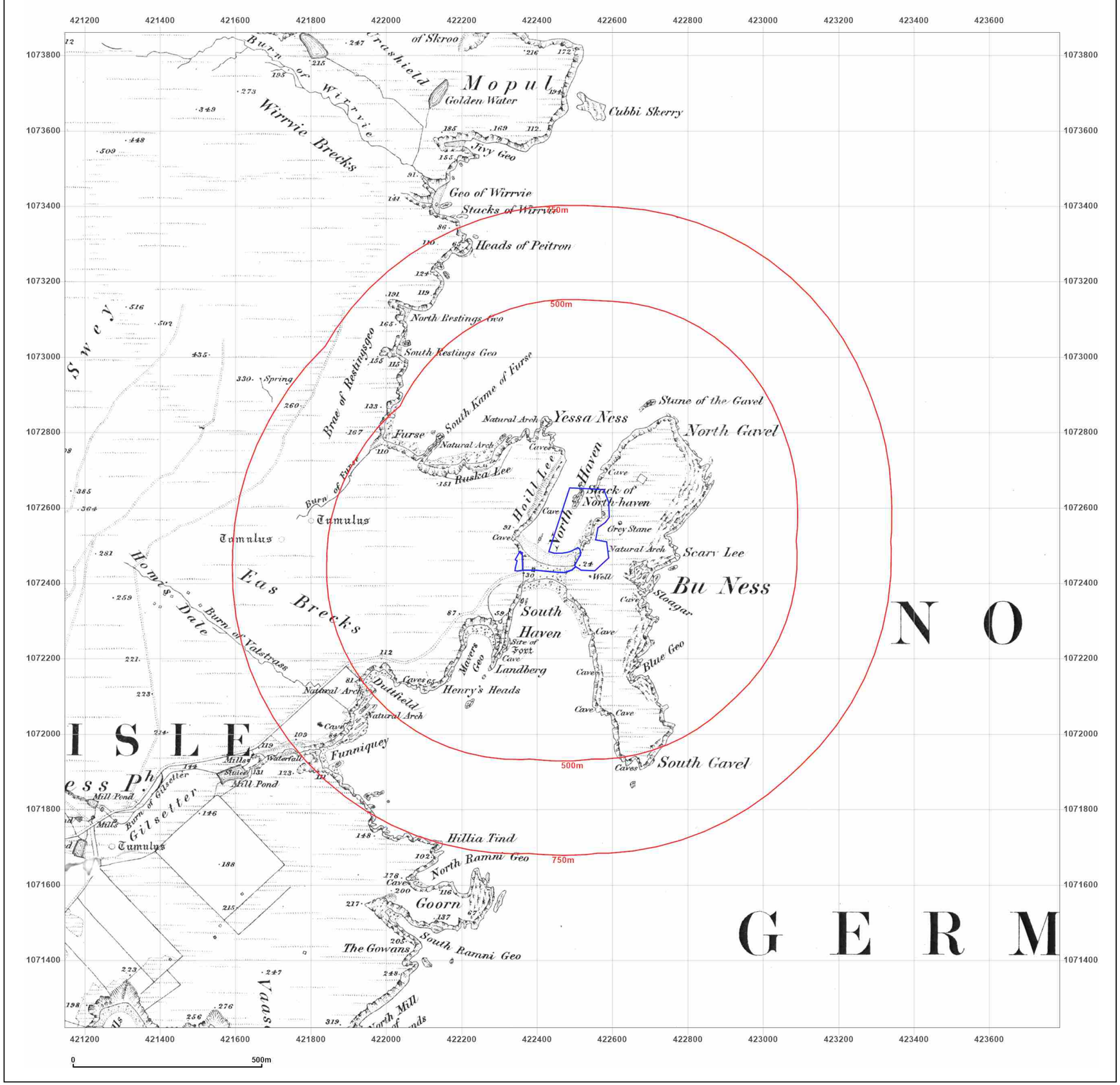

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North Haven, Fair Isle, ZE2 9JU

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Report Ref: GS-9395810
Grid Ref: 422466, 1072540

Map Name: County Series

Map date: **1878**

Scale: 1:10,560

Printed at: 1:10,560

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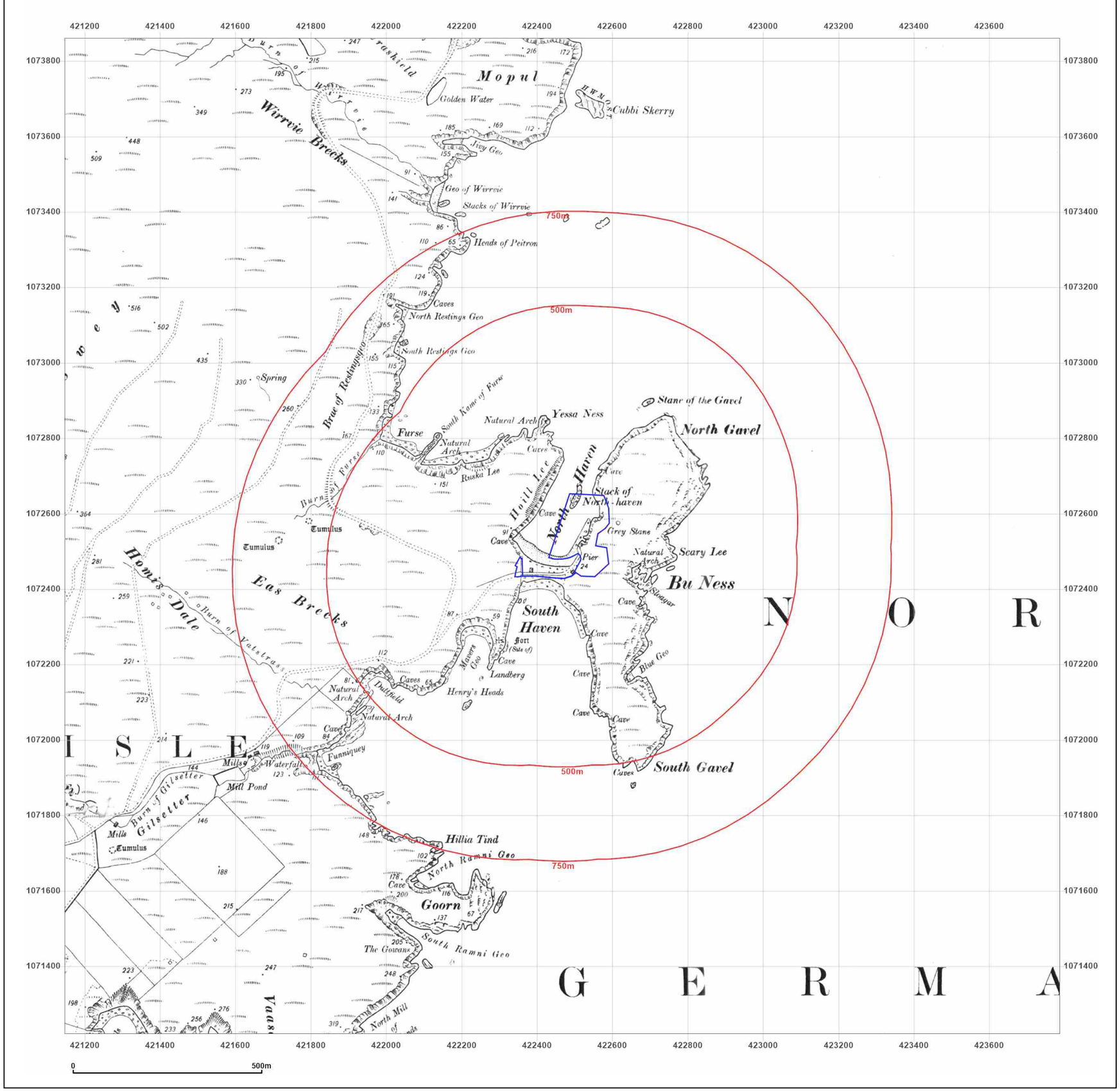

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Report Ref: GS-9395810
Grid Ref: 422466, 1072540

Map Name: County Series

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Scale: 1:10,560

Printed at: 1:10,560

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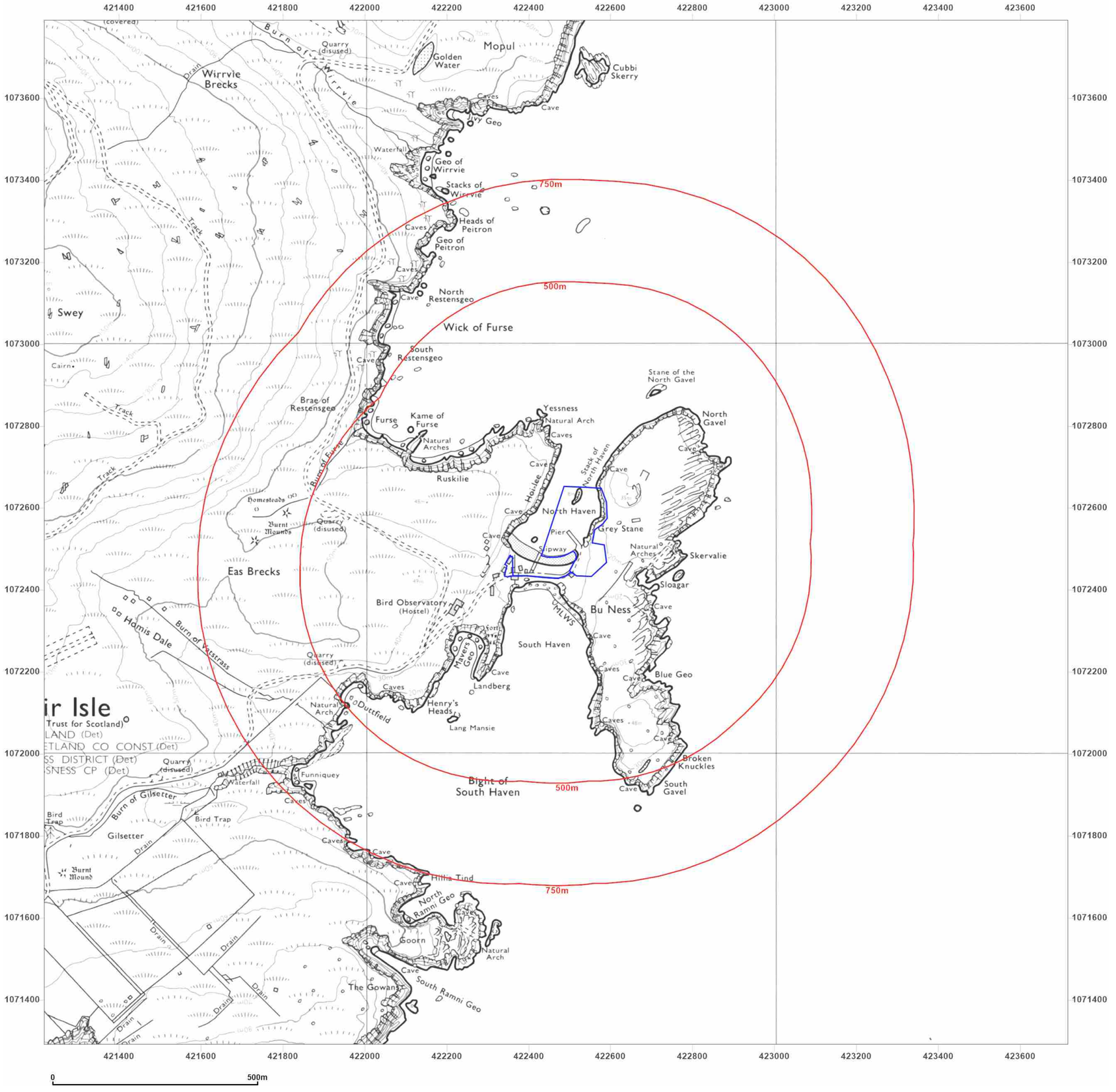

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Site Details:

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Report Ref: GS-9395810
Grid Ref: 422466, 1072540

Map Name: National Grid

Map date: **1973**

Scale: 1:10,000

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Client Ref: EPL_Fair_Isle
Report Ref: GS-9395810
Grid Ref: 422466, 1072540

Map Name: National Grid

Map date: **2001**

Scale: 1:10,000

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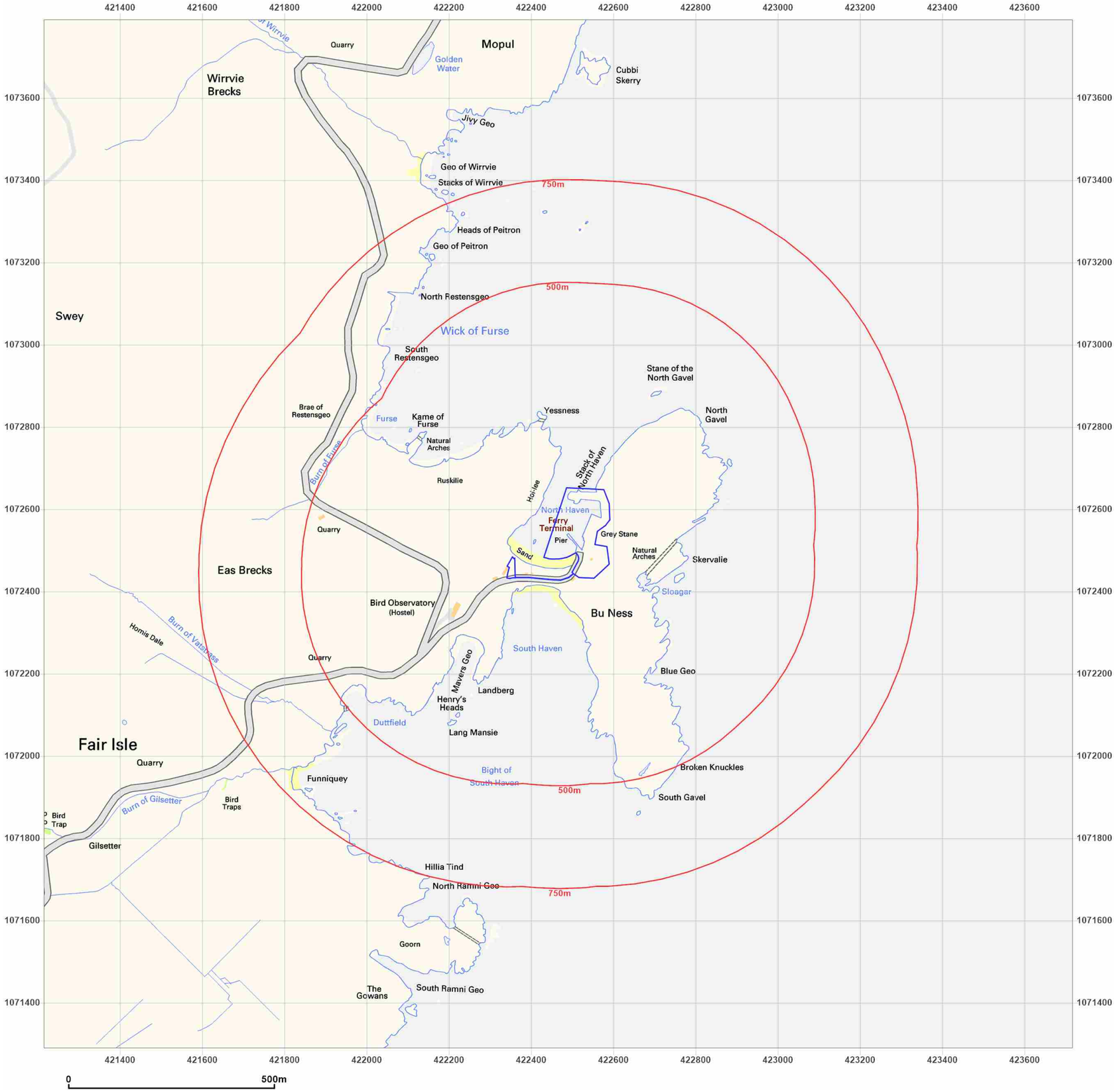

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Client Ref: EPL_Fair_Isle
Report Ref: GS-9395810
Grid Ref: 422466, 1072540

Map Name: National Grid

Map date: **2010**

Scale: 1:10,000

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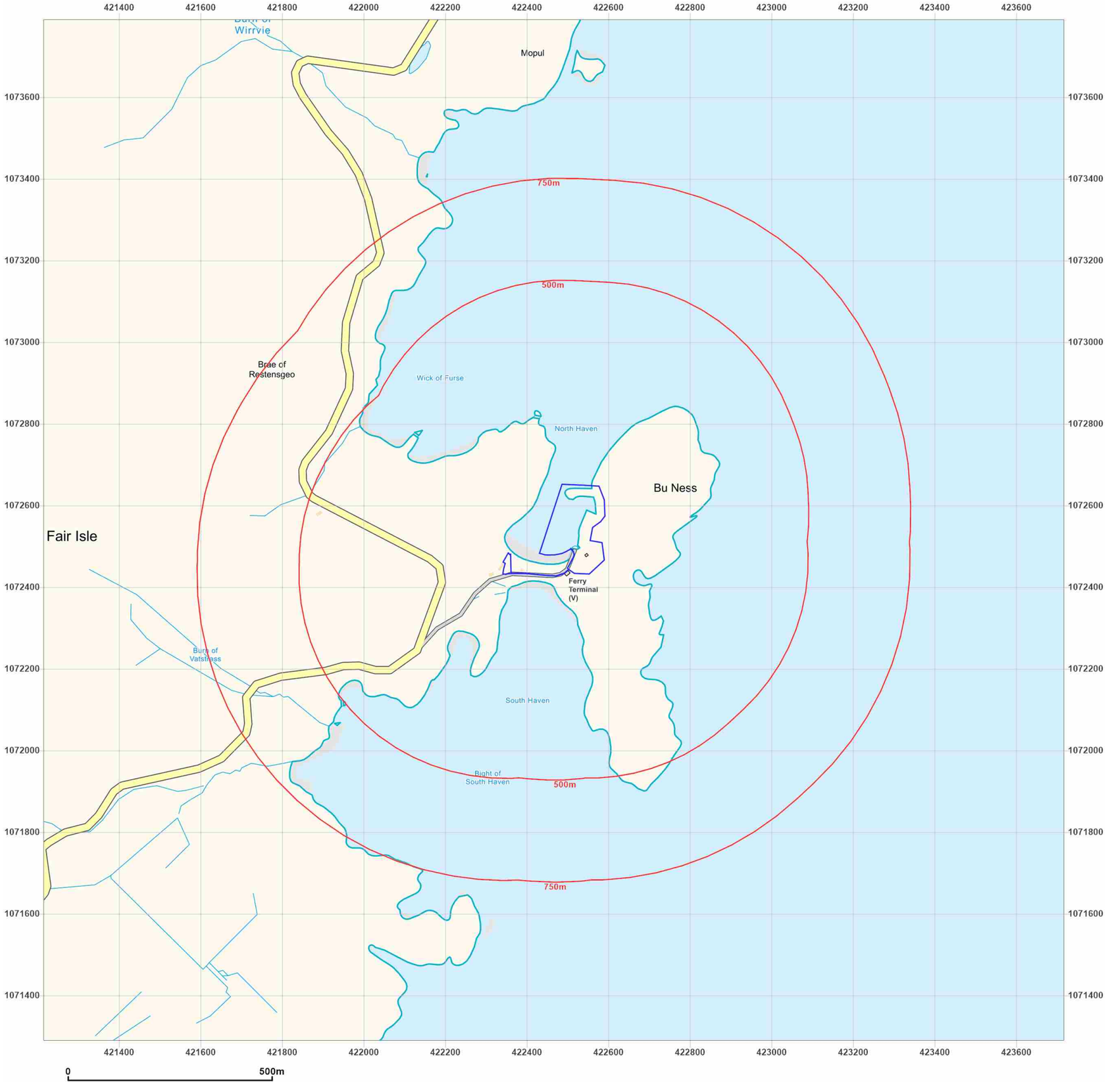

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Site Details:

North Haven, Fair Isle, ZE2 9JU

Client Ref: EPL_Fair_Isle
Report Ref: GS-9395810
Grid Ref: 422466, 1072540

Map Name: National Grid

Map date: **2023**

Scale: 1:10,000

Printed at: 1:10,000

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LOCATION INTELLIGENCE

Enviro+Geo Insight

North Haven, Fair Isle, ZE2 9JU

Order Details

Date: 03/03/2023

Your ref: EPL_Fair_Isle

Our Ref: GS-9395811

Site Details

Location: 422530 1072546

Area: 2.45 ha

Authority: Shetland Islands Council

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

Summary of findings

Page	Section	Past land use	On site	0-50m	50-250m	250-500m	500-2000m
11	**1.1**	**Historical industrial land uses**	0	0	0	3	-
12	1.2	Historical tanks	0	0	0	0	-
12	1.3	Historical energy features	0	0	0	0	-
12	1.4	Historical petrol stations	0	0	0	0	-
13	1.5	Historical garages	0	0	0	0	-
13	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
14	**2.1**	**Historical industrial land uses**	0	0	0	3	-
15	2.2	Historical tanks	0	0	0	0	-
15	2.3	Historical energy features	0	0	0	0	-
15	2.4	Historical petrol stations	0	0	0	0	-
15	2.5	Historical garages	0	0	0	0	-
Page	Section	Waste and landfill	On site	0-50m	50-250m	250-500m	500-2000m
16	3.1	Active or recent landfill	0	0	0	0	-
16	3.2	Historical landfill (BGS records)	0	0	0	0	-
16	3.3	Historical landfill (LA/mapping records)	0	0	0	0	-
16	3.4	Licensed waste sites	0	0	0	0	-
16	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
17	**4.1**	**Recent industrial land uses**	2	1	0	-	-
18	4.2	Current or recent petrol stations	0	0	0	0	-
18	4.3	Electricity cables	0	0	0	0	-
18	4.4	Gas pipelines	0	0	0	0	-
18	4.5	Sites determined as Contaminated Land	0	0	0	0	-
19	4.6	Control of Major Accident Hazards (COMAH)	0	0	0	0	-
19	4.7	Regulated explosive sites	0	0	0	0	-

19	**4.8**	**Hazardous substance storage/usage**	1	0	0	0	-
19	4.9	Part A(1), IPPC and Historic IPC Authorisations	0	0	0	0	-
20	4.10	Part B Authorisations	0	0	0	0	-
20	4.11	Pollution inventory substances	0	0	0	0	-
20	4.12	Pollution inventory waste transfers	0	0	0	0	-
20	4.13	Pollution inventory radioactive waste	0	0	0	0	-
Page	Section	Hydrogeology	On site	0-50m	50-250m	250-500m	500-2000m
21	5.1	Superficial aquifer	None (within 500m)				
22	**5.2**	**Bedrock aquifer**	Identified (within 500m)				
Page	Section	Hydrology	On site	0-50m	50-250m	250-500m	500-2000m
23	**6.1**	**Water Network (OS MasterMap)**	0	3	8	-	-
24	**6.2**	**Surface water features**	0	2	1	-	-
Page	Section	River flooding					
26	7.1	River flooding	Negligible (within 50m)				
Page	Section	Coastal flooding					
27	8.1	Coastal flooding	Negligible (within 50m)				
Page	Section	Surface water flooding					
28	9.1	Surface water flooding	Negligible (within 50m)				
Page	Section	Groundwater flooding					
29	**10.1**	**Groundwater flooding**	Low (within 50m)				
Page	Section	Environmental designations	On site	0-50m	50-250m	250-500m	500-2000m
30	**11.1**	**Sites of Special Scientific Interest (SSSI)**	2	2	8	14	105
35	11.2	Conserved wetland sites (Ramsar sites)	0	0	0	0	0
36	**11.3**	**Special Areas of Conservation (SAC)**	2	1	6	14	105
52	**11.4**	**Special Protection Areas (SPA)**	1	0	0	0	1
52	11.5	National Nature Reserves (NNR)	0	0	0	0	0
53	11.6	Local Nature Reserves (LNR)	0	0	0	0	0
53	11.7	Designated Ancient Woodland	0	0	0	0	0
53	11.8	Biosphere Reserves	0	0	0	0	0

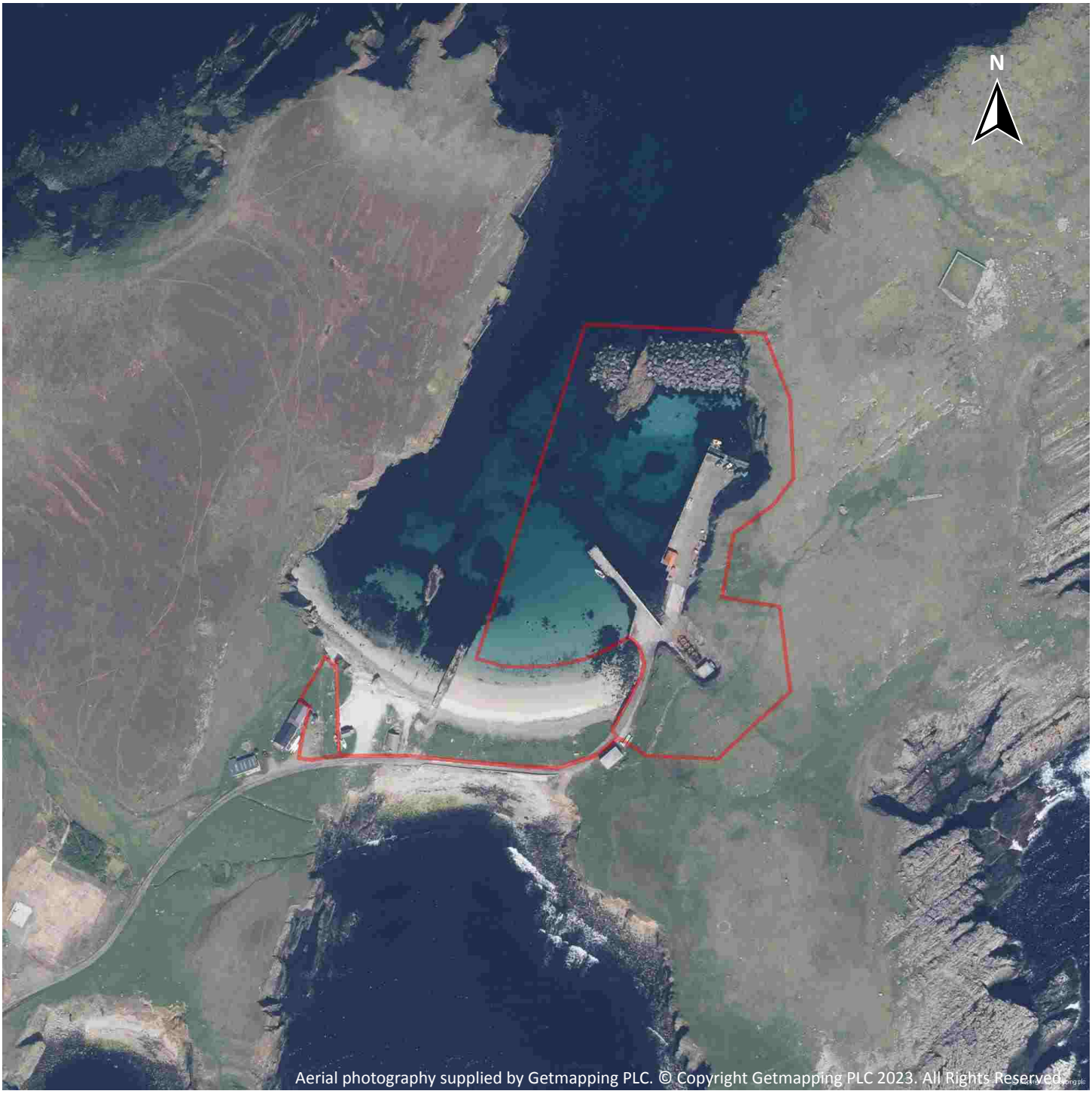
53	11.9	Forest Parks	0	0	0	0	0
54	11.10	Marine Conservation Zones	0	0	0	0	0
Page	Section	Visual and cultural designations	On site	0-50m	50-250m	250-500m	500-2000m
55	12.1	World Heritage Sites	0	0	0	-	-
56	**12.2**	**Area of Outstanding Natural Beauty**	1	0	0	-	-
56	12.3	National Parks	0	0	0	-	-
56	**12.4**	**Listed Buildings**	0	1	0	-	-
57	12.5	Conservation Areas	0	0	0	-	-
57	**12.6**	**Scheduled Ancient Monuments**	1	0	1	-	-
57	12.7	Registered Parks and Gardens	0	0	0	-	-
Page	Section	Agricultural designations	On site	0-50m	50-250m	250-500m	500-2000m
58	**13.1**	**Agricultural Land Classification**	Grade 6.3 (within 250m)				
Page	Section	Geology 1:10,000 scale	On site	0-50m	50-250m	250-500m	500-2000m
59	**14.1**	**10k Availability**	Identified (within 500m)				
60	14.2	Artificial and made ground (10k)	0	0	0	0	-
61	14.3	Superficial geology (10k)	0	0	0	0	-
61	14.4	Landslip (10k)	0	0	0	0	-
62	14.5	Bedrock geology (10k)	0	0	0	0	-
62	14.6	Bedrock faults and other linear features (10k)	0	0	0	0	-
Page	Section	Geology 1:50,000 scale	On site	0-50m	50-250m	250-500m	500-2000m
63	**15.1**	**50k Availability**	Identified (within 500m)				
64	15.2	Artificial and made ground (50k)	0	0	0	0	-
64	15.3	Artificial ground permeability (50k)	0	0	-	-	-
65	**15.4**	**Superficial geology (50k)**	1	1	0	0	-
66	**15.5**	**Superficial permeability (50k)**	Identified (within 50m)				
66	15.6	Landslip (50k)	0	0	0	0	-
66	15.7	Landslip permeability (50k)	None (within 50m)				
67	**15.8**	**Bedrock geology (50k)**	6	0	3	4	-
68	**15.9**	**Bedrock permeability (50k)**	Identified (within 50m)				

69	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
70	16.1	BGS Boreholes	0	0	0	-	-
Page	Section	Natural ground subsidence					
71	17.1	Shrink swell clays	Very low (within 50m)				
72	17.2	Running sands	Moderate (within 50m)				
74	17.3	Compressible deposits	Negligible (within 50m)				
75	17.4	Collapsible deposits	Very low (within 50m)				
76	17.5	Landslides	Moderate (within 50m)				
78	17.6	Ground dissolution of soluble rocks	Negligible (within 50m)				
Page	Section	Mining, ground workings and natural cavities	On site	0-50m	50-250m	250-500m	500-2000m
79	18.1	Natural cavities	0	0	0	0	-
80	18.2	BritPits	0	0	0	2	-
80	18.3	Surface ground workings	4	4	19	-	-
81	18.4	Underground workings	0	0	0	0	0
82	18.5	Historical Mineral Planning Areas	0	0	0	0	-
82	18.6	Non-coal mining	2	0	1	0	3
83	18.7	Mining cavities	0	0	0	0	0
83	18.8	JPB mining areas	None (within 0m)				
83	18.9	Coal mining	None (within 0m)				
83	18.10	Brine areas	None (within 0m)				
83	18.11	Gypsum areas	None (within 0m)				
84	18.12	Tin mining	None (within 0m)				
84	18.13	Clay mining	None (within 0m)				
Page	Section	Radon					
85	19.1	Radon	Less than 1% (within 0m)				
Page	Section	Soil chemistry	On site	0-50m	50-250m	250-500m	500-2000m
87	20.1	BGS Estimated Background Soil Chemistry	11	4	-	-	-
88	20.2	BGS Estimated Urban Soil Chemistry	0	0	-	-	-

88	20.3	BGS Measured Urban Soil Chemistry	0	0	-	-	-

Page	Section	Railway infrastructure and projects	On site	0-50m	50-250m	250-500m	500-2000m
89	21.1	Underground railways (London)	0	0	0	-	-
89	21.2	Underground railways (Non-London)	0	0	0	-	-
89	21.3	Railway tunnels	0	0	0	-	-
89	21.4	Historical railway and tunnel features	0	0	0	-	-
89	21.5	Royal Mail tunnels	0	0	0	-	-
90	21.6	Historical railways	0	0	0	-	-
90	21.7	Railways	0	0	0	-	-
90	21.8	Crossrail 1	0	0	0	0	-
90	21.9	Crossrail 2	0	0	0	0	-
90	21.10	HS2	0	0	0	0	-

Recent aerial photograph



Capture Date: 01/06/2021

Site Area: 2.45ha

Recent site history - 2016 aerial photograph

Capture Date: 13/06/2016

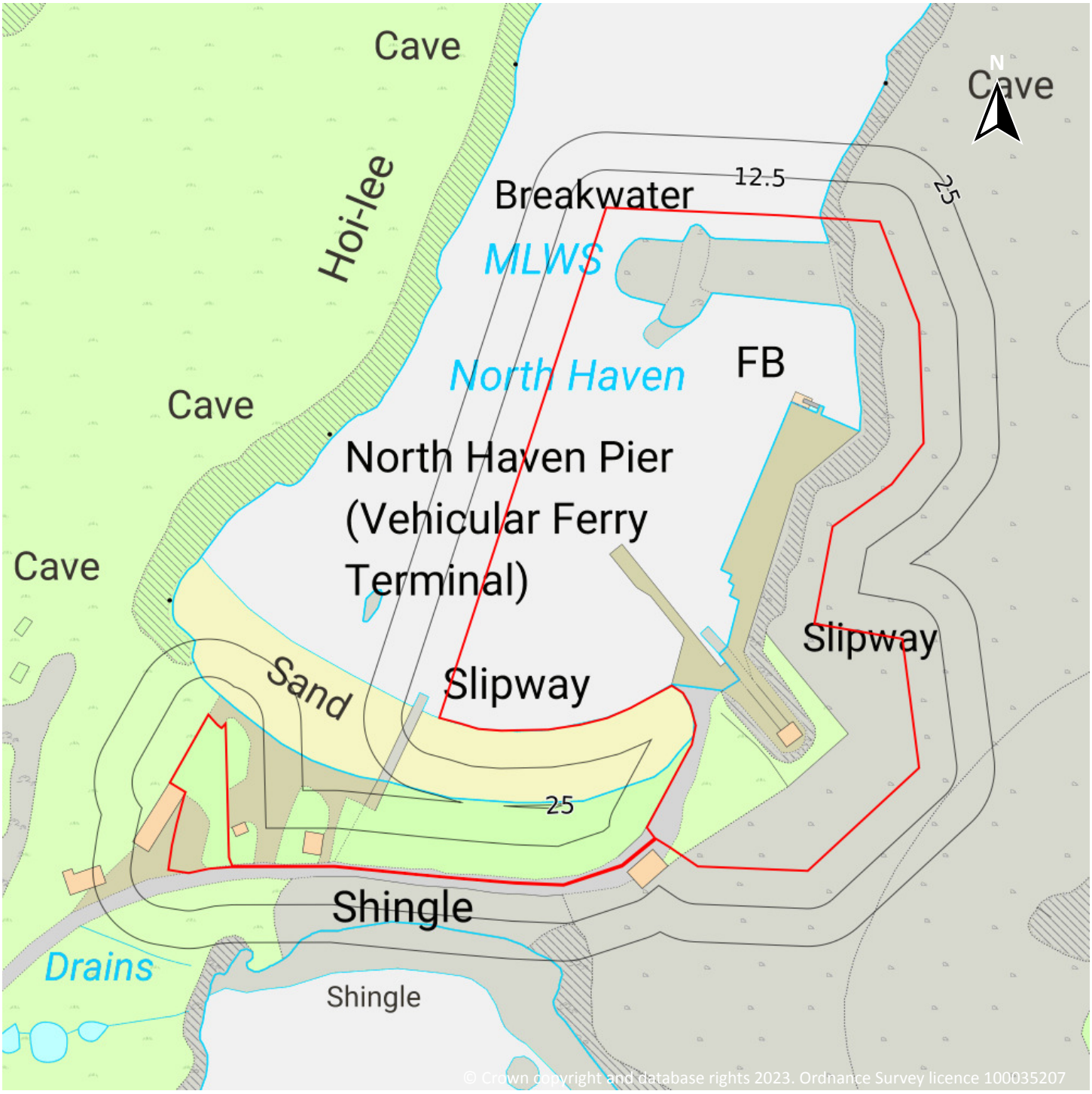
Site Area: 2.45ha

Recent site history - 2008 aerial photograph

Capture Date: 09/05/2008

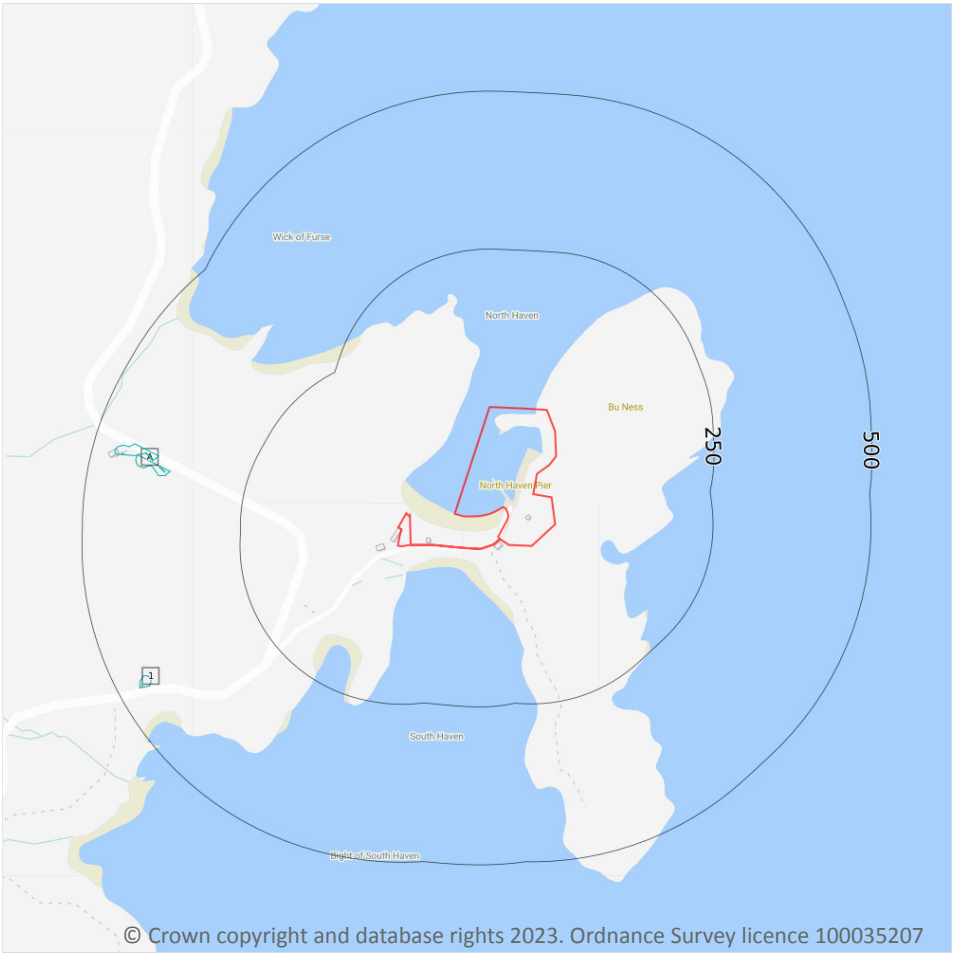
Site Area: 2.45ha

OS MasterMap site plan



Site Area: 2.45ha

1 Past land use



Site Outline

Search buffers in metres (m)

Historical industrial land uses

1.1 Historical industrial land uses

Records within 500m	3

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 11**

ID	Location	Land use	Dates present	Group ID
A	372m W	Unspecified Quarry	1900	1293988

ID	Location	Land use	Dates present	Group ID
A	396m W	Unspecified Disused Quarry	1973	1294000
1	445m SW	Unspecified Disused Quarry	1973	1294001

This data is sourced from Ordnance Survey / Groundsure.

1.2 Historical tanks

Records within 500m	0

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'.

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.

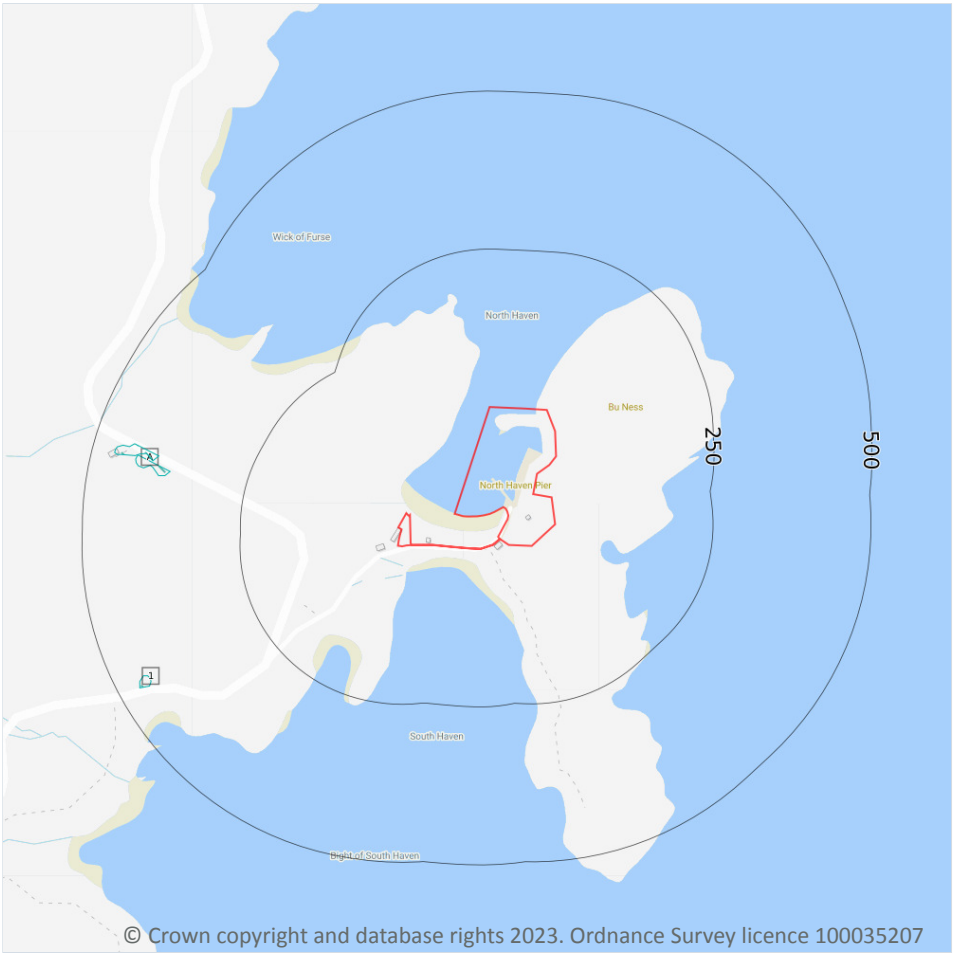
1.6 Historical military land

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

2.1 Historical industrial land uses

Records within 500m	3

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 14**

ID	Location	Land Use	Date	Group ID
A	372m W	Unspecified Quarry	1900	1293988
A	396m W	Unspecified Disused Quarry	1973	1294000
1	445m SW	Unspecified Disused Quarry	1973	1294001

This data is sourced from Ordnance Survey / Groundsure.

2.2 Historical tanks

Records within 500m	0

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'.

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.

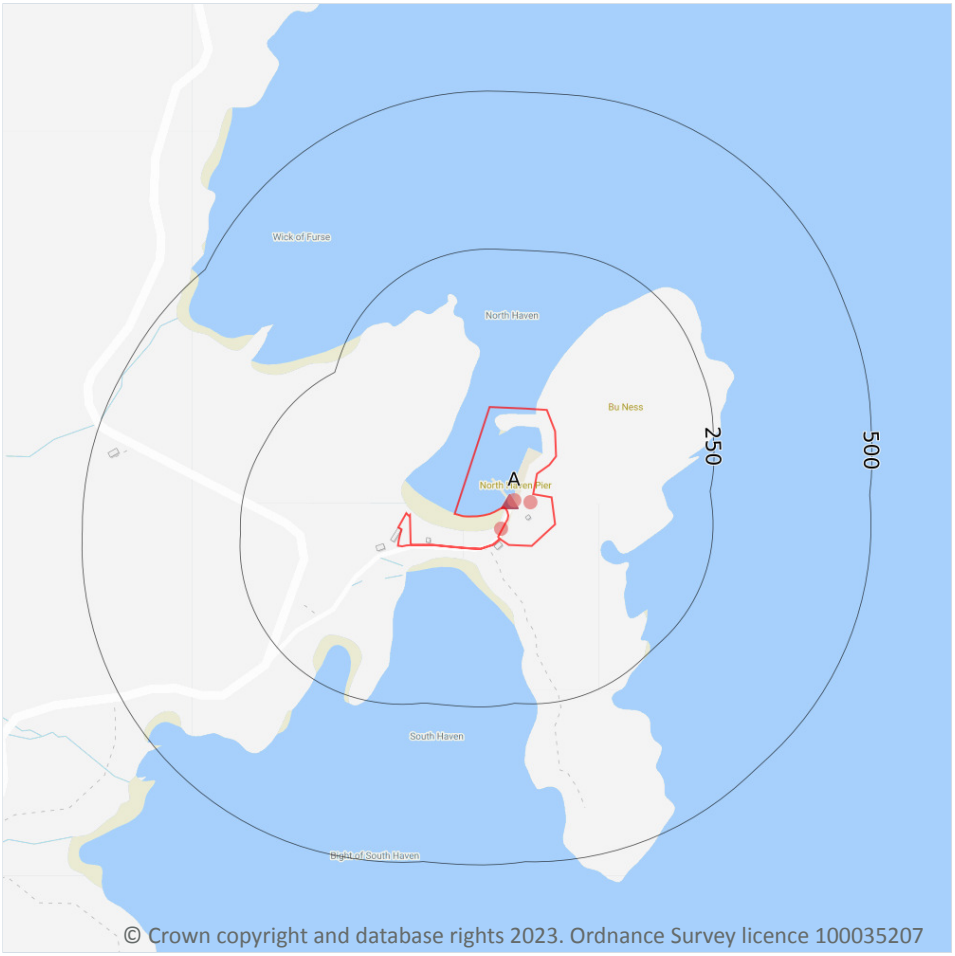
3.5 Historical waste sites

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



Site Outline

Search buffers in metres (m)

Recent industrial land uses

Hazardous substance storage/usage

4.1 Recent industrial land uses

Records within 250m	3

Current potentially contaminative industrial sites.

Features are displayed on the Current industrial land use map on **page 17**

ID	Location	Company	Address	Activity	Category
A	**On site**	**Fair Isle Shetland Ferry Terminal**	**Shetland, ZE2**	**Ferries and Ferry Terminals**	**Water**
A	**On site**	**Slipway**	**Shetland, ZE2**	**Moorings and Unloading Facilities**	**Water**

ID	Location	Company	Address	Activity	Category
A	2m S	Fair Isle Shetland Ferry Terminal	Shetland, ZE2	Ferries and Ferry Terminals	Water

This data is sourced from Ordnance Survey.

4.2 Current or recent petrol stations

Records within 500m	**0**

Open, closed, under development and obsolete petrol stations.

This data is sourced from Experian.

4.3 Electricity cables

Records within 500m	**0**

High voltage underground electricity transmission cables.

This data is sourced from National Grid.

4.4 Gas pipelines

Records within 500m	**0**

High pressure underground gas transmission pipelines.

This data is sourced from National Grid.

4.5 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.

4.6 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.

4.7 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.

4.8 Hazardous substance storage/usage

Records within 500m	1

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.

Features are displayed on the Current industrial land use map on **page 17**

ID	Location	Details	
A	**On site**	**Application reference number: No Details** **Application status: Historical Consent** **Application date: No Details** **Address: Shetland Islands Council, Fair Isle Pier, Fair Isle Pier, Fair Isle, Shetland Islands, Scotland**	**Details: No Details** **Enforcement: No Details** **Date of enforcement: No Details** **Comment: No Details**

This data is sourced from Local Authority records.

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

Records within 500m	0

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

This data is sourced from the Scottish Environment Protection Agency.

4.10 Part B Authorisations

Records within 500m	0

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

This data is sourced from the Scottish Environment Protection Agency.

4.11 Pollution inventory substances

Records within 500m	0

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.

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

4.12 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.

4.13 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

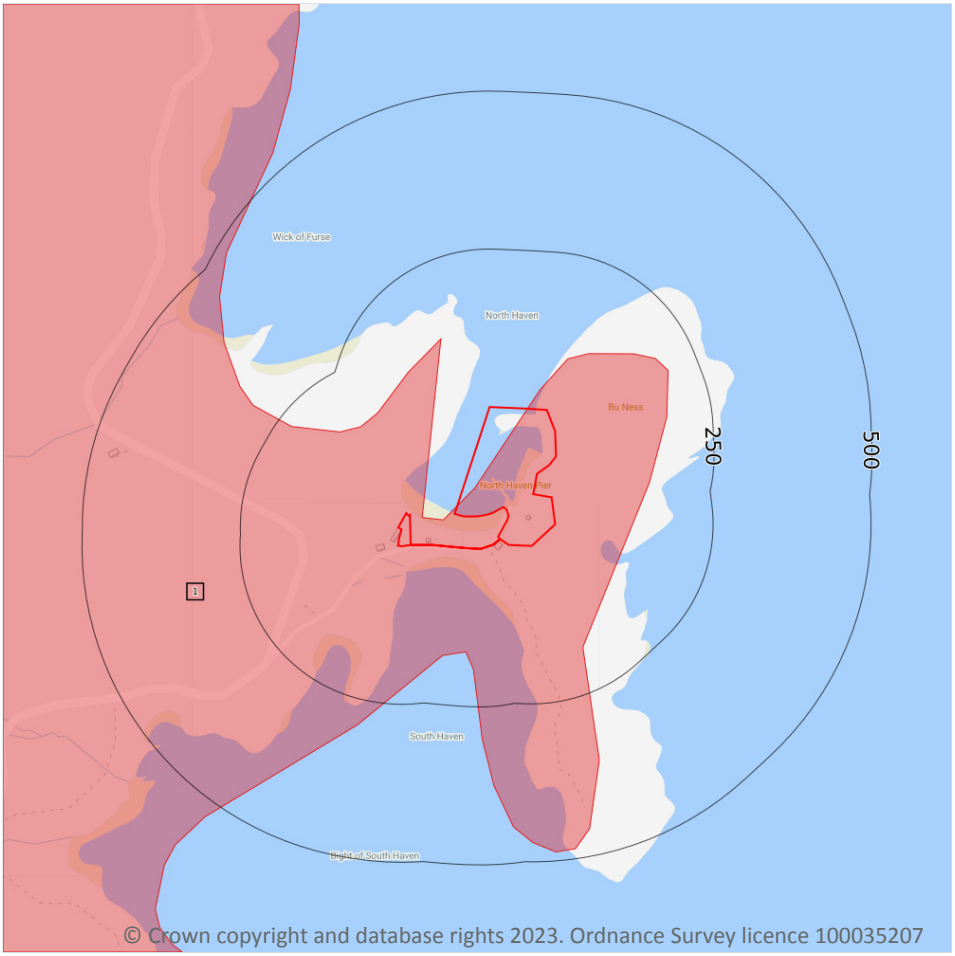
5.1 Superficial aquifer

Records within 500m	0

Records of groundwater classification within superficial geology.

This data is sourced from the British Geological Survey.

Bedrock aquifer



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 **1**

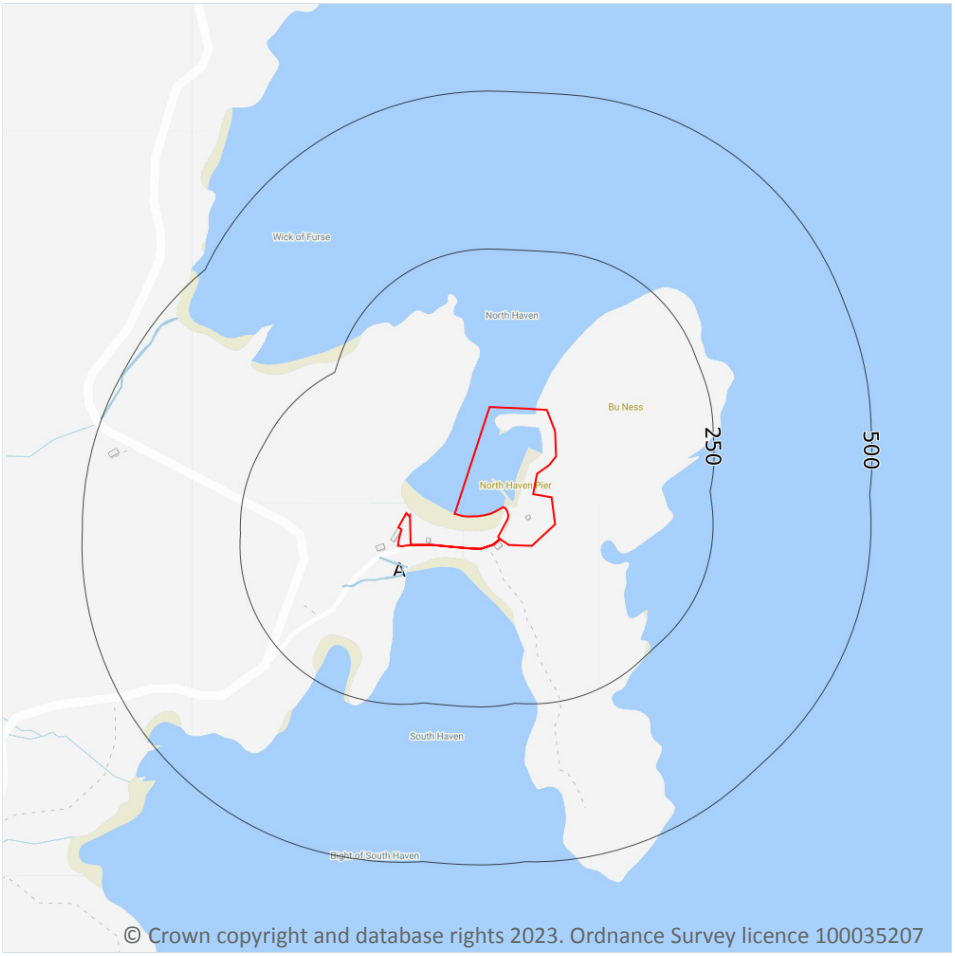
Records of groundwater classification within bedrock geology.

Features are displayed on the Bedrock aquifer map on **page 22**

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 yields small amounts of groundwater.**	**MIDDLE OLD RED SANDSTONE (UNDIFFERENTIATED)**

This data is sourced from the British Geological Survey.

6 Hydrology



Site Outline

Search buffers in metres (m)

Water Network (OS MasterMap)

Surface water features (wider than 5m)

Surface water features (narrower than 5m)

6.1 Water Network (OS MasterMap)

Records within 250m	11

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 23**

ID	Location	Type of water feature	Ground level	Permanence	Name
A	28m SW	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
A	30m SW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
A	30m SW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
A	55m SW	Lake, loch or reservoir.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
A	60m SW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
A	64m SW	Lake, loch or reservoir.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
A	71m SW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
A	73m SW	Lake, loch or reservoir.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
A	79m SW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
A	98m SW	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
A	102m SW	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	**3**

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 23**

This data is sourced from the Ordnance Survey.

7 River flooding

7.1 River flooding

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

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.

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.

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

9.1 Surface water flooding

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

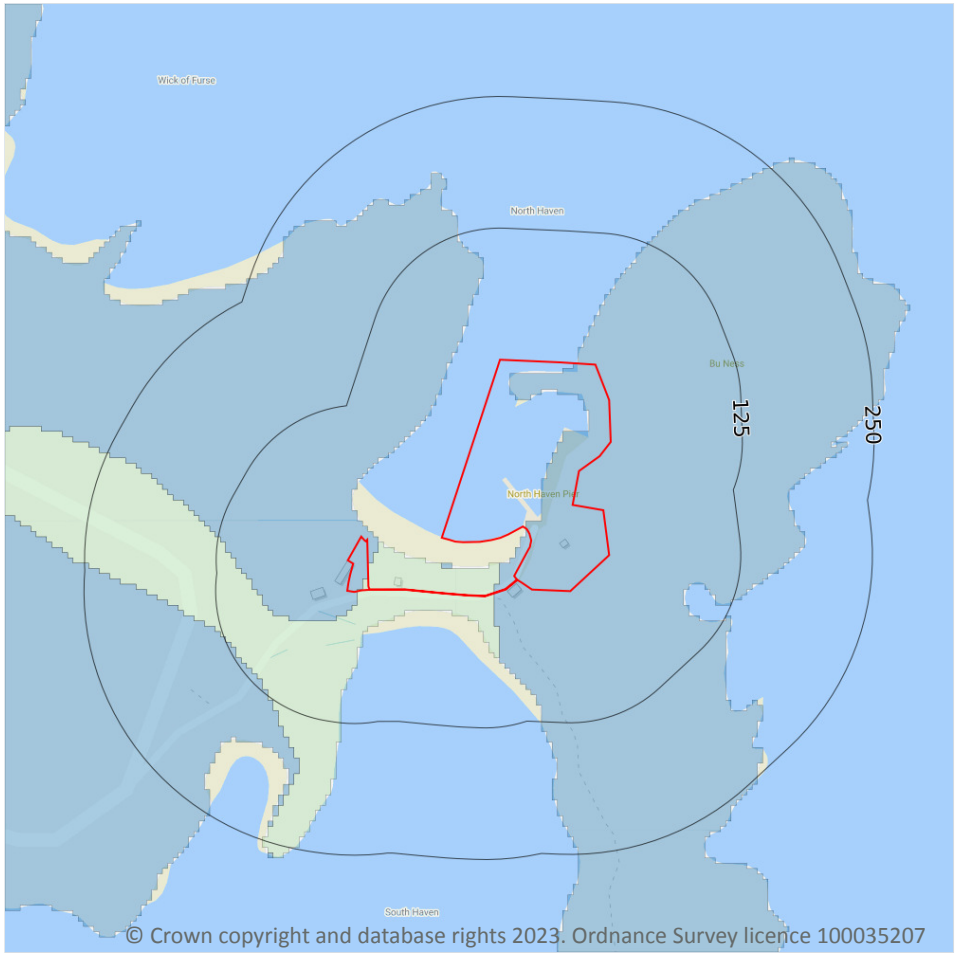
Ambiental Risk Analytics surface water (pluvial) FloodMap identifies areas likely to flood as a result of extreme rainfall events, i.e. land naturally vulnerable to surface water ponding or flooding. This data set was produced by simulating 1 in 30 year, 1 in 100 year, 1 in 250 year and 1 in 1,000 year 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.

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	Negligible
1 in 250 year	Negligible
1 in 100 year	Negligible
1 in 30 year	Negligible

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

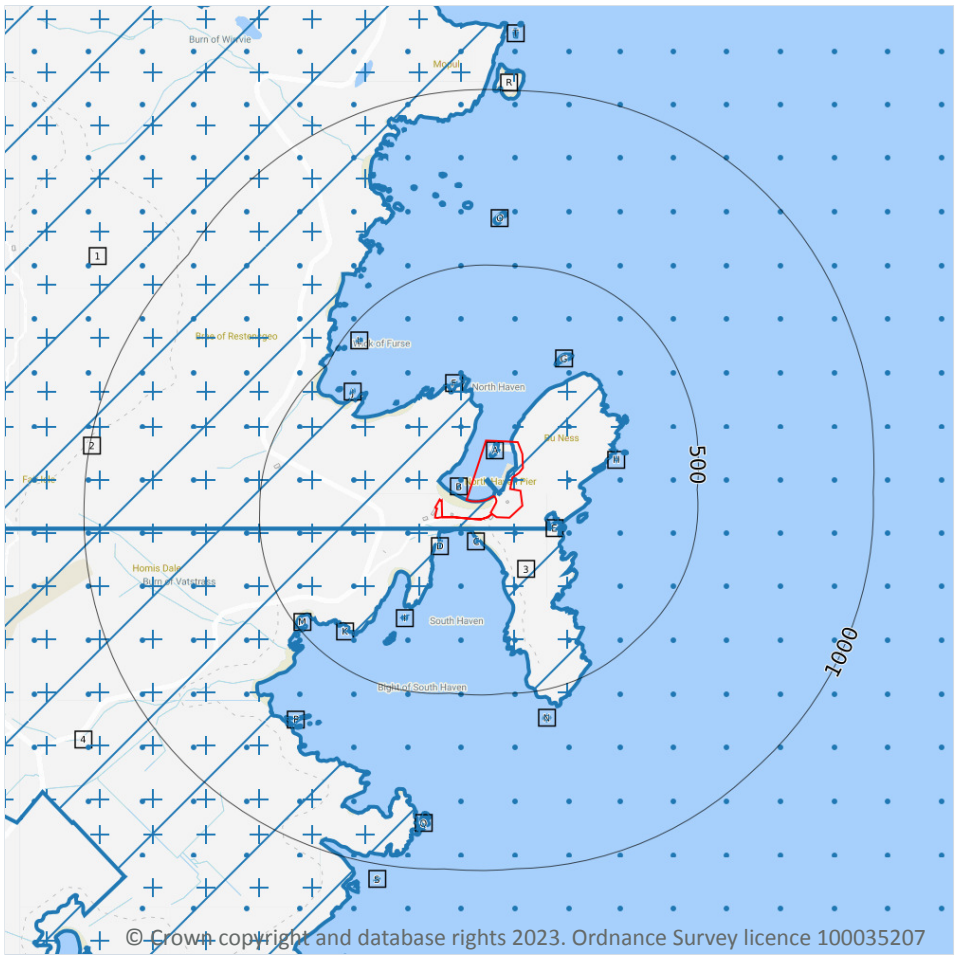
Highest risk on site	**Low**
Highest risk within 50m	**Low**

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 29**

This data is sourced from Ambiental Risk Analytics.

11 Environmental designations



Site Outline

Search buffers in metres (m)

Sites of Special Scientific Interest (SSSI)

Special Areas of Conservation (SAC)

Special Protection Areas (SPA)

11.1 Sites of Special Scientific Interest (SSSI)

Records within 2000m	**131**

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 30**

ID	Location	Name	Data source
1	**On site**	**Fair Isle**	**Scottish Natural Heritage**

ID	Location	Name	Data source
A	**On site**	**Fair Isle**	**Scottish Natural Heritage**
4	26m S	Fair Isle	Scottish Natural Heritage
B	31m W	Fair Isle	Scottish Natural Heritage
C	57m S	Fair Isle	Scottish Natural Heritage
D	74m SW	Fair Isle	Scottish Natural Heritage
E	108m SE	Fair Isle	Scottish Natural Heritage
E	122m SE	Fair Isle	Scottish Natural Heritage
E	163m SE	Fair Isle	Scottish Natural Heritage
F	184m NW	Fair Isle	Scottish Natural Heritage
F	222m NW	Fair Isle	Scottish Natural Heritage
G	244m NE	Fair Isle	Scottish Natural Heritage
H	262m E	Fair Isle	Scottish Natural Heritage
F	274m NW	Fair Isle	Scottish Natural Heritage
H	286m E	Fair Isle	Scottish Natural Heritage
I	293m SW	Fair Isle	Scottish Natural Heritage
H	304m NE	Fair Isle	Scottish Natural Heritage
I	348m SW	Fair Isle	Scottish Natural Heritage
J	392m NW	Fair Isle	Scottish Natural Heritage
K	410m SW	Fair Isle	Scottish Natural Heritage
J	421m NW	Fair Isle	Scottish Natural Heritage
L	456m NW	Fair Isle	Scottish Natural Heritage
M	479m SW	Fair Isle	Scottish Natural Heritage
L	479m NW	Fair Isle	Scottish Natural Heritage
M	480m SW	Fair Isle	Scottish Natural Heritage
L	493m NW	Fair Isle	Scottish Natural Heritage
M	513m SW	Fair Isle	Scottish Natural Heritage
L	534m NW	Fair Isle	Scottish Natural Heritage
L	552m NW	Fair Isle	Scottish Natural Heritage

ID	Location	Name	Data source
L	555m NW	Fair Isle	Scottish Natural Heritage
L	565m NW	Fair Isle	Scottish Natural Heritage
N	574m S	Fair Isle	Scottish Natural Heritage
L	586m NW	Fair Isle	Scottish Natural Heritage
L	596m NW	Fair Isle	Scottish Natural Heritage
L	615m NW	Fair Isle	Scottish Natural Heritage
O	618m N	Fair Isle	Scottish Natural Heritage
L	631m NW	Fair Isle	Scottish Natural Heritage
L	642m NW	Fair Isle	Scottish Natural Heritage
L	659m NW	Fair Isle	Scottish Natural Heritage
O	664m N	Fair Isle	Scottish Natural Heritage
P	667m SW	Fair Isle	Scottish Natural Heritage
P	668m SW	Fair Isle	Scottish Natural Heritage
O	681m N	Fair Isle	Scottish Natural Heritage
P	685m SW	Fair Isle	Scottish Natural Heritage
O	699m N	Fair Isle	Scottish Natural Heritage
P	704m SW	Fair Isle	Scottish Natural Heritage
O	709m N	Fair Isle	Scottish Natural Heritage
O	728m N	Fair Isle	Scottish Natural Heritage
O	736m N	Fair Isle	Scottish Natural Heritage
O	744m N	Fair Isle	Scottish Natural Heritage
O	761m N	Fair Isle	Scottish Natural Heritage
O	762m N	Fair Isle	Scottish Natural Heritage
O	770m N	Fair Isle	Scottish Natural Heritage
Q	840m S	Fair Isle	Scottish Natural Heritage
O	856m N	Fair Isle	Scottish Natural Heritage
O	856m N	Fair Isle	Scottish Natural Heritage
O	883m N	Fair Isle	Scottish Natural Heritage

ID	Location	Name	Data source
O	886m N	Fair Isle	Scottish Natural Heritage
O	892m N	Fair Isle	Scottish Natural Heritage
O	914m N	Fair Isle	Scottish Natural Heritage
R	975m N	Fair Isle	Scottish Natural Heritage
S	1038m S	Fair Isle	Scottish Natural Heritage
S	1060m S	Fair Isle	Scottish Natural Heritage
T	1153m N	Fair Isle	Scottish Natural Heritage
T	1185m N	Fair Isle	Scottish Natural Heritage
-	1296m S	Fair Isle	Scottish Natural Heritage
-	1325m N	Fair Isle	Scottish Natural Heritage
-	1337m S	Fair Isle	Scottish Natural Heritage
-	1406m S	Fair Isle	Scottish Natural Heritage
-	1455m N	Fair Isle	Scottish Natural Heritage
-	1462m N	Fair Isle	Scottish Natural Heritage
-	1472m NW	Fair Isle	Scottish Natural Heritage
-	1479m S	Fair Isle	Scottish Natural Heritage
-	1482m N	Fair Isle	Scottish Natural Heritage
-	1484m N	Fair Isle	Scottish Natural Heritage
-	1496m N	Fair Isle	Scottish Natural Heritage
-	1502m N	Fair Isle	Scottish Natural Heritage
-	1521m NW	Fair Isle	Scottish Natural Heritage
-	1556m NW	Fair Isle	Scottish Natural Heritage
-	1570m N	Fair Isle	Scottish Natural Heritage
-	1572m N	Fair Isle	Scottish Natural Heritage
-	1573m NW	Fair Isle	Scottish Natural Heritage
-	1582m NW	Fair Isle	Scottish Natural Heritage
-	1583m N	Fair Isle	Scottish Natural Heritage
-	1586m N	Fair Isle	Scottish Natural Heritage

ID	Location	Name	Data source
-	1593m NW	Fair Isle	Scottish Natural Heritage
-	1597m SW	Fair Isle	Scottish Natural Heritage
-	1597m SW	Fair Isle	Scottish Natural Heritage
-	1601m N	Fair Isle	Scottish Natural Heritage
-	1609m SW	Fair Isle	Scottish Natural Heritage
-	1611m NW	Fair Isle	Scottish Natural Heritage
-	1615m SW	Fair Isle	Scottish Natural Heritage
-	1615m NW	Fair Isle	Scottish Natural Heritage
-	1619m SW	Fair Isle	Scottish Natural Heritage
-	1626m SW	Fair Isle	Scottish Natural Heritage
-	1634m S	Fair Isle	Scottish Natural Heritage
-	1639m N	Fair Isle	Scottish Natural Heritage
-	1642m N	Fair Isle	Scottish Natural Heritage
-	1656m N	Fair Isle	Scottish Natural Heritage
-	1660m N	Fair Isle	Scottish Natural Heritage
-	1663m N	Fair Isle	Scottish Natural Heritage
-	1665m N	Fair Isle	Scottish Natural Heritage
-	1674m SW	Fair Isle	Scottish Natural Heritage
-	1678m N	Fair Isle	Scottish Natural Heritage
-	1681m SW	Fair Isle	Scottish Natural Heritage
-	1688m NW	Fair Isle	Scottish Natural Heritage
-	1701m N	Fair Isle	Scottish Natural Heritage
-	1718m NW	Fair Isle	Scottish Natural Heritage
-	1728m NW	Fair Isle	Scottish Natural Heritage
-	1730m SW	Fair Isle	Scottish Natural Heritage
-	1733m SW	Fair Isle	Scottish Natural Heritage
-	1738m NW	Fair Isle	Scottish Natural Heritage
-	1744m N	Fair Isle	Scottish Natural Heritage

ID	Location	Name	Data source
-	1763m SW	Fair Isle	Scottish Natural Heritage
-	1768m NW	Fair Isle	Scottish Natural Heritage
-	1806m NW	Fair Isle	Scottish Natural Heritage
-	1826m NW	Fair Isle	Scottish Natural Heritage
-	1847m NW	Fair Isle	Scottish Natural Heritage
-	1852m W	Fair Isle	Scottish Natural Heritage
-	1871m W	Fair Isle	Scottish Natural Heritage
-	1881m NW	Fair Isle	Scottish Natural Heritage
-	1890m W	Fair Isle	Scottish Natural Heritage
-	1902m SW	Fair Isle	Scottish Natural Heritage
-	1920m W	Fair Isle	Scottish Natural Heritage
-	1922m SW	Fair Isle	Scottish Natural Heritage
-	1950m NW	Fair Isle	Scottish Natural Heritage
-	1960m W	Fair Isle	Scottish Natural Heritage
-	1973m SW	Fair Isle	Scottish Natural Heritage
-	1977m NW	Fair Isle	Scottish Natural Heritage
-	1989m NW	Fair Isle	Scottish Natural Heritage
-	1993m NW	Fair Isle	Scottish Natural Heritage

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	**128**

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.

Features are displayed on the Environmental designations map on **page 30**

ID	Location	Name	Features of interest	Habitat description	Data source
2	**On site**	**Fair Isle**	**Vegetated sea cliffs; Dry heaths.**	**Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens**	**Scottish Natural Heritage**
A	**On site**	**Fair Isle**	**Vegetated sea cliffs; Dry heaths.**	**Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens**	**Scottish Natural Heritage**
B	31m W	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
C	57m S	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
D	74m SW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
E	163m SE	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
F	184m NW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage

ID	Location	Name	Features of interest	Habitat description	Data source
F	222m NW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
G	244m NE	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
H	262m E	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
F	274m NW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
H	286m E	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
I	293m SW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
H	304m NE	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
I	348m SW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage

ID	Location	Name	Features of interest	Habitat description	Data source
J	392m NW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
K	410m SW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
J	421m NW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
L	456m NW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
M	479m SW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
L	479m NW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
M	480m SW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
L	493m NW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage

ID	Location	Name	Features of interest	Habitat description	Data source
M	513m SW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
L	534m NW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
L	552m NW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
L	555m NW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
L	565m NW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
N	574m S	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
L	586m NW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
L	596m NW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage

ID	Location	Name	Features of interest	Habitat description	Data source
L	615m NW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
O	618m N	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
L	631m NW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
L	642m NW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
L	659m NW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
O	664m N	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
P	667m SW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
P	668m SW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage

ID	Location	Name	Features of interest	Habitat description	Data source
O	681m N	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
P	685m SW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
O	699m N	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
P	704m SW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
O	709m N	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
O	728m N	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
O	736m N	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
O	744m N	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage

ID	Location	Name	Features of interest	Habitat description	Data source
O	761m N	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
O	762m N	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
O	770m N	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
Q	840m S	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
O	856m N	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
O	856m N	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
O	883m N	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
O	886m N	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage

ID	Location	Name	Features of interest	Habitat description	Data source
O	892m N	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
O	914m N	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
R	975m N	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
S	1038m S	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
S	1060m S	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
T	1153m N	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
T	1185m N	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1296m S	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage

ID	Location	Name	Features of interest	Habitat description	Data source
-	1325m N	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1337m S	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1406m S	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1455m N	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1462m N	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1472m NW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1479m S	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1482m N	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage

ID	Location	Name	Features of interest	Habitat description	Data source
-	1484m N	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1496m N	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1502m N	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1521m NW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1556m NW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1570m N	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1572m N	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1573m NW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage

ID	Location	Name	Features of interest	Habitat description	Data source
-	1582m NW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1583m N	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1586m N	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1593m NW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1597m SW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1597m SW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1601m N	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1609m SW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage

ID	Location	Name	Features of interest	Habitat description	Data source
-	1611m NW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1615m SW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1615m NW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1619m SW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1626m SW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1634m S	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1639m N	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1642m N	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage

ID	Location	Name	Features of interest	Habitat description	Data source
-	1656m N	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1660m N	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1663m N	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1665m N	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1674m SW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1678m N	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1681m SW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1688m NW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage

ID	Location	Name	Features of interest	Habitat description	Data source
-	1701m N	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1718m NW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1728m NW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1730m SW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1733m SW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1738m NW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1744m N	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1763m SW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage

ID	Location	Name	Features of interest	Habitat description	Data source
-	1768m NW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1806m NW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1826m NW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1847m NW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1852m W	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1871m W	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1881m NW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1890m W	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage

ID	Location	Name	Features of interest	Habitat description	Data source
-	1902m SW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1920m W	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1922m SW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1950m NW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1960m W	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1973m SW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1977m NW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1989m NW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage

ID	Location	Name	Features of interest	Habitat description	Data source
-	1993m NW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage

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

11.4 Special Protection Areas (SPA)

Records within 2000m **2**

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.

Features are displayed on the Environmental designations map on **page 30**

ID	Location	Name	Species of interest	Habitat description	Data source
3	**On site**	**Fair Isle**	**Northern fulmar; Northern gannet; European shag; Arctic skua; Great skua; Black-legged kittiwake; Arctic tern; Common guillemot; Razorbill; Atlantic puffin; Fair Isle wren**	**Heath, Scrub, Maquis and Garrigue, Phygrana; Dry grassland, Steppes; Bogs, Marshes, Water fringed vegetation, Fens; Inland water bodies (Standing water, Running water); Humid grassland, Mesophile grassland; Shingle, Sea cliffs, Islets; Marine areas, Sea inlets**	**Scottish Natural Heritage**
-	1665m N	Fair Isle	Northern fulmar; Northern gannet; European shag; Arctic skua; Great skua; Black-legged kittiwake; Arctic tern; Common guillemot; Razorbill; Atlantic puffin; Fair Isle wren	Heath, Scrub, Maquis and Garrigue, Phygrana; Dry grassland, Steppes; Bogs, Marshes, Water fringed vegetation, Fens; Inland water bodies (Standing water, Running water); Humid grassland, Mesophile grassland; Shingle, Sea cliffs, Islets; Marine areas, Sea inlets	Scottish Natural Heritage

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	0

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.

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.

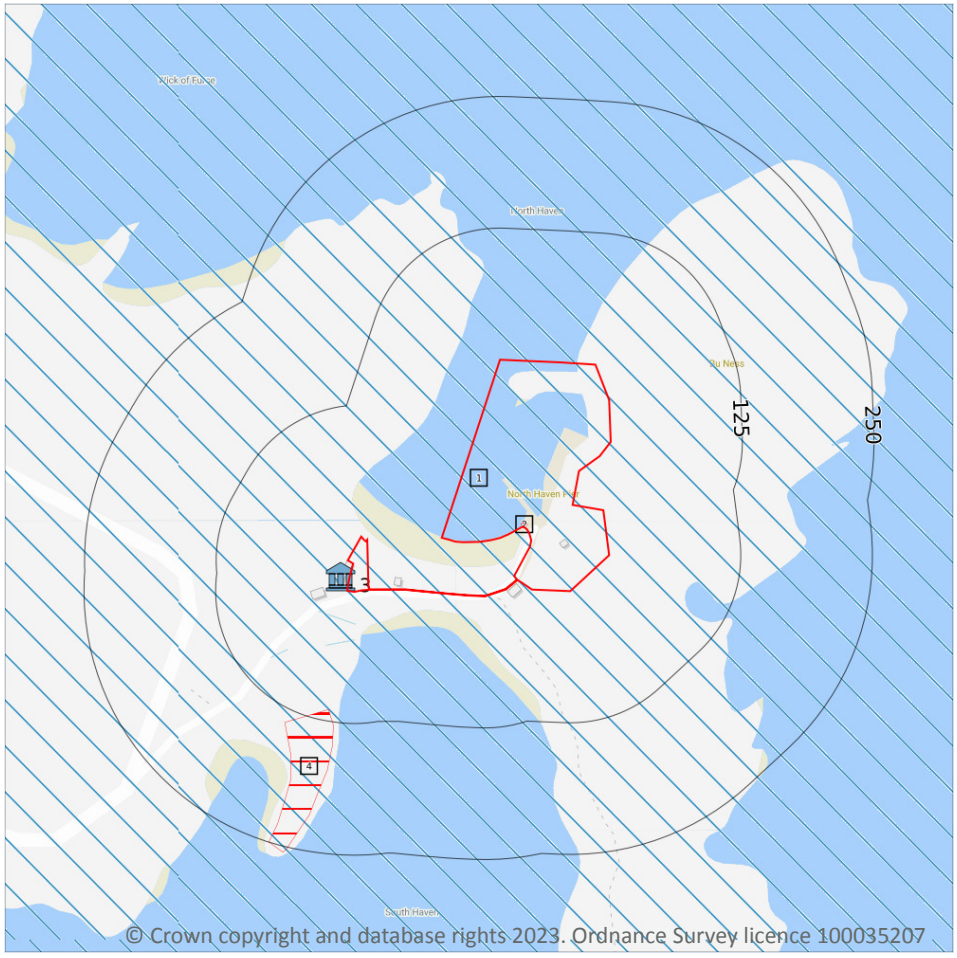
11.10 Marine Conservation Zones

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	1

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.

Features are displayed on the Visual and cultural designations map on **page 55**

ID	Location	NAME	Data Source
1	**On site**	**Shetland**	**Scottish Natural Heritage**

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	1

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 55**

ID	Location	Name	Grade	Reference Number	Listed date
3	9m SW	Storehouse, North Haven, Fair Isle, Shetland Islands	C	391120	26/03/1997

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	2

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 55**

ID	Location	Ancient monument name	Reference number
2	**On site**	**North Haven, crane, Fair Isle**	**-**
4	114m SW	Landberg,fort,South Haven,Fair Isle	-

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

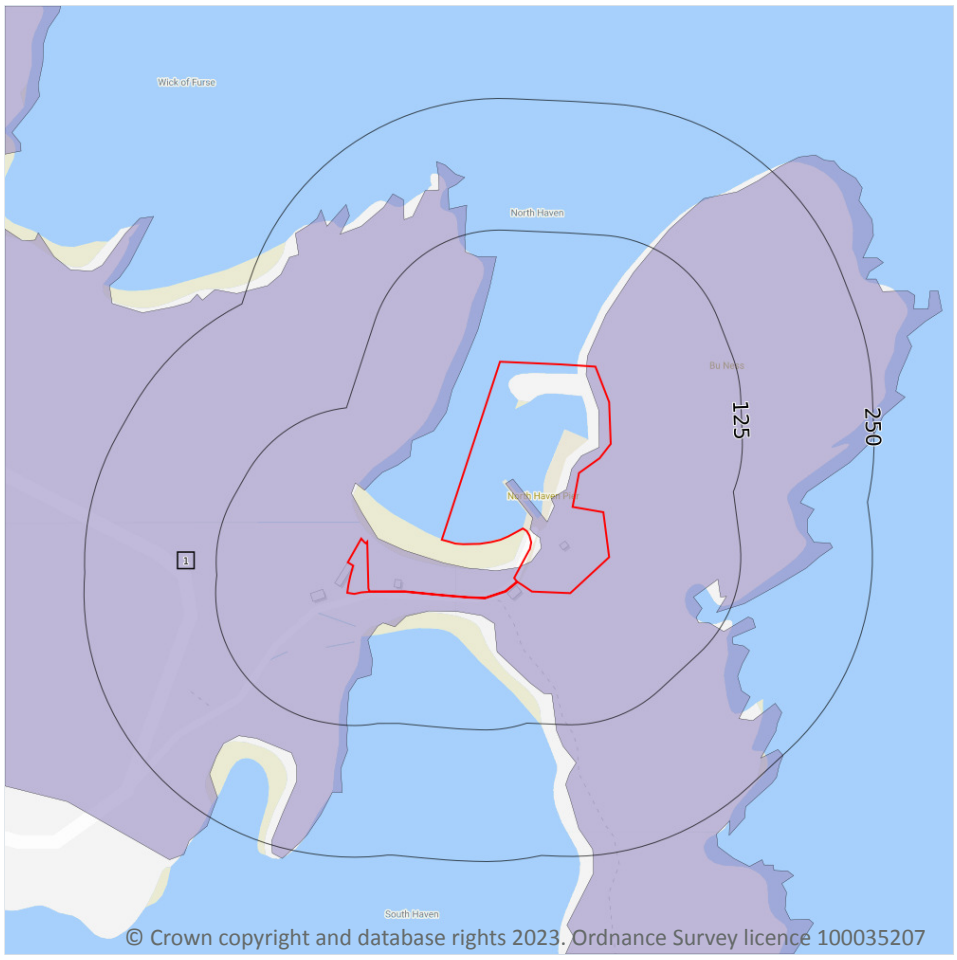
12.7 Registered Parks and Gardens

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



Site Outline

Search buffers in metres (m)

- Grade 1 - excellent quality
- Grade 2 - very good quality
- Grade 3 - good to moderate quality
- Grade 4 - good quality
- Grade 5 - moderate quality
- Grade 6 - poor quality
- Grade 7 - very poor quality

13.1 Agricultural Land Classification

Records within 250m	1

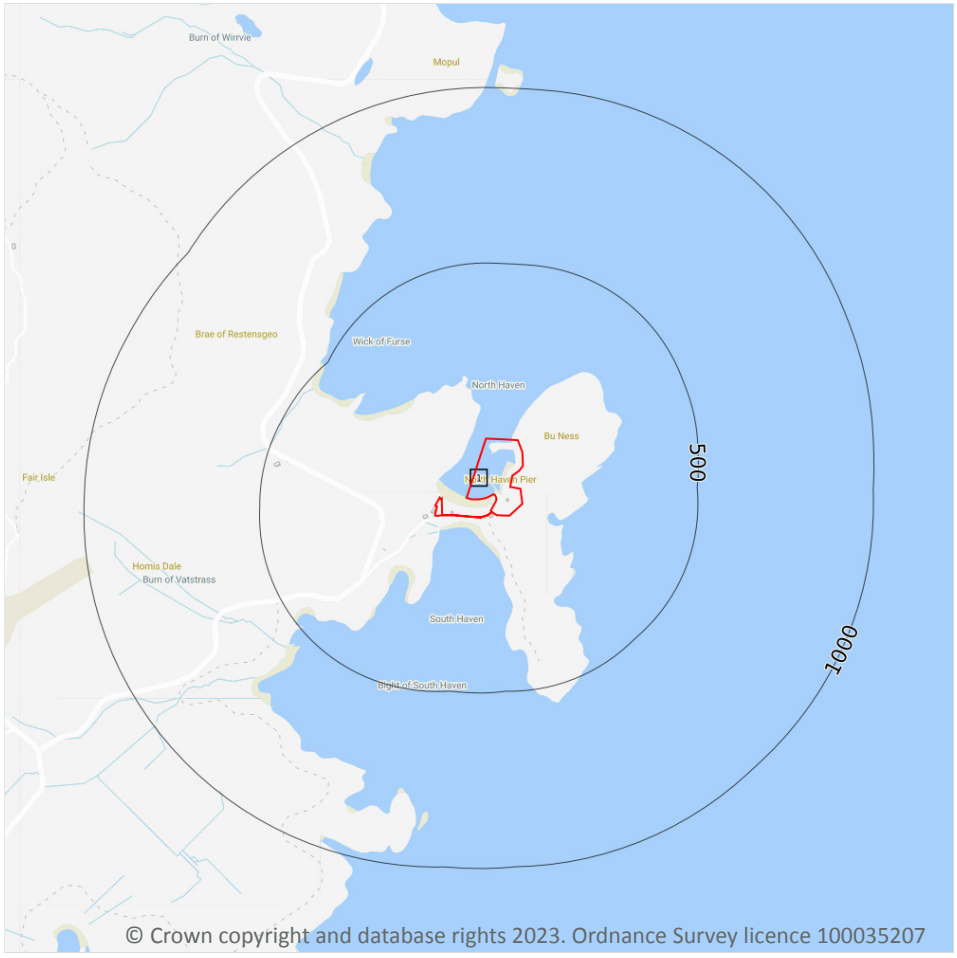
Classification of the quality of agricultural land taking into consideration multiple factors inclusing climate, physical geography and soil properties. It should be noted that the categories for the grading of agricultural land are not consistent across England, Wales and Scotland.

Features are displayed on the Agricultural designations map on **page 58**

ID	Location	Classification	Description
1	**On site**	**Grade 6.3**	**Land Suited only to Improved Grassland and Rough Grazings**

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	1

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 59**

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	**On site**	**No coverage**	**No coverage**	**No coverage**	**No coverage**	**NoCov**

This data is sourced from the British Geological Survey.

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

14.2 Artificial and made ground (10k)

Records within 500m	0

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.

This data is sourced from the British Geological Survey.

Geology 1:10,000 scale - Superficial

14.3 Superficial geology (10k)

Records within 500m	0

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.

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.

Geology 1:10,000 scale - Bedrock

14.5 Bedrock geology (10k)

Records within 500m	0

Bedrock geology at 1:10,000 scale. The main mass of rocks forming the Earth and present everywhere, whether exposed at the surface in outcrops or concealed beneath superficial deposits or water.

This data is sourced from the British Geological Survey.

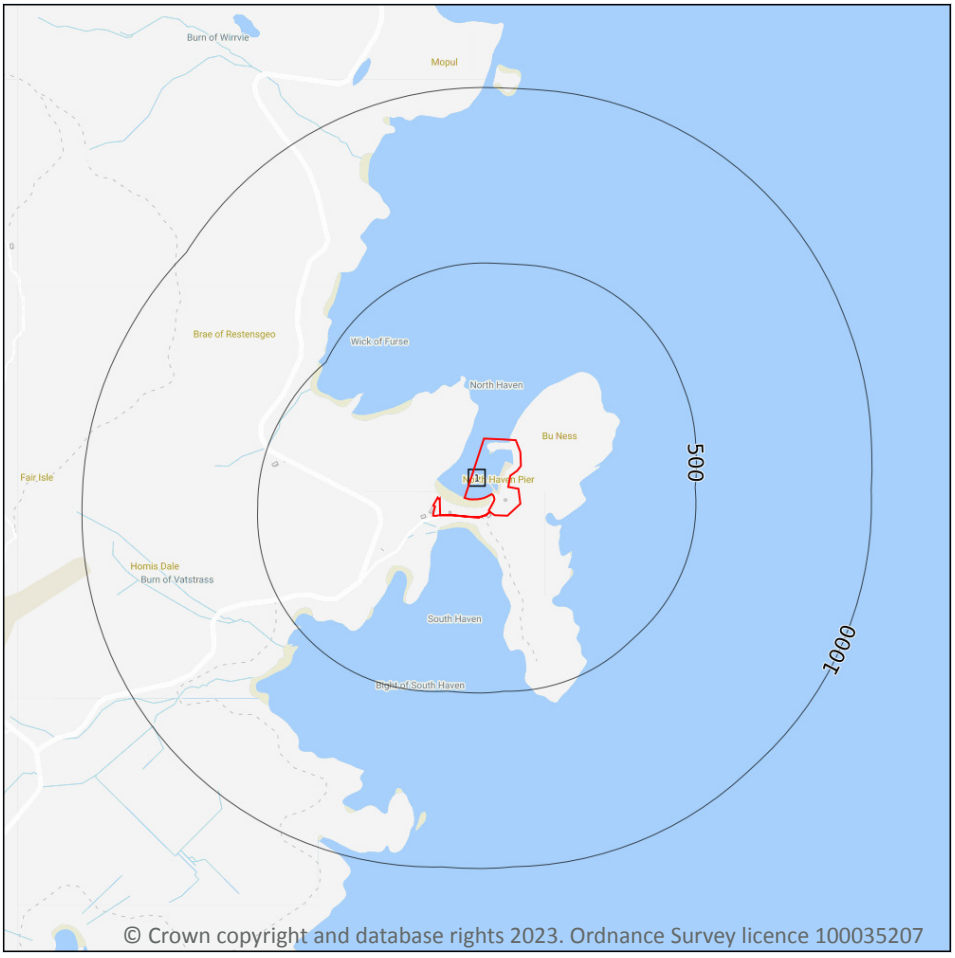
14.6 Bedrock faults and other linear features (10k)

Records within 500m	0

Linear features at the ground or bedrock surface at 1:10,000 scale of six main types; rock, fault, fold axis, mineral vein, alteration area or landform. Features are either observed or inferred, and relate primarily to bedrock.

This data is sourced from the British Geological Survey.

15 Geology 1:50,000 scale - Availability



Site Outline

Search buffers in metres (m)

Geological map tile

15.1 50k Availability

Records within 500m	1

An indication on the coverage of 1:50,000 scale geology data for the site. Either 'Full' or 'No coverage' for each geological theme.

Features are displayed on the Geology 1:50,000 scale - Availability map on **page 63**

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	**On site**	**No coverage**	**Full**	**Full**	**No coverage**	**SC123_124_shetland_south_v4**

This data is sourced from the British Geological Survey.

Geology 1:50,000 scale - Artificial and made ground

15.2 Artificial and made ground (50k)

Records within 500m	0

Details of made, worked, infilled, disturbed and landscaped ground at 1:50,000 scale. Artificial ground can be associated with potentially contaminated material, unpredictable engineering conditions and instability.

This data is sourced from the British Geological Survey.

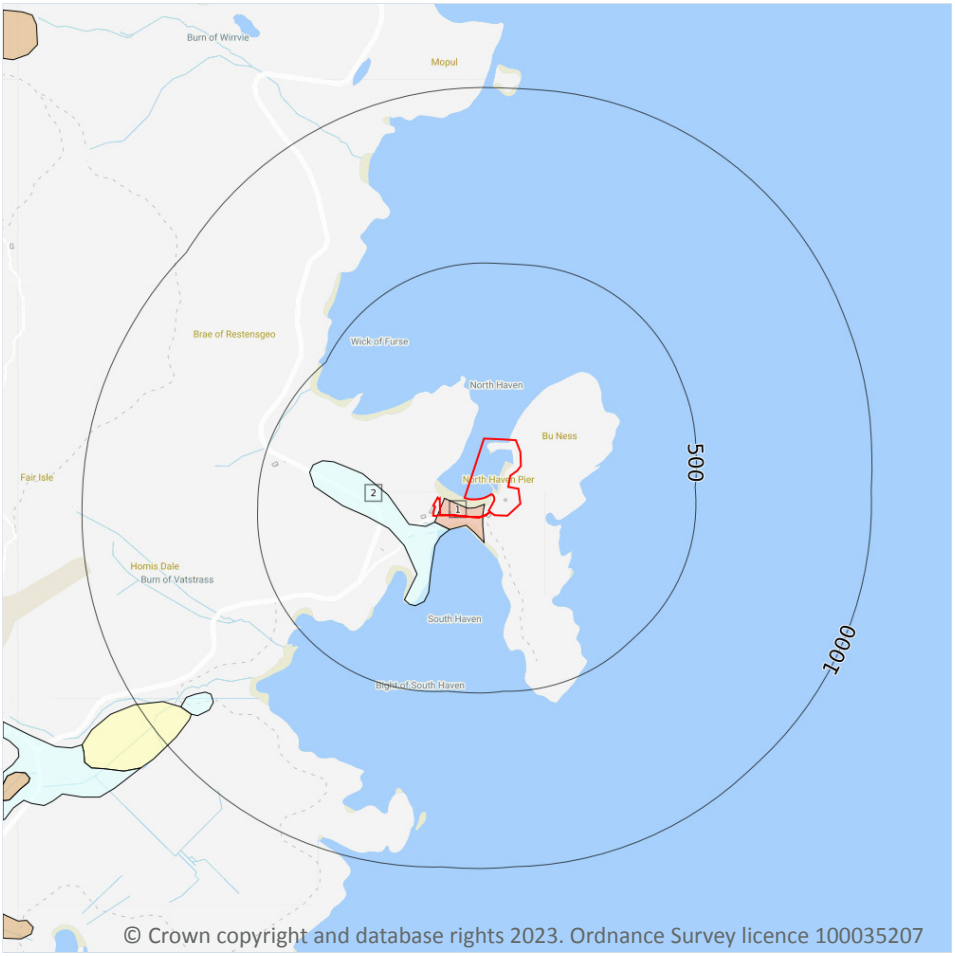
15.3 Artificial ground permeability (50k)

Records within 50m	0

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any artificial deposits (the zone between the land surface and the water table).

This data is sourced from the British Geological Survey.

Geology 1:50,000 scale - Superficial



Site Outline

Search buffers in metres (m)

Landslip (50k)

Superficial geology (50k)
Please see table for more details.

15.4 Superficial geology (50k)

Records within 500m **2**

Superficial geological deposits at 1:50,000 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 1:50,000 scale - Superficial map on **page 65**

ID	Location	LEX Code	Description	Rock description
1	**On site**	**MBD-XVSZ**	**MARINE BEACH DEPOSITS**	**GRAVEL, SAND AND SILT**
2	18m SW	TIMO-DMTN	TILL AND MORAINIC DEPOSITS (UNDIFFERENTIATED)	DIAMICTON

This data is sourced from the British Geological Survey.

15.5 Superficial permeability (50k)

Records within 50m	2

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any superficial deposits (the zone between the land surface and the water table).

Location	Flow type	Maximum permeability	Minimum permeability
On site	**Intergranular**	**Very High**	**Moderate**
18m SW	Mixed	High	Low

This data is sourced from the British Geological Survey.

15.6 Landslip (50k)

Records within 500m	0

Mass movement deposits on BGS geological maps at 1:50,000 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.

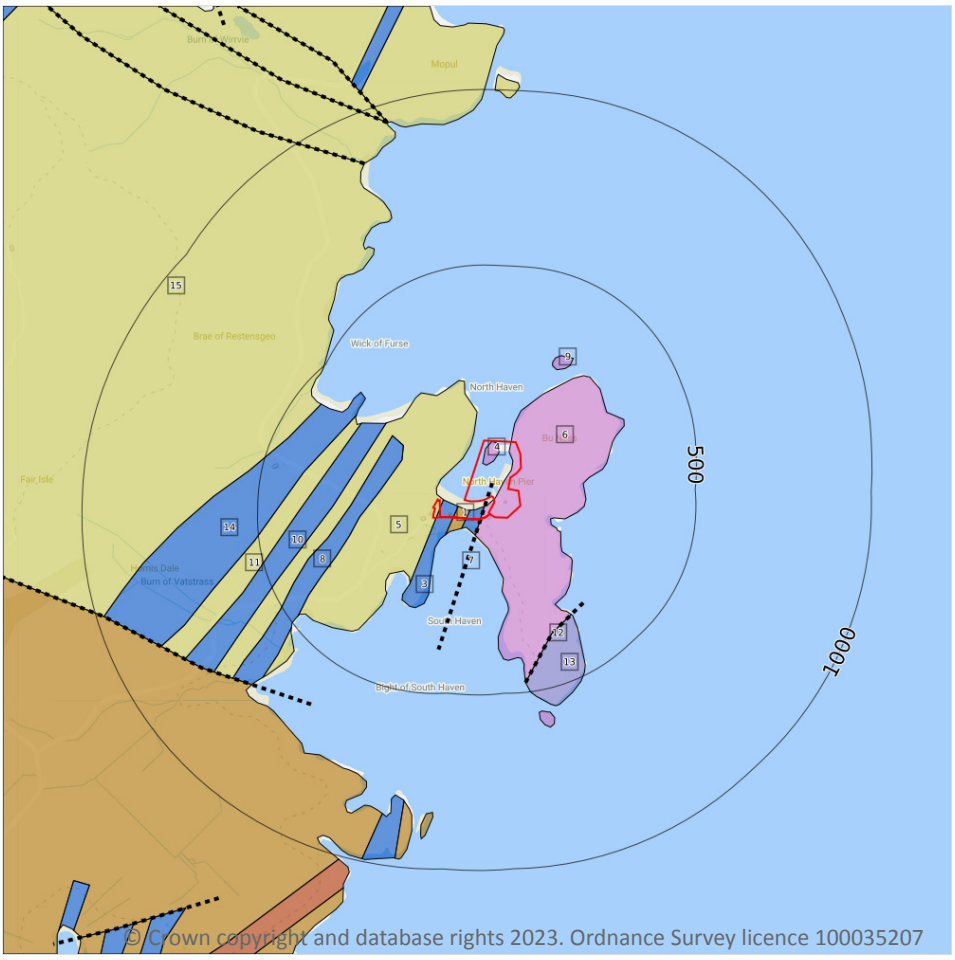
15.7 Landslip permeability (50k)

Records within 50m	0

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any landslip deposits (the zone between the land surface and the water table).

This data is sourced from the British Geological Survey.

Geology 1:50,000 scale - Bedrock



Site Outline

Search buffers in metres (m)

Bedrock faults and other linear features (50k)

Bedrock geology (50k)
Please see table for more details.

15.8 Bedrock geology (50k)

Records within 500m **13**

Bedrock geology at 1:50,000 scale. The main mass of rocks forming the Earth and present everywhere, whether exposed at the surface in outcrops or concealed beneath superficial deposits or water.

Features are displayed on the Geology 1:50,000 scale - Bedrock map on **page 67**

ID	Location	LEX Code	Description	Rock age
1	**On site**	**VAG-SCON**	**VAASETTER SANDSTONE FORMATION - SANDSTONE AND CONGLOMERATE, INTERBEDDED**	-
2	**On site**	**OBG-ARRD**	**OBSERVATORY SANDSTONE FORMATION - ARGILLACEOUS ROCK, DOLOMITIC**	-

ID	Location	LEX Code	Description	Rock age
3	**On site**	**OBG-ARRD**	**OBSERVATORY SANDSTONE FORMATION - ARGILLACEOUS ROCK, DOLOMITIC**	**-**
4	**On site**	**BNG-SDST**	**BU NESS SANDSTONE FORMATION - SANDSTONE**	**-**
5	**On site**	**WAG-SDDS**	**WARD HILL SANDSTONE FORMATION - SANDSTONE AND DOLOMITIC SILTSTONE**	**-**
6	**On site**	**BNG-SDST**	**BU NESS SANDSTONE FORMATION - SANDSTONE**	**-**
8	148m W	WAG-ARRD	WARD HILL SANDSTONE FORMATION - ARGILLACEOUS ROCK, DOLOMITIC	-
9	237m NE	BNG-SDST	BU NESS SANDSTONE FORMATION - SANDSTONE	-
10	241m W	WAG-ARRD	WARD HILL SANDSTONE FORMATION - ARGILLACEOUS ROCK, DOLOMITIC	-
11	303m W	WAG-SDDS	WARD HILL SANDSTONE FORMATION - SANDSTONE AND DOLOMITIC SILTSTONE	-
13	330m SE	BNG-CONG	BU NESS SANDSTONE FORMATION - CONGLOMERATE	-
14	333m W	WAG-ARRD	WARD HILL SANDSTONE FORMATION - ARGILLACEOUS ROCK, DOLOMITIC	-
15	429m NW	WAG-SDDS	WARD HILL SANDSTONE FORMATION - SANDSTONE AND DOLOMITIC SILTSTONE	-

This data is sourced from the British Geological Survey.

15.9 Bedrock permeability (50k)

Records within 50m	**6**

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of bedrock (the zone between the land surface and the water table).

Location	Flow type	Maximum permeability	Minimum permeability
On site	**Fracture**	**High**	**Moderate**
On site	**Fracture**	**Moderate**	**Moderate**
On site	**Fracture**	**Moderate**	**Low**
On site	**Fracture**	**Moderate**	**Low**
On site	**Fracture**	**Moderate**	**Moderate**
On site	**Fracture**	**Moderate**	**Moderate**

This data is sourced from the British Geological Survey.

15.10 Bedrock faults and other linear features (50k)

Records within 500m	**2**

Linear features at the ground or bedrock surface at 1:50,000 scale of six main types; rock, fault, fold axis, mineral vein, alteration area or landform. Features are either observed or inferred, and relate primarily to bedrock.

Features are displayed on the Geology 1:50,000 scale - Bedrock map on **page 67**

ID	Location	Category	Description
7	**On site**	**FAULT**	**Fault, inferred, displacement unknown**
12	324m SE	FAULT	Fault, inferred, displacement unknown

This data is sourced from the British Geological Survey.

16 Boreholes

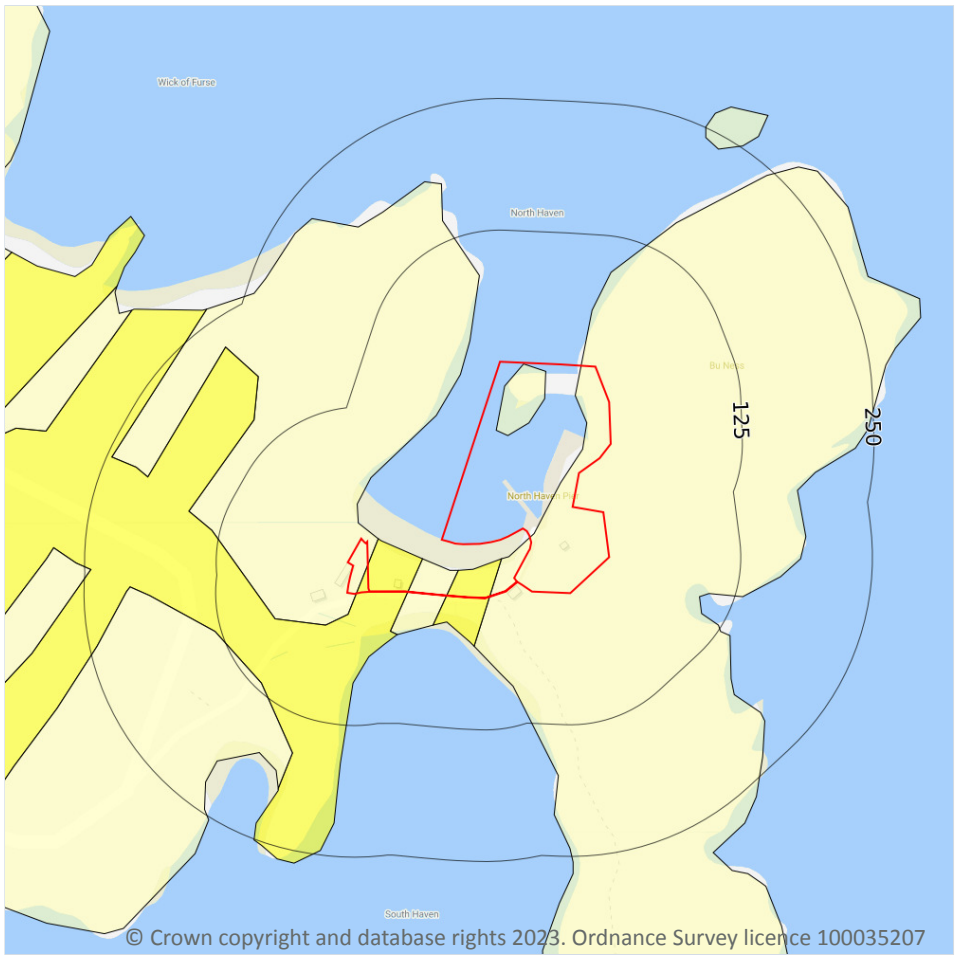
16.1 BGS Boreholes

Records within 250m	0

The Single Onshore Boreholes Index (SOBI); an index of over one million records of boreholes, shafts and wells from all forms of drilling and site investigation work held by the British Geological Survey. Covering onshore and nearshore boreholes dating back to at least 1790 and ranging from one to several thousand metres deep.

This data is sourced from the British Geological Survey.

17 Natural ground subsidence - Shrink swell clays



Site Outline

Search buffers in metres (m)

- No data
- Negligible
- Very low
- Low
- Moderate
- High

17.1 Shrink swell clays

Records within 50m	2

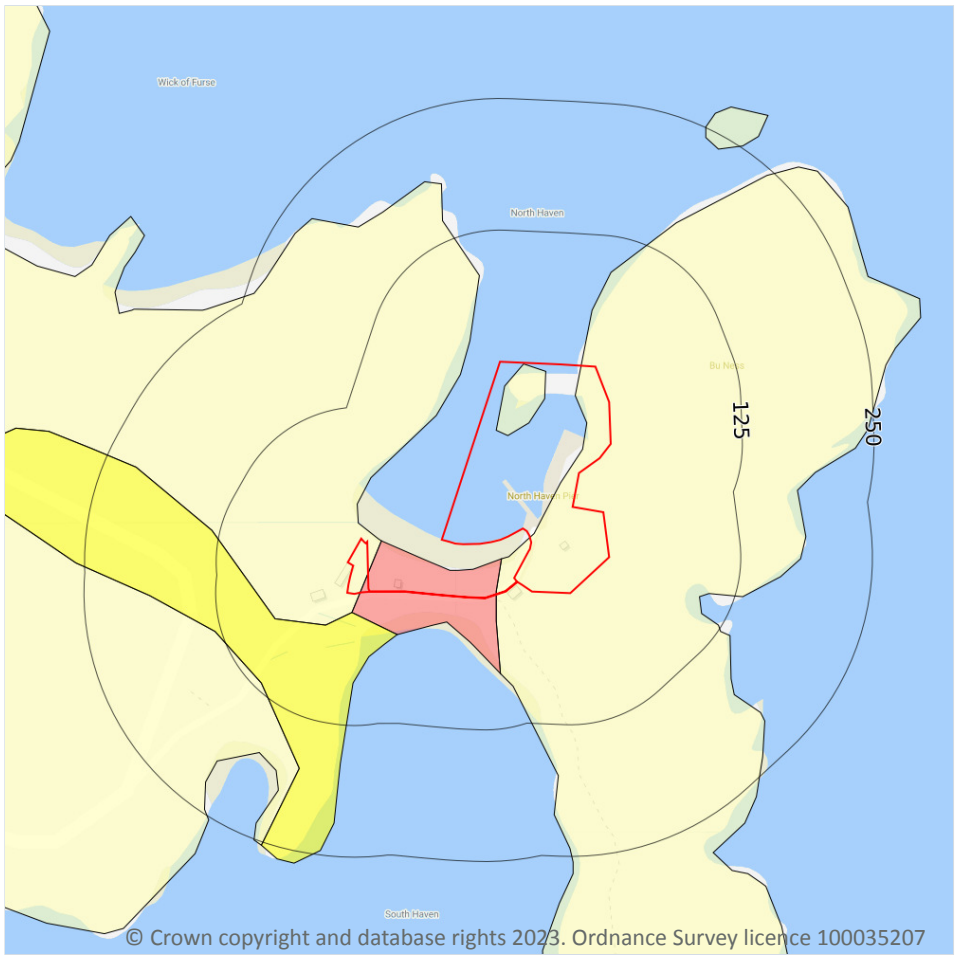
The potential hazard presented by soils that absorb water when wet (making them swell), and lose water as they dry (making them shrink). This shrink-swell behaviour is controlled by the type and amount of clay in the soil, and by seasonal changes in the soil moisture content (related to rainfall and local drainage).

Features are displayed on the Natural ground subsidence - Shrink swell clays map on **page 71**

Location	Hazard rating	Details
On site	**Negligible**	**Ground conditions predominantly non-plastic.**
On site	**Very low**	**Ground conditions predominantly low plasticity.**

This data is sourced from the British Geological Survey.

Natural ground subsidence - Running sands



Site Outline

Search buffers in metres (m)

- No data
- Negligible
- Very low
- Low
- Moderate
- High

17.2 Running sands

Records within 50m	3

The potential hazard presented by rocks that can contain loosely-packed sandy layers that can become fluidised by water flowing through them. Such sands can 'run', removing support from overlying buildings and causing potential damage.

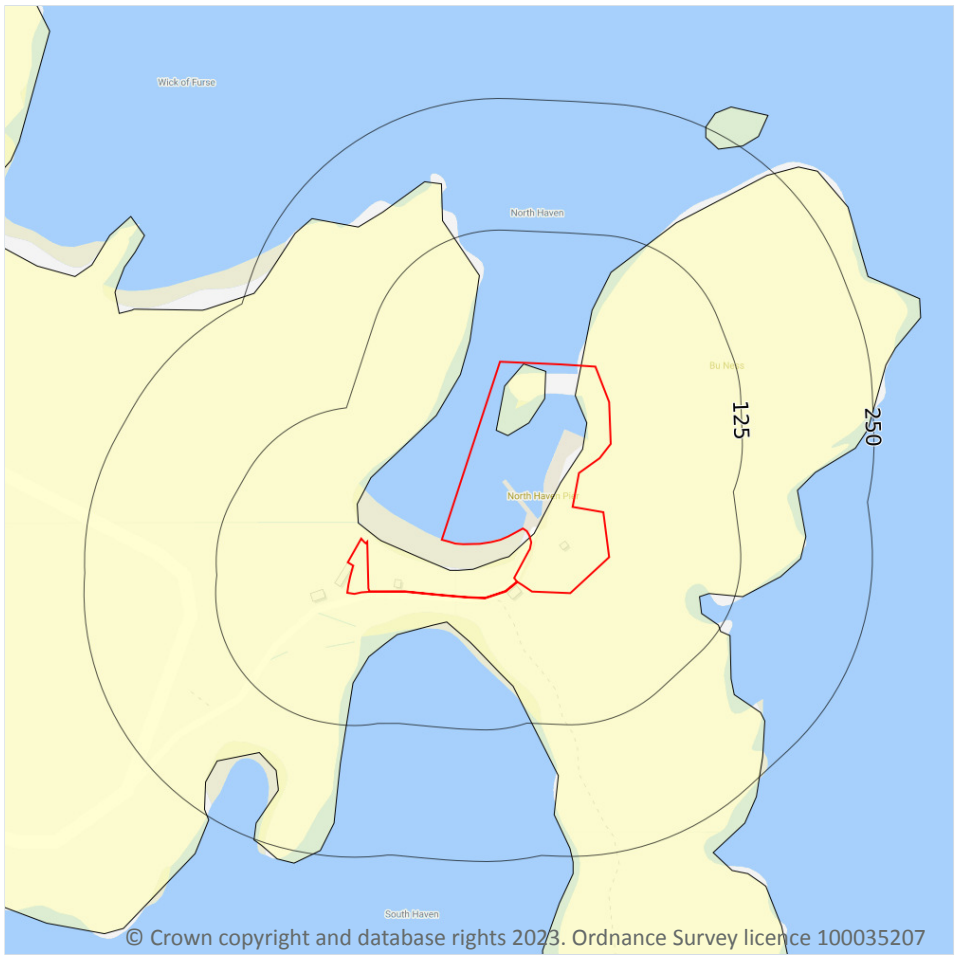
Features are displayed on the Natural ground subsidence - Running sands map on **page 72**

Location	Hazard rating	Details
On site	**Negligible**	**Running sand conditions are not thought to occur whatever the position of the water table. No identified constraints on lands use due to running conditions.**

Location	Hazard rating	Details
On site	**Moderate**	**Running sand conditions are probably present. Constraints may apply to land uses involving excavation or the addition or removal of water.**
18m SW	Very low	Running sand conditions are unlikely. No identified constraints on land use due to running conditions unless water table rises rapidly.

This data is sourced from the British Geological Survey.

Natural ground subsidence - Compressible deposits



Site Outline

Search buffers in metres (m)

- No data
- Negligible
- Very low
- Low
- Moderate
- High

17.3 Compressible deposits

Records within 50m	1

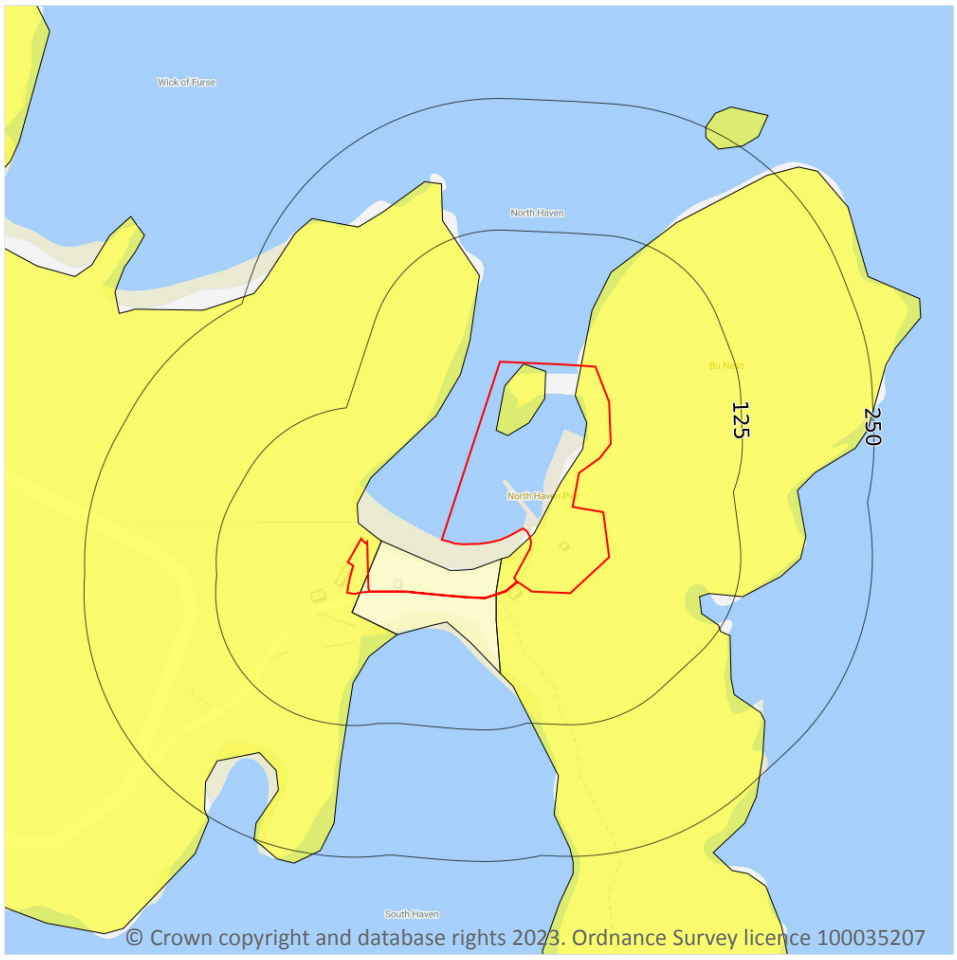
The potential hazard presented by types of ground that may contain layers of very soft materials like clay or peat and may compress if loaded by overlying structures, or if the groundwater level changes, potentially resulting in depression of the ground and disturbance of foundations.

Features are displayed on the Natural ground subsidence - Compressible deposits map on **page 74**

Location	Hazard rating	Details
On site	**Negligible**	**Compressible strata are not thought to occur.**

This data is sourced from the British Geological Survey.

Natural ground subsidence - Collapsible deposits



Site Outline

Search buffers in metres (m)

- No data
- Negligible
- Very low
- Low
- Moderate
- High

17.4 Collapsible deposits

Records within 50m	2

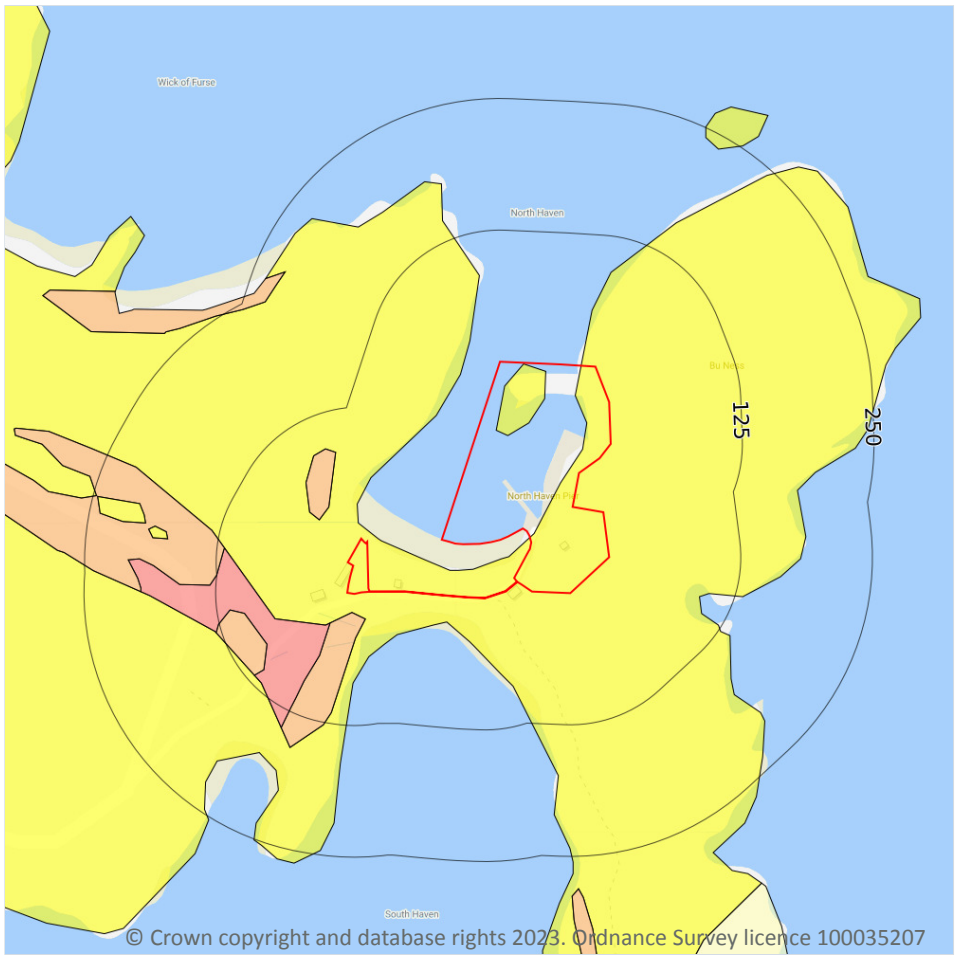
The potential hazard presented by natural deposits that could collapse when a load (such as a building) is placed on them or they become saturated with water.

Features are displayed on the Natural ground subsidence - Collapsible deposits map on **page 75**

Location	Hazard rating	Details
On site	**Negligible**	**Deposits with potential to collapse when loaded and saturated are believed not to be present.**
On site	**Very low**	**Deposits with potential to collapse when loaded and saturated are unlikely to be present.**

This data is sourced from the British Geological Survey.

Natural ground subsidence - Landslides



Site Outline

Search buffers in metres (m)

- No data
- Negligible
- Very low
- Low
- Moderate
- High

17.5 Landslides

Records within 50m	4

The potential for landsliding (slope instability) to be a hazard assessed using 1:50,000 scale digital maps of superficial and bedrock deposits, combined with information from the BGS National Landslide Database and scientific and engineering reports.

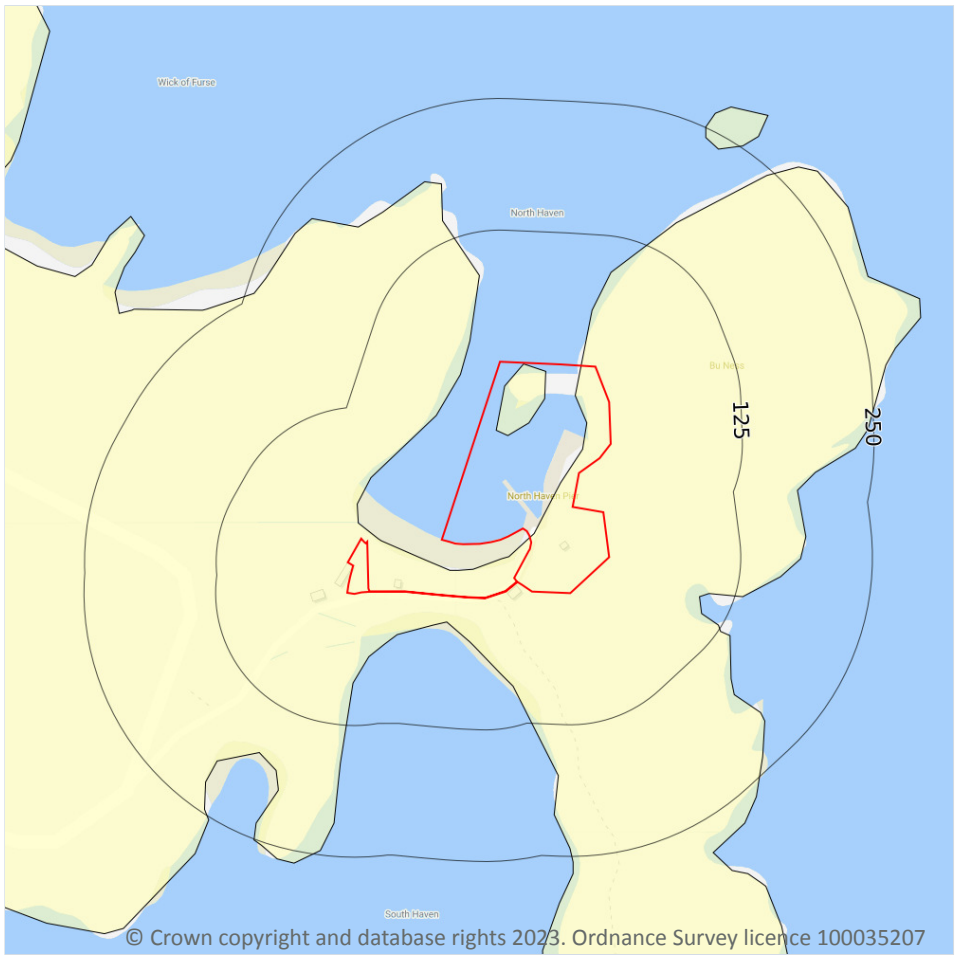
Features are displayed on the Natural ground subsidence - Landslides map on **page 76**

Location	Hazard rating	Details
On site	**Very low**	**Slope instability problems are not likely to occur but consideration to potential problems of adjacent areas impacting on the site should always be considered.**

Location	Hazard rating	Details
18m SW	Low	Slope instability problems may be present or anticipated. Site investigation should consider specifically the slope stability of the site.
33m SW	Moderate	Slope instability problems are probably present or have occurred in the past. Land use should consider specifically the stability of the site.
43m W	Low	Slope instability problems may be present or anticipated. Site investigation should consider specifically the slope stability of the site.

This data is sourced from the British Geological Survey.

Natural ground subsidence - Ground dissolution of soluble rocks



Site Outline

Search buffers in metres (m)

- No data
- Negligible
- Very low
- Low
- Moderate
- High

17.6 Ground dissolution of soluble rocks

Records within 50m	1

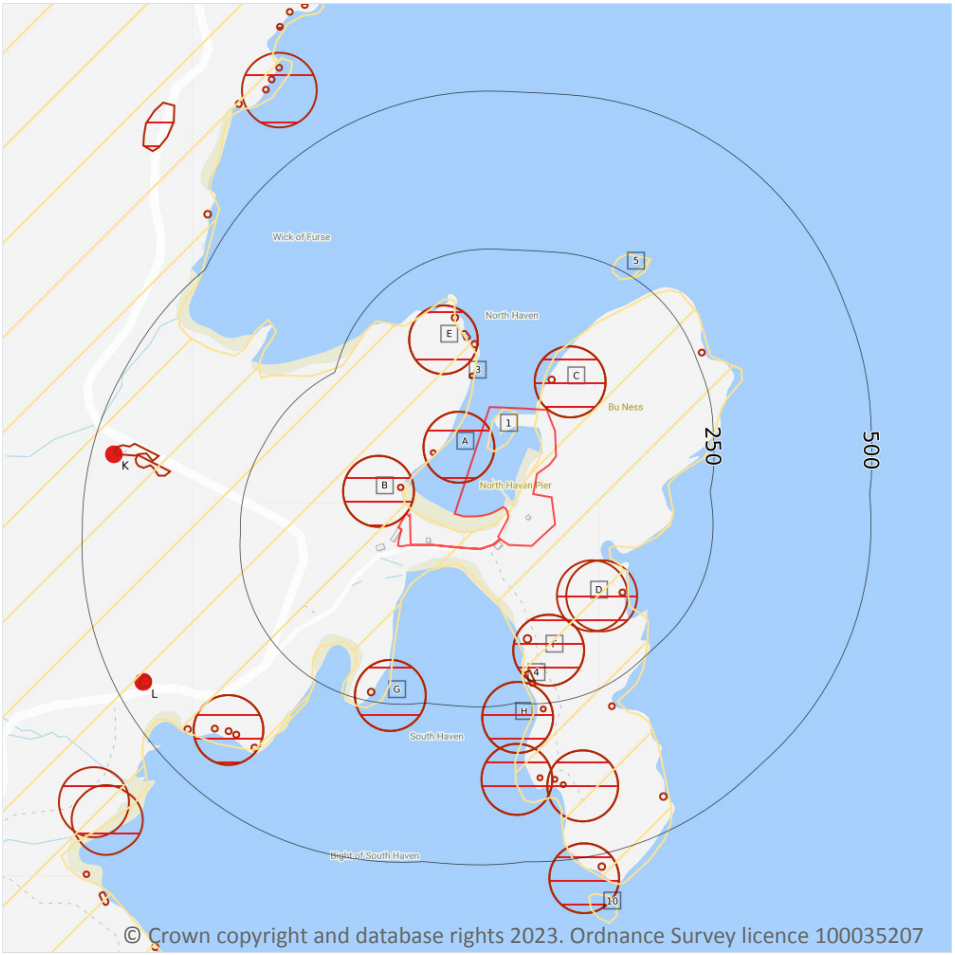
The potential hazard presented by ground dissolution, which occurs when water passing through soluble rocks produces underground cavities and cave systems. These cavities reduce support to the ground above and can cause localised collapse of the overlying rocks and deposits.

Features are displayed on the Natural ground subsidence - Ground dissolution of soluble rocks map on **page 78**

Location	Hazard rating	Details
On site	**Negligible**	**Soluble rocks are either not thought to be present within the ground, or not prone to dissolution. Dissolution features are unlikely to be present.**

This data is sourced from the British Geological Survey.

18 Mining, ground workings and natural cavities



Site Outline

Search buffers in metres (m)

Natural cavities (Area)

Natural cavities (Point)

BritPits

Surface ground workings

Underground workings

Historical Mineral Planning Areas

Mining Cavities

Non Coal Mining

Sporadic underground mining of restricted extent possible

Localised small scale underground mining possible

Small scale mining possible

Underground mining known or likely within or in close proximity

Underground mining known within or in very close proximity

18.1 Natural cavities

Records within 500m	0

Industry recognised national database of natural cavities. Sinkholes and caves are formed by the dissolution of soluble rock, such as chalk and limestone, gulls and fissures by cambering. Ground instability can result from movement of loose material contained within these cavities, often triggered by water.

This data is sourced from Stantec UK Ltd.

18.2 BritPits

Records within 500m	2

BritPits (an abbreviation of British Pits) is a database maintained by the British Geological Survey of currently active and closed surface and underground mineral workings. Details of major mineral handling sites, such as wharfs and rail depots are also held in the database.

Features are displayed on the Mining, ground workings and natural cavities map on **page 79**

ID	Location	Details	Description
L	456m SW	Name: Eas Brecks Address: Bu Ness, FAIR ISLE, Shetland Commodity: Sandstone Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
K	464m W	Name: Eas Brecks Address: Bu Ness, FAIR ISLE, Shetland Commodity: Sandstone Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority

This data is sourced from the British Geological Survey.

18.3 Surface ground workings

Records within 250m	27

Historical land uses identified from Ordnance Survey mapping that involved ground excavation at the surface. These features may or may not have been subsequently backfilled.

Features are displayed on the Mining, ground workings and natural cavities map on **page 79**

ID	Location	Land Use	Year of mapping	Mapping scale
A	**On site**	**Cave**	**1878**	**1:10560**
A	**On site**	**Cave**	**1900**	**1:10560**
B	**On site**	**Cave**	**1878**	**1:10560**
B	**On site**	**Cave**	**1900**	**1:10560**
C	2m NE	Cave	1878	1:10560
C	2m NE	Cave	1900	1:10560

ID	Location	Land Use	Year of mapping	Mapping scale
B	37m W	Cave	1973	1:10000
C	43m NE	Cave	1973	1:10000
3	53m N	Cave	1973	1:10000
A	59m W	Cave	1973	1:10000
D	67m SE	Cave	1878	1:10560
E	75m NW	Caves	1878	1:10560
E	75m NW	Caves	1900	1:10560
D	77m SE	Cave	1900	1:10560
E	97m N	Caves	1973	1:10000
E	111m N	Caves	1973	1:10000
F	111m S	Cave	1878	1:10560
F	111m S	Cave	1900	1:10560
F	141m S	Cave	1973	1:10000
E	147m N	Caves	1973	1:10000
D	147m SE	Cave	1973	1:10000
G	181m SW	Cave	1878	1:10560
G	181m SW	Cave	1900	1:10560
4	197m S	Caves	1973	1:10000
H	216m S	Cave	1878	1:10560
H	216m S	Cave	1900	1:10560
G	230m SW	Cave	1973	1:10000

This is data is sourced from Ordnance Survey/Groundsure.

18.4 Underground workings

Records within 1000m	**0**

Historical land uses identified from Ordnance Survey mapping that indicate the presence of underground workings e.g. mine shafts.

This is data is sourced from Ordnance Survey/Groundsure.

18.5 Historical Mineral Planning Areas

Records within 500m	0

Boundaries of mineral planning permissions for England and Wales. This data was collated between the 1940s (and retrospectively to the 1930s) and the mid 1980s. The data includes permitted, withdrawn and refused permissions.

This data is sourced from the British Geological Survey.

18.6 Non-coal mining

Records within 1000m	6

The potential for historical non-coal mining to have affected an area. The assessment is drawn from expert knowledge and literature in addition to the digital geological map of Britain. Mineral commodities may be divided into seven general categories - vein minerals, chalk, oil shale, building stone, bedded ores, evaporites and 'other' commodities (including ball clay, jet, black marble, graphite and chert).

Features are displayed on the Mining, ground workings and natural cavities map on **page 79**

ID	Location	Name	Commodity	Class	Likelihood
1	**On site**	**Not available**	**Vein Mineral**	**A**	**Sporadic underground mining of restricted extent may have occurred. Potential for difficult ground conditions are unlikely and localised and are at a level where they need not be considered**
2	**On site**	**Not available**	**Vein Mineral**	**A**	**Sporadic underground mining of restricted extent may have occurred. Potential for difficult ground conditions are unlikely and localised and are at a level where they need not be considered**
5	237m NE	Not available	Vein Mineral	A	Sporadic underground mining of restricted extent may have occurred. Potential for difficult ground conditions are unlikely and localised and are at a level where they need not be considered
10	559m S	Not available	Vein Mineral	A	Sporadic underground mining of restricted extent may have occurred. Potential for difficult ground conditions are unlikely and localised and are at a level where they need not be considered
-	839m S	Not available	Vein Mineral	A	Sporadic underground mining of restricted extent may have occurred. Potential for difficult ground conditions are unlikely and localised and are at a level where they need not be considered
-	978m N	Not available	Vein Mineral	A	Sporadic underground mining of restricted extent may have occurred. Potential for difficult ground conditions are unlikely and localised and are at a level where they need not be considered

This data is sourced from the British Geological Survey.

18.7 Mining cavities

Records within 1000m	0

Industry recognised national database of mining cavities. Degraded mines may result in hazardous subsidence (crown holes). Climatic conditions and water escape can also trigger subsidence over mine entrances and workings.

This data is sourced from Stantec UK Ltd.

18.8 JPB mining areas

Records on site	0

Areas which could be affected by former coal and other mining. This data includes some mine plans unavailable to the Coal Authority.

This data is sourced from Johnson Poole and Bloomer.

18.9 Coal mining

Records on site	0

Areas which could be affected by past, current or future coal mining.

This data is sourced from the Coal Authority.

18.10 Brine areas

Records on site	0

The Cheshire Brine Compensation District indicates areas that may be affected by salt and brine extraction in Cheshire and where compensation would be available where damage from this mining has occurred. Damage from salt and brine mining can still occur outside this district, but no compensation will be available.

This data is sourced from the Cheshire Brine Subsidence Compensation Board.

18.11 Gypsum areas

Records on site	0

Generalised areas that may be affected by gypsum extraction.

This data is sourced from British Gypsum.

18.12 Tin mining

Records on site	0

Generalised areas that may be affected by historical tin mining.

This data is sourced from Groundsure.

18.13 Clay mining

Records on site	0

Generalised areas that may be affected by kaolin and ball clay extraction.

This data is sourced from the Kaolin and Ball Clay Association (UK).

19 Radon

Site Outline

Search buffers in metres (m)

Greater than 30%

Between 10% and 30%

Between 5% and 10%

Between 3% and 5%

Between 1% and 3%

Less than 1%

19.1 Radon

Records on site	1

The Radon Potential data classifies areas based on their likelihood of a property having a radon level at or above the Action Level in Great Britain. The dataset is intended for use at 1:50,000 scale and was derived from both geological assessments and indoor radon measurements (more than 560,000 records). A minimum 50m buffer should be considered when searching the maps, as the smallest detectable feature at this scale is 50m. The findings of this section should supersede any estimations derived from the Indicative Atlas of Radon in Great Britain (1:100,000 scale).

Features are displayed on the Radon map on **page 85**

Location	Estimated properties affected	Radon Protection Measures required
On site	**Less than 1%**	**None**

This data is sourced from the British Geological Survey and UK Health Security Agency.

20 Soil chemistry

20.1 BGS Estimated Background Soil Chemistry

Records within 50m	**15**

The estimated values provide the likely background concentration of the potentially harmful elements Arsenic, Cadmium, Chromium, Lead and Nickel in topsoil. The values are estimated primarily from rural topsoil data collected at a sample density of approximately 1 per 2 km^2. In areas where rural soil samples are not available, estimation is based on stream sediment data collected from small streams at a sampling density of 1 per 2.5 km^2; this is the case for most of Scotland, Wales and southern England. The stream sediment data are converted to soil-equivalent concentrations prior to the estimation.

Location	Arsenic	Bioaccessible Arsenic	Lead	Bioaccessible Lead	Cadmium	Chromium	Nickel
On site	**15 mg/kg**	**-**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**-**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**-**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**-**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**-**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**-**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**-**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**-**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**-**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**-**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**-**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
15m W	15 mg/kg	-	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
18m SW	15 mg/kg	-	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
20m SW	15 mg/kg	-	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
37m SW	15 mg/kg	-	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg

This data is sourced from the British Geological Survey.

20.2 BGS Estimated Urban Soil Chemistry

Records within 50m	0

Estimated topsoil chemistry of Arsenic, Cadmium, Chromium, Copper, Nickel, Lead, Tin and Zinc and bioaccessible Arsenic and Lead in 23 urban centres across Great Britain. These estimates are derived from interpolation of the measured urban topsoil data referred to above and provide information across each city between the measured sample locations (4 per km^2).

This data is sourced from the British Geological Survey.

20.3 BGS Measured Urban Soil Chemistry

Records within 50m	0

The locations and measured total concentrations (mg/kg) of Arsenic, Cadmium, Chromium, Copper, Nickel, Lead, Tin and Zinc in urban topsoil samples from 23 urban centres across Great Britain. These are collected at a sample density of 4 per km^2.

This data is sourced from the British Geological Survey.

21 Railway infrastructure and projects

21.1 Underground railways (London)

Records within 250m	0

Details of all active London Underground lines, including approximate tunnel roof depth and operational hours.

This data is sourced from publicly available information by Groundsure.

21.2 Underground railways (Non-London)

Records within 250m	0

Details of the Merseyrail system, the Tyne and Wear Metro and the Glasgow Subway. Not all parts of all systems are located underground. The data contains location information only and does not include a depth assessment.

This data is sourced from publicly available information by Groundsure.

21.3 Railway tunnels

Records within 250m	0

Railway tunnels taken from contemporary Ordnance Survey mapping.

This data is sourced from the Ordnance Survey.

21.4 Historical railway and tunnel features

Records within 250m	0

Railways and tunnels digitised from historical Ordnance Survey mapping as scales of 1:1,250, 1:2,500, 1:10,000 and 1:10,560.

This data is sourced from Ordnance Survey/Groundsure.

21.5 Royal Mail tunnels

Records within 250m	0

The Post Office Railway, otherwise known as the Mail Rail, is an underground railway running through Central London from Paddington Head District Sorting Office to Whitechapel Eastern Head Sorting Office. The line is 10.5km long. The data includes details of the full extent of the tunnels, the depth of the tunnel, and the depth to track level.

This data is sourced from Groundsure/the Postal Museum.

21.6 Historical railways

Records within 250m	0

Former railway lines, including dismantled lines, abandoned lines, disused lines, historic railways and razed lines.

This data is sourced from OpenStreetMap.

21.7 Railways

Records within 250m	0

Currently existing railway lines, including standard railways, narrow gauge, funicular, trams and light railways.

This data is sourced from Ordnance Survey and OpenStreetMap.

21.8 Crossrail 1

Records within 500m	0

The Crossrail railway project links 41 stations over 100 kilometres from Reading and Heathrow in the west, through underground sections in central London, to Shenfield and Abbey Wood in the east.

This data is sourced from publicly available information by Groundsure.

21.9 Crossrail 2

Records within 500m	0

Crossrail 2 is a proposed railway linking the national rail networks in Surrey and Hertfordshire via an underground tunnel through London.

This data is sourced from publicly available information by Groundsure.

21.10 HS2

Records within 500m	0

HS2 is a proposed high speed rail network running from London to Manchester and Leeds via Birmingham. Main civils construction on Phase 1 (London to Birmingham) of the project began in 2019, and it is currently anticipated that this phase will be fully operational by 2026. Construction on Phase 2a (Birmingham to Crewe) is anticipated to commence in 2021, with the service fully operational by 2027. Construction on Phase 2b (Crewe to Manchester and Birmingham to Leeds) is scheduled to begin in 2023 and be operational by 2033.

This data is sourced from HS2 ltd.

Data providers

Groundsure works with respected data providers to bring you the most relevant and accurate information. To find out who they are and their areas of expertise see https://www.groundsure.com/sources-reference.

Terms and conditions

Groundsure's Terms and Conditions can be accessed at this link: https://www.groundsure.com/terms-and-conditions-jan-2020/.

Pre-Desk Study Assessment

Site:	Fair Isle, Shetland, Scotland
Client:	Stantec
Contact:	Rhona Mitchell
Date:	1st February 2023
Pre-WWI Military Activity on or Affecting the Site	None identified.
WWI Military Activity on or Affecting the Site	None identified.
WWI Strategic Targets (within 5km of Site)	The following strategic targets were located in the vicinity of the Site: ■ North Haven Harbour. ■ Transport infrastructure.
WWI Bombing	None identified on the Site.
Interwar Military Activity on or Affecting the Site	None identified.
WWII Military Activity on or Affecting the Site	During WWII, North Haven Military Camp was established on land encroaching on the southern part of the Site. It consisted of approximately 16No. huts and was likely associated with the Royal Air Force (RAF) radar station located at Ward Hill, approximately 0.9km west of the Site. During WWII, Shetland was a closed military area, meaning that training activities could take place anywhere on the islands. No readily available records have been found to indicate that military training took place on the Site.
WWII Strategic Targets (within 5km of Site)	The following strategic targets were located in the vicinity of the Site: ■ North Haven Harbour. ■ Transport infrastructure. ■ RAF Ward Hill. ■ Military camps and training areas. ■ Anti-invasion defences.
WWII Bombing Decoys (within 5km of Site)	None identified.
WWII Bombing	During WWII the Site was located in the Landward Area (LA) of Zetland, which officially recorded 72No. High Explosive (HE) bombs with a bombing density of 0.2 bombs per 405 hectares (ha). No readily available records have been found to indicate that the Site was bombed.
Post-WWII Military Activity on or Affecting the Site	None identified.
Recommendation	It is recommended that a detailed desk study is commissioned to assess, and potentially zone, the Unexploded Ordnance (UXO) hazard level on the Site.

This summary is based on a cursory review of readily available records. Caution is advised if you plan to action work based on this summary.

It should be noted that where a potentially significant source of UXO hazard has been identified on the Site, the requirement for a detailed desk study and risk assessment has been confirmed and no further research will be undertaken at this stage. It is possible that further in-depth research as part of a detailed UXO desk study and risk assessment may identify other potential sources of UXO hazard on the Site.

Receptor	Receptor Sensitivity ('0' if not present)	Pathway	Present (Y=1, N=0)	EPH & Solvents	PAHs	Inorganics and Metals	Asbestos	Biocides	Permanent Gases	Consequence	Probability/ Likelihood	Estimated Risk
Human Health - On-Site Current Users	4	Ingestion of fruit or vegetable leaf or roots	0	✓	✓	✓	x	✓	x	N/A	N/A	N/A
		Ingestion of contaminated drinking water	0	✓	✓	x	x	✓	x	N/A	N/A	N/A
		Ingestion of water / sediments when swimming	1	✓	✓	✓	✓	✓	x	Mild	Unlikely	Very Low
		Ingestion of soil/dust indoors	1	✓	✓	✓	✓	✓	x	Mild	Unlikely	Very Low
		Ingestion of soil/dust outdoors	1	✓	✓	✓	✓	✓	x	Mild	Unlikely	Very Low
		Inhalation of particles (dust / soil) indoor and outdoor	1	✓	✓	✓	✓	✓	x	Mild	Unlikely	Very Low
		Inhalation of vapours/gases – outdoor	1	✓	x	x	x	x	✓	Mild	Unlikely	Very Low
		Inhalation of vapours/gases - indoor	1	✓	x	x	x	x	✓	Mild	Unlikely	Very Low
		Dermal absorption via direct contact with soil	1	✓	✓	✓	✓	✓	x	Mild	Unlikely	Very Low
		Dermal absorption via waters (swimming / showering)	1	✓	✓	✓	✓	✓	x	Mild	Unlikely	Very Low
Human Health On-Site Future User	4	Ingestion of fruit or vegetable leaf or roots	0	✓	✓	✓	x	✓	x	N/A	N/A	N/A
		Ingestion of contaminated drinking water	0	✓	✓	x	x	✓	x	N/A	N/A	N/A
		Ingestion of water / sediments when swimming	1	✓	✓	x	x	✓	x	Mild	Unlikely	Very Low
		Ingestion of soil/dust indoors	1	✓	✓	✓	✓	✓	x	Mild	Unlikely	Very Low
		Ingestion of soil/dust outdoors	1	✓	✓	✓	✓	✓	x	Mild	Unlikely	Very Low
		Inhalation of particles (dust / soil) indoor and outdoor	1	✓	✓	✓	✓	✓	x	Mild	Unlikely	Very Low
		Inhalation of vapours – outdoor	1	✓	x	x	x	x	✓	Mild	Unlikely	Very Low
		Inhalation of vapours - indoor	1	✓	x	x	x	x	✓	Mild	Unlikely	Very Low
		Dermal absorption via direct contact with soil	1	✓	✓	✓	✓	✓	x	Mild	Unlikely	Very Low
		Dermal absorption via waters (swimming / showering)	1	✓	✓	✓	✓	✓	x	Mild	Unlikely	Very Low
Human Health - Neighbours	4	Ingestion of fruit or vegetable leaf or roots	0	✓	✓	✓	x	✓	x	N/A	N/A	N/A
		Ingestion of contaminated drinking water	0	✓	✓	x	x	✓	x	N/A	N/A	N/A
		Ingestion of water / sediments when swimming	1	✓	✓	x	x	✓	x	Mild	Unlikely	Very Low
		Ingestion of soil/dust indoors	1	✓	✓	✓	✓	✓	x	Mild	Unlikely	Very Low
		Ingestion of soil/dust outdoors	1	✓	✓	✓	✓	✓	x	Mild	Unlikely	Very Low
		Inhalation of particles (dust / soil) indoor and outdoor	1	✓	✓	✓	✓	✓	x	Mild	Unlikely	Very Low
		Inhalation of vapours – outdoor	1	✓	x	x	x	x	✓	Mild	Unlikely	Very Low
		Inhalation of vapours - indoor	1	✓	x	x	x	x	✓	Mild	Unlikely	Very Low
		Dermal absorption via direct contact with soil	1	✓	✓	✓	✓	✓	x	Mild	Unlikely	Very Low
		Dermal absorption via waters (swimming / showering)	1	✓	✓	✓	✓	✓	x	Mild	Unlikely	Very Low
Human Health - Construction/ Maintenance Workers	4	Ingestion of soil/dust indoors	1	✓	✓	✓	✓	✓	x	Mild	Unlikely	Very Low
		Ingestion of soil/dust outdoors	1	✓	✓	✓	✓	✓	x	Mild	Low	Low
		Inhalation of particles (dust / soil) outdoor	1	✓	✓	✓	✓	✓	x	Mild	Low	Low
		Inhalation of vapours – outdoor	1	✓	x	x	x	x	✓	Mild	Low	Low
		Inhalation of vapours - indoor	1	✓	x	x	x	x	✓	Mild	Unlikely	Very Low
		Dermal absorption via direct contact with soil	1	✓	✓	✓	✓	✓	x	Mild	Low	Low
Groundwater (Shallow)	0	Leaching	1	✓	✓	✓	x	✓	x	N/A	Unlikely	N/A
		Migration via natural or anthropogenic	1	✓	✓	✓	x	✓	x	N/A	Unlikely	N/A
Groundwater (Deep)	3	Leaching	1	✓	✓	✓	x	✓	x	Mild	Low	Low
		Migration via natural or anthropogenic	1	✓	✓	✓	x	✓	x	Mild	Low	Low
Surface Water	4	Direct runoff or discharges from pipes	1	✓	✓	✓	✓	✓	x	Mild	Likely	Moderate
		Indirect via recharge from groundwater (hydraulic flow)	1	✓	✓	✓	✓	✓	x	Mild	Unlikely	Very Low
		Deposition of wind blown dust	1	✓	✓	✓	✓	✓	x	Mild	Low	Low
Property - Buildings	3	Direct contact	1	✓	✓	✓	x	x	x	Mild	Low	Low
		Explosion due to gas migration via natural / anthropogenic	0	✓	x	x	x	x	✓	N/A	N/A	N/A
Ecological Systems	5	Direct deposition of particles / dust - wind blown or flood	1	✓	✓	✓	✓	✓	x	Medium	Unlikely	Low
		Indirect - through watering	0	✓	✓	✓	x	✓	x	N/A	N/A	N/A
		Inhalation of gases/vapours or particulates/dust by animals	1	✓	✓	✓	✓	✓	✓	Medium	Unlikely	Low
		Ingestion of vegetation / water / soil by animals	1	✓	✓	✓	✓	✓	x	Medium	Unlikely	Low
Property - Animal/Crop	1	Direct (including deposition via wind or flood)	1	✓	✓	✓	✓	✓	x	Minor	Unlikely	Very Low
		Indirect (through watering)	0	✓	✓	✓	x	✓	x	N/A	N/A	N/A
		Inhalation of gas / vapour / particulates / dust by animals	1	✓	✓	✓	✓	✓	✓	Minor	Low	Very Low
		Ingestion of vegetation / water / soil by animals	1	✓	✓	✓	✓	✓	x	Minor	Low	Very Low

Risk estimation establishes the magnitude and probability of the possible consequences (what degree of harm might result and how likely).
The criteria for classifying probability and consequence are set out in Tables 4 and 5 of the Stantec methodology.
Green text highlights one or more elements of the Pollutant Linkage are missing and therefore eliminated

EPH = Extractable hydrocarbons
PAHs = Poly Aromatic Hydrocarbons
Note For Metals there is an Inhalation pathway if Mercury is present
Note for PAHs there are Inhalation and/or Solubility pathways for some eg Naphthalene

Stantec
Caversham Bridge House, Waterman Place, Reading, RG1 8DN Tel 0118 950 0761 Fax 0118 959 7499

Client: Shetland Islands Council

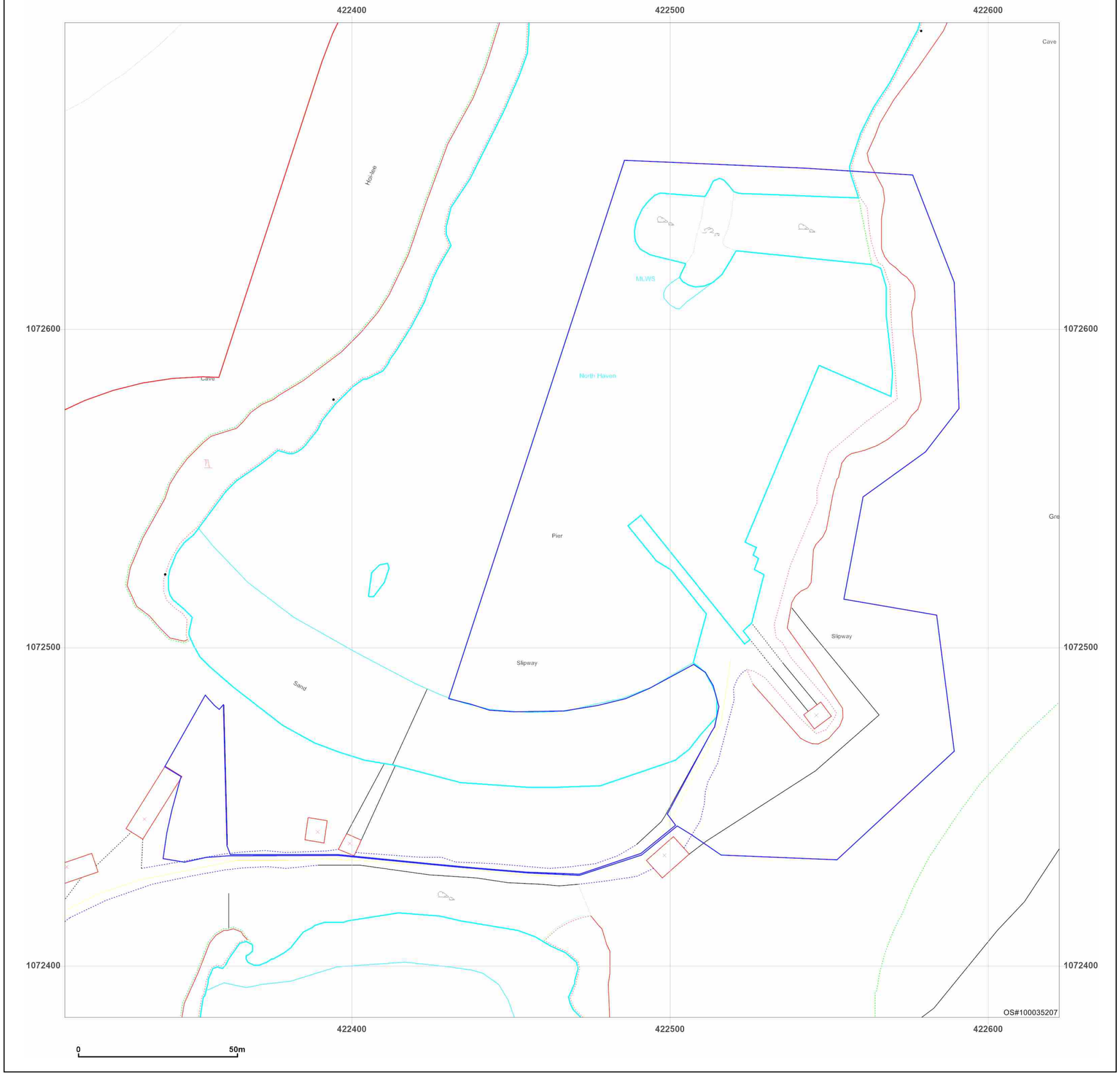
Ferry Upgrade, Fair Isle, Shetland

TABLE SUMMARISING POLLUTANT LINKAGES AND RISK ESTIMATION

Date	07/03/2023
A3 Scale	NTS
Drawn By	CB
Checked By	OB

HAZARD CLASSIFICATION	2	THE POTENTIAL CONTAMINANTS OF CONCERN ARE :- Asbestos, heavy metals, inorganics, polycyclic aromatic hydrocarbons (PAHs), petroleum hydrocarbons. □

Appendix B Groundsure Report



Groundsure INSIGHTS

Site Details:

North Haven, Fair Isle, ZE2 9JU

Client Ref: EPL_Fair_Isle
Report Ref: GS-9395810
Grid Ref: 422466, 1072540

Map Name: LandLine
Map date: **2003**
Scale: 1:1,250
Printed at: 1:1,250

N
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S

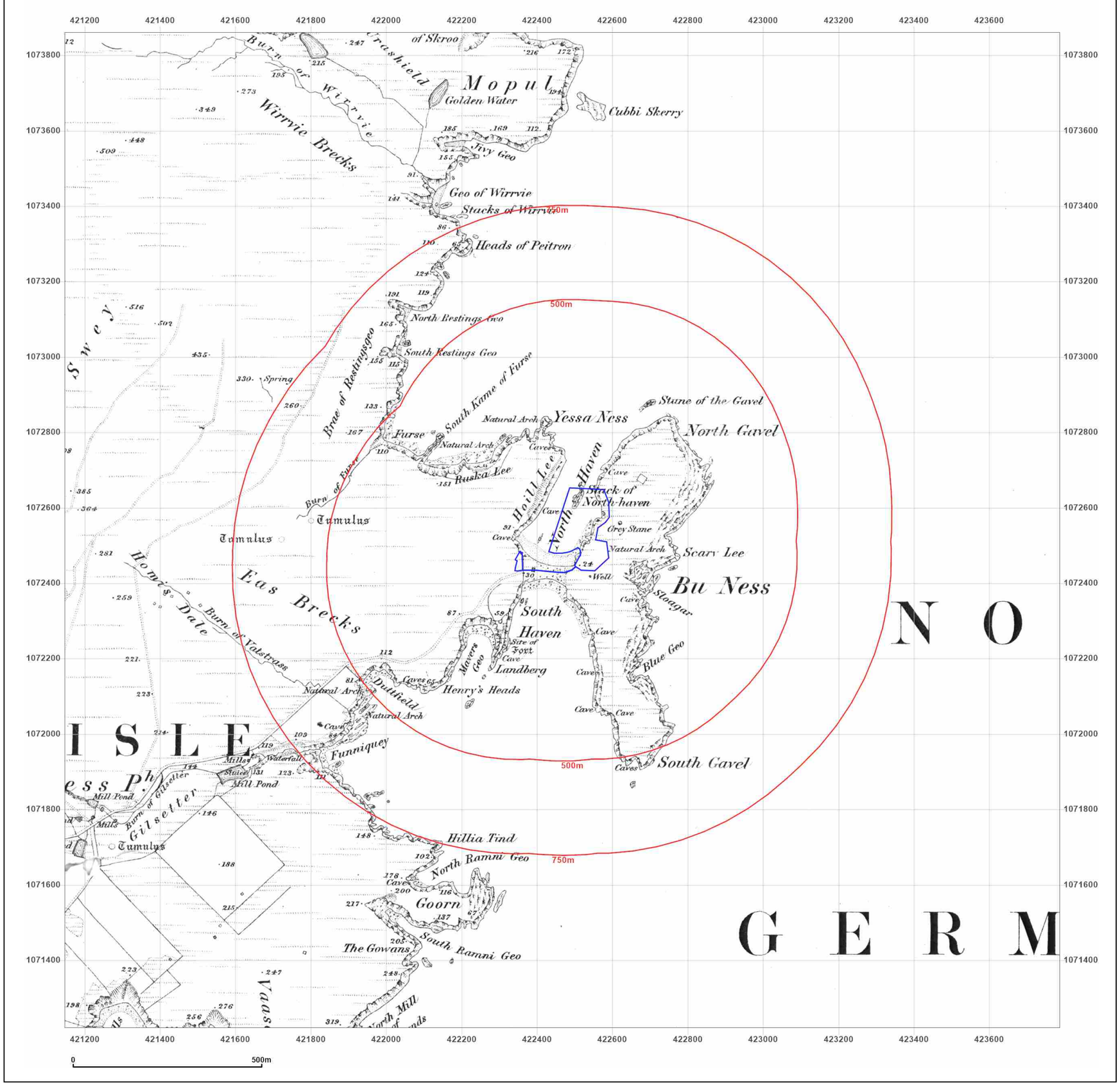
2003

Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 03 March 2023

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



Groundsure INSIGHTS

Site Details:

North Haven, Fair Isle, ZE2 9JU

Client Ref: EPL_Fair_Isle
Report Ref: GS-9395810
Grid Ref: 422466, 1072540

Map Name: County Series

Map date: **1878**

Scale: 1:10,560

Printed at: 1:10,560

N
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S

Surveyed 1878
Revised 1878
Edition N/A
Copyright N/A
Levelled N/A

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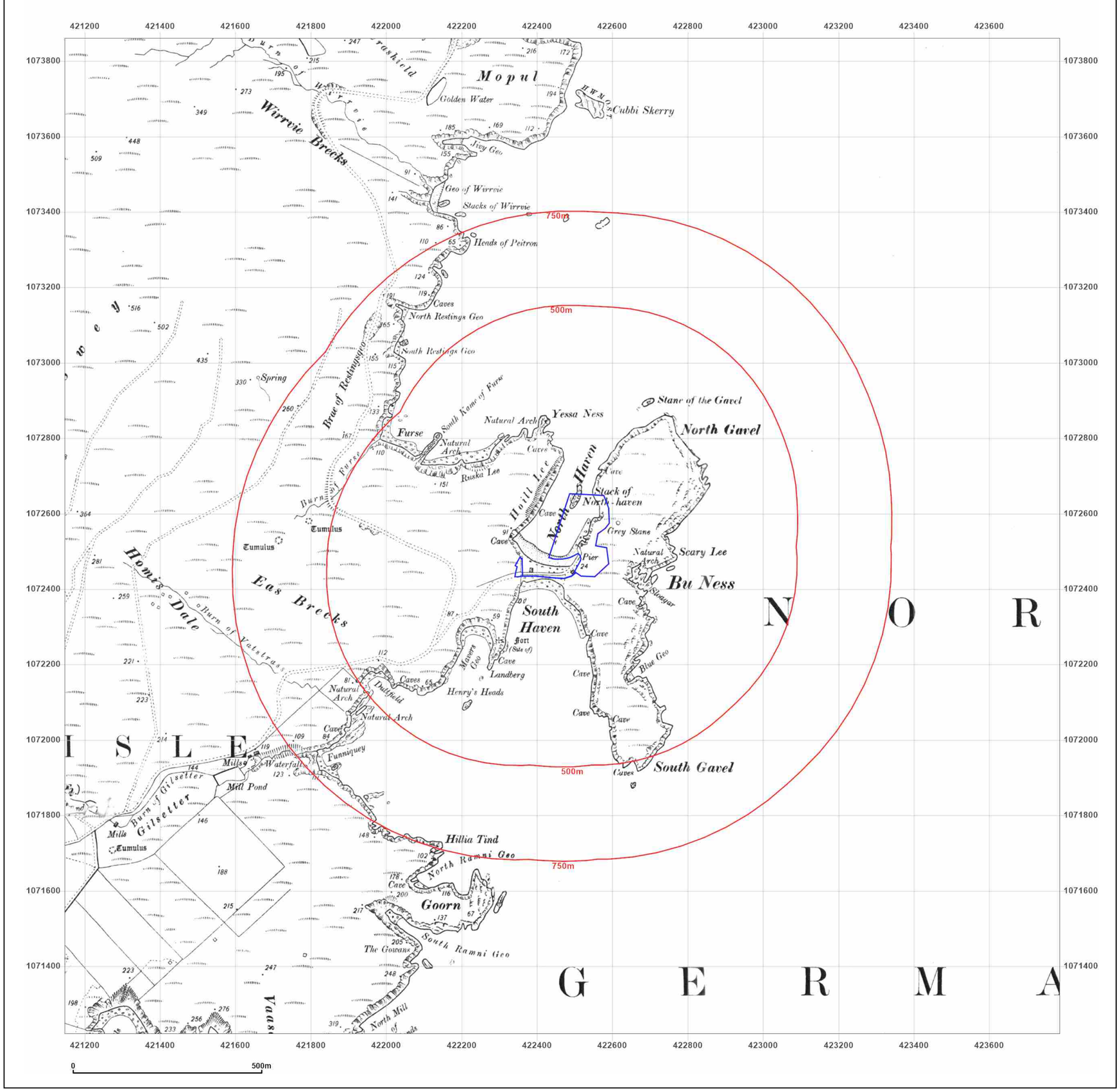
Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 03 March 2023

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



Groundsure INSIGHTS

Site Details:

North Haven, Fair Isle, ZE2 9JU

Client Ref: EPL_Fair_Isle
Report Ref: GS-9395810
Grid Ref: 422466, 1072540

Map Name: County Series

Map date: **1900**

Scale: 1:10,560

Printed at: 1:10,560

N
W E
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Surveyed 1878
Revised 1900
Edition N/A
Copyright N/A
Levelled N/A

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Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
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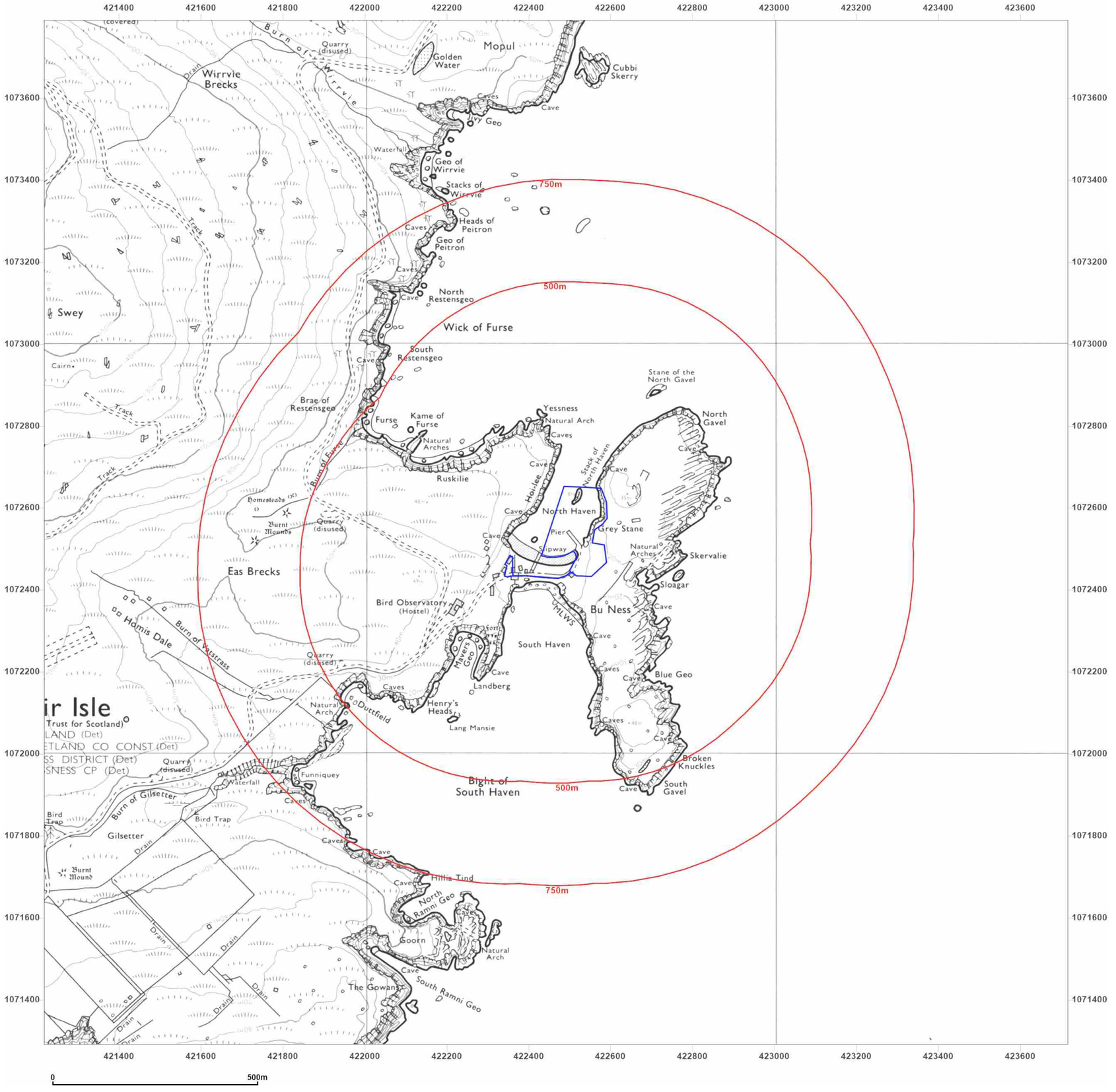
Production date: 03 March 2023

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



Groundsure INSIGHTS

Site Details:

North Haven, Fair Isle, ZE2 9JU

Client Ref: EPL_Fair_Isle
Report Ref: GS-9395810
Grid Ref: 422466, 1072540

Map Name: National Grid

Map date: **1973**

Scale: 1:10,000

Printed at: 1:10,000

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Surveyed 1970
Revised 1973
Edition N/A
Copyright 1973
Levelled 1970

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W: www.groundsure.com

Production date: 03 March 2023

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

Groundsure INSIGHTS

Site Details:

North Haven, Fair Isle, ZE2 9JU

Client Ref: EPL_Fair_Isle
Report Ref: GS-9395810
Grid Ref: 422466, 1072540

Map Name: National Grid

Map date: **2001**

Scale: 1:10,000

Printed at: 1:10,000

N
W E
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2001

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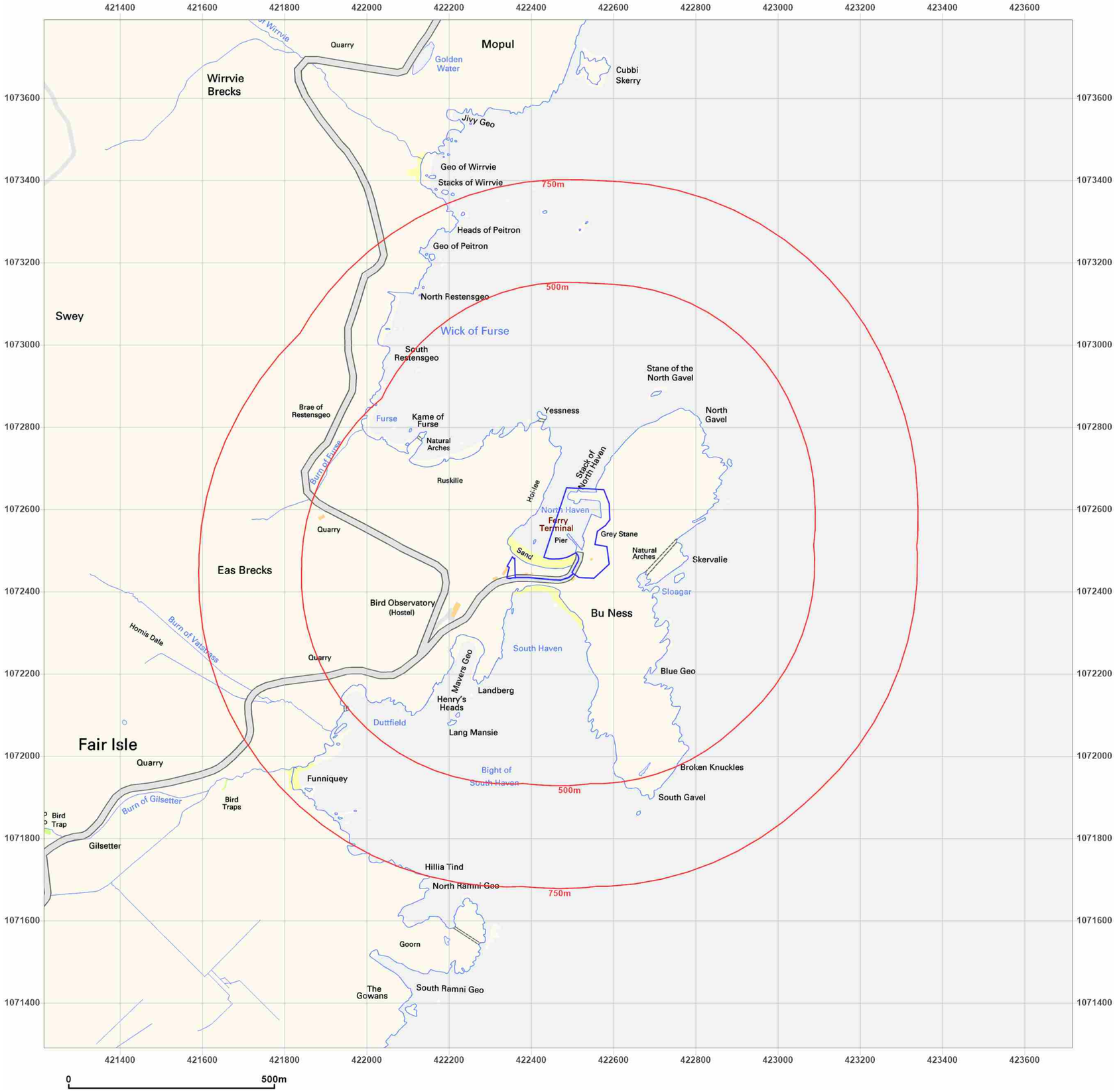
Production date: 03 March 2023

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



Groundsure INSIGHTS

Site Details:

North Haven, Fair Isle, ZE2 9JU

Client Ref: EPL_Fair_Isle
Report Ref: GS-9395810
Grid Ref: 422466, 1072540

Map Name: National Grid

Map date: **2010**

Scale: 1:10,000

Printed at: 1:10,000

N
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2010

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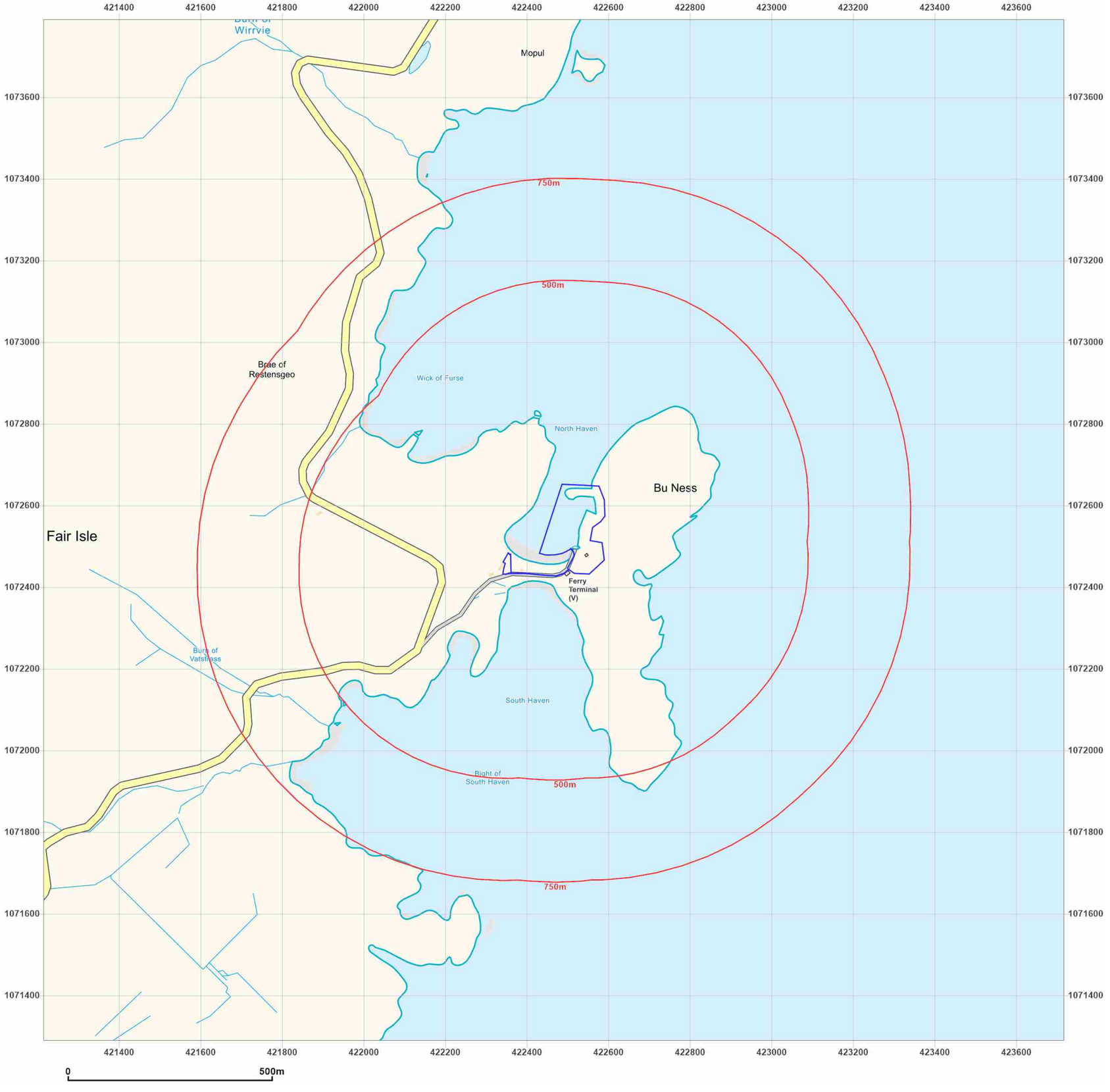

Groundsure INSIGHTS

Site Details:

North Haven, Fair Isle, ZE2 9JU

Client Ref: EPL_Fair_Isle
Report Ref: GS-9395810
Grid Ref: 422466, 1072540

Map Name: National Grid

Map date: **2023**

Scale: 1:10,000

Printed at: 1:10,000

N
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2023

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Groundsure
LOCATION INTELLIGENCE

Enviro+Geo Insight

North Haven, Fair Isle, ZE2 9JU

Order Details

Date: 03/03/2023

Your ref: EPL_Fair_Isle

Our Ref: GS-9395811

Site Details

Location: 422530 1072546

Area: 2.45 ha

Authority: Shetland Islands Council

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

Summary of findings

Page	Section	Past land use	On site	0-50m	50-250m	250-500m	500-2000m
11	**1.1**	**Historical industrial land uses**	0	0	0	3	-
12	1.2	Historical tanks	0	0	0	0	-
12	1.3	Historical energy features	0	0	0	0	-
12	1.4	Historical petrol stations	0	0	0	0	-
13	1.5	Historical garages	0	0	0	0	-
13	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
14	**2.1**	**Historical industrial land uses**	0	0	0	3	-
15	2.2	Historical tanks	0	0	0	0	-
15	2.3	Historical energy features	0	0	0	0	-
15	2.4	Historical petrol stations	0	0	0	0	-
15	2.5	Historical garages	0	0	0	0	-
Page	Section	Waste and landfill	On site	0-50m	50-250m	250-500m	500-2000m
16	3.1	Active or recent landfill	0	0	0	0	-
16	3.2	Historical landfill (BGS records)	0	0	0	0	-
16	3.3	Historical landfill (LA/mapping records)	0	0	0	0	-
16	3.4	Licensed waste sites	0	0	0	0	-
16	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
17	**4.1**	**Recent industrial land uses**	2	1	0	-	-
18	4.2	Current or recent petrol stations	0	0	0	0	-
18	4.3	Electricity cables	0	0	0	0	-
18	4.4	Gas pipelines	0	0	0	0	-
18	4.5	Sites determined as Contaminated Land	0	0	0	0	-
19	4.6	Control of Major Accident Hazards (COMAH)	0	0	0	0	-
19	4.7	Regulated explosive sites	0	0	0	0	-

19	**4.8**	**Hazardous substance storage/usage**	1	0	0	0	-
19	4.9	Part A(1), IPPC and Historic IPC Authorisations	0	0	0	0	-
20	4.10	Part B Authorisations	0	0	0	0	-
20	4.11	Pollution inventory substances	0	0	0	0	-
20	4.12	Pollution inventory waste transfers	0	0	0	0	-
20	4.13	Pollution inventory radioactive waste	0	0	0	0	-
Page	Section	Hydrogeology	On site	0-50m	50-250m	250-500m	500-2000m
21	5.1	Superficial aquifer	None (within 500m)				
22	**5.2**	**Bedrock aquifer**	Identified (within 500m)				
Page	Section	Hydrology	On site	0-50m	50-250m	250-500m	500-2000m
23	**6.1**	**Water Network (OS MasterMap)**	0	3	8	-	-
24	**6.2**	**Surface water features**	0	2	1	-	-
Page	Section	River flooding					
26	7.1	River flooding	Negligible (within 50m)				
Page	Section	Coastal flooding					
27	8.1	Coastal flooding	Negligible (within 50m)				
Page	Section	Surface water flooding					
28	9.1	Surface water flooding	Negligible (within 50m)				
Page	Section	Groundwater flooding					
29	**10.1**	**Groundwater flooding**	Low (within 50m)				
Page	Section	Environmental designations	On site	0-50m	50-250m	250-500m	500-2000m
30	**11.1**	**Sites of Special Scientific Interest (SSSI)**	2	2	8	14	105
35	11.2	Conserved wetland sites (Ramsar sites)	0	0	0	0	0
36	**11.3**	**Special Areas of Conservation (SAC)**	2	1	6	14	105
52	**11.4**	**Special Protection Areas (SPA)**	1	0	0	0	1
52	11.5	National Nature Reserves (NNR)	0	0	0	0	0
53	11.6	Local Nature Reserves (LNR)	0	0	0	0	0
53	11.7	Designated Ancient Woodland	0	0	0	0	0
53	11.8	Biosphere Reserves	0	0	0	0	0

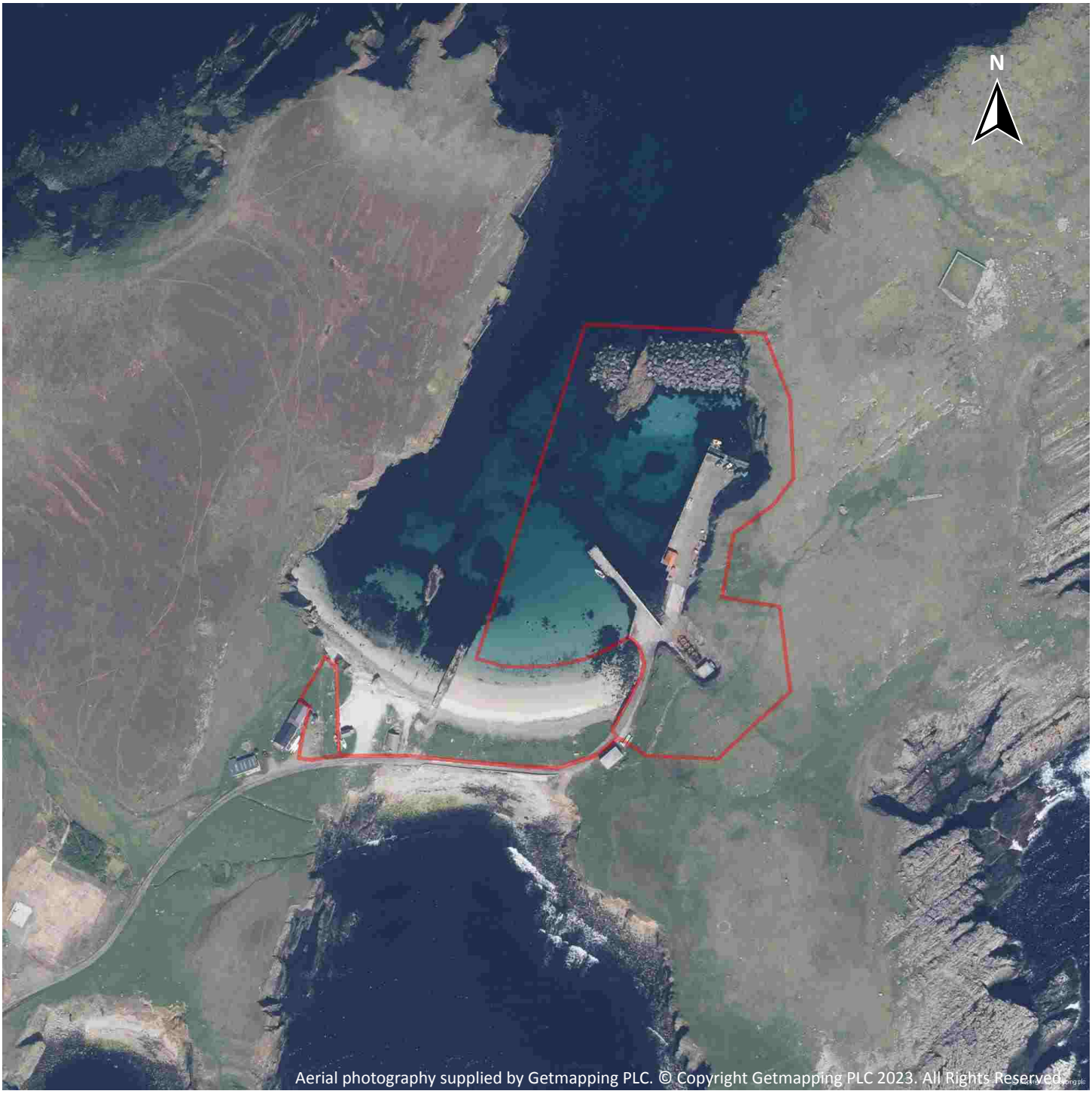
53	11.9	Forest Parks	0	0	0	0	0
54	11.10	Marine Conservation Zones	0	0	0	0	0
Page	Section	Visual and cultural designations	On site	0-50m	50-250m	250-500m	500-2000m
55	12.1	World Heritage Sites	0	0	0	-	-
56	**12.2**	**Area of Outstanding Natural Beauty**	1	0	0	-	-
56	12.3	National Parks	0	0	0	-	-
56	**12.4**	**Listed Buildings**	0	1	0	-	-
57	12.5	Conservation Areas	0	0	0	-	-
57	**12.6**	**Scheduled Ancient Monuments**	1	0	1	-	-
57	12.7	Registered Parks and Gardens	0	0	0	-	-
Page	Section	Agricultural designations	On site	0-50m	50-250m	250-500m	500-2000m
58	**13.1**	**Agricultural Land Classification**	Grade 6.3 (within 250m)				
Page	Section	Geology 1:10,000 scale	On site	0-50m	50-250m	250-500m	500-2000m
59	**14.1**	**10k Availability**	Identified (within 500m)				
60	14.2	Artificial and made ground (10k)	0	0	0	0	-
61	14.3	Superficial geology (10k)	0	0	0	0	-
61	14.4	Landslip (10k)	0	0	0	0	-
62	14.5	Bedrock geology (10k)	0	0	0	0	-
62	14.6	Bedrock faults and other linear features (10k)	0	0	0	0	-
Page	Section	Geology 1:50,000 scale	On site	0-50m	50-250m	250-500m	500-2000m
63	**15.1**	**50k Availability**	Identified (within 500m)				
64	15.2	Artificial and made ground (50k)	0	0	0	0	-
64	15.3	Artificial ground permeability (50k)	0	0	-	-	-
65	**15.4**	**Superficial geology (50k)**	1	1	0	0	-
66	**15.5**	**Superficial permeability (50k)**	Identified (within 50m)				
66	15.6	Landslip (50k)	0	0	0	0	-
66	15.7	Landslip permeability (50k)	None (within 50m)				
67	**15.8**	**Bedrock geology (50k)**	6	0	3	4	-
68	**15.9**	**Bedrock permeability (50k)**	Identified (within 50m)				

69	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
70	16.1	BGS Boreholes	0	0	0	-	-
Page	Section	Natural ground subsidence					
71	17.1	Shrink swell clays	Very low (within 50m)				
72	17.2	Running sands	Moderate (within 50m)				
74	17.3	Compressible deposits	Negligible (within 50m)				
75	17.4	Collapsible deposits	Very low (within 50m)				
76	17.5	Landslides	Moderate (within 50m)				
78	17.6	Ground dissolution of soluble rocks	Negligible (within 50m)				
Page	Section	Mining, ground workings and natural cavities	On site	0-50m	50-250m	250-500m	500-2000m
79	18.1	Natural cavities	0	0	0	0	-
80	18.2	BritPits	0	0	0	2	-
80	18.3	Surface ground workings	4	4	19	-	-
81	18.4	Underground workings	0	0	0	0	0
82	18.5	Historical Mineral Planning Areas	0	0	0	0	-
82	18.6	Non-coal mining	2	0	1	0	3
83	18.7	Mining cavities	0	0	0	0	0
83	18.8	JPB mining areas	None (within 0m)				
83	18.9	Coal mining	None (within 0m)				
83	18.10	Brine areas	None (within 0m)				
83	18.11	Gypsum areas	None (within 0m)				
84	18.12	Tin mining	None (within 0m)				
84	18.13	Clay mining	None (within 0m)				
Page	Section	Radon					
85	19.1	Radon	Less than 1% (within 0m)				
Page	Section	Soil chemistry	On site	0-50m	50-250m	250-500m	500-2000m
87	20.1	BGS Estimated Background Soil Chemistry	11	4	-	-	-
88	20.2	BGS Estimated Urban Soil Chemistry	0	0	-	-	-

88	20.3	BGS Measured Urban Soil Chemistry	0	0	-	-	-

Page	Section	Railway infrastructure and projects	On site	0-50m	50-250m	250-500m	500-2000m
89	21.1	Underground railways (London)	0	0	0	-	-
89	21.2	Underground railways (Non-London)	0	0	0	-	-
89	21.3	Railway tunnels	0	0	0	-	-
89	21.4	Historical railway and tunnel features	0	0	0	-	-
89	21.5	Royal Mail tunnels	0	0	0	-	-
90	21.6	Historical railways	0	0	0	-	-
90	21.7	Railways	0	0	0	-	-
90	21.8	Crossrail 1	0	0	0	0	-
90	21.9	Crossrail 2	0	0	0	0	-
90	21.10	HS2	0	0	0	0	-

Recent aerial photograph



Capture Date: 01/06/2021

Site Area: 2.45ha

Recent site history - 2016 aerial photograph

Capture Date: 13/06/2016

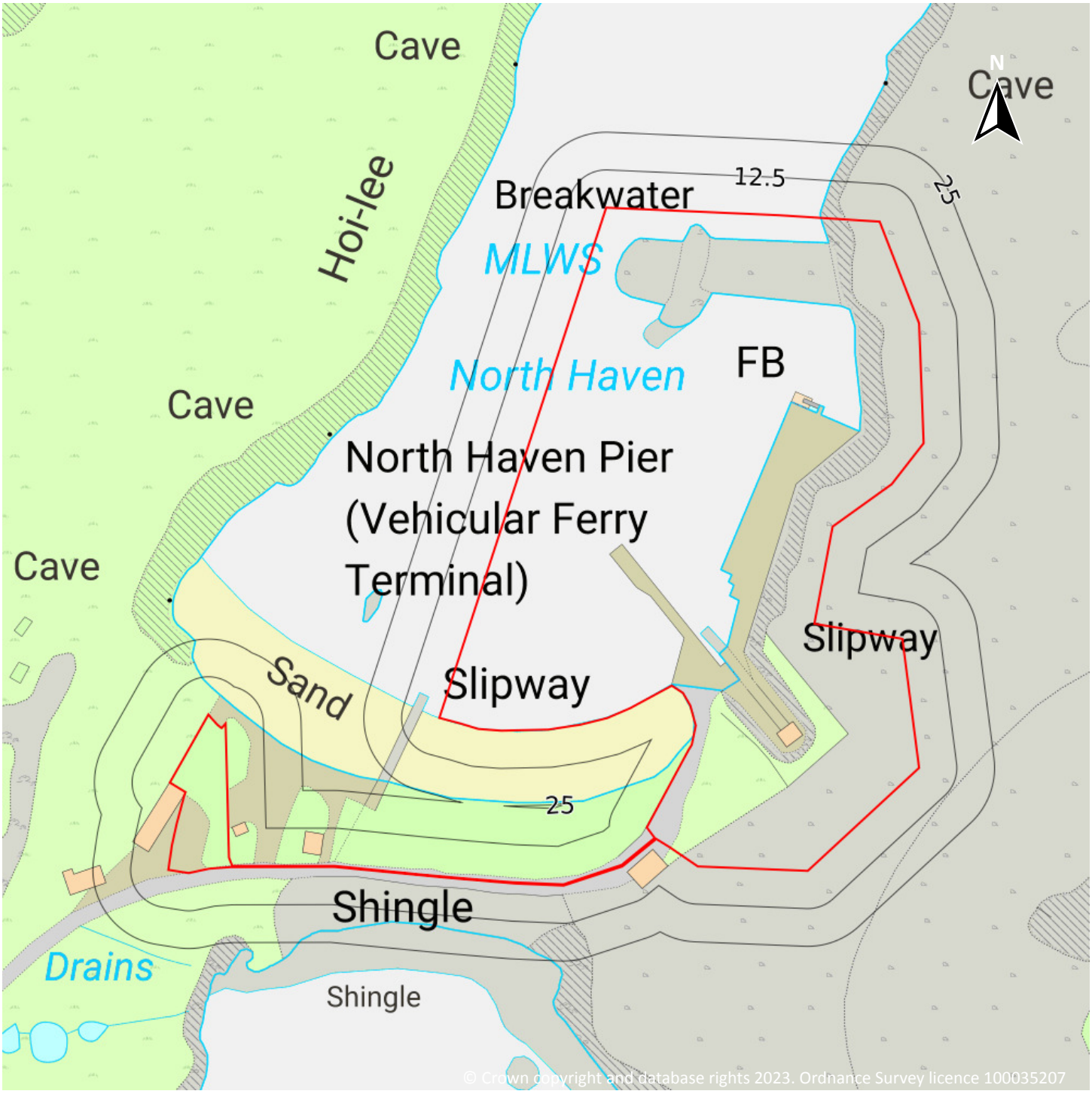
Site Area: 2.45ha

Recent site history - 2008 aerial photograph

Capture Date: 09/05/2008

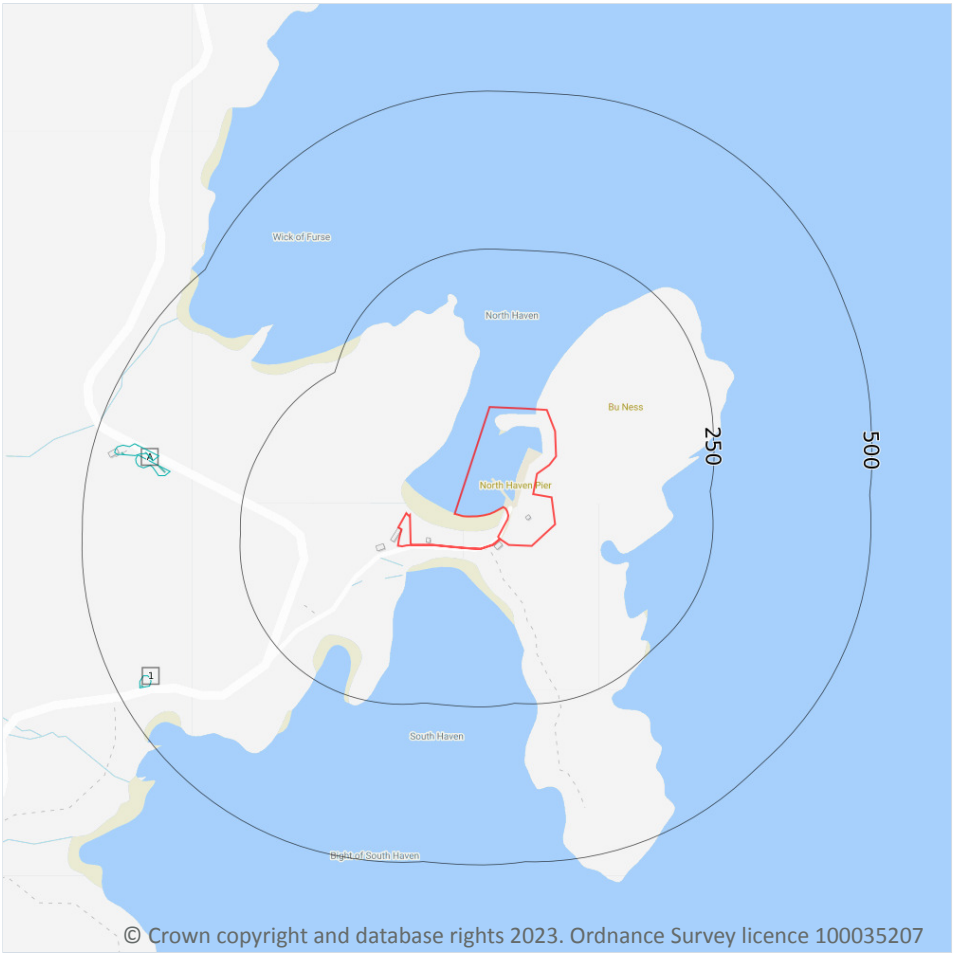
Site Area: 2.45ha

OS MasterMap site plan



Site Area: 2.45ha

1 Past land use



Site Outline

Search buffers in metres (m)

Historical industrial land uses

1.1 Historical industrial land uses

Records within 500m	3

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 11**

ID	Location	Land use	Dates present	Group ID
A	372m W	Unspecified Quarry	1900	1293988

ID	Location	Land use	Dates present	Group ID
A	396m W	Unspecified Disused Quarry	1973	1294000
1	445m SW	Unspecified Disused Quarry	1973	1294001

This data is sourced from Ordnance Survey / Groundsure.

1.2 Historical tanks

Records within 500m	0

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'.

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.

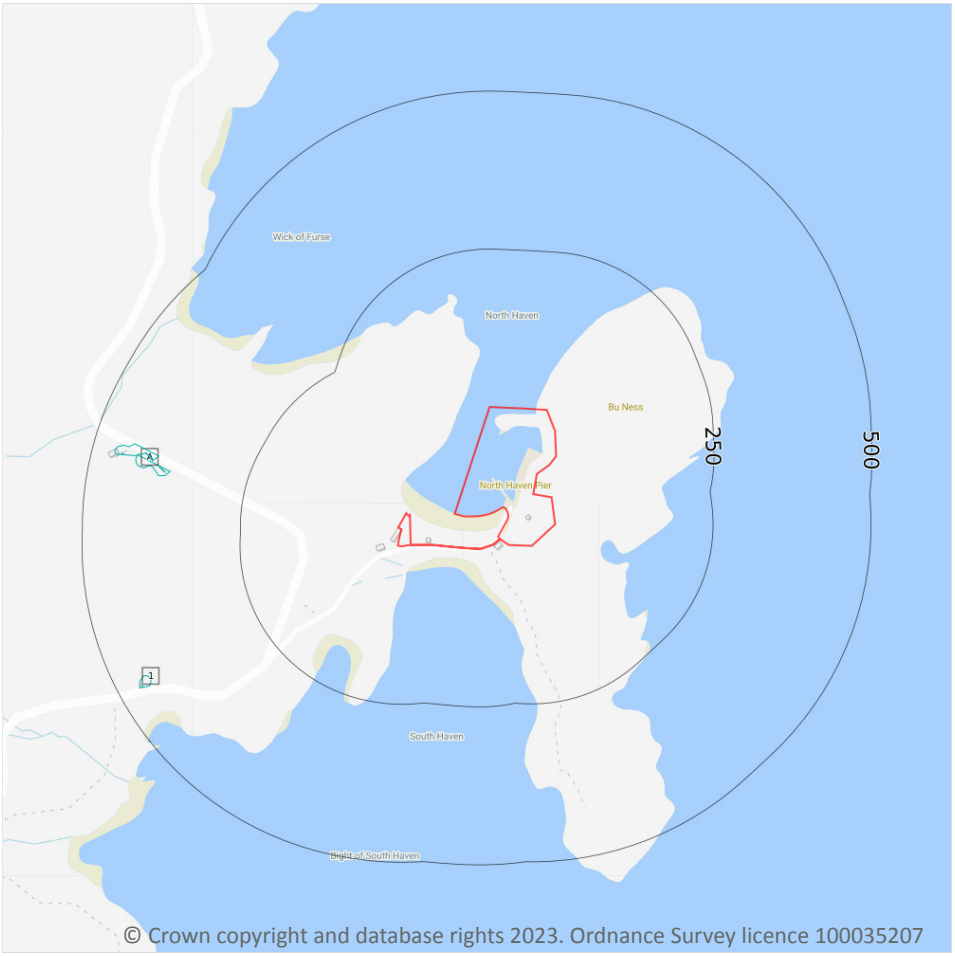
1.6 Historical military land

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

2.1 Historical industrial land uses

Records within 500m	3

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 14**

ID	Location	Land Use	Date	Group ID
A	372m W	Unspecified Quarry	1900	1293988
A	396m W	Unspecified Disused Quarry	1973	1294000
1	445m SW	Unspecified Disused Quarry	1973	1294001

This data is sourced from Ordnance Survey / Groundsure.

2.2 Historical tanks

Records within 500m	0

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'.

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.

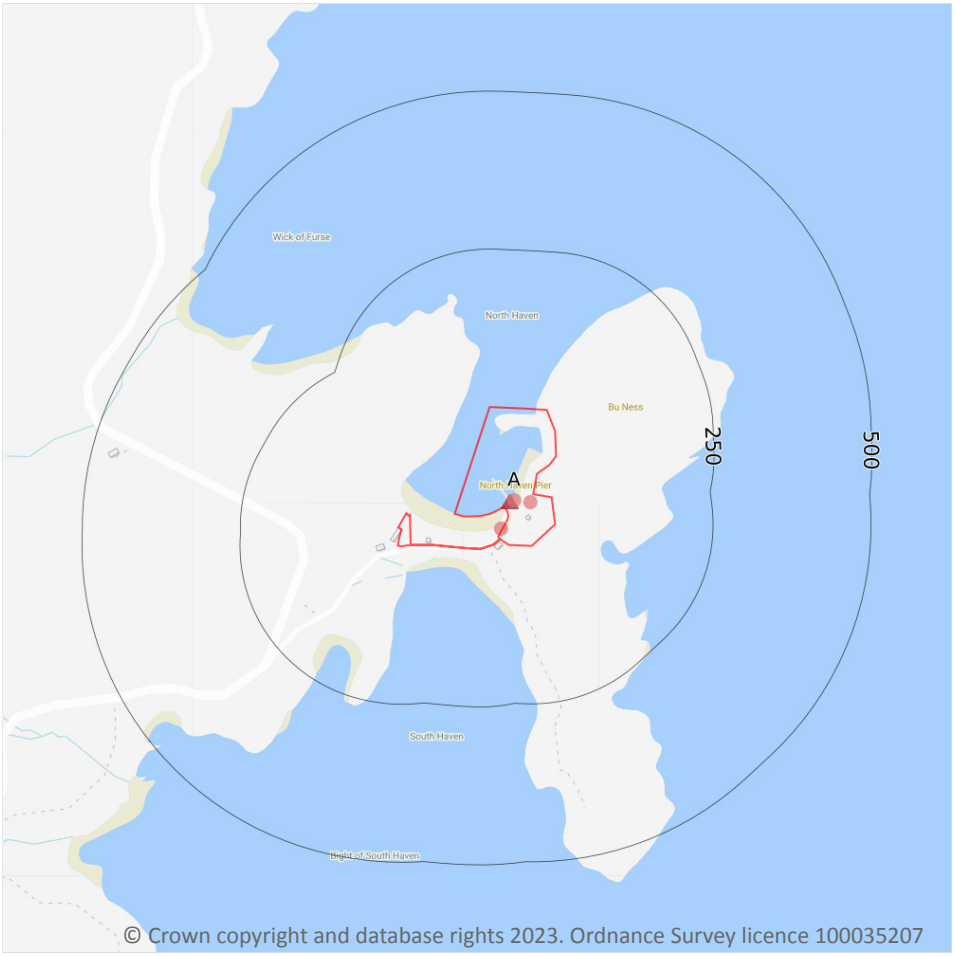
3.5 Historical waste sites

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



Site Outline

Search buffers in metres (m)

Recent industrial land uses

Hazardous substance storage/usage

4.1 Recent industrial land uses

Records within 250m	3

Current potentially contaminative industrial sites.

Features are displayed on the Current industrial land use map on **page 17**

ID	Location	Company	Address	Activity	Category
A	**On site**	**Fair Isle Shetland Ferry Terminal**	**Shetland, ZE2**	**Ferries and Ferry Terminals**	**Water**
A	**On site**	**Slipway**	**Shetland, ZE2**	**Moorings and Unloading Facilities**	**Water**

ID	Location	Company	Address	Activity	Category
A	2m S	Fair Isle Shetland Ferry Terminal	Shetland, ZE2	Ferries and Ferry Terminals	Water

This data is sourced from Ordnance Survey.

4.2 Current or recent petrol stations

Records within 500m	**0**

Open, closed, under development and obsolete petrol stations.

This data is sourced from Experian.

4.3 Electricity cables

Records within 500m	**0**

High voltage underground electricity transmission cables.

This data is sourced from National Grid.

4.4 Gas pipelines

Records within 500m	**0**

High pressure underground gas transmission pipelines.

This data is sourced from National Grid.

4.5 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.

4.6 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.

4.7 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.

4.8 Hazardous substance storage/usage

Records within 500m	1

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.

Features are displayed on the Current industrial land use map on **page 17**

ID	Location	Details	
A	**On site**	**Application reference number: No Details** **Application status: Historical Consent** **Application date: No Details** **Address: Shetland Islands Council, Fair Isle Pier, Fair Isle Pier, Fair Isle, Shetland Islands, Scotland**	**Details: No Details** **Enforcement: No Details** **Date of enforcement: No Details** **Comment: No Details**

This data is sourced from Local Authority records.

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

Records within 500m	0

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

This data is sourced from the Scottish Environment Protection Agency.

4.10 Part B Authorisations

Records within 500m	0

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

This data is sourced from the Scottish Environment Protection Agency.

4.11 Pollution inventory substances

Records within 500m	0

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.

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

4.12 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.

4.13 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

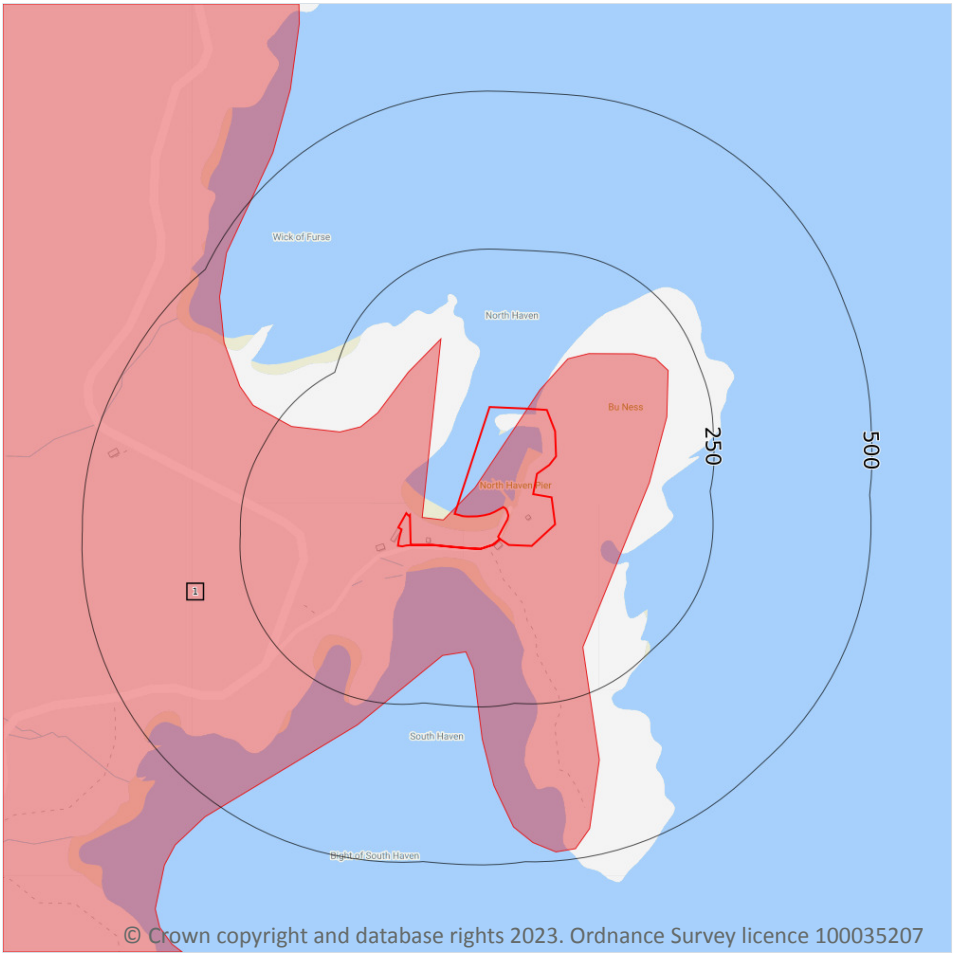
5.1 Superficial aquifer

Records within 500m	0

Records of groundwater classification within superficial geology.

This data is sourced from the British Geological Survey.

Bedrock aquifer



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 **1**

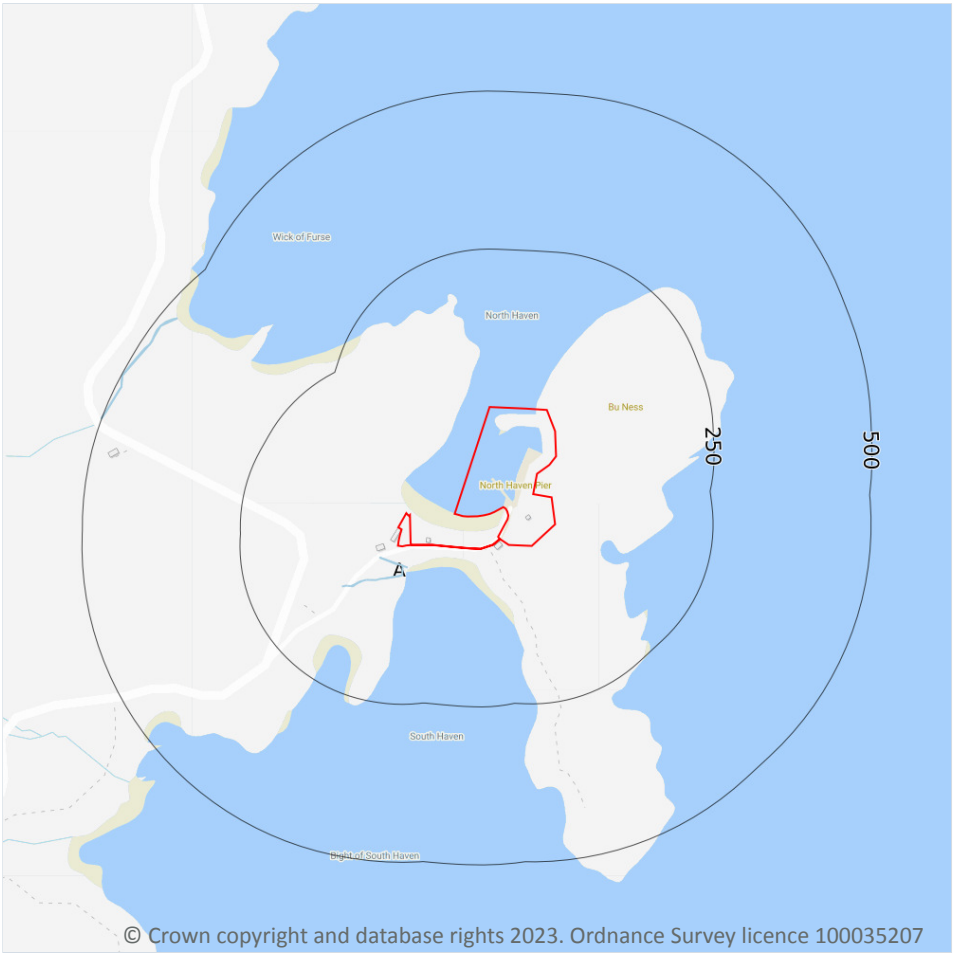
Records of groundwater classification within bedrock geology.

Features are displayed on the Bedrock aquifer map on **page 22**

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 yields small amounts of groundwater.**	**MIDDLE OLD RED SANDSTONE (UNDIFFERENTIATED)**

This data is sourced from the British Geological Survey.

6 Hydrology



Site Outline

Search buffers in metres (m)

Water Network (OS MasterMap)

Surface water features (wider than 5m)

Surface water features (narrower than 5m)

6.1 Water Network (OS MasterMap)

Records within 250m	11

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 23**

ID	Location	Type of water feature	Ground level	Permanence	Name
A	28m SW	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
A	30m SW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
A	30m SW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
A	55m SW	Lake, loch or reservoir.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
A	60m SW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
A	64m SW	Lake, loch or reservoir.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
A	71m SW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
A	73m SW	Lake, loch or reservoir.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
A	79m SW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
A	98m SW	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
A	102m SW	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	**3**

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 23**

This data is sourced from the Ordnance Survey.

7 River flooding

7.1 River flooding

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

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.

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.

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

9.1 Surface water flooding

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

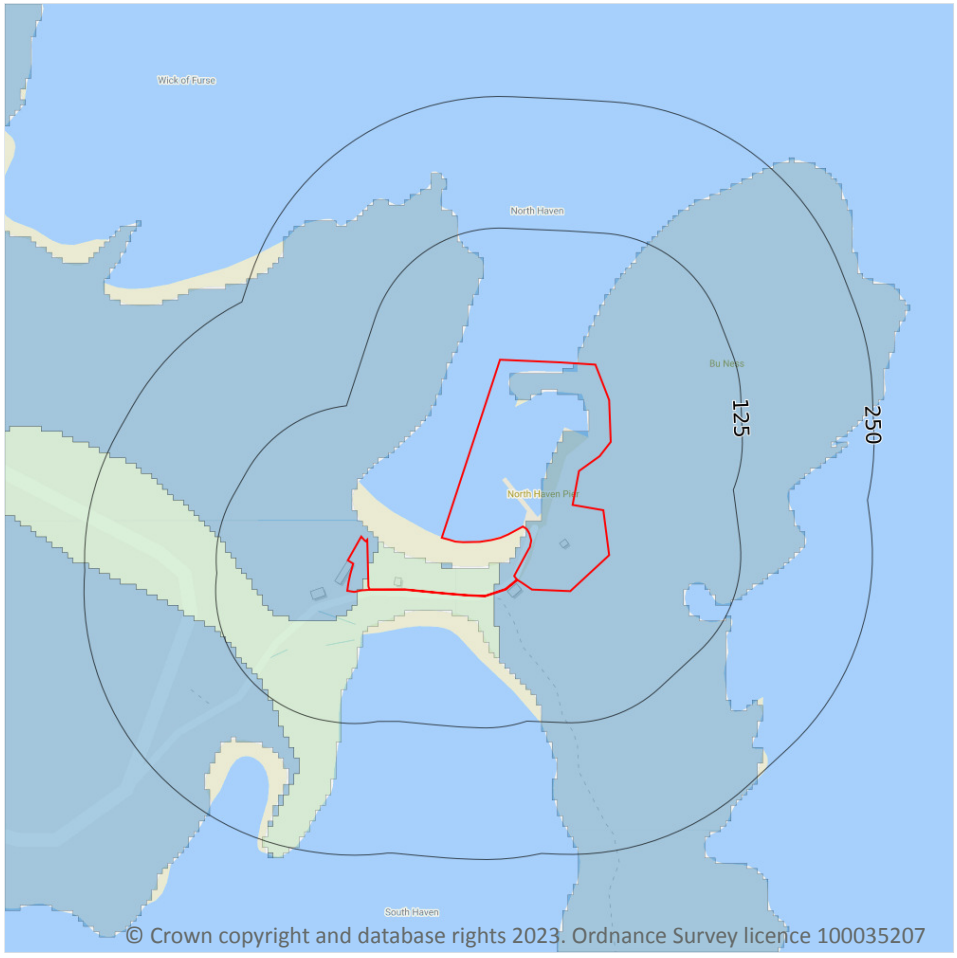
Ambiental Risk Analytics surface water (pluvial) FloodMap identifies areas likely to flood as a result of extreme rainfall events, i.e. land naturally vulnerable to surface water ponding or flooding. This data set was produced by simulating 1 in 30 year, 1 in 100 year, 1 in 250 year and 1 in 1,000 year 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.

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	Negligible
1 in 250 year	Negligible
1 in 100 year	Negligible
1 in 30 year	Negligible

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

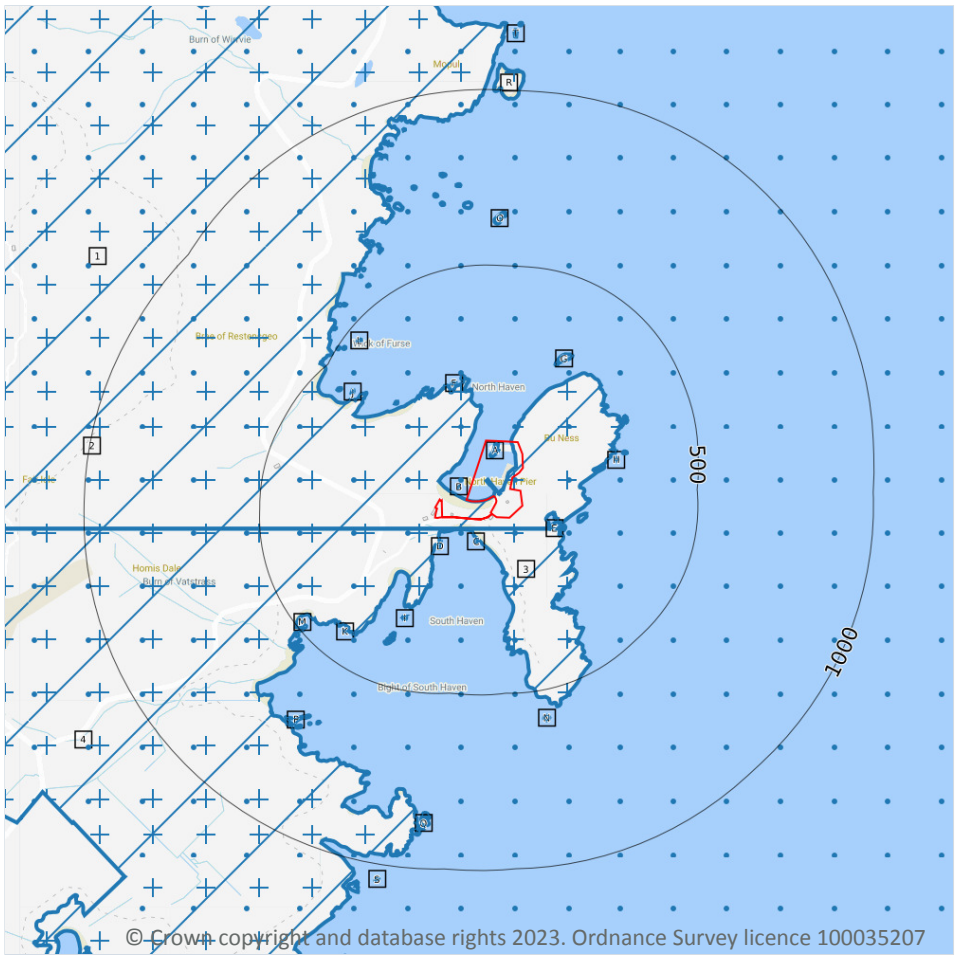
Highest risk on site	**Low**
Highest risk within 50m	**Low**

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 29**

This data is sourced from Ambiental Risk Analytics.

11 Environmental designations



Site Outline

Search buffers in metres (m)

Sites of Special Scientific Interest (SSSI)

Special Areas of Conservation (SAC)

Special Protection Areas (SPA)

11.1 Sites of Special Scientific Interest (SSSI)

Records within 2000m	**131**

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 30**

ID	Location	Name	Data source
1	**On site**	**Fair Isle**	**Scottish Natural Heritage**

ID	Location	Name	Data source
A	**On site**	**Fair Isle**	**Scottish Natural Heritage**
4	26m S	Fair Isle	Scottish Natural Heritage
B	31m W	Fair Isle	Scottish Natural Heritage
C	57m S	Fair Isle	Scottish Natural Heritage
D	74m SW	Fair Isle	Scottish Natural Heritage
E	108m SE	Fair Isle	Scottish Natural Heritage
E	122m SE	Fair Isle	Scottish Natural Heritage
E	163m SE	Fair Isle	Scottish Natural Heritage
F	184m NW	Fair Isle	Scottish Natural Heritage
F	222m NW	Fair Isle	Scottish Natural Heritage
G	244m NE	Fair Isle	Scottish Natural Heritage
H	262m E	Fair Isle	Scottish Natural Heritage
F	274m NW	Fair Isle	Scottish Natural Heritage
H	286m E	Fair Isle	Scottish Natural Heritage
I	293m SW	Fair Isle	Scottish Natural Heritage
H	304m NE	Fair Isle	Scottish Natural Heritage
I	348m SW	Fair Isle	Scottish Natural Heritage
J	392m NW	Fair Isle	Scottish Natural Heritage
K	410m SW	Fair Isle	Scottish Natural Heritage
J	421m NW	Fair Isle	Scottish Natural Heritage
L	456m NW	Fair Isle	Scottish Natural Heritage
M	479m SW	Fair Isle	Scottish Natural Heritage
L	479m NW	Fair Isle	Scottish Natural Heritage
M	480m SW	Fair Isle	Scottish Natural Heritage
L	493m NW	Fair Isle	Scottish Natural Heritage
M	513m SW	Fair Isle	Scottish Natural Heritage
L	534m NW	Fair Isle	Scottish Natural Heritage
L	552m NW	Fair Isle	Scottish Natural Heritage

ID	Location	Name	Data source
L	555m NW	Fair Isle	Scottish Natural Heritage
L	565m NW	Fair Isle	Scottish Natural Heritage
N	574m S	Fair Isle	Scottish Natural Heritage
L	586m NW	Fair Isle	Scottish Natural Heritage
L	596m NW	Fair Isle	Scottish Natural Heritage
L	615m NW	Fair Isle	Scottish Natural Heritage
O	618m N	Fair Isle	Scottish Natural Heritage
L	631m NW	Fair Isle	Scottish Natural Heritage
L	642m NW	Fair Isle	Scottish Natural Heritage
L	659m NW	Fair Isle	Scottish Natural Heritage
O	664m N	Fair Isle	Scottish Natural Heritage
P	667m SW	Fair Isle	Scottish Natural Heritage
P	668m SW	Fair Isle	Scottish Natural Heritage
O	681m N	Fair Isle	Scottish Natural Heritage
P	685m SW	Fair Isle	Scottish Natural Heritage
O	699m N	Fair Isle	Scottish Natural Heritage
P	704m SW	Fair Isle	Scottish Natural Heritage
O	709m N	Fair Isle	Scottish Natural Heritage
O	728m N	Fair Isle	Scottish Natural Heritage
O	736m N	Fair Isle	Scottish Natural Heritage
O	744m N	Fair Isle	Scottish Natural Heritage
O	761m N	Fair Isle	Scottish Natural Heritage
O	762m N	Fair Isle	Scottish Natural Heritage
O	770m N	Fair Isle	Scottish Natural Heritage
Q	840m S	Fair Isle	Scottish Natural Heritage
O	856m N	Fair Isle	Scottish Natural Heritage
O	856m N	Fair Isle	Scottish Natural Heritage
O	883m N	Fair Isle	Scottish Natural Heritage

ID	Location	Name	Data source
O	886m N	Fair Isle	Scottish Natural Heritage
O	892m N	Fair Isle	Scottish Natural Heritage
O	914m N	Fair Isle	Scottish Natural Heritage
R	975m N	Fair Isle	Scottish Natural Heritage
S	1038m S	Fair Isle	Scottish Natural Heritage
S	1060m S	Fair Isle	Scottish Natural Heritage
T	1153m N	Fair Isle	Scottish Natural Heritage
T	1185m N	Fair Isle	Scottish Natural Heritage
-	1296m S	Fair Isle	Scottish Natural Heritage
-	1325m N	Fair Isle	Scottish Natural Heritage
-	1337m S	Fair Isle	Scottish Natural Heritage
-	1406m S	Fair Isle	Scottish Natural Heritage
-	1455m N	Fair Isle	Scottish Natural Heritage
-	1462m N	Fair Isle	Scottish Natural Heritage
-	1472m NW	Fair Isle	Scottish Natural Heritage
-	1479m S	Fair Isle	Scottish Natural Heritage
-	1482m N	Fair Isle	Scottish Natural Heritage
-	1484m N	Fair Isle	Scottish Natural Heritage
-	1496m N	Fair Isle	Scottish Natural Heritage
-	1502m N	Fair Isle	Scottish Natural Heritage
-	1521m NW	Fair Isle	Scottish Natural Heritage
-	1556m NW	Fair Isle	Scottish Natural Heritage
-	1570m N	Fair Isle	Scottish Natural Heritage
-	1572m N	Fair Isle	Scottish Natural Heritage
-	1573m NW	Fair Isle	Scottish Natural Heritage
-	1582m NW	Fair Isle	Scottish Natural Heritage
-	1583m N	Fair Isle	Scottish Natural Heritage
-	1586m N	Fair Isle	Scottish Natural Heritage

ID	Location	Name	Data source
-	1593m NW	Fair Isle	Scottish Natural Heritage
-	1597m SW	Fair Isle	Scottish Natural Heritage
-	1597m SW	Fair Isle	Scottish Natural Heritage
-	1601m N	Fair Isle	Scottish Natural Heritage
-	1609m SW	Fair Isle	Scottish Natural Heritage
-	1611m NW	Fair Isle	Scottish Natural Heritage
-	1615m SW	Fair Isle	Scottish Natural Heritage
-	1615m NW	Fair Isle	Scottish Natural Heritage
-	1619m SW	Fair Isle	Scottish Natural Heritage
-	1626m SW	Fair Isle	Scottish Natural Heritage
-	1634m S	Fair Isle	Scottish Natural Heritage
-	1639m N	Fair Isle	Scottish Natural Heritage
-	1642m N	Fair Isle	Scottish Natural Heritage
-	1656m N	Fair Isle	Scottish Natural Heritage
-	1660m N	Fair Isle	Scottish Natural Heritage
-	1663m N	Fair Isle	Scottish Natural Heritage
-	1665m N	Fair Isle	Scottish Natural Heritage
-	1674m SW	Fair Isle	Scottish Natural Heritage
-	1678m N	Fair Isle	Scottish Natural Heritage
-	1681m SW	Fair Isle	Scottish Natural Heritage
-	1688m NW	Fair Isle	Scottish Natural Heritage
-	1701m N	Fair Isle	Scottish Natural Heritage
-	1718m NW	Fair Isle	Scottish Natural Heritage
-	1728m NW	Fair Isle	Scottish Natural Heritage
-	1730m SW	Fair Isle	Scottish Natural Heritage
-	1733m SW	Fair Isle	Scottish Natural Heritage
-	1738m NW	Fair Isle	Scottish Natural Heritage
-	1744m N	Fair Isle	Scottish Natural Heritage

ID	Location	Name	Data source
-	1763m SW	Fair Isle	Scottish Natural Heritage
-	1768m NW	Fair Isle	Scottish Natural Heritage
-	1806m NW	Fair Isle	Scottish Natural Heritage
-	1826m NW	Fair Isle	Scottish Natural Heritage
-	1847m NW	Fair Isle	Scottish Natural Heritage
-	1852m W	Fair Isle	Scottish Natural Heritage
-	1871m W	Fair Isle	Scottish Natural Heritage
-	1881m NW	Fair Isle	Scottish Natural Heritage
-	1890m W	Fair Isle	Scottish Natural Heritage
-	1902m SW	Fair Isle	Scottish Natural Heritage
-	1920m W	Fair Isle	Scottish Natural Heritage
-	1922m SW	Fair Isle	Scottish Natural Heritage
-	1950m NW	Fair Isle	Scottish Natural Heritage
-	1960m W	Fair Isle	Scottish Natural Heritage
-	1973m SW	Fair Isle	Scottish Natural Heritage
-	1977m NW	Fair Isle	Scottish Natural Heritage
-	1989m NW	Fair Isle	Scottish Natural Heritage
-	1993m NW	Fair Isle	Scottish Natural Heritage

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	**128**

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.

Features are displayed on the Environmental designations map on **page 30**

ID	Location	Name	Features of interest	Habitat description	Data source
2	**On site**	**Fair Isle**	**Vegetated sea cliffs; Dry heaths.**	**Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens**	**Scottish Natural Heritage**
A	**On site**	**Fair Isle**	**Vegetated sea cliffs; Dry heaths.**	**Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens**	**Scottish Natural Heritage**
B	31m W	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
C	57m S	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
D	74m SW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
E	163m SE	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
F	184m NW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage

ID	Location	Name	Features of interest	Habitat description	Data source
F	222m NW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
G	244m NE	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
H	262m E	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
F	274m NW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
H	286m E	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
I	293m SW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
H	304m NE	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
I	348m SW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage

ID	Location	Name	Features of interest	Habitat description	Data source
J	392m NW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
K	410m SW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
J	421m NW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
L	456m NW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
M	479m SW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
L	479m NW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
M	480m SW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
L	493m NW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage

ID	Location	Name	Features of interest	Habitat description	Data source
M	513m SW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
L	534m NW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
L	552m NW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
L	555m NW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
L	565m NW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
N	574m S	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
L	586m NW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
L	596m NW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage

ID	Location	Name	Features of interest	Habitat description	Data source
L	615m NW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
O	618m N	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
L	631m NW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
L	642m NW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
L	659m NW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
O	664m N	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
P	667m SW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
P	668m SW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage

ID	Location	Name	Features of interest	Habitat description	Data source
O	681m N	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
P	685m SW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
O	699m N	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
P	704m SW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
O	709m N	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
O	728m N	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
O	736m N	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
O	744m N	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage

ID	Location	Name	Features of interest	Habitat description	Data source
O	761m N	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
O	762m N	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
O	770m N	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
Q	840m S	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
O	856m N	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
O	856m N	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
O	883m N	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
O	886m N	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage

ID	Location	Name	Features of interest	Habitat description	Data source
O	892m N	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
O	914m N	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
R	975m N	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
S	1038m S	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
S	1060m S	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
T	1153m N	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
T	1185m N	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1296m S	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage

ID	Location	Name	Features of interest	Habitat description	Data source
-	1325m N	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1337m S	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1406m S	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1455m N	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1462m N	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1472m NW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1479m S	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1482m N	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage

ID	Location	Name	Features of interest	Habitat description	Data source
-	1484m N	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1496m N	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1502m N	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1521m NW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1556m NW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1570m N	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1572m N	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1573m NW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage

ID	Location	Name	Features of interest	Habitat description	Data source
-	1582m NW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1583m N	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1586m N	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1593m NW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1597m SW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1597m SW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1601m N	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1609m SW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage

ID	Location	Name	Features of interest	Habitat description	Data source
-	1611m NW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1615m SW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1615m NW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1619m SW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1626m SW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1634m S	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1639m N	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1642m N	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage

ID	Location	Name	Features of interest	Habitat description	Data source
-	1656m N	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1660m N	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1663m N	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1665m N	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1674m SW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1678m N	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1681m SW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1688m NW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage

ID	Location	Name	Features of interest	Habitat description	Data source
-	1701m N	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1718m NW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1728m NW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1730m SW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1733m SW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1738m NW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1744m N	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1763m SW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage

ID	Location	Name	Features of interest	Habitat description	Data source
-	1768m NW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1806m NW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1826m NW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1847m NW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1852m W	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1871m W	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1881m NW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1890m W	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage

ID	Location	Name	Features of interest	Habitat description	Data source
-	1902m SW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1920m W	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1922m SW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1950m NW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1960m W	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1973m SW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1977m NW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage
-	1989m NW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage

ID	Location	Name	Features of interest	Habitat description	Data source
-	1993m NW	Fair Isle	Vegetated sea cliffs; Dry heaths.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water); Shingle, Sea cliffs, Islets; Heath, Scrub, Maquis and Garrigue, Phygrana; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens	Scottish Natural Heritage

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

11.4 Special Protection Areas (SPA)

Records within 2000m **2**

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.

Features are displayed on the Environmental designations map on **page 30**

ID	Location	Name	Species of interest	Habitat description	Data source
3	**On site**	**Fair Isle**	**Northern fulmar; Northern gannet; European shag; Arctic skua; Great skua; Black-legged kittiwake; Arctic tern; Common guillemot; Razorbill; Atlantic puffin; Fair Isle wren**	**Heath, Scrub, Maquis and Garrigue, Phygrana; Dry grassland, Steppes; Bogs, Marshes, Water fringed vegetation, Fens; Inland water bodies (Standing water, Running water); Humid grassland, Mesophile grassland; Shingle, Sea cliffs, Islets; Marine areas, Sea inlets**	**Scottish Natural Heritage**
-	1665m N	Fair Isle	Northern fulmar; Northern gannet; European shag; Arctic skua; Great skua; Black-legged kittiwake; Arctic tern; Common guillemot; Razorbill; Atlantic puffin; Fair Isle wren	Heath, Scrub, Maquis and Garrigue, Phygrana; Dry grassland, Steppes; Bogs, Marshes, Water fringed vegetation, Fens; Inland water bodies (Standing water, Running water); Humid grassland, Mesophile grassland; Shingle, Sea cliffs, Islets; Marine areas, Sea inlets	Scottish Natural Heritage

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	0

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.

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.

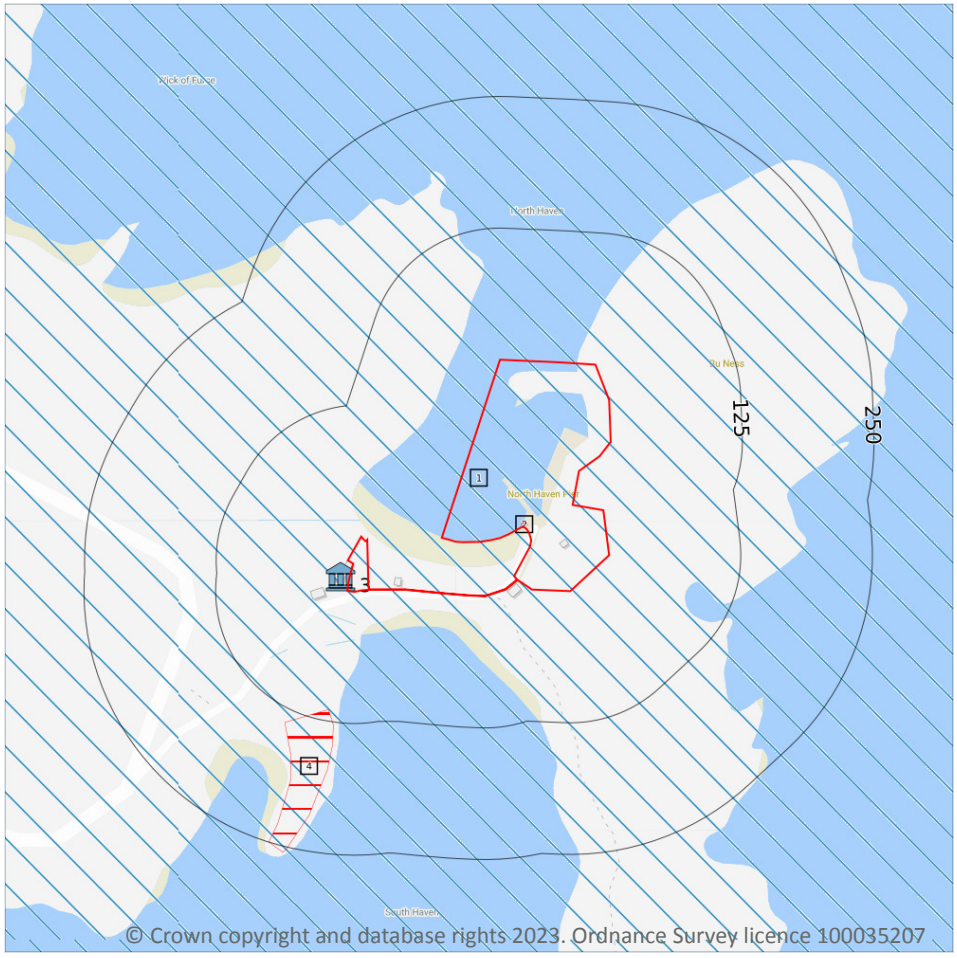
11.10 Marine Conservation Zones

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	1

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.

Features are displayed on the Visual and cultural designations map on **page 55**

ID	Location	NAME	Data Source
1	**On site**	**Shetland**	**Scottish Natural Heritage**

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	1

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 55**

ID	Location	Name	Grade	Reference Number	Listed date
3	9m SW	Storehouse, North Haven, Fair Isle, Shetland Islands	C	391120	26/03/1997

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	2

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 55**

ID	Location	Ancient monument name	Reference number
2	**On site**	**North Haven, crane, Fair Isle**	**-**
4	114m SW	Landberg,fort,South Haven,Fair Isle	-

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

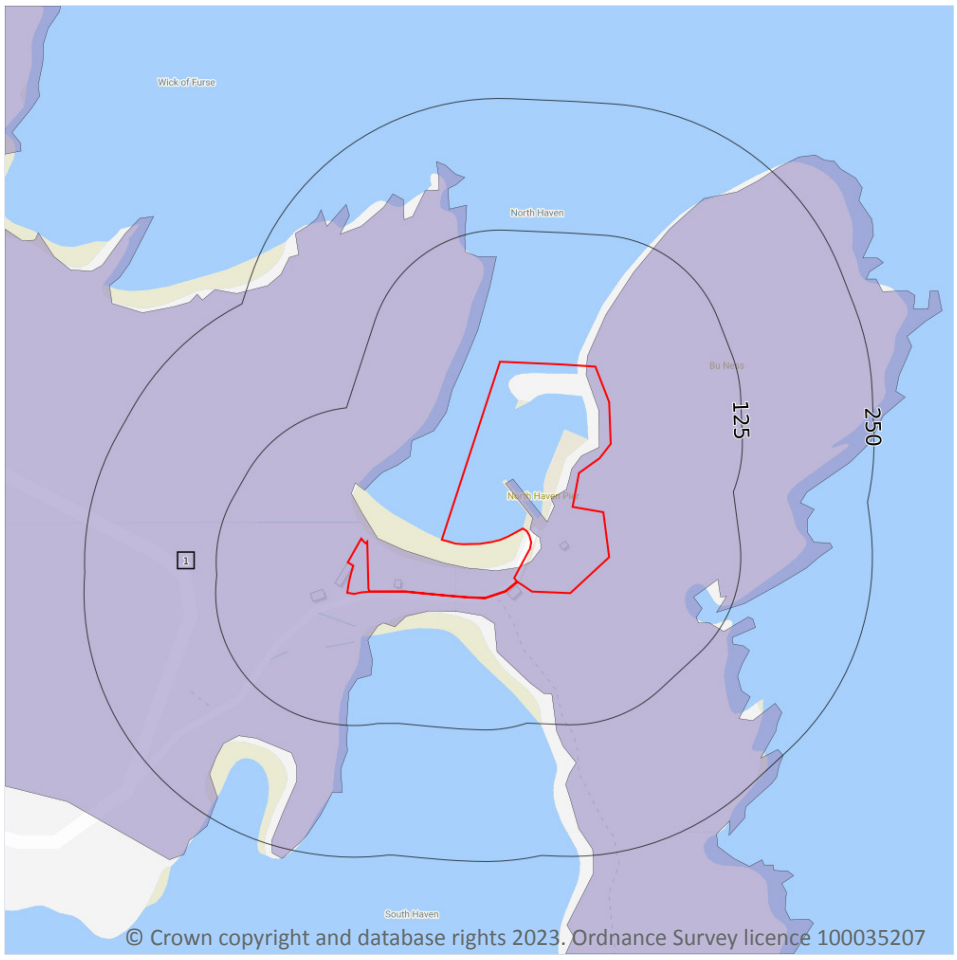
12.7 Registered Parks and Gardens

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



Site Outline

Search buffers in metres (m)

- Grade 1 - excellent quality
- Grade 2 - very good quality
- Grade 3 - good to moderate quality
- Grade 4 - good quality
- Grade 5 - moderate quality
- Grade 6 - poor quality
- Grade 7 - very poor quality

13.1 Agricultural Land Classification

Records within 250m	1

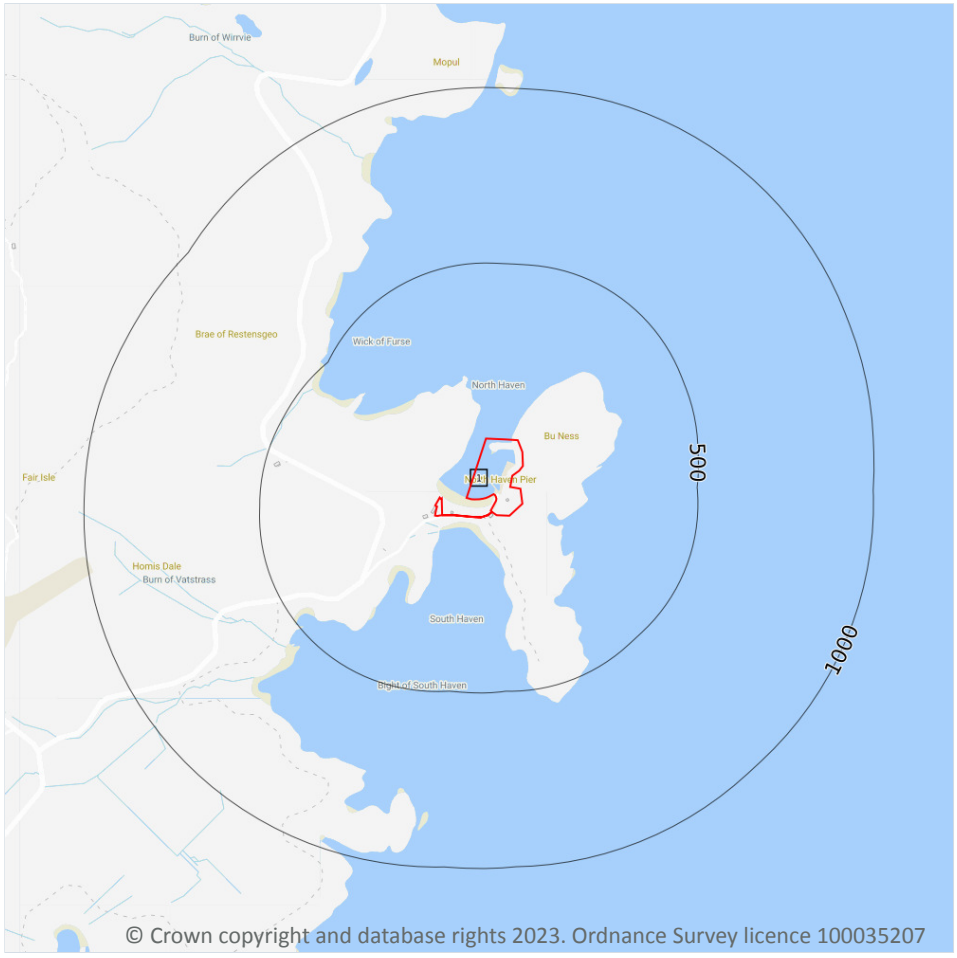
Classification of the quality of agricultural land taking into consideration multiple factors inclusing climate, physical geography and soil properties. It should be noted that the categories for the grading of agricultural land are not consistent across England, Wales and Scotland.

Features are displayed on the Agricultural designations map on **page 58**

ID	Location	Classification	Description
1	**On site**	**Grade 6.3**	**Land Suited only to Improved Grassland and Rough Grazings**

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	1

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 59**

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	**On site**	**No coverage**	**No coverage**	**No coverage**	**No coverage**	**NoCov**

This data is sourced from the British Geological Survey.

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

14.2 Artificial and made ground (10k)

Records within 500m	0

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.

This data is sourced from the British Geological Survey.

Geology 1:10,000 scale - Superficial

14.3 Superficial geology (10k)

Records within 500m	0

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.

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.

Geology 1:10,000 scale - Bedrock

14.5 Bedrock geology (10k)

Records within 500m	0

Bedrock geology at 1:10,000 scale. The main mass of rocks forming the Earth and present everywhere, whether exposed at the surface in outcrops or concealed beneath superficial deposits or water.

This data is sourced from the British Geological Survey.

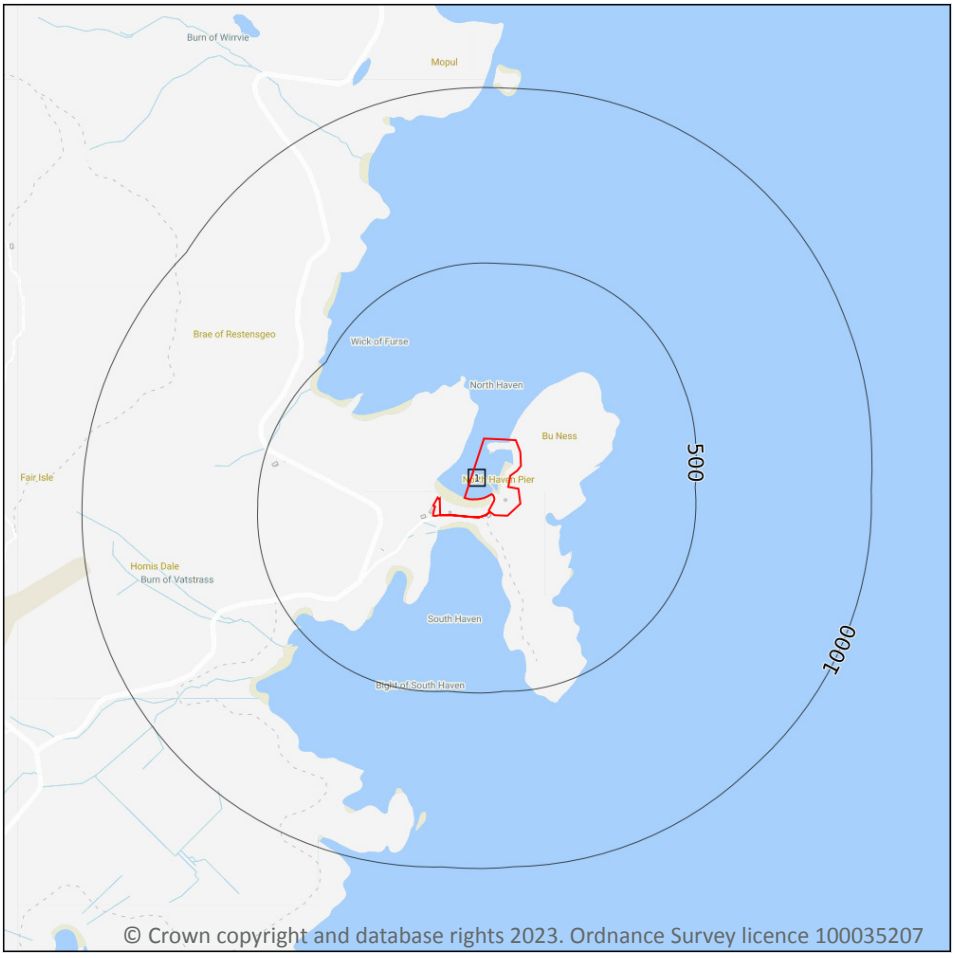
14.6 Bedrock faults and other linear features (10k)

Records within 500m	0

Linear features at the ground or bedrock surface at 1:10,000 scale of six main types; rock, fault, fold axis, mineral vein, alteration area or landform. Features are either observed or inferred, and relate primarily to bedrock.

This data is sourced from the British Geological Survey.

15 Geology 1:50,000 scale - Availability



Site Outline

Search buffers in metres (m)

Geological map tile

15.1 50k Availability

Records within 500m	1

An indication on the coverage of 1:50,000 scale geology data for the site. Either 'Full' or 'No coverage' for each geological theme.

Features are displayed on the Geology 1:50,000 scale - Availability map on **page 63**

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	**On site**	**No coverage**	**Full**	**Full**	**No coverage**	**SC123_124_shetland_south_v4**

This data is sourced from the British Geological Survey.

Geology 1:50,000 scale - Artificial and made ground

15.2 Artificial and made ground (50k)

Records within 500m	0

Details of made, worked, infilled, disturbed and landscaped ground at 1:50,000 scale. Artificial ground can be associated with potentially contaminated material, unpredictable engineering conditions and instability.

This data is sourced from the British Geological Survey.

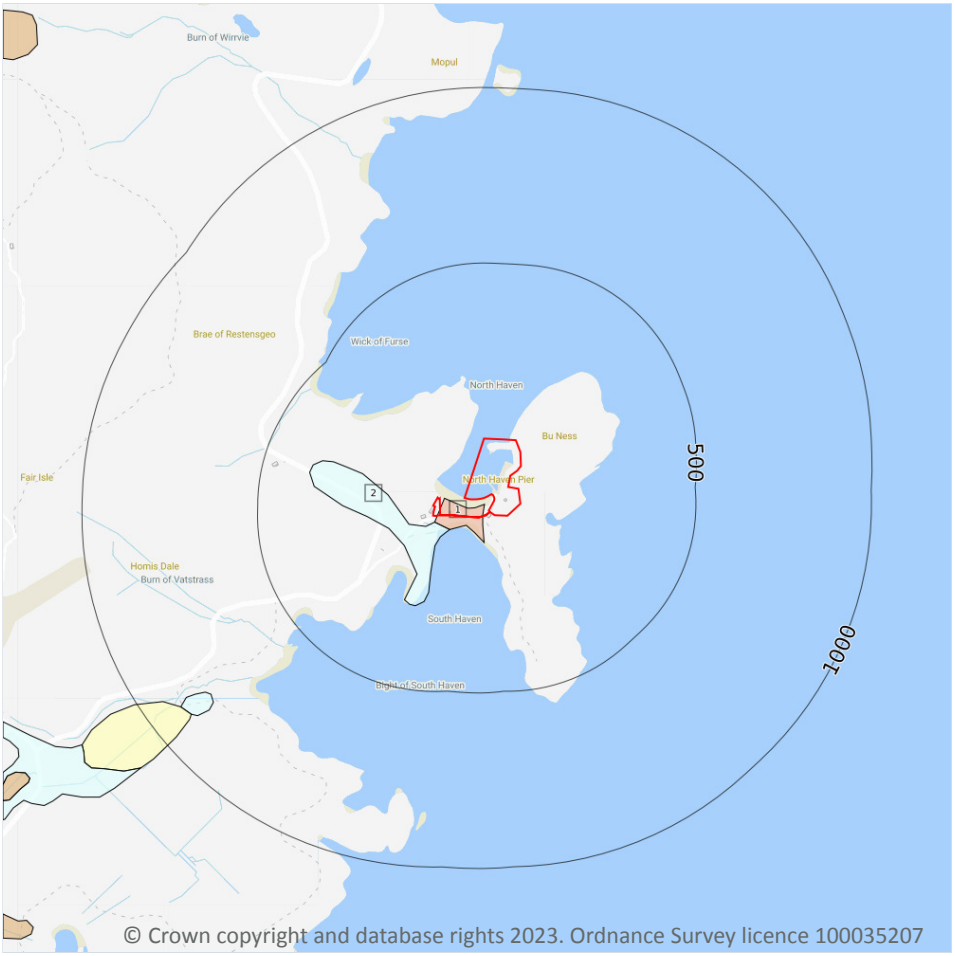
15.3 Artificial ground permeability (50k)

Records within 50m	0

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any artificial deposits (the zone between the land surface and the water table).

This data is sourced from the British Geological Survey.

Geology 1:50,000 scale - Superficial



Site Outline

Search buffers in metres (m)

Landslip (50k)

Superficial geology (50k)
Please see table for more details.

15.4 Superficial geology (50k)

Records within 500m **2**

Superficial geological deposits at 1:50,000 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 1:50,000 scale - Superficial map on **page 65**

ID	Location	LEX Code	Description	Rock description
1	**On site**	**MBD-XVSZ**	**MARINE BEACH DEPOSITS**	**GRAVEL, SAND AND SILT**
2	18m SW	TIMO-DMTN	TILL AND MORAINIC DEPOSITS (UNDIFFERENTIATED)	DIAMICTON

This data is sourced from the British Geological Survey.

15.5 Superficial permeability (50k)

Records within 50m	2

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any superficial deposits (the zone between the land surface and the water table).

Location	Flow type	Maximum permeability	Minimum permeability
On site	**Intergranular**	**Very High**	**Moderate**
18m SW	Mixed	High	Low

This data is sourced from the British Geological Survey.

15.6 Landslip (50k)

Records within 500m	0

Mass movement deposits on BGS geological maps at 1:50,000 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.

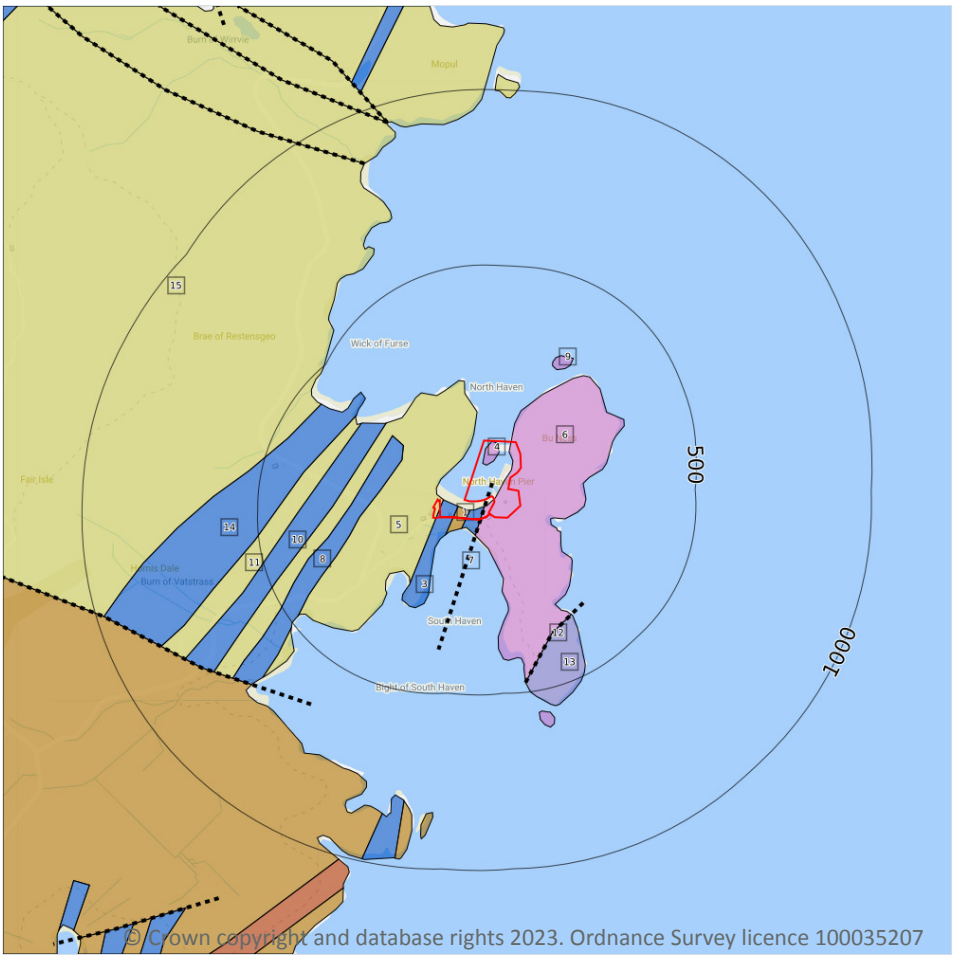
15.7 Landslip permeability (50k)

Records within 50m	0

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any landslip deposits (the zone between the land surface and the water table).

This data is sourced from the British Geological Survey.

Geology 1:50,000 scale - Bedrock



Site Outline

Search buffers in metres (m)

Bedrock faults and other linear features (50k)

Bedrock geology (50k)
Please see table for more details.

15.8 Bedrock geology (50k)

Records within 500m **13**

Bedrock geology at 1:50,000 scale. The main mass of rocks forming the Earth and present everywhere, whether exposed at the surface in outcrops or concealed beneath superficial deposits or water.

Features are displayed on the Geology 1:50,000 scale - Bedrock map on **page 67**

ID	Location	LEX Code	Description	Rock age
1	**On site**	**VAG-SCON**	**VAASETTER SANDSTONE FORMATION - SANDSTONE AND CONGLOMERATE, INTERBEDDED**	-
2	**On site**	**OBG-ARRD**	**OBSERVATORY SANDSTONE FORMATION - ARGILLACEOUS ROCK, DOLOMITIC**	-

ID	Location	LEX Code	Description	Rock age
3	**On site**	**OBG-ARRD**	**OBSERVATORY SANDSTONE FORMATION - ARGILLACEOUS ROCK, DOLOMITIC**	**-**
4	**On site**	**BNG-SDST**	**BU NESS SANDSTONE FORMATION - SANDSTONE**	**-**
5	**On site**	**WAG-SDDS**	**WARD HILL SANDSTONE FORMATION - SANDSTONE AND DOLOMITIC SILTSTONE**	**-**
6	**On site**	**BNG-SDST**	**BU NESS SANDSTONE FORMATION - SANDSTONE**	**-**
8	148m W	WAG-ARRD	WARD HILL SANDSTONE FORMATION - ARGILLACEOUS ROCK, DOLOMITIC	-
9	237m NE	BNG-SDST	BU NESS SANDSTONE FORMATION - SANDSTONE	-
10	241m W	WAG-ARRD	WARD HILL SANDSTONE FORMATION - ARGILLACEOUS ROCK, DOLOMITIC	-
11	303m W	WAG-SDDS	WARD HILL SANDSTONE FORMATION - SANDSTONE AND DOLOMITIC SILTSTONE	-
13	330m SE	BNG-CONG	BU NESS SANDSTONE FORMATION - CONGLOMERATE	-
14	333m W	WAG-ARRD	WARD HILL SANDSTONE FORMATION - ARGILLACEOUS ROCK, DOLOMITIC	-
15	429m NW	WAG-SDDS	WARD HILL SANDSTONE FORMATION - SANDSTONE AND DOLOMITIC SILTSTONE	-

This data is sourced from the British Geological Survey.

15.9 Bedrock permeability (50k)

Records within 50m	**6**

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of bedrock (the zone between the land surface and the water table).

Location	Flow type	Maximum permeability	Minimum permeability
On site	**Fracture**	**High**	**Moderate**
On site	**Fracture**	**Moderate**	**Moderate**
On site	**Fracture**	**Moderate**	**Low**
On site	**Fracture**	**Moderate**	**Low**
On site	**Fracture**	**Moderate**	**Moderate**
On site	**Fracture**	**Moderate**	**Moderate**

This data is sourced from the British Geological Survey.

15.10 Bedrock faults and other linear features (50k)

Records within 500m	**2**

Linear features at the ground or bedrock surface at 1:50,000 scale of six main types; rock, fault, fold axis, mineral vein, alteration area or landform. Features are either observed or inferred, and relate primarily to bedrock.

Features are displayed on the Geology 1:50,000 scale - Bedrock map on **page 67**

ID	Location	Category	Description
7	**On site**	**FAULT**	**Fault, inferred, displacement unknown**
12	324m SE	FAULT	Fault, inferred, displacement unknown

This data is sourced from the British Geological Survey.

16 Boreholes

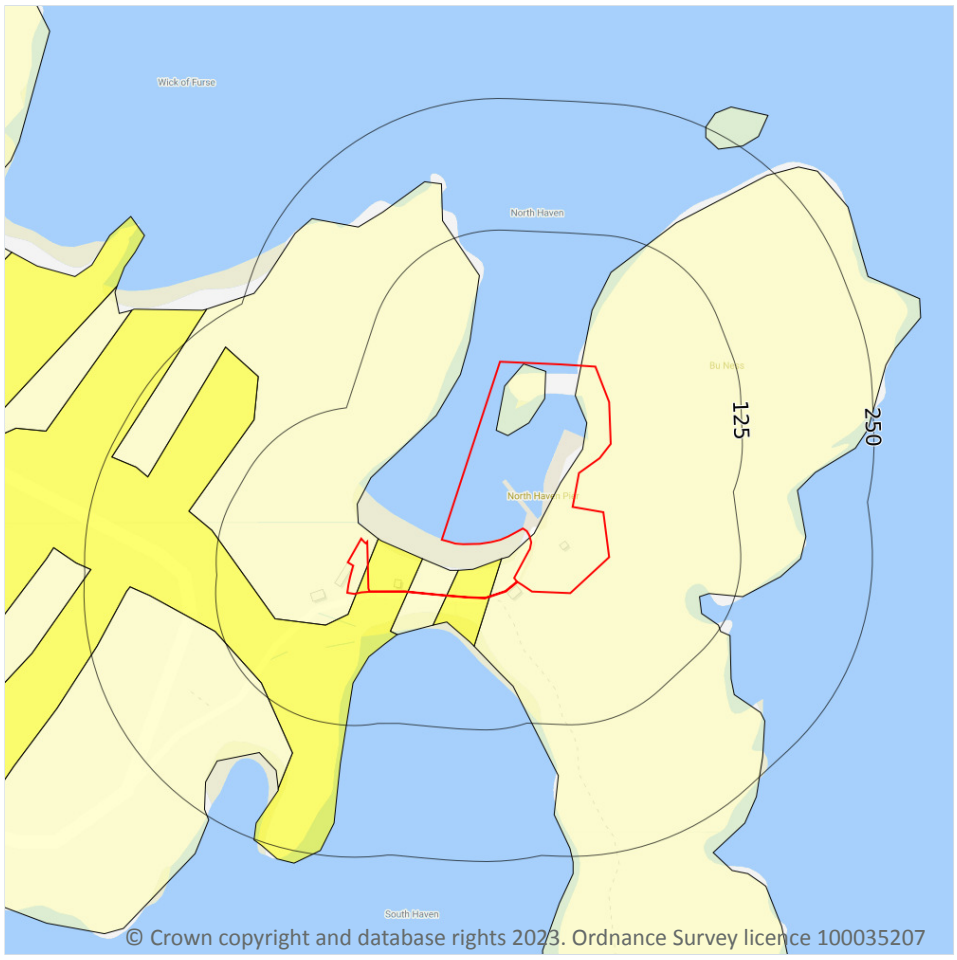
16.1 BGS Boreholes

Records within 250m	0

The Single Onshore Boreholes Index (SOBI); an index of over one million records of boreholes, shafts and wells from all forms of drilling and site investigation work held by the British Geological Survey. Covering onshore and nearshore boreholes dating back to at least 1790 and ranging from one to several thousand metres deep.

This data is sourced from the British Geological Survey.

17 Natural ground subsidence - Shrink swell clays



Site Outline

Search buffers in metres (m)

- No data
- Negligible
- Very low
- Low
- Moderate
- High

17.1 Shrink swell clays

Records within 50m	2

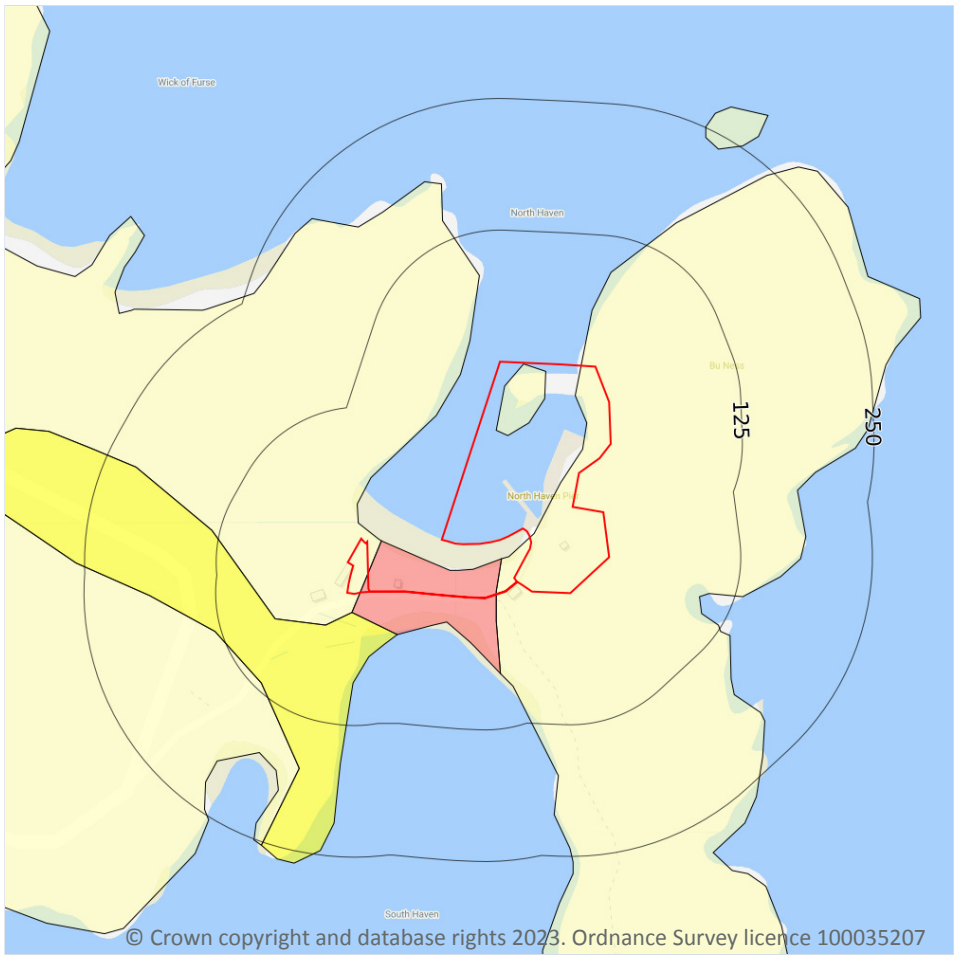
The potential hazard presented by soils that absorb water when wet (making them swell), and lose water as they dry (making them shrink). This shrink-swell behaviour is controlled by the type and amount of clay in the soil, and by seasonal changes in the soil moisture content (related to rainfall and local drainage).

Features are displayed on the Natural ground subsidence - Shrink swell clays map on **page 71**

Location	Hazard rating	Details
On site	**Negligible**	**Ground conditions predominantly non-plastic.**
On site	**Very low**	**Ground conditions predominantly low plasticity.**

This data is sourced from the British Geological Survey.

Natural ground subsidence - Running sands



Site Outline

Search buffers in metres (m)

- No data
- Negligible
- Very low
- Low
- Moderate
- High

17.2 Running sands

Records within 50m	3

The potential hazard presented by rocks that can contain loosely-packed sandy layers that can become fluidised by water flowing through them. Such sands can 'run', removing support from overlying buildings and causing potential damage.

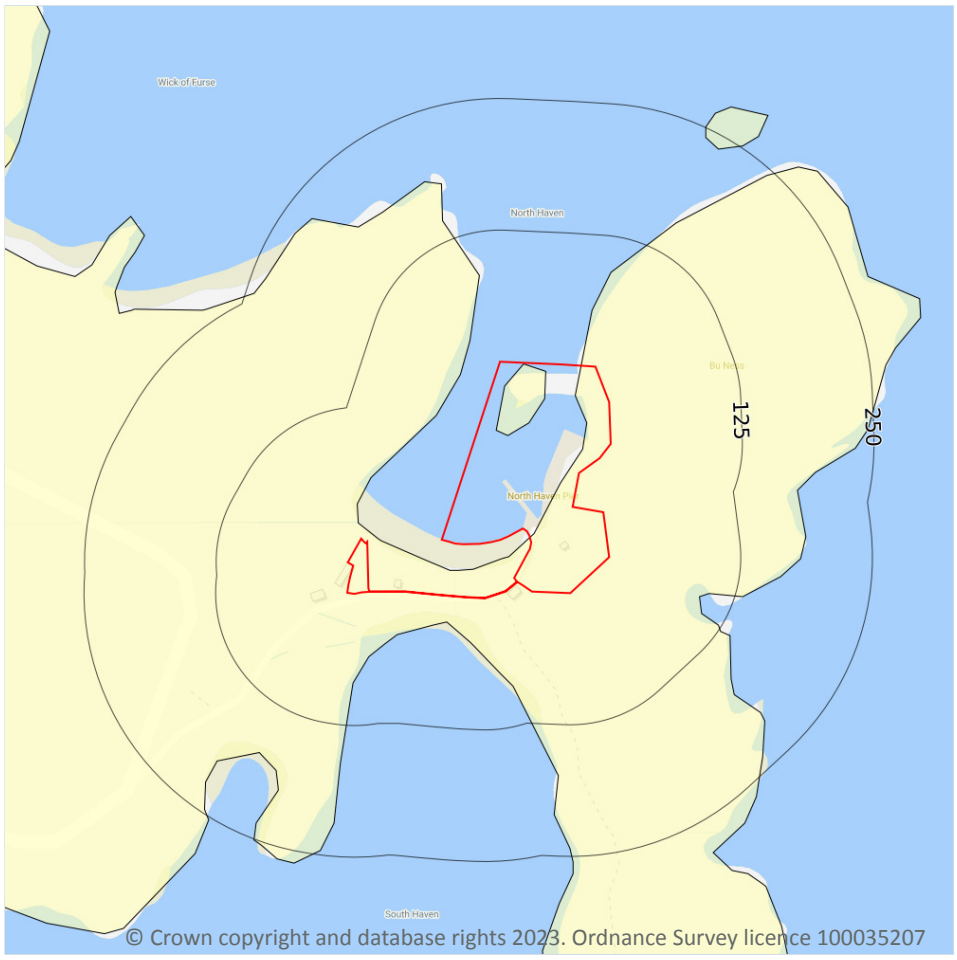
Features are displayed on the Natural ground subsidence - Running sands map on **page 72**

Location	Hazard rating	Details
On site	**Negligible**	**Running sand conditions are not thought to occur whatever the position of the water table. No identified constraints on lands use due to running conditions.**

Location	Hazard rating	Details
On site	**Moderate**	**Running sand conditions are probably present. Constraints may apply to land uses involving excavation or the addition or removal of water.**
18m SW	Very low	Running sand conditions are unlikely. No identified constraints on land use due to running conditions unless water table rises rapidly.

This data is sourced from the British Geological Survey.

Natural ground subsidence - Compressible deposits



Site Outline

Search buffers in metres (m)

- No data
- Negligible
- Very low
- Low
- Moderate
- High

17.3 Compressible deposits

Records within 50m	1

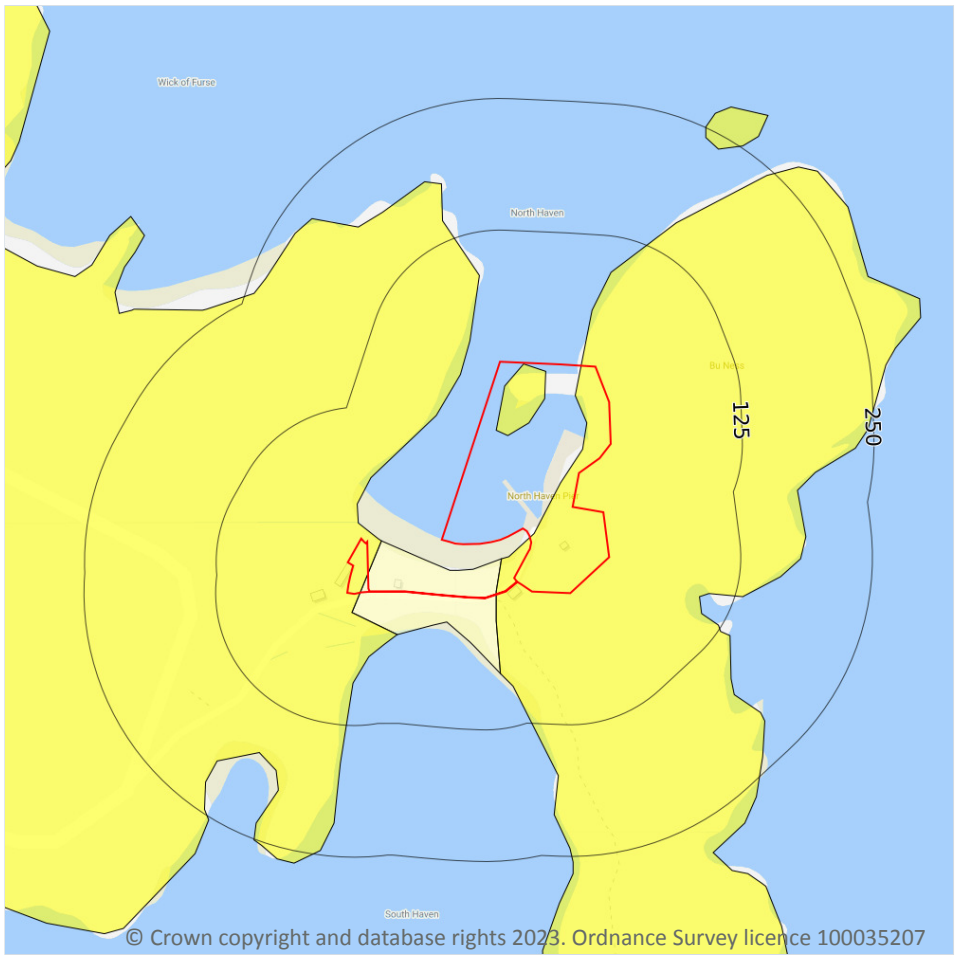
The potential hazard presented by types of ground that may contain layers of very soft materials like clay or peat and may compress if loaded by overlying structures, or if the groundwater level changes, potentially resulting in depression of the ground and disturbance of foundations.

Features are displayed on the Natural ground subsidence - Compressible deposits map on **page 74**

Location	Hazard rating	Details
On site	**Negligible**	**Compressible strata are not thought to occur.**

This data is sourced from the British Geological Survey.

Natural ground subsidence - Collapsible deposits



Site Outline

Search buffers in metres (m)

- No data
- Negligible
- Very low
- Low
- Moderate
- High

17.4 Collapsible deposits

Records within 50m	2

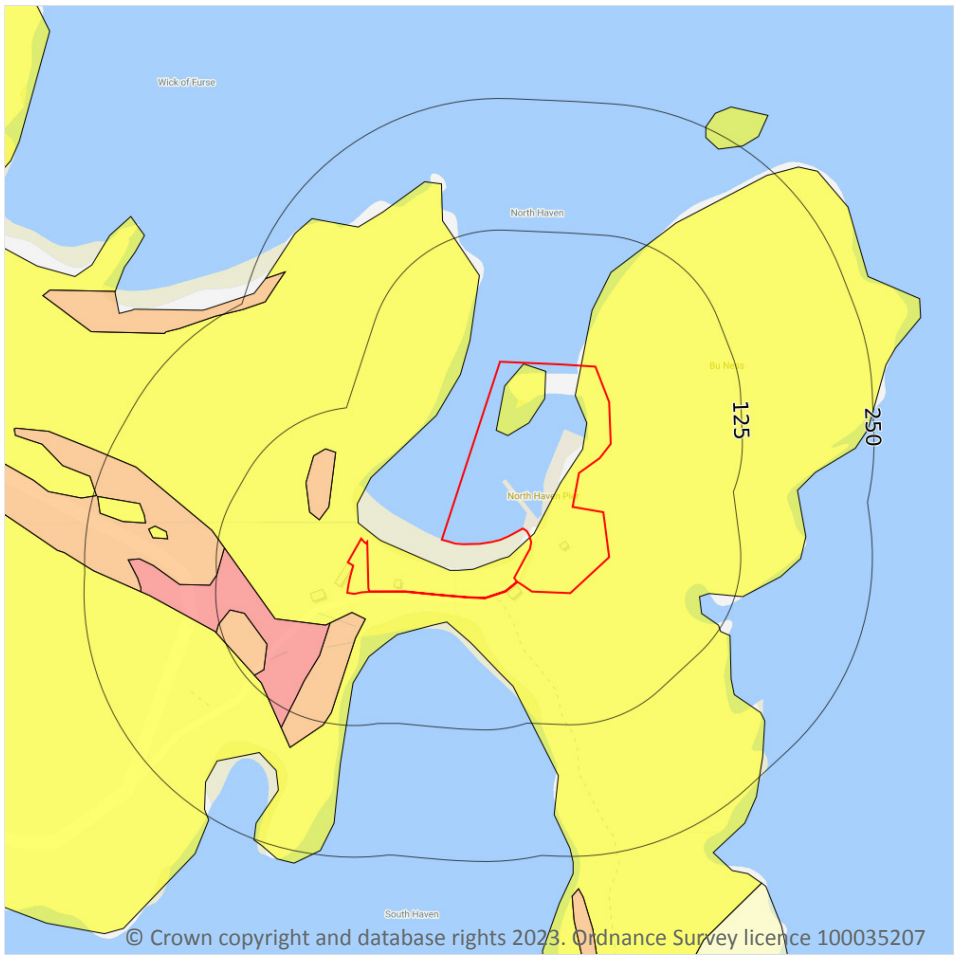
The potential hazard presented by natural deposits that could collapse when a load (such as a building) is placed on them or they become saturated with water.

Features are displayed on the Natural ground subsidence - Collapsible deposits map on **page 75**

Location	Hazard rating	Details
On site	**Negligible**	**Deposits with potential to collapse when loaded and saturated are believed not to be present.**
On site	**Very low**	**Deposits with potential to collapse when loaded and saturated are unlikely to be present.**

This data is sourced from the British Geological Survey.

Natural ground subsidence - Landslides



Site Outline

Search buffers in metres (m)

- No data
- Negligible
- Very low
- Low
- Moderate
- High

17.5 Landslides

Records within 50m	4

The potential for landsliding (slope instability) to be a hazard assessed using 1:50,000 scale digital maps of superficial and bedrock deposits, combined with information from the BGS National Landslide Database and scientific and engineering reports.

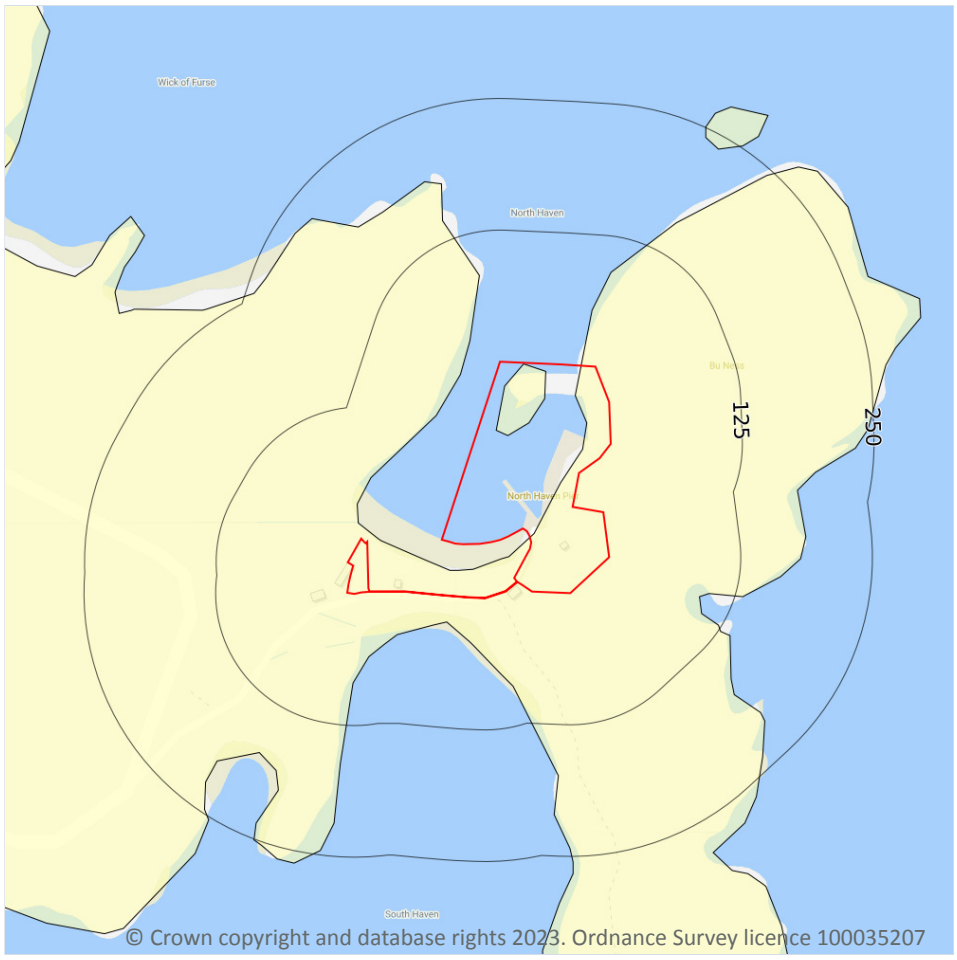
Features are displayed on the Natural ground subsidence - Landslides map on **page 76**

Location	Hazard rating	Details
On site	**Very low**	**Slope instability problems are not likely to occur but consideration to potential problems of adjacent areas impacting on the site should always be considered.**

Location	Hazard rating	Details
18m SW	Low	Slope instability problems may be present or anticipated. Site investigation should consider specifically the slope stability of the site.
33m SW	Moderate	Slope instability problems are probably present or have occurred in the past. Land use should consider specifically the stability of the site.
43m W	Low	Slope instability problems may be present or anticipated. Site investigation should consider specifically the slope stability of the site.

This data is sourced from the British Geological Survey.

Natural ground subsidence - Ground dissolution of soluble rocks



Site Outline

Search buffers in metres (m)

- No data
- Negligible
- Very low
- Low
- Moderate
- High

17.6 Ground dissolution of soluble rocks

Records within 50m	1

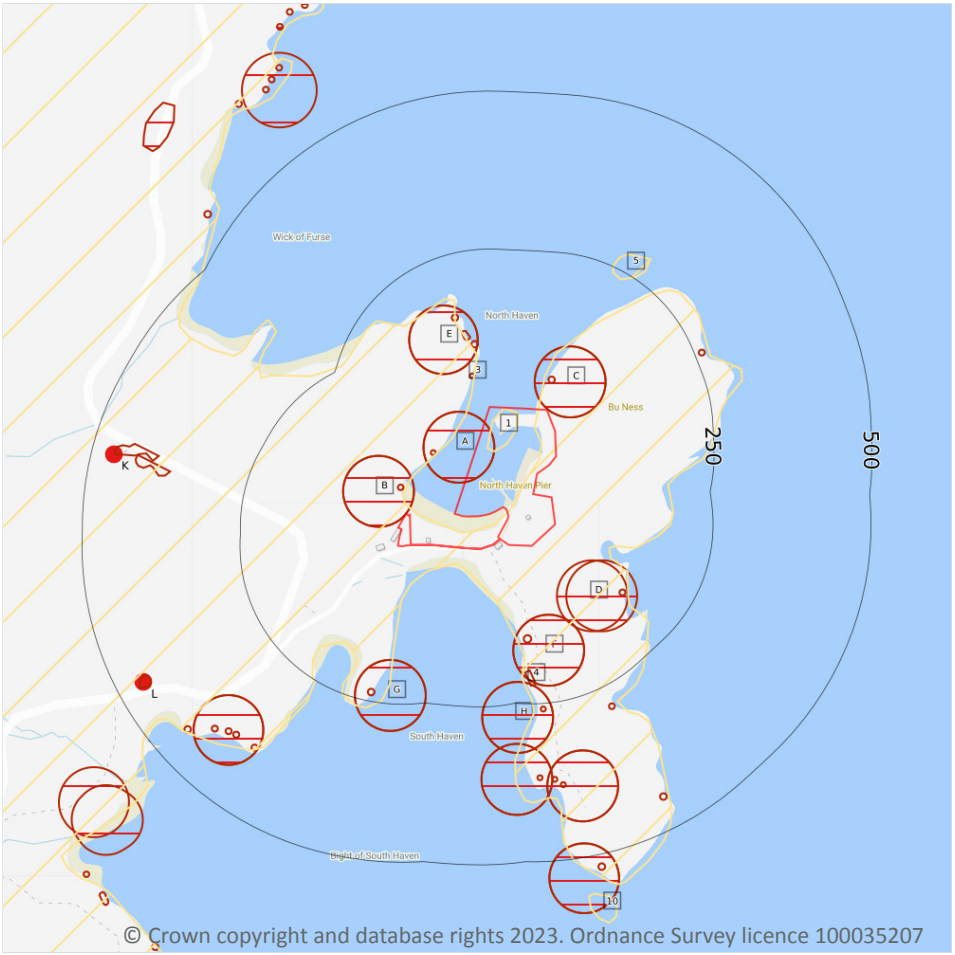
The potential hazard presented by ground dissolution, which occurs when water passing through soluble rocks produces underground cavities and cave systems. These cavities reduce support to the ground above and can cause localised collapse of the overlying rocks and deposits.

Features are displayed on the Natural ground subsidence - Ground dissolution of soluble rocks map on **page 78**

Location	Hazard rating	Details
On site	**Negligible**	**Soluble rocks are either not thought to be present within the ground, or not prone to dissolution. Dissolution features are unlikely to be present.**

This data is sourced from the British Geological Survey.

18 Mining, ground workings and natural cavities



Site Outline

Search buffers in metres (m)

Natural cavities (Area)

Natural cavities (Point)

BritPits

Surface ground workings

Underground workings

Historical Mineral Planning Areas

Mining Cavities

Non Coal Mining

Sporadic underground mining of restricted extent possible

Localised small scale underground mining possible

Small scale mining possible

Underground mining known or likely within or in close proximity

Underground mining known within or in very close proximity

18.1 Natural cavities

Records within 500m	0

Industry recognised national database of natural cavities. Sinkholes and caves are formed by the dissolution of soluble rock, such as chalk and limestone, gulls and fissures by cambering. Ground instability can result from movement of loose material contained within these cavities, often triggered by water.

This data is sourced from Stantec UK Ltd.

18.2 BritPits

Records within 500m	2

BritPits (an abbreviation of British Pits) is a database maintained by the British Geological Survey of currently active and closed surface and underground mineral workings. Details of major mineral handling sites, such as wharfs and rail depots are also held in the database.

Features are displayed on the Mining, ground workings and natural cavities map on **page 79**

ID	Location	Details	Description
L	456m SW	Name: Eas Brecks Address: Bu Ness, FAIR ISLE, Shetland Commodity: Sandstone Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
K	464m W	Name: Eas Brecks Address: Bu Ness, FAIR ISLE, Shetland Commodity: Sandstone Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority

This data is sourced from the British Geological Survey.

18.3 Surface ground workings

Records within 250m	27

Historical land uses identified from Ordnance Survey mapping that involved ground excavation at the surface. These features may or may not have been subsequently backfilled.

Features are displayed on the Mining, ground workings and natural cavities map on **page 79**

ID	Location	Land Use	Year of mapping	Mapping scale
A	**On site**	**Cave**	**1878**	**1:10560**
A	**On site**	**Cave**	**1900**	**1:10560**
B	**On site**	**Cave**	**1878**	**1:10560**
B	**On site**	**Cave**	**1900**	**1:10560**
C	2m NE	Cave	1878	1:10560
C	2m NE	Cave	1900	1:10560

ID	Location	Land Use	Year of mapping	Mapping scale
B	37m W	Cave	1973	1:10000
C	43m NE	Cave	1973	1:10000
3	53m N	Cave	1973	1:10000
A	59m W	Cave	1973	1:10000
D	67m SE	Cave	1878	1:10560
E	75m NW	Caves	1878	1:10560
E	75m NW	Caves	1900	1:10560
D	77m SE	Cave	1900	1:10560
E	97m N	Caves	1973	1:10000
E	111m N	Caves	1973	1:10000
F	111m S	Cave	1878	1:10560
F	111m S	Cave	1900	1:10560
F	141m S	Cave	1973	1:10000
E	147m N	Caves	1973	1:10000
D	147m SE	Cave	1973	1:10000
G	181m SW	Cave	1878	1:10560
G	181m SW	Cave	1900	1:10560
4	197m S	Caves	1973	1:10000
H	216m S	Cave	1878	1:10560
H	216m S	Cave	1900	1:10560
G	230m SW	Cave	1973	1:10000

This is data is sourced from Ordnance Survey/Groundsure.

18.4 Underground workings

Records within 1000m	**0**

Historical land uses identified from Ordnance Survey mapping that indicate the presence of underground workings e.g. mine shafts.

This is data is sourced from Ordnance Survey/Groundsure.

18.5 Historical Mineral Planning Areas

Records within 500m	0

Boundaries of mineral planning permissions for England and Wales. This data was collated between the 1940s (and retrospectively to the 1930s) and the mid 1980s. The data includes permitted, withdrawn and refused permissions.

This data is sourced from the British Geological Survey.

18.6 Non-coal mining

Records within 1000m	6

The potential for historical non-coal mining to have affected an area. The assessment is drawn from expert knowledge and literature in addition to the digital geological map of Britain. Mineral commodities may be divided into seven general categories - vein minerals, chalk, oil shale, building stone, bedded ores, evaporites and 'other' commodities (including ball clay, jet, black marble, graphite and chert).

Features are displayed on the Mining, ground workings and natural cavities map on **page 79**

ID	Location	Name	Commodity	Class	Likelihood
1	**On site**	**Not available**	**Vein Mineral**	**A**	**Sporadic underground mining of restricted extent may have occurred. Potential for difficult ground conditions are unlikely and localised and are at a level where they need not be considered**
2	**On site**	**Not available**	**Vein Mineral**	**A**	**Sporadic underground mining of restricted extent may have occurred. Potential for difficult ground conditions are unlikely and localised and are at a level where they need not be considered**
5	237m NE	Not available	Vein Mineral	A	Sporadic underground mining of restricted extent may have occurred. Potential for difficult ground conditions are unlikely and localised and are at a level where they need not be considered
10	559m S	Not available	Vein Mineral	A	Sporadic underground mining of restricted extent may have occurred. Potential for difficult ground conditions are unlikely and localised and are at a level where they need not be considered
-	839m S	Not available	Vein Mineral	A	Sporadic underground mining of restricted extent may have occurred. Potential for difficult ground conditions are unlikely and localised and are at a level where they need not be considered
-	978m N	Not available	Vein Mineral	A	Sporadic underground mining of restricted extent may have occurred. Potential for difficult ground conditions are unlikely and localised and are at a level where they need not be considered

This data is sourced from the British Geological Survey.

18.7 Mining cavities

Records within 1000m	0

Industry recognised national database of mining cavities. Degraded mines may result in hazardous subsidence (crown holes). Climatic conditions and water escape can also trigger subsidence over mine entrances and workings.

This data is sourced from Stantec UK Ltd.

18.8 JPB mining areas

Records on site	0

Areas which could be affected by former coal and other mining. This data includes some mine plans unavailable to the Coal Authority.

This data is sourced from Johnson Poole and Bloomer.

18.9 Coal mining

Records on site	0

Areas which could be affected by past, current or future coal mining.

This data is sourced from the Coal Authority.

18.10 Brine areas

Records on site	0

The Cheshire Brine Compensation District indicates areas that may be affected by salt and brine extraction in Cheshire and where compensation would be available where damage from this mining has occurred. Damage from salt and brine mining can still occur outside this district, but no compensation will be available.

This data is sourced from the Cheshire Brine Subsidence Compensation Board.

18.11 Gypsum areas

Records on site	0

Generalised areas that may be affected by gypsum extraction.

This data is sourced from British Gypsum.

18.12 Tin mining

Records on site	0

Generalised areas that may be affected by historical tin mining.

This data is sourced from Groundsure.

18.13 Clay mining

Records on site	0

Generalised areas that may be affected by kaolin and ball clay extraction.

This data is sourced from the Kaolin and Ball Clay Association (UK).

19 Radon

Site Outline

Search buffers in metres (m)

Greater than 30%

Between 10% and 30%

Between 5% and 10%

Between 3% and 5%

Between 1% and 3%

Less than 1%

19.1 Radon

Records on site	1

The Radon Potential data classifies areas based on their likelihood of a property having a radon level at or above the Action Level in Great Britain. The dataset is intended for use at 1:50,000 scale and was derived from both geological assessments and indoor radon measurements (more than 560,000 records). A minimum 50m buffer should be considered when searching the maps, as the smallest detectable feature at this scale is 50m. The findings of this section should supersede any estimations derived from the Indicative Atlas of Radon in Great Britain (1:100,000 scale).

Features are displayed on the Radon map on **page 85**

Location	Estimated properties affected	Radon Protection Measures required
On site	**Less than 1%**	**None**

This data is sourced from the British Geological Survey and UK Health Security Agency.

20 Soil chemistry

20.1 BGS Estimated Background Soil Chemistry

Records within 50m	**15**

The estimated values provide the likely background concentration of the potentially harmful elements Arsenic, Cadmium, Chromium, Lead and Nickel in topsoil. The values are estimated primarily from rural topsoil data collected at a sample density of approximately 1 per 2 km^2. In areas where rural soil samples are not available, estimation is based on stream sediment data collected from small streams at a sampling density of 1 per 2.5 km^2; this is the case for most of Scotland, Wales and southern England. The stream sediment data are converted to soil-equivalent concentrations prior to the estimation.

Location	Arsenic	Bioaccessible Arsenic	Lead	Bioaccessible Lead	Cadmium	Chromium	Nickel
On site	**15 mg/kg**	**-**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**-**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**-**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**-**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**-**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**-**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**-**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**-**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**-**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**-**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**-**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
15m W	15 mg/kg	-	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
18m SW	15 mg/kg	-	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
20m SW	15 mg/kg	-	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
37m SW	15 mg/kg	-	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg

This data is sourced from the British Geological Survey.

20.2 BGS Estimated Urban Soil Chemistry

Records within 50m	0

Estimated topsoil chemistry of Arsenic, Cadmium, Chromium, Copper, Nickel, Lead, Tin and Zinc and bioaccessible Arsenic and Lead in 23 urban centres across Great Britain. These estimates are derived from interpolation of the measured urban topsoil data referred to above and provide information across each city between the measured sample locations (4 per km^2).

This data is sourced from the British Geological Survey.

20.3 BGS Measured Urban Soil Chemistry

Records within 50m	0

The locations and measured total concentrations (mg/kg) of Arsenic, Cadmium, Chromium, Copper, Nickel, Lead, Tin and Zinc in urban topsoil samples from 23 urban centres across Great Britain. These are collected at a sample density of 4 per km^2.

This data is sourced from the British Geological Survey.

21 Railway infrastructure and projects

21.1 Underground railways (London)

Records within 250m	0

Details of all active London Underground lines, including approximate tunnel roof depth and operational hours.

This data is sourced from publicly available information by Groundsure.

21.2 Underground railways (Non-London)

Records within 250m	0

Details of the Merseyrail system, the Tyne and Wear Metro and the Glasgow Subway. Not all parts of all systems are located underground. The data contains location information only and does not include a depth assessment.

This data is sourced from publicly available information by Groundsure.

21.3 Railway tunnels

Records within 250m	0

Railway tunnels taken from contemporary Ordnance Survey mapping.

This data is sourced from the Ordnance Survey.

21.4 Historical railway and tunnel features

Records within 250m	0

Railways and tunnels digitised from historical Ordnance Survey mapping as scales of 1:1,250, 1:2,500, 1:10,000 and 1:10,560.

This data is sourced from Ordnance Survey/Groundsure.

21.5 Royal Mail tunnels

Records within 250m	0

The Post Office Railway, otherwise known as the Mail Rail, is an underground railway running through Central London from Paddington Head District Sorting Office to Whitechapel Eastern Head Sorting Office. The line is 10.5km long. The data includes details of the full extent of the tunnels, the depth of the tunnel, and the depth to track level.

This data is sourced from Groundsure/the Postal Museum.

21.6 Historical railways

Records within 250m	0

Former railway lines, including dismantled lines, abandoned lines, disused lines, historic railways and razed lines.

This data is sourced from OpenStreetMap.

21.7 Railways

Records within 250m	0

Currently existing railway lines, including standard railways, narrow gauge, funicular, trams and light railways.

This data is sourced from Ordnance Survey and OpenStreetMap.

21.8 Crossrail 1

Records within 500m	0

The Crossrail railway project links 41 stations over 100 kilometres from Reading and Heathrow in the west, through underground sections in central London, to Shenfield and Abbey Wood in the east.

This data is sourced from publicly available information by Groundsure.

21.9 Crossrail 2

Records within 500m	0

Crossrail 2 is a proposed railway linking the national rail networks in Surrey and Hertfordshire via an underground tunnel through London.

This data is sourced from publicly available information by Groundsure.

21.10 HS2

Records within 500m	0

HS2 is a proposed high speed rail network running from London to Manchester and Leeds via Birmingham. Main civils construction on Phase 1 (London to Birmingham) of the project began in 2019, and it is currently anticipated that this phase will be fully operational by 2026. Construction on Phase 2a (Birmingham to Crewe) is anticipated to commence in 2021, with the service fully operational by 2027. Construction on Phase 2b (Crewe to Manchester and Birmingham to Leeds) is scheduled to begin in 2023 and be operational by 2033.

This data is sourced from HS2 ltd.

Data providers

Groundsure works with respected data providers to bring you the most relevant and accurate information. To find out who they are and their areas of expertise see https://www.groundsure.com/sources-reference.

Terms and conditions

Groundsure's Terms and Conditions can be accessed at this link: https://www.groundsure.com/terms-and-conditions-jan-2020/.

Appendix C Regulatory Correspondence

Appendix D Zetica UXO Pre-Desk Study Assessment

Pre-Desk Study Assessment

Site:	Fair Isle, Shetland, Scotland
Client:	Stantec
Contact:	Rhona Mitchell
Date:	1st February 2023
Pre-WWI Military Activity on or Affecting the Site	None identified.
WWI Military Activity on or Affecting the Site	None identified.
WWI Strategic Targets (within 5km of Site)	The following strategic targets were located in the vicinity of the Site: ■ North Haven Harbour. ■ Transport infrastructure.
WWI Bombing	None identified on the Site.
Interwar Military Activity on or Affecting the Site	None identified.
WWII Military Activity on or Affecting the Site	During WWII, North Haven Military Camp was established on land encroaching on the southern part of the Site. It consisted of approximately 16No. huts and was likely associated with the Royal Air Force (RAF) radar station located at Ward Hill, approximately 0.9km west of the Site. During WWII, Shetland was a closed military area, meaning that training activities could take place anywhere on the islands. No readily available records have been found to indicate that military training took place on the Site.
WWII Strategic Targets (within 5km of Site)	The following strategic targets were located in the vicinity of the Site: ■ North Haven Harbour. ■ Transport infrastructure. ■ RAF Ward Hill. ■ Military camps and training areas. ■ Anti-invasion defences.
WWII Bombing Decoys (within 5km of Site)	None identified.
WWII Bombing	During WWII the Site was located in the Landward Area (LA) of Zetland, which officially recorded 72No. High Explosive (HE) bombs with a bombing density of 0.2 bombs per 405 hectares (ha). No readily available records have been found to indicate that the Site was bombed.
Post-WWII Military Activity on or Affecting the Site	None identified.
Recommendation	It is recommended that a detailed desk study is commissioned to assess, and potentially zone, the Unexploded Ordnance (UXO) hazard level on the Site.

This summary is based on a cursory review of readily available records. Caution is advised if you plan to action work based on this summary.

It should be noted that where a potentially significant source of UXO hazard has been identified on the Site, the requirement for a detailed desk study and risk assessment has been confirmed and no further research will be undertaken at this stage. It is possible that further in-depth research as part of a detailed UXO desk study and risk assessment may identify other potential sources of UXO hazard on the Site.

Appendix E Risk Estimation Table

Receptor	Receptor Sensitivity ('0' if not present)	Pathway	Present (Y=1, N=0)	EPH & Solvents	PAHs	Inorganics and Metals	Asbestos	Biocides	Permanent Gases	Consequence	Probability/ Likelihood	Estimated Risk
Human Health - On-Site Current Users	4	Ingestion of fruit or vegetable leaf or roots	0	✓	✓	✓	x	✓	x	N/A	N/A	N/A
		Ingestion of contaminated drinking water	0	✓	✓	x	x	✓	x	N/A	N/A	N/A
		Ingestion of water / sediments when swimming	1	✓	✓	✓	✓	✓	x	Mild	Unlikely	Very Low
		Ingestion of soil/dust indoors	1	✓	✓	✓	✓	✓	x	Mild	Unlikely	Very Low
		Ingestion of soil/dust outdoors	1	✓	✓	✓	✓	✓	x	Mild	Unlikely	Very Low
		Inhalation of particles (dust / soil) indoor and outdoor	1	✓	✓	✓	✓	✓	x	Mild	Unlikely	Very Low
		Inhalation of vapours/gases – outdoor	1	✓	x	x	x	x	✓	Mild	Unlikely	Very Low
		Inhalation of vapours/gases - indoor	1	✓	x	x	x	x	✓	Mild	Unlikely	Very Low
		Dermal absorption via direct contact with soil	1	✓	✓	✓	✓	✓	x	Mild	Unlikely	Very Low
		Dermal absorption via waters (swimming / showering)	1	✓	✓	✓	✓	✓	x	Mild	Unlikely	Very Low
Human Health On-Site Future User	4	Ingestion of fruit or vegetable leaf or roots	0	✓	✓	✓	x	✓	x	N/A	N/A	N/A
		Ingestion of contaminated drinking water	0	✓	✓	x	x	✓	x	N/A	N/A	N/A
		Ingestion of water / sediments when swimming	1	✓	✓	x	x	✓	x	Mild	Unlikely	Very Low
		Ingestion of soil/dust indoors	1	✓	✓	✓	✓	✓	x	Mild	Unlikely	Very Low
		Ingestion of soil/dust outdoors	1	✓	✓	✓	✓	✓	x	Mild	Unlikely	Very Low
		Inhalation of particles (dust / soil) indoor and outdoor	1	✓	✓	✓	✓	✓	x	Mild	Unlikely	Very Low
		Inhalation of vapours – outdoor	1	✓	x	x	x	x	✓	Mild	Unlikely	Very Low
		Inhalation of vapours - indoor	1	✓	x	x	x	x	✓	Mild	Unlikely	Very Low
		Dermal absorption via direct contact with soil	1	✓	✓	✓	✓	✓	x	Mild	Unlikely	Very Low
		Dermal absorption via waters (swimming / showering)	1	✓	✓	✓	✓	✓	x	Mild	Unlikely	Very Low
Human Health - Neighbours	4	Ingestion of fruit or vegetable leaf or roots	0	✓	✓	✓	x	✓	x	N/A	N/A	N/A
		Ingestion of contaminated drinking water	0	✓	✓	x	x	✓	x	N/A	N/A	N/A
		Ingestion of water / sediments when swimming	1	✓	✓	x	x	✓	x	Mild	Unlikely	Very Low
		Ingestion of soil/dust indoors	1	✓	✓	✓	✓	✓	x	Mild	Unlikely	Very Low
		Ingestion of soil/dust outdoors	1	✓	✓	✓	✓	✓	x	Mild	Unlikely	Very Low
		Inhalation of particles (dust / soil) indoor and outdoor	1	✓	✓	✓	✓	✓	x	Mild	Unlikely	Very Low
		Inhalation of vapours – outdoor	1	✓	x	x	x	x	✓	Mild	Unlikely	Very Low
		Inhalation of vapours - indoor	1	✓	x	x	x	x	✓	Mild	Unlikely	Very Low
		Dermal absorption via direct contact with soil	1	✓	✓	✓	✓	✓	x	Mild	Unlikely	Very Low
		Dermal absorption via waters (swimming / showering)	1	✓	✓	✓	✓	✓	x	Mild	Unlikely	Very Low
Human Health - Construction/ Maintenance Workers	4	Ingestion of soil/dust indoors	1	✓	✓	✓	✓	✓	x	Mild	Unlikely	Very Low
		Ingestion of soil/dust outdoors	1	✓	✓	✓	✓	✓	x	Mild	Low	Low
		Inhalation of particles (dust / soil) outdoor	1	✓	✓	✓	✓	✓	x	Mild	Low	Low
		Inhalation of vapours – outdoor	1	✓	x	x	x	x	✓	Mild	Low	Low
		Inhalation of vapours - indoor	1	✓	x	x	x	x	✓	Mild	Unlikely	Very Low
		Dermal absorption via direct contact with soil	1	✓	✓	✓	✓	✓	x	Mild	Low	Low
Groundwater (Shallow)	0	Leaching	1	✓	✓	✓	x	✓	x	N/A	Unlikely	N/A
		Migration via natural or anthropogenic	1	✓	✓	✓	x	✓	x	N/A	Unlikely	N/A
Groundwater (Deep)	3	Leaching	1	✓	✓	✓	x	✓	x	Mild	Low	Low
		Migration via natural or anthropogenic	1	✓	✓	✓	x	✓	x	Mild	Low	Low
Surface Water	4	Direct runoff or discharges from pipes	1	✓	✓	✓	✓	✓	x	Mild	Likely	Moderate
		Indirect via recharge from groundwater (hydraulic flow)	1	✓	✓	✓	✓	✓	x	Mild	Unlikely	Very Low
		Deposition of wind blown dust	1	✓	✓	✓	✓	✓	x	Mild	Low	Low
Property - Buildings	3	Direct contact	1	✓	✓	✓	x	x	x	Mild	Low	Low
		Explosion due to gas migration via natural / anthropogenic	0	✓	x	x	x	x	✓	N/A	N/A	N/A
Ecological Systems	5	Direct deposition of particles / dust - wind blown or flood	1	✓	✓	✓	✓	✓	x	Medium	Unlikely	Low
		Indirect - through watering	0	✓	✓	✓	x	✓	x	N/A	N/A	N/A
		Inhalation of gases/vapours or particulates/dust by animals	1	✓	✓	✓	✓	✓	✓	Medium	Unlikely	Low
		Ingestion of vegetation / water / soil by animals	1	✓	✓	✓	✓	✓	x	Medium	Unlikely	Low
Property - Animal/Crop	1	Direct (including deposition via wind or flood)	1	✓	✓	✓	✓	✓	x	Minor	Unlikely	Very Low
		Indirect (through watering)	0	✓	✓	✓	x	✓	x	N/A	N/A	N/A
		Inhalation of gas / vapour / particulates / dust by animals	1	✓	✓	✓	✓	✓	✓	Minor	Low	Very Low
		Ingestion of vegetation / water / soil by animals	1	✓	✓	✓	✓	✓	x	Minor	Low	Very Low

Risk estimation establishes the magnitude and probability of the possible consequences (what degree of harm might result and how likely).
The criteria for classifying probability and consequence are set out in Tables 4 and 5 of the Stantec methodology.
Green text highlights one or more elements of the Pollutant Linkage are missing and therefore eliminated

EPH = Extractable hydrocarbons
PAHs = Poly Aromatic Hydrocarbons
Note For Metals there is an Inhalation pathway if Mercury is present
Note for PAHs there are Inhalation and/or Solubility pathways for some eg Naphthalene

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Client: Shetland Islands Council

Ferry Upgrade, Fair Isle, Shetland

TABLE SUMMARISING POLLUTANT LINKAGES AND RISK ESTIMATION

Date	07/03/2023
A3 Scale	NTS
Drawn By	CB
Checked By	OB

HAZARD CLASSIFICATION	2	THE POTENTIAL CONTAMINANTS OF CONCERN ARE :- Asbestos, heavy metals, inorganics, polycyclic aromatic hydrocarbons (PAHs), petroleum hydrocarbons. □