Eastern Green Link 2 - Marine Scheme

Environmental Appraisal Report
Volume 3

Appendix 12.1 - Marine Archaeology Technical Report

nationalgrid

Scottish & Southern
Electricity Networks
TRANSMISSION

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Prepared for:

National Grid Electricity Transmission and
Scottish Hydro Electric Transmission plc

Prepared by:

AECOM UK Limited
1 Tanfield
Edinburgh EH3 5DA
United Kingdom

T: +44 131 301 8600
aecom.com

In association with:

Xodus Group (Shipping and Navigation);

Wessex Archaeology (Marine Archaeology); and

Brown and May Marine Ltd (Commercial Fisheries).

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12.1 Marine Archaeology

12.1.1 Introduction

Wessex Archaeology was commissioned by AECOM to prepare a marine archaeological baseline Technical Report including a high level Environmental Appraisal (EA) for the marine component of the Eastern Green Link 2 Marine Scheme, which extends from the Mean High Water Springs (MHWS) from the Scottish landfall at Sandford Bay, crossing through the Scottish and English territorial waters (up to 12 Nautical Miles (NM)) and beyond into Scottish and English offshore waters, to the MHWS at the English landfall near Fraisthorpe Sands. This Technical Report is prepared in support of the Environmental Appraisal Report (EAR) for the proposed Eastern Green Link 2 Marine Scheme.

This Technical Report comprises a marine archaeological baseline study of the Marine Scheme, based on an archaeological assessment of geophysical and geotechnical data, gathered as part of the site specific surveys, together with a review of records held by national and local inventories and secondary sources relating to the marine and intertidal historic environment of the region. This archaeological baseline also includes an assessment of the value and sensitivity of any identified marine or intertidal archaeological assets within the Marine Installation Corridor and additional 1 km buffer area (known as the Archaeological Study Area (ASA)). An assessment of the seascape character will also be undertaken.

12.1.1.1 Proposed Development

The Marine Scheme comprises an installation corridor of approximately 436 km length and 500 m maximum width, within which cables will be installed (hereinafter referred to as the 'Marine Installation Corridor'). The Marine Scheme activities are considered in the following phases: installation, operation and maintenance, and decommissioning.

The Marine Scheme is partly located within both Scottish and English territorial waters, up to 12 NM from the coast, and partly beyond 12 NM within Scottish and English offshore waters.

12.1.1.2 Scope of Document

The purpose of this assessment is to determine, as far as possible from existing information and bespoke survey data, the nature, extent and significance of the known and potential marine archaeological resource within the boundary of the Marine Scheme.

12.1.1.3 Aims

The specific aim of this marine archaeological Technical Report is to summarise the known and potential archaeological baseline within the Marine Installation Corridor to subsequently inform the EAR. The objectives of the assessment are as follows:

- To provide details of relevant legislation, national and local planning policy, and best practice guidance;

- To assess the 2012 and 2020 geophysical survey datasets provided by MMT and NEXT in order to identify any buried palaeolandscape features of possible archaeological potential (see Section 12.1.3.3); confirm the presence of known or previously located marine sites of archaeological potential and to comment on their apparent character; and identify, locate and characterise hitherto unrecorded marine sites of archaeological potential;

- To compare the geophysical interpretation with desk-based assessments, historical data, know archaeological sites and previous investigations in the vicinity of the Marine Installation Corridor to outline the known and potential marine archaeological resource;

- To summarise the historic seascape character for the area that the Marine Scheme truncates;

- To assess the significance of the known and potential marine archaeological resource through weighted consideration of their valued components; and

- To recommend mitigation measures for any potential archaeological or cultural heritage assets newly identified within the Marine Installation Corridor, including the addition of new archaeological exclusion zones where necessary within the Marine Installation Corridor.

12.1.1.4   Copyright

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12.1.2 Legislation, Policy and Guidance

The Marine Scheme falls within several different national jurisdictions, each covered by separate legislation and guidance, and is under the responsibility of different curators and heritage agencies. The following section provides a summary of the national, regional and local planning and legislative framework that governs the treatment of the marine historic environment in the planning process.

12.1.2.1   Legislation

International Conventions

The United Nations Educational, Scientific and Cultural Organisation (UNESCO) Convention on the Protection of the Underwater Cultural Heritage was concluded in 2001 and is a comprehensive attempt to codify the law internationally with regards to underwater cultural heritage. The UK has not ratified the Convention, but has stated that it has adopted the Annex of the Convention, which governs the conduct of archaeological investigations, as best practice for archaeology. Although the UK is not a signatory, the Convention entered into force on 02 January 2009 having been signed or ratified by 20 member states. It has since been ratified or accepted by an additional 60 member states.

Scotland

Historic Environment Scotland (HES) is responsible for the archaeological resource within Scotland's territorial waters (up to 12 NM) and acts as stakeholder for the resources in the Scottish offshore waters (also referred to as the Exclusive Economic Zone (EEZ)). The Marine Scotland Licencing Operations Team (MS-LOT) is responsible for licencing, regulating and planning marine activities within Scotland's territorial waters (up to 12 NM), and in the Scottish offshore waters (between 12 NM and 200 NM, the EEZ) under the Marine and Coastal Access Act (MCAA) 2009.

The following relevant legislation applies within Marine Scotland's licencing area:

- Marine (Scotland) Act 2010;
- Protection of Wrecks Act 1973 (PWA 1973): Section Two;
- Ancient Monuments and Archaeological Areas Act 1979 (AMAA 1979) (as amended);
- Protection of Military Remains Act 1986 (PMRA 1986); and
- Merchant Shipping Act 1995 (MSA 1995).

The Marine (Scotland) Act 2010 is the primary legislation relevant to marine development within Scottish Territorial Waters. The Marine (Scotland) Act 2010 provides a framework to achieve sustainable development in Scottish waters, implementing marine planning, licensing, conservation and enforcement. It is the responsibility of the Scottish Ministers and public authorities to act to protect and enhance the marine biodiversity and the preservation of marine heritage assets of national importance.

Marine heritage assets may also be designated under the Marine (Scotland) Act 2010 (Section 73) and the AMAA 1979 (Pat II). Military wrecks and aircraft remains may be protected under the PMRA 1986. Ownership of any wreck remains is determined in accordance with the MSA 1995.

Within the Scottish offshore waters the following legislation applies:

- MCAA 2009;

- PMRA 1989; and

- MSA 1995.

England

Historic England (HE) is responsible for the archaeological resource within England's territorial waters, up to the 12 NM limit and is consultee for the resource in the UK EEZ. The Marine Management Organisation (MMO) is responsible for licencing, regulating and planning marine activities in English territorial waters and also some activities beyond the territorial waters, to ensure they are carried out in a sustainable way.

Within English territorial waters the following relevant legislation applies:

- MCAA 2009;

- PWA 1973: Sections One and Two;

- AMAA 1979 (as amended);

- PMRA 1986; and

- MSA 1995.

The MCAA 2009 is the primary legislation relevant to marine development within English territorial waters.

Marine heritage assets may also be designated under the PWA 1973 and the AMAA 1979. Military wrecks and aircraft remains may be protected under the PMRA 1986. Ownership of any wreck remains is determined in accordance with the MSA 1995.

Within English offshore waters the following legislation applies:
- MCAA 2009;

- PMRA 1989; and

- MSA 1995.

12.1.2.2   Policy

The UK Marine Policy Statement (MPS) (MPS, 2011) was adopted in 2011 by all UK Administrations in March 2011 as part of a new system of marine planning being introduced across UK seas (Department for Environment, Food and Rural Affairs (Defra) (Defra, 2011). The statement was intended to facilitate and support the formulation of Marine Plans, ensuring that marine resources are used in a sustainable way in line with high level marine objectives.

Scotland

The Marine (Scotland) Act 2010 is the primary legislation relevant to marine development plans within Scottish Territorial Waters. Under this legislation, Scottish Ministers adopted a National Marine Plan (Marine Scotland, 2015). The National Marine Plan sets out a single framework for sustainable development within Scotland's marine area. General Policy 6 for the Historic Environment states, "*development and use of the marine environment should protect and, where appropriate, enhance heritage assets in a manner proportionate to their significance*" and also notes the requirement for development proposals to provide "*information on the significance of known heritage assets and the potential for new discoveries to arise*". Proposals should demonstrate how any adverse impacts will be avoided, or, if not possible, minimised and mitigated.

The Scottish Marine Regions Order 2015 identifies 11 Scottish Marine Regions for the purposes of regional marine planning and establishes their boundaries. The Marine Scheme is partly located within the North East region. No regional North East marine plan has yet been published.

England

The primary planning framework relevant to the Marine Scheme in England is the National Planning Policy Framework (NPPF) published in March 2012 and replacing previous Planning Policy Statement 5 in England (Department for Communities and Local Government (DCLG) 2012, revised 2018) and revised in February 2019. As with the Marine Policy Statement, a core planning principle is to "*conserve*

heritage assets in a manner appropriate to their significance, so that they can be enjoyed for their contribution to the quality of life of this and future generations".

Under the MCAA 2009, England was divided into marine planning regions, with an associated authority responsible for preparing a Marine Plan for that area. The MPS sets out the framework for preparing Marine Plans and making decisions affecting the marine environment. The MPS also states that Marine Plans must ensure a sustainable marine environment that will protect heritage assets. Marine plans must also be in accordance with other UK national policy, including the National Planning Policy Framework (DCLG, 2018).

The MMO have divided the inshore and offshore waters around England into 11 plan areas for which marine plans are to be produced. The Marine Scheme is within the East Inshore Marine Plan Area, and travels through North East Offshore Marine Plan Area and into the southern end of the North East Inshore Marine Plan Area (HM Government, 2021).

The East Inshore Marine Plan Policy SOC2 (Defra, 2014) states that proposals that may affect heritage assets should demonstrate, in order preference:

a. that they will not compromise or harm elements which contribute to the significance of the heritage asset;

b. how, if there is compromise or harm to a heritage asset, this will be minimised;

c. how, where compromise or harm to a heritage asset cannot be minimised it will be mitigated against; or

d. the public benefits for proceeding with the proposal if it is not possible to minimise or mitigate compromise or harm to the heritage asset.

The North East Inshore and Offshore Marine Plan was published in June 2021 (Defra, 2021). This states (NE-HER-1) that proposals unable to conserve and enhance elements contributing to the significance of heritage assets will be supported if they demonstrate that they will, in order of preference:

a. avoid

b. minimise

c. mitigate any harm to those elements contributing to the significance of heritage assets.

If it is not possible to mitigate, then public benefits for proceeding with the proposal must outweigh the harm to the significance of heritage assets.

12.1.2.3   Guidance

There is no specific guidance for offshore cable projects. Therefore, the assessment has been completed in line with current best practice following national, regional and industry specific standards and guidance, as relevant to cable projects:

- Standard and Guidance for Archaeological Advice by Historic Environment Services (CIfA, Standard and Guidance for Archaeological Advice by Historic Environment Services, 2014a);

- Code of Conduct (CIfA, 2014b);

- Regulations for Professional Conduct (CIfA, 2019);

- Military Aircraft Crash Sites – Archaeological Guidance on their Significance and Future Management (English Heritage (now Historic England), 2002);

- Managing Significance in Decision-Taking in the Historic Environment (English Heritage (now Historic England), 2015a);

- Management of Research Projects in the Historic Environment: the MoRPHE Project Managers' Guide (English Heritage (now Historic England), 2015b);

- Preserving Archaeological Remains: Decision-Taking for Sites under Development (English Heritage (now Historic England), 2016);

- Deposit Modelling and Archaeology. Guidance for Mapping Buried Deposits, Historic England, Swindon (Historic England, 2020);

- Code of Practice for Seabed Development (Joint Nautical Archaeology Policy Committee (JNAPC), 2006);

- Annex to the Protocol Guidance on the Use of the Protocol for Reporting Finds of Archaeological Interest in Relation to Aircraft Crash Sites at Sea (Wessex Archaeology, 2008a);

- Our Seas - A shared resource: High level marine objectives (Defra, 2009);

- Offshore Geotechnical Investigations and Historic Environment Analysis: Guidance for the Renewable Energy Sector (COWRIE, 2011);

- COWRIE Historic Environment Guidance for the Offshore Renewable Energy Sector (Wessex Archaeology, 2007);

- Ships and Boats: Prehistory to Present - Designation Selection Guide (English Heritage (now Historic England), 2012);

- Standard and Guidance for Historic Environment Desk-based Assessment (CIfA, 2014c);

- Marine Geophysics Data Acquisition, Processing and Interpretation Guidance Notes (English Heritage (now Historic England), 2013);

- Geoarchaeology: Using Earth Sciences to Understand the Archaeological Record (English Heritage (now Historic England), 2015c);

- Archaeological Written Schemes of Investigation for Offshore Wind Farm Projects. (The Crown Estate, 2021);

- Protocol for Archaeological Discoveries: Offshore Renewables Projects (ORPAD). (The Crown Estate, 2014); and

- Commercial Renewable Energy Development and the Historic Environment (Historic England, 2021).

12.1.3 Methodology
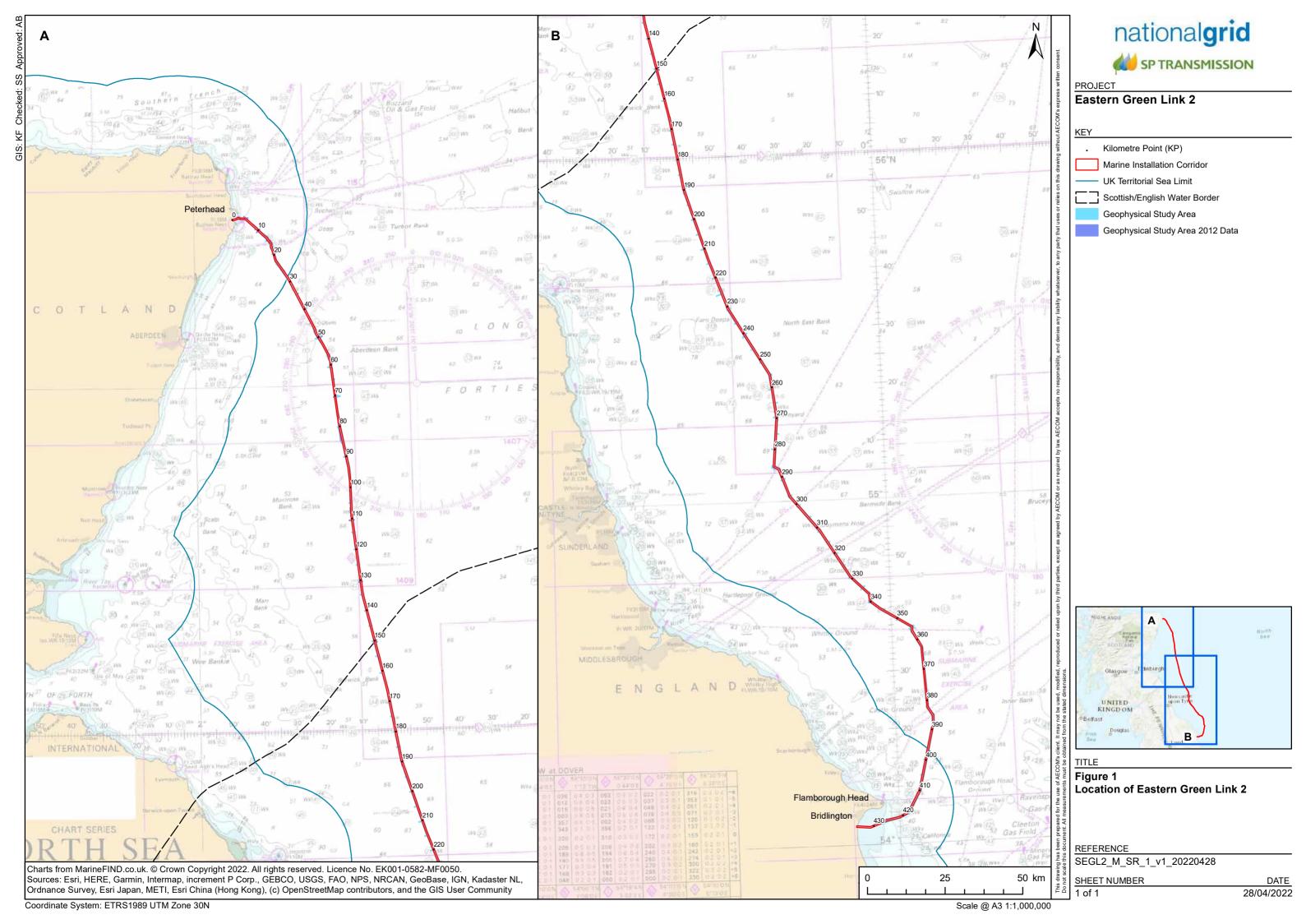
12.1.3.1 Study Area

The area assessed in this report is defined by the extent of the Marine Scheme as provided by the Client, which is located within UK marine area. This consists of a 500 m wide Marine Installation Corridor.

For the purposes of this assessment, the Marine Scheme has been sub-divided into the following sections:

- **Scottish territorial waters** - extending from KP0 to just south of KP28;

- **Scottish offshore waters** - within the EEZ from just south of KP28 to south of KP150;

- **English offshore waters** - within the EEZ from just south of KP150 to between KP396 / KP397; and

- **English territorial waters** - from between KP396 / KP397 to the landfall east of KP435.

The geophysical study area is located within the boundary of the Marine Installation Corridor (Figure 1). The geophysical study area for this report is defined as the extents of the side scan sonar (SSS) dataset, running from the Scottish landfall at Sandford Bay, through Scottish and English offshore waters, to the English landfall at Fraisthorpe Sands. Anything outside of the defined geophysical study area is not included in this assessment

Figure 1
Location of Eastern Green Link 2

A

B

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SP TRANSMISSION

PROJECT
Eastern Green Link 2

KEY

• Kilometre Point (KP)
— Marine Installation Corridor
— UK Territorial Sea Limit
--- Scottish/English Water Border
Geophysical Study Area
Geophysical Study Area 2012 Data

TITLE

Figure 1
Location of Eastern Green Link 2

REFERENCE
SEGL2_M_SR_1_v1_20220428

SHEET NUMBER   DATE
1 of 1   28/04/2022

Coordinate System: ETRS1989 UTM Zone 30N

Scale @ A3 1:1,000,000

0   25   50 km

Search Area

An ASA consisting of an additional 250 m buffer area around the extent of the Marine Installation Corridor was used as the search area for obtaining records from relevant archive databases. The wider ASA allows for a greater understanding of the wider archaeological baseline environment, with the dual purpose of enabling any archaeological trends within the region to be recognised and to allow any marine heritage assets identified to be represented in a broader archaeological context.

12.1.3.2 Archaeological Desk-Based Assessment

Key Themes

The methodology within this EAR follows the best practice professional guidance outlined by the Chartered Institute for Archaeologists' (CIfA) Standard and Guidance for Historic Environment Desk-Based Assessment (CIfA, 2014c).

The marine themes relevant to marine archaeological baseline assessed in this chapter are:

- Seabed prehistory (for example, palaeochannels and other features that contain prehistoric sediment, and derived Palaeolithic artefacts e.g., handaxes);

- Seabed features, including maritime sites (such as shipwrecks and associated material including cargo, obstructions and fishermen's fasteners) and aviation sites (aircraft crash sites and associated debris);

- Intertidal heritage assets; and

- Historic seascape character.

Data Sources

Baseline conditions have been established by undertaking a desktop review of published information and through consultation with relevant organisations. The data sources used to inform the baseline description and assessment include:

- United Kingdom Hydrographic Office (UKHO) data for charted wrecks and obstructions;

- National Record of the Historic Environment (NRHE) maintained by HE, comprising data for terrestrial and marine archaeological sites, find spots and archaeological events;

- National Heritage List for England maintained by HE, comprising data of designated heritage assets including sites protected under the PMRA 1986 and the PWA 1973;

- Canmore Historic Environment Records (HER) maintained by HES, comprising a database of all recorded terrestrial and marine archaeological sites, find spots and archaeological events;

- Aberdeenshire Council HER, comprising a database of all recorded terrestrial and marine archaeological sites, find spots and archaeological events within Aberdeenshire and offshore;

- Humber County Council HER, comprising a database of all recorded terrestrial and marine archaeological sites, find spots and archaeological events within the county and offshore;

- Historic Seascape Characterisation (HSC) for the Northumberland to Yorkshire published by seazone Solutions Ltd for English Heritage and Yorkshire and Lincolnshire Rapid Coastal Zone Assessment carried out by Humber Field Archaeology;

- Relevant mapping including Admiralty Charts, British Geological Survey (BGS), Ordnance Survey and historic maps; and

- Relevant documentary sources and grey literature held by Wessex Archaeology, and those available through the Archaeology Data Service and other websites (presented in the 'References').

Data Structure

This chapter is supported by a Geographic Information System (GIS) using ArcGIS 10.6.1, incorporating the positional information of the various data sources listed above, allowing the data to be spatially analysed. The data were subsequently compiled into gazetteers of the maritime and aviation resources within the Marine Installation Corridor (defined in Section 12.1.3.1); these were used to inform the assessment of geophysical data that are presented in Section 12.1.3.3.

Within this assessment, the gazetteer has been compiled and presented in Universal Transverse Mercator (UTM) Zone 30 North projected from a European Terrestrial Reference System (ETRS) 1989 datum.

Information relating to the marine heritage assets that did not include location or positional information were also used to inform the marine archaeological baseline assessment where relevant.

Chronology

Archaeological material is generally studied within a framework of 'periods' or 'ages' that reflect the activities and cultural changes taking place over time. All dates are referred to as BCE (Before Common Era), BP (Before Present) or AD (Anno Domini) within the text. BCE refers to calibrated radiocarbon chronology that can be considered equivalent to calendar years. BP dates are used for periods of time older than circa 10,000 years ago.

A list of the main archaeological periods of the British Isles referred to in the text, along with their broadly defined dates, are presented in Appendix A, which reflects the archaeological record documented from coastal and marine contexts.

Seabed Prehistory

The baseline summary for seabed prehistory was based on a review of geological mapping of seabed sediments, solid geology and bathymetry from published BGS sources. This assessment was further supported by the examination of models of past sea level, palaeo-shorelines and submerged prehistoric landscapes.

The geophysical data obtained for the study area was reviewed to identify deposits of geoarchaeological interest and were compiled to form a gazetteer as part of the seabed prehistory baseline. These records were each given a unique identifier beginning with 7900 continuing sequentially (Appendix B) and were added to the Marine Scheme GIS.

Maritime and Aviation Archaeology

The sources of data for maritime and aviation archaeology listed above have been collated and summarised in order to develop a baseline of marine archaeology for the study area, and the potential for encountering unknown shipwreck and aircraft crash sites (Section 12.1.4.2). Sources of data relevant to maritime and aviation archaeology are the UKHO, NRHE, Canmore and local HERs.

The data obtained were reviewed and those located within the Marine Installation Corridor were extracted and compiled to form a gazetteer as part of the known maritime and aviation baseline. These records were each given a unique identifier beginning with 2000 continuing sequentially (Appendix C).

For the purpose of this assessment, records with duplicate positions between datasets were amalgamated and their co-ordinates are taken from the UKHO dataset as the raw data therein is based on hydrographic survey data presented in World Geodetic System (WGS) 1984 datum. These co-ordinates were projected from WGS84 into UTM30N eastings and northings using the Quest Geodetic Calculator version. Furthermore, the NRHE and HER datasets are primary terrestrial datasets expressed in British National Grid and are considered to be less accurate offshore.

The research for maritime and aviation archaeology was then combined with the archaeological assessment of geophysical survey data. These records were each given a unique identifier beginning with 70000, continuing sequentially (Appendix D to Appendix G) were added to the Marine Scheme GIS. The 2021 survey data was acquired in ETRS89 UTM30N and the 2012 survey data was acquired in WGS84 UTM30N. All the results are presented in ETRS89 UTM30N.

Data relating to Recorded Losses were also extracted from the NRHE, HER and UKHO data sources. Recorded Losses are records for ships or aircraft that are known to have wrecked or crashed offshore, but for which the exact locations are not known. Recorded Losses are often grouped by area into Maritime Named Locations by the NRHE, and the positional data of these records is unreliable and serves only to provide an indication of the types of vessels that passed through the area and the wrecking incidents that are known to have occurred in the general region. Whilst the remains of these vessels and aircraft are expected to exist somewhere on the seafloor, their location is unknown. As such, they signify the potential maritime and aviation resource.

Details regarding maritime Recorded Losses, whose Named Location happens to be located within the Marine Installation Corridor, are presented in a gazetteer format (Appendix H). These records have retained their original identification assigned by the UKHO, NRHE, Canmore or HER for ease of cross referencing. Where records are duplicated between datasets all corresponding identification numbers have been included but are referred to in the text by the NRHE Monument ID if one exists. The gazetteer does not include positional data due to the inaccuracies therein.

The baseline assessment of maritime and aviation archaeology was further supplemented by a review of relevant primary and secondary source material to provide an indication on the nature of maritime and aviation activity across the region. As well as summarising the known archaeological resource, the baseline assessment underlines the potential for encountering unknown shipwreck and aircraft crash sites within the ASA (English Heritage (now Historic England), 2002); (Wessex Archaeology, 2008a).

Intertidal Archaeology

Since the assessment of the onshore archaeological elements of the Marine Scheme will cover to MHWS only, there is no overlap between the onshore assessment and marine assessments within the intertidal area. Details regarding intertidal heritage assets are presented in Appendix I.

Data from the NRHE, Canmore and HER is provided in two spatial formats, points and polygons. All points and polygons below the MHWS mark that intersect the study area have been included within the assessment, however, it should be noted that co-ordinates given for the polygon records is the centroid generated using ArcGIS 10.6.1, which may lie outside the study area.

Assessment of Historic Seascape Character (HSC)

In accordance with the European Landscape Convention, 'landscape' can be defined as '*an area, as perceived by people, whose character is the result of the action and interaction of natural and /or human factors*' (Council of Europe, 2000). The term 'seascape' can be defined as a subset of 'landscape', and has '*an area of sea, coastline and land, as perceived by people, whose character results from the actions and interactions of land and sea, by natural and / or human factors*' (*ibid.*).

Seascape assessment reflects the holistic approach to landscape assessment as defined in the European Landscape Convention, extending it to the sea. Seascape Character Areas include coastal land, intertidal and marine environments up to the territorial limit (12 NM). Historic Seascape Characterisation is the identification and interpretation of the historic dimension of the present day coastal and marine environment (Natural England, 2012, p. 33). This is done by mapping and describing the historic cultural influences which define present seascape perceptions across all of England's marine areas and costal land.

No rapid coastal zone assessment nor historic seascape characterisation have been undertaken at the Scottish landfall in Aberdeenshire as no data is currently available to undertake such an assessment in Scotland. However, the seascape character within the Scottish study area is likely to have similar characteristics to that described within English waters.The baseline summary for character of the historic seascape within the English study area was assessed using the results of the Yorkshire and Lincolnshire Rapid Coastal Zone Assessment carried out by Humber Field Archaeology in 2008 (Brigham, Buglass, & George, 2008); (Buglass & Brigham, 2008) and the HSC undertaken by the SeaZone and Maritime Archaeology Ltd with a methodology developed through the England's Historic Seascapes Programme (Merritt & Dellino-Musgrave, 2009). The HSC include ArcGIS shapefiles of the character areas and reports including a regional and national assessment of the historic seascape character types.

12.1.3.3   Geophysical Methodology

Data Sources

A number of data sources were consulted during this assessment, including:

- Geophysical survey datasets acquired by NEXT in 2021 and MMT in 2012, comprising SBP, SSS, MAG and MBES data;

- Recorded wreck and obstruction data acquired via the UKHO;

- Relevant background mapping from the area (BGS, 1985) (BGS, 1986a) (BGS, 1986b) (BGS, 1986c) (BGS, 1988)(admiralty charts received from UKHO); and

- Client supplied survey reports (MMT, 2012) (NEXT, 2020) (NEXT, 2021).

Geophysical Data – Technical Specifications

The 2021 geophysical datasets were acquired between 30 April and 13 July by NEXT. The nearshore geophysical data were acquired onboard the *Humber Guardian* and the offshore data were acquired onboard the *Levoli Cobalt*. Table 1Table 1 presents a summary of the survey equipment used.

Table 1: Summary of survey equipment

Survey company	Survey Vessel	Data Type	Equipment	Data Format
NEXT	Humber Guardian (Nearshore)	SBP	Innomar SES-2000 (Hull Mounted)	.sgy
			Geosparker 200 (Towed)	.sgy
		MBES	R2Sonic 2024 MBES system, 350-400 kHz	.xyz
		SSS	Edgetech 4200 50 m range, 300-600 kHz dual frequency	.cod
		MAG	G-882 Magnetometer	.xyz
		Positioning	C-NAV 3050	N/A
	Levoli Cobalt (Offshore)	SBP	Innomar SES-2000 (Hull Mounted)	.sgy
			Geosparker 200 (Towed)	.sgy
		MBES	R2Sonic 2024 MBES system, 350-400 kHz	.xyz
		SSS	Edgetech 4200 100 m range, 300-600 kHz dual frequency	.cod
		MAG	G-882 Magnetometer	.xyz
		Positioning	C-NAV 3050	N/A

The 2012 geophysical datasets were acquired between June and July by MMT. The data were acquired for the Anglo-Scottish Eastern HVDC Link project, between Sandford Bay in Scotland and Barmston Sands in England. The data is being assessed to infill the geophysical study area between Scottish territorial waters to approximately KP190 in the EEZ. The survey covered a 500 m wide corridor, with data acquired at a 75 m line spacing and cross lines acquired every 20 km (MMT, 2012). Further details on the equipment used is presented in Table 2.

Table 2: Summary of survey equipment

Survey company	Survey Vessel	Data Type	Equipment	Data Format
MMT	M/V Franklin	SBP	Edgetech chirp DW106	.sgy
			GeoSparker 200	.sgy
		MBES	Kongsberg EM3002D, EM710	.xyz
		SSS	Edgetech 4200	.xtf
		MAG	Geometrics G-882	.txt
		Positioning	Applanix POS/MV 320 with CNAV corrections	N/A

Geophysical data – Processing

A number of datasets were assessed within the geophysical study area (refer to Section 12.1.3.1 for a definition), each dataset was processed separately using the following software (Table 3).

Table 3: Software used for geophysical assessment

Dataset	Processing Software	Interpretation and Rationalisation
SBP	CodaOctopus Survey Engine v5.11	ArcMap v10.6
MBES	QPS Fledermaus v7.7.5	

Dataset	Processing Software	Interpretation and Rationalisation
SSS	CodaOctopus Survey Engine v5.11	
MAG	Geometrics MagPick v3.25 and proprietary software	

The SBP and MBES data were used as the primary datasets for the palaeographic assessment and SSS, MBES and MAG datasets were used for the seabed features assessment.

The SBP data were processed using CodaOctopus Survey Engine Seismic+ software. This software allows the data to be visualised with user selected filters and gain settings in order to optimise the appearance of the data for interpretation. The software then allows an interpretation to be applied to the data by identifying and selecting sedimentary boundaries and shallow geological features that might be of archaeological interest.

The SBP data were interpreted with a two-way travel time (TWTT) along the z-axis. In order to convert from TWTT to depth, the velocity of the seismic waves was estimated to be 1,600 ms^{-1}. This is a standard estimate for shallow, unconsolidated sediments.

The SBP data can also be used to identify small reflectors, which may indicate buried material such as a wreck site covered by sediment. The position and dimensions of any such objects are noted in a gazetteer, and an image acquired of each anomaly for future reference. It should be noted that anomalies of this type are rare, as the sensors must pass directly over such an object in order to detect an anomaly.

For the SBP assessment, 25% of the lines were initially assessed. Where features of interest were identified, additional lines were then interpreted in order to more accurately map the extents of these features.

The MBES data were analysed to identify any unusual seabed structures that could be shipwrecks or other anthropogenic debris. The data were gridded at an appropriate resolution based on the raw data and analysed using QPS Fledermaus software, which enables a 3-D visualisation of the acquired data and geo-picking of seabed anomalies. The MBES data were also used in the palaeogeographic assessment.

The high frequency *.cod* and *.xtf* SSS data files were processed using CodaOctopus Survey Engine Sidescan+ software. This allowed the data to be replayed with various gain settings in order to optimise the quality of the images. The data were interpreted for any objects of possible anthropogenic origin. This involves creating a database of anomalies within CodaOctopus by tagging individual features of possible archaeological potential, recording their positions and dimensions, and acquiring an image of each anomaly for future reference.

A mosaic of the SSS is produced during this process to assess the quality of the sonar towfish positioning. This process allows the position of anomalies to be checked between different survey lines and for the positioning to be further refined if necessary.

The form, size and/or extent of an anomaly is a guide to its potential to be an anthropogenic feature and therefore of archaeological interest. A single small but prominent anomaly may be part of a much more extensive feature that is largely buried. Similarly, a scatter of minor anomalies may be unrelated individual features, define the edges of a buried but intact feature, or may be all that remains as a result of past impacts from, for example, dredging or fishing. Assessment is made of such groups of anomalies during data interpretation to determine which of these alternatives is the most likely.

The MAG data were processed using a combination Geometrics MagPick and proprietary software in order to identify any discrete magnetic contacts which could represent buried metallic debris or structures such as wrecks.

The software enables both the visualisation of individual lines of data and gridding of data to produce a magnetic anomaly map. The data were first smoothed to try and eliminate any spiking. A trend was then fitted to the resulting data, and the trend values subtracted from the smoothed values. This was carried out to remove natural variations in the data (such as diurnal variation in magnetic field strength and

changes in geology). The processed data were then gridded to produce a map of magnetic anomalies, and individual anomalies tagged based on the grid and individual profile lines. Images are taken in a similar process to that of the SSS data.

For the purposes of this assessment, any identified magnetic anomalies have been classified depending on their amplitude as small (5 nanotesla (nT) to 49 nT), medium (50 nT to 99 nT), large (100 nT to 499 nT) and very large (>500 nT).

Geophysical Data – Data Quality

Once processed, the geophysical data sets were individually assessed for quality and their suitability for archaeological purposes, and rated using the following criteria (Table 4).

Table 4: Criteria for assigning data quality rating

Data Quality	Description
Good	Data which are clear and unaffected or only slightly affected by weather conditions, sea state, background noise or data artefacts. Seabed datasets are suitable for the interpretation of upstanding and partially buried wrecks, debris fields, and small individual anomalies. The structure of wrecks is clear, allowing assessments on wreck condition to be made. Subtle reflectors are clear within SBP data. These data provide the highest probability that anomalies of archaeological potential will be identified.
Average	Data which are moderately affected by weather conditions, sea state and noise. Seabed datasets are suitable for the identification of upstanding and partially buried wrecks, the larger elements of debris fields and dispersed sites, and larger individual anomalies. Dispersed and/or partially buried wrecks may be difficult to identify. Interpretation of continuous reflectors in SBP data is problematic. These data are not considered to be detrimentally affected to a significant degree.
Below Average	Data which are affected by weather conditions, sea state and noise to a significant degree. Seabed datasets are suitable for the identification of relatively intact, upstanding wrecks and large individual anomalies. Dispersed and/or partially buried wrecks, or small isolated anomalies may not be clearly resolved. Small palaeogeographic features, or internal structure may not be resolved in SBP data.
Variable	This category contains datasets where the individual lines range in quality. Confidence of interpretation is subsequently likely to vary within the geophysical study area.

The 2021 parametric sonar data were the primary dataset used for the SBP assessment, with sparker lines used to view the deeper stratigraphy across the geophysical study area. The quality of the parametric sonar and sparker data has been rated as 'Good' using the above criteria. The data were mostly clear and appeared to be largely unaffected by sea state or weather conditions, and shallow geological features were mostly clear.

The 2012 sparker data were rated as 'Average' using the above criteria. The data displayed some noise from sea state and weather conditions; however, they are considered suitable for archaeological assessment.

The 2021 MBES data were rated as 'Average' using the above criteria, some areas display striping and possible data artefacts so it may not always be possible to differentiate between data artefacts and anomalies, but this has not affected the data to a significant degree. The data resolution ranged from 0.2 m to 0.5 m and the quality was found to be of a good standard and suitable for archaeological assessment.

The 2012 MBES data were rated as 'Average' using the above criteria, as the data were acquired at 2.0 m resolution. Overall, the data are considered suitable for archaeological assessment of larger features, such as wrecks, however anomalies smaller than 2.0 m will not be identified.

The 2021 SSS data have been rated as 'Average' using the above criteria table. Data spiking was observed throughout the lines and the data displayed weather noise and cable snatching due to sea state and/or weather conditions. Overall, the data are considered suitable for archaeological assessment.

The 2012 SSS data have been rated as 'Average' using the above criteria table, the data displayed some weather noise and cable snatching due to sea state and/or weather conditions, however the data are considered suitable for archaeological assessment.

The 2021 and 2012 MAG data have been rated as 'Average' using the above criterial table. Some areas of increased magnetic responses were visible in the data due to geological features, which can affect the ability to interpret anomalies. However, the data have not been detrimentally affected to a significant degree. Also, the relatively wide line spacing means that smaller ferrous features which are not directly covered by a line of MAG data may not have been picked up in the data. However larger features such as wrecks and substantial ferrous debris were largely still identifiable in the data and, as such, the dataset was considered suitable for archaeological interpretation.

Geophysical data – Anomaly Grouping and Discrimination

The previous section describes the initial interpretation of all available geophysical datasets which were conducted independently of one another. This inevitably leads to the possibility of any one object being the cause of numerous anomalies in different datasets and apparently overstating the number of archaeological features in the geophysical study area.

To address this fact the anomalies were grouped together; allowing one ID number to be assigned to a single object for which there may be, for example, a UKHO record, a MBES anomaly, and multiple SSS anomalies.

Once all the geophysical anomalies and desk-based information have been grouped, a discrimination flag is added to the record in order to discriminate against those which are not thought to be of an archaeological concern. For anomalies located on the seabed, these flags are ascribed in Table 5Table 5.

Table 5: Criteria discriminating relevance of identified features

Overview Classification	Discrimination	Criteria	Data Type
Archaeological	P1	Feature of probable archaeological interest, either because of its palaeogeography or likelihood for producing palaeoenvironmental material	SBP, MBES
Archaeological	P2	Feature of possible archaeological interest	SBP, MBES
Archaeological	A1	Anthropogenic origin of archaeological interest	MBES, SSS, Mag
Archaeological	A2	Uncertain origin of possible archaeological interest	MBES, SSS, Mag
Archaeological	A3	Historic record of possible archaeological interest with no corresponding geophysical anomaly	MBES, SSS, MAG

The grouping and discrimination of information at this stage is based on all available information and is not definitive. It allows for all features of potential archaeological interest to be highlighted, while retaining all the information produced during the course of the geophysical interpretation and desk-based assessment for further evaluation should more information become available.

Any anomalies located outside of the defined geophysical study area, either previously recorded in known databases (e.g., UKHO) or identified during this geophysical assessment, are deemed beyond the scope of the current assessment and are subsequently not included in this chapter.

12.1.3.4   Impact Assessment Criteria

Receptor/Asset Sensitivity

To assess the potential impacts of a Marine Scheme on marine archaeology, the conceptual approach known as the 'source-pathway-receptor' model has been adopted. This approach is based on the identification of the source (i.e., the origin of a potential impact), the pathway (i.e., the means by which the effect of the activity could impact a receptor) and the receptor that may be impacted (e.g., known/potential heritage assets). For the significance of any given impact to be fully understood and for appropriate mitigation to be identified, the sensitivity of any marine heritage assets that may be

impacted need to be considered. This section outlines how the sensitivity of marine heritage assets is ascertained.

The capability of an asset to accommodate change and its ability to recover if affected is a function of its sensitivity. Asset sensitivity is typically assessed via the following factors:

- Adaptability - the degree to which an asset can avoid or adapt to an effect;

- Tolerance - the ability of an asset to accommodate temporary or permanent change without significant adverse impact;

- Recoverability - the temporal scale over and extent to which an asset will recover following an effect; and

- Value - a measure of the asset's importance, rarity and worth.

Cultural heritage assets cannot typically adapt, tolerate or recover from physical impacts resulting in material damage or loss caused by project activities. Consequently, the sensitivity of each asset is predominantly quantified only by its value.

Value of a Receptor/Asset

Based on Historic England's Conservation Principles, Policies and Guidance for the Sustainable Management of the Historic Environment (English Heritage (now Historic England), 2008, p. 21) the significance of a heritage asset '*embraces all the diverse cultural and natural heritage values that people associate with it, or which prompt them to respond to it*'.

Within this chapter, significance is weighed by consideration of the potential for the asset to demonstrate the following value criteria:

- Evidential value – deriving from the potential of a place to yield evidence about past human activity;

- Historical value – deriving from the ways in which past people, events and aspects of life can be connected through a place to the present. It tends to be illustrative or associative;

- Aesthetic value – deriving from the ways in which people draw sensory and intellectual stimulation from a place; and

- Communal value – deriving from the meanings of a place for the people who relate to it, or for whom it figures in their collective experience or memory. Communal values are closely bound up with historical (particularly associative) and aesthetic values but tend to have additional and specific aspects.

With regards to assessing the value of shipwrecks, the following criteria listed in English Heritage's Ships and Boats: Prehistory to Present – Designation Selection Guide (English Heritage (now Historic England), 2012) can be used to assess an asset in terms of its value:

- Period;

- Rarity;

- Documentation;

- Group value;

- Survival/condition; and

- Potential.

These aspects help to characterise each asset whilst also comparing them to other similar assets. The criteria also enable the potential to contribute to knowledge, understanding and outreach to be assessed.

The value of known cultural heritage assets were assessed on a four-point scale using professional judgement informed by criteria provided in Table 6. Value has been assigned to individual receptors based on available information including both primary and secondary sources.

Table 6: Criteria to assess the archaeological value of marine assets

Value	Definition
High	• Best known, only example or above average example and / or significant or high potential to contribute to knowledge and understanding and / or outreach. Assets with a demonstrable international or national dimension to their importance are likely to fall within this category; • Wrecked ships and aircraft that are protected under the Marine Scotland Act 2010, Protection of Wrecks Act 1973, Ancient Monuments and Archaeological Areas Act 1979 or Protection of Military Remains Act 1986 with an international dimension to their importance, plus as-yet undesignated sites that are demonstrably of equivalent archaeological value; and • Known submerged prehistoric sites and landscapes with the confirmed presence of largely in situ artefactual material or palaeogeographic features with demonstrable potential to include artefactual and/or palaeo-environmental material, possibly as part of a prehistoric site or landscape.
Medium	• Average example and / or moderate potential to contribute to knowledge and understanding and / or outreach; • Includes wrecks of ships and aircraft that do not have statutory protection or equivalent significance, but have moderate potential based on a formal assessment of their importance in terms of build, use, loss, survival and investigation; and • Prehistoric deposits with moderate potential to contribute to an understanding of the palaeoenvironment.
Low	• Below average example and / or low potential to contribute to knowledge and understanding and / or outreach; • Includes wrecks of ships and aircraft that do not have statutory protection or equivalent significance, but have low potential based on a formal assessment of their importance in terms of build, use, loss, survival and investigation; and • Prehistoric deposits with low potential to contribute to an understanding of the palaeoenvironment.
Negligible	• Poor example and / or little or no potential to contribute to knowledge and understanding and / or outreach. Assets with little or no surviving archaeological interest.

Furthermore, 'On the Importance of Shipwrecks' (Wessex Archaeology, 2006) report suggests importance can also be assessed through the BULSI system, incorporates the following criteria: build, use, loss, survival and investigation; this is described further below.

To further supplement this approach, the ALSF-funded Marine Class Description and principles of selection for aggregate producing areas project (ALSF 5383), undertaken by Wessex Archaeology (Wessex Archaeology, 2008b), proposed a composite timeline that considers wrecks in five distinct date ranges. The timeline considers the broad chronology of shipbuilding, thus drawing out generalisations regarding the age and special value of sites. The timeline is summarised as follows:

• Pre- 1500 AD: this covers the period from the earliest Prehistoric evidence for human maritime activity to the end of the medieval period, c. 1508. Little is known of watercraft or vessels from this period and archaeological evidence of them is so rare that all examples of craft are likely to be of special value;

• 1500 to 1815: this encompasses the Tudor period in England and the Stuart periods in Scotland and Britain, the Wars of the Three Kingdoms, the Anglo-Dutch Wars and later the American Independence and French Revolutionary Wars. Wreck and vessel remains from this date are also quite rare, and can be expected to be of special value;

• 1816 to 1913: this period witnessed great changes in the way in which vessels were built and used, corresponding with the introduction of metal to shipbuilding, and steam to propulsion technology. Examples of watercraft from this period are more numerous and as such, it is those that specifically contribute to an understanding of these changes that should be regarded as having special value;

- 1914 to 1945: this period encompasses the First World War, the Interwar years and the Second World War. This date range contains Britain's highest volume of recorded boat and ships losses. Those which might be regarded as having special interest are likely to relate to technological changes and to local and global activities during this period; and

- Post 1945: the final period extends from 1946 through the post-war years to the present day. Vessels from this date range would have to present a strong case if they are to be considered of special interest.

According to this composite timeline, vessels that pre-date 1816 are likely to be considered of special value on the basis of their rarity and subsequent national and international value in our understanding of maritime activity and shipping movements during these periods.

Wrecks dating from 1816 to the present day are more plentiful amongst known wrecks. The 'Marine Class Description and Principles of Selection' project (Wessex Archaeology, 2008c) further revealed that a total of 96% of known and dated wrecks were lost in the period between 1860 and 1950. Due to their predominance in the known marine archaeological record, the special value of wrecks of this period thus depends upon their ability to exhibit both integral and relative factors based on attributes relating to the Wessex Archaeology 'BULSI' system of wreck assessment. The ALSF-funded project Assessing Boats and Ships 1860-1950 (Wessex Archaeology, 2011a; Wessex Archaeology, 2011) explored this further by providing a national stock-take of known wrecks in Territorial Waters off England and review it in the light of the framework for assessing special interest prepared in the Marine Class Description and Principles of Selection project (Wessex Archaeology, 2008c) and historical thematic studies.

The 'Early Ships and Boats Prehistory to 1840' provided further information about earlier vessels (Wessex Archaeology, 2013a). Through undertaking a national stock-take of wrecks dating to this period within English Territorial Waters, this project provides supplementary guidance on the key themes and interests represented by such wrecks, in order to inform decisions regarding importance and mitigation. These are summarised thus:

- Does it illustrate a key narrative of the period;

- Does it represent a distinct and tangible link to significant persons or events;

- Is it representative of significant loss of life or related responses in seafaring safety;

- Does it make a distinct cultural contribution; and

- Does it have current relevance or parallels.

The perceived value of each marine archaeological asset is generally assessed and assigned on a site-by-site basis, depending on the criteria listed in Table 6. The UK Marine Policy Statement (Defra, 2011) describes a heritage asset as holding a degree of significance. Significance relates to the heritage interest of an asset that may be archaeological, architectural, artistic or historic.

Furthermore, the nature of the archaeological resource is such that there is a high level of uncertainty concerning the distribution of potential, unknown archaeological remains on the seabed. It is often the case that data concerning the nature and extent of sites is out of date, extremely limited or entirely lacking. As a precautionary measure, unknown potential cultural heritage receptors are therefore considered to be of high sensitivity and high value.

12.1.3.5 Data Gaps and Limitations

Archaeological Data

Data used to compile this chapter comprises primary geophysical survey data and secondary information derived from a variety of sources, only some of which have been directly examined for the purposes of this appraisal. The assumption is made that the secondary data, as well as that derived from other secondary sources, are reasonably accurate.

The records held by the UKHO, NRHE, Canmore, HER and the other sources used in this appraisal are not a record of all surviving cultural heritage assets, rather a record of the discovery of a wide range of archaeological and historical components of the marine historic environment. The information held within these is not complete and does not preclude the subsequent discovery of further elements of the historic environment that are, at present, unknown. In particular, this relates to buried archaeological features.

Geophysical Data

During acquisition, the 2021 survey data corridor was narrowed where there was existing geophysical data coverage acquired by MMT in 2012 (Figure 5viii – Figure 5xxx). Where this occurred, the 2012 SBP, SSS, MAG and MBES survey datasets were assessed to infill the survey corridor.

It should be noted that where 2012 MBES data have been used to infill the 2021 survey corridor, the resolution of 2.0 m means that any object and debris less than 2.0 m in size will not be identified in these areas.

12.1.4 Baseline Conditions

This section covers the marine archaeology baseline for the Marine Scheme, with regard to seabed prehistory, seabed features, intertidal heritage assets and historic seascape character.

12.1.4.1   Seabed Prehistory

Geological Baseline and Archaeological Potential

The following is an overview of the geological and archaeological history of the wider region, from the Pleistocene to the Holocene marine transgression. This is based on a range of secondary sources, including academic papers, monographs, geological information (e.g., BGS mapping), and previous work undertaken by Wessex Archaeology from the area. This serves as a baseline for the palaeogeographic assessment, and aids in producing a stratigraphy for the study area, assigning archaeological potential to identified units, and informing future sampling strategies.

The Marine Installation Corridor extends from the north east coast of Scotland to the north east coast of England. As a long, linear study area, the background geology varies from the English landfall to the Scottish landfall. In general, the geology in the study area can be summarised as outcropping bedrock of Cretaceous age or younger close to the coast, with increasingly thick deposits of overlying Tertiary and Quaternary sediments further offshore (Gatliff, et al., 1994).

The environment within the study area is currently fully marine, and a shallow marine basin has existed in the approximate location of the North Sea since the Early Tertiary (although the exact location and extent has altered over time), which is reflected in the geology of the region (Cameron, et al., 1992).

The recent geological history of the North Sea is directly linked to glacial/interglacial cycles experienced by the area during the Pleistocene (2.5 million – 10 kilo years ago (ka)), which resulted in large areas of the central and southern North Sea being periodically exposed as a terrestrial environment (Figure 2). This is represented in the geological record, with distinct terrestrial landscape features being present, interspersed with deposits of marine and glacially derived sediments.

Due to the fluctuating glacial cycles, the corresponding rises and falls in eustatic sea level, and major reconfigurations of the landscape during the last million years, the archaeological record is phased between periods of occupation and long periods of hiatus when environmental conditions or high sea levels restricted access to Britain (Figure 2). These changes in relative sea level are recorded as Marine Isotope Stages (MIS).

The southern North Sea is known to contain relatively well preserved palaeolandscape features such as fluvial channels, created during periods of sea level lowstand but while the landscape was still free of ice. The remains of this terrestrial landscape are frequently recovered by dredging and fishing in numerous areas around the southern North Sea, generally in the form of the remains of extinct megafauna (e.g., mammoths, bison, horse etc.).

The discovery of actual human artefacts, such as hand axes and worked bone, is a rarer occurrence, but artefacts have been recovered. Reported finds from offshore activity have, to date, produced a range of early prehistoric lithic artefacts indicating early prehistoric activity in submerged palaeolandscapes from Lower, Middle, and Upper Palaeolithic periods (Tizzard L. , Bicket, Benjamin, & De Loecker, 2014) (Wessex Archaeology, 2011a) (Wessex Archaeology, 2013b), with notable collections of more recent Mesolithic artefacts from submerged palaeolandscape contexts (Momber, Tomalin, Scaife, Satchell, & Gillespie, 2011) (Wessex Archaeology, 2013c).

Figure 2
Sea level curve and chronology
of the southern North Sea

The figure presents information derived from several references:
the global sea-level curve is from Lisiecki and Raymo (2005) and Jelgersma (1979).
Details on the geology and archaeology were provided by Dix and Westley (2004);
Funnel (1995); Gibbard and van Kolfschoten (2004); Kukla et al. (2002);
Lee et al. (2006); Lowe and Walker (1997) and Wymer (1999).

Preserved palaeolandscape features and their potentially associated finds are rarer further north within the North Sea, due to repeated reworking of the landscape in this area by ice sheets. However, such features do still survive in shallower water, such as nearshore/intertidal sites and on bathymetric highs such as Dogger Bank.

The following timeline is a summary of the broader southern and central North Sea region to place the archaeological potential of the study area in a wider context; not all information will be directly relevant to the study area itself.

Pre-Anglian (>478 ka; >Marine Isotope Stage (MIS) 12)

Prior to the Anglian glaciation, an extensive estuarine/deltaic landscape existed at the location of the current North Sea basin. This landscape, the Ur-Frisia delta (Cameron, et al., 1992), drained many major European rivers, including the Bytham/Ingham palaeo-river (Rose, 2009) (Westaway, 2009), the palaeo-Thames-Medway system, which drained northwards through Essex and East Anglia (Bridgland, 1994), as well as the Rhine (Hijma, Cohen, Roebroeks, Westerhoff, & Busschers, 2012).

The pre-Anglian period represents a significant amount of the Lower Palaeolithic (c. 970,000 to 300,000 BP, >MIS 9). The earliest direct evidence for hominin activity in the UK has been identified at the Lower Palaeolithic sites of Happisburgh, on the Norfolk coast, and Pakefield, on the Suffolk coast, which date from c. 900,000 and 700,000 BP respectively (Parfitt S. A., 2005) (Parfitt, et al., 2010). These sites would have been situated on the edge of an extensive landscape of low-lying estuaries, major river systems, plains and rolling hills. It was a rich, diverse and productive landscape like any contemporary example, and should not be considered as a temporary land-bridge or intermittent linkage to continental Europe (Coles, 1998).

The importance of these sites is international, as they are currently unique at this latitude for this early date (Wessex Archaeology, 2013c). Cohen, et al. (2012) have highlighted the North Sea basin as a key region for understanding Pleistocene hominins within a northerly, coastal environment. The east of England, particularly East Anglia, but also the south east of England, are important regions for Lower Palaeolithic archaeology in the last 500,000 years during MIS 13 and 11 (Hoxnian interglacial, Figure 2) (Wymer, 1999) (Pettitt & White, 2012).

Anglian to Ipswichian (c. 478 ka – 115 ka; MIS 12 – 5e)

The Anglian glacial period was the most extensive glaciation of the Pleistocene and saw ice sheets extending further south than at any time in the past 2.5 million years. The advancing ice sheets gradually pushed the courses of major rivers further south, until they eventually reached their approximate current positions. During this period the study area will have been completely covered by ice, and the climate around the remaining ice-free areas of the UK would have been too cold for hominin habitation.

During deglaciation and retreat of the ice sheet at the end of the Anglian, it is thought that the emptying of an ice-dammed lake within the North Sea created a volume of water large enough to breach a chalk ridge across the eastern end of what is now the English Channel. This connected the North Sea to the English Channel, incising the Lobourg Channel off the Kent coast and some of the English Channel palaeovalleys in the process (Hamblin, et al., 1992) (Gupta, et al., 2017).

The breaching of the Weald-Artois ridge had a major impact on the palaeogeography of Britain, turning Britain from an island at times of high sea level, to a peninsula of Europe when sea levels dropped. In periods associated with lower sea levels since the Anglian, the Lobourg Channel is likely to have formed the main drainage route of the major northern European rivers flowing into the dry North Sea Basin (Cameron, et al., 1992). During periods of lowered sea levels, these river systems, including the Thames, Medway, Great Stour, and palaeo-Yare, extended across these now submerged landscapes, resulting in cyclical deposition of associated terrace and flood plain deposits laid down in relation to relative sea level (Wessex Archaeology , 2010).

During the interglacial periods between the Anglian and Devensian glaciations (Hoxnian and Ipswichian), warmer climate conditions meant the UK was again available to be recolonised by hominin communities. The foreshore, cliffs and hinterland at Clacton-on Sea (Essex) comprise an important Middle Pleistocene site and is a designated geological Site of Special Scientific Interest (SSSI). Channel sediments from the area are also an important site for the Lower Palaeolithic Clactonian flint industry and have yielded a rare wooden spear alongside lithic artefacts. The site dates from the Hoxnian

interglacial period (MIS 11, c. 423,000 - 380,000 BP, Figure 2) (Sumbler, 1996), and the type site for the Hoxnian (the Hoxne Brick Pit) is located a relatively short distance inland outside of Diss, Suffolk.

During the Saalian glaciation (MIS 10,Figure 2) there was a hiatus in hominin activity in Britain (Pettitt & White, 2012). When hominins returned, H. neanderthalensis, they brought a new lithic technology: the Levallois prepared core technique developing from MIS 9, c. 300,000 BP (Scott & Ashton, The Early Middle Palaeolithic: The European Context., 2011). They were hunters adapted to a 'mammoth steppe' environment (Ashton & Lewis, 2002).

The international importance of Early Middle Palaeolithic archaeology in the southern North Sea is highlighted by the numerous sites preserved along the south east of England (White, 2006) (Scott, Ashton, Lewis, Parfitt, & White, 2011) and, in particular, by the submerged prehistoric Levallois lithic assemblage from marine aggregates licence Area 240 in the palaeo-Yare catchment. A substantial number of artefacts have now been recovered from this locale, some of which are identifiable as Levellois, with many recovered from in situ or near in situ contexts (Wessex Archaeology, 2013b) (Wessex Archaeology, 2013c) (Tizzard L. , Bicket, Benjamin, & De Loecker, 2014) (Tizzard L. , Bicket, Benjamin, & De Loecker, 2015).

The substantial, mixed assemblage of handaxes also recovered from Area 240 may be of older Lower Palaeolithic origin (e.g., >MIS 9,Figure 2), or may date to the Later Middle Palaeolithic when technologically similar artefacts were made (c. MIS 3, Figure 2) (Boismier, Gamble, & Coward, 2012). However, based on palaeoenvironmental and sedimentological evidence an Early Middle Palaeolithic date is most likely (Tizzard L. , Bicket, Benjamin, & De Loecker, 2015).

Palaeogeographically, Area 240 is one of the most northerly Neanderthal sites in north west Europe and of primary archaeological importance for defining Middle Palaeolithic potential and the contemporary palaeogeography across the southern North Sea basin (Tizzard L. , Bicket, Benjamin, & De Loecker, 2014). The site highlights the archaeological potential of preserved Pleistocene fluvial deposits within the southern North Sea.

Part of a Lower Palaeolithic (Achulean) hand axe was discovered at South Gare, near Redcar (Rowe, 2007), due north of the English landfall, which represents the first and only Lower Palaeolithic artefact discovered in this area. However, it should be noted that it may not be in its primary context and may have been eroded from offshore deposits within the North Sea Basin or redeposited through 19th century dredging and ballast (Wessex Archaeology, 2021). The most northerly palaeolithic record in the English Heritage archives is related to a 'quartzite implement', which was recovered in 1927 from a gravel bed in Limehouse Gill, County Durham (Wessex Archaeology, 2015).

Devensian to Late Glacial Maximum (c. 115 ka – 18 ka; MIS 5d – 2)

Deterioration of the climate during the Late Pleistocene resulted in the most recent glaciation of the North Sea during the Devensian period. Currently there is no definitive evidence of a hominin presence in Britain during MIS 5 (Lewis, Ashton, & Jacobi, 2011), and the study area would again have been completely covered by ice during this period.

Within the context of early prehistory and submerged palaeogeography however, substantial areas of the southern North Sea basin would have been dry land during the warming and cooling limbs of the various sub-stages (MIS 5a to 5e, Figure 2). Recent analysis has suggested that eight relatively brief phases of human activity within the UK are represented by the existing Upper Palaeolithic archaeological record (Jacobi & Higham, 2011), with six occurring before the Devensian glacial maximum. Therefore, the potential exists for human activity to have occurred in Doggerland, the area of exposed terrestrial environment within the southern North Sea basin, during and after the Devensian glaciation.

Again, East Anglia provides early evidence for Neanderthal recolonisation of Britain after the hiatus between MIS 6 to 4, around 60,000 BP (Figure 2). The Lynford Quarry material highlights a new lithic technology visually similar to Lower Palaeolithic Acheulean lithics, so-called Mousterian of Acheulean Tradition handaxes and tools (Boismier, Gamble, & Coward, 2012).

Climatically, MIS 3 was significantly colder than now but did not attain the glacial conditions of later or earlier glacial periods (e.g., MIS 6 or 2, Figure 2) (Pettitt & White, 2012). For the Neanderthals that may have occupied the region at this time, surviving in Doggerland during this period may have been subject to a variety of technological and cultural adaptations (White, 2006). Whilst sediments from this period

do still exist within the wider North Sea region, erosion of upper layers of deposits by the Devensian glaciation significantly reduces the potential for archaeological material of this age remaining on the seabed further north within the North Sea basin.

Post-Late Glacial Maximum and early Holocene (18,000 – 6000 BP; MIS 2 – 1)

Following the Devensian glacial maximum, ice sheet retreat once again left significant areas of the southern and central North Sea exposed as a terrestrial environment, with deposition of fluvially derived sediments continuing from the Late Pleistocene into the Early Holocene.

In the Early Upper Palaeolithic, at the end of the Late Pleistocene, there was a transition period for hominins. Neanderthals died out around 40,000 BP, and modern humans then colonised Doggerland, arriving in Britain around 34,000 BP (Jacobi & Higham, 2011) (Bicket & Tizzard, 2015). Archaeological evidence for this period is relatively sparse, but submerged palaeolandscapes provide key contextual evidence for recovered artefacts and provides a background landscape within which to place these human communities.

During the Last Glacial Maximum (LGM), the environment within the southern North Sea was relatively poor for human colonisation and was situated at the north western extents of possible habitation. However, there was increasing human exploitation after 15,000 BP. Humans at this time were hunting game, such as mammoth and deer, and evidence of these animals has been reported through marine aggregate dredging, and the associated reporting requirements (Bicket & Tizzard, 2015).

The onshore archaeological record of Upper Palaeolithic activity is relatively sparse, and offshore locations may provide unique and important context for coastal and lowland human activity during this period (Wessex Archaeology, 2013c). For example, a Maglemosian harpoon artefact from trawled peat in the early 20th century was subsequently radiocarbon dated to around 12,000 years ago (Housley, 1991), and archaeological and palaeoenvironmental material has been reported from North Sea contexts for over a century (Reid, 1913) (Godwin & Godwin, 1933).

Landscape features and archaeological evidence survive off East Anglia as the area is thought to have only experienced one glacial advance during the Pleistocene. However, the region of the North Sea north of Norfolk has experienced a number of major glacial events, and, as such, much of the evidence for past landscapes is likely to have been adversely affect by the associated glacial erosion and deposition of till (Tappin, et al., 2011). This certainly seems to be the case over much of this area of the North Sea, as the shallow Pleistocene geology is dominated by infilled glacial valleys (such as the Swarte Bank Formation) and extensive deposits of glacial till (such as the Bolders Bank Formation and Wee Bankie Formation) (Cameron, et al., 1992) (Gatliff, et al., 1994).

However, it is clear from numerous research and development-led investigations that postglacial marine transgression has not destroyed Pleistocene and Holocene palaeogeography by default (Wessex Archaeology, 2013b). Areas of preserved palaeogeographic features do remain, and detailed reconstructions of palaeoenvironments and palaeogeography can be achieved for large parts of the North Sea basin (Tappin, et al., 2011) (Limpenny, et al., 2011) (Dix & Sturt, 2011)

In a terrestrial context, Upper Palaeolithic activity has been recorded in the north east of England at Prudhoe Farm and possibly at Towler Hill in Teesdale (Petts, et al., 2006). Upper Palaeolithic finds have also been found in other glaciated areas, such as Howburn Farm, South Lanarkshire, in Scotland (Ballin, Saville, Tipping, & Ward, 2010), demonstrating the potential for such material in these types of glaciated landscapes. It is noted in Wessex Archaeology (2015) that the coastal strip moving north to Northumberland is a key palaeogeographical zone which not only links the onshore and offshore archaeological records, but also represents an area of merging routes through the southern North Sea basin into northern England and Scotland, during both the Later Upper Palaeolithic and the Mesolithic. It is also thought that larger valleys such as the Tweed may have served as routeways in and out of the North Sea Basin (Wessex Archaeology, 2015).

The Mesolithic period began in the early Holocene. Around 10,000 BP, sea levels were still more than 60 m below current levels, and during this period, an extremely large area of the central and southern North Sea and English Channel was dry land, suitable for human occupation.

Evidence of this environment has been identified from the foreshore at Jaywick, Essex, where layers of peat dating from the Early Holocene are present along with a preserved land surface from which Mesolithic artefacts have been recovered (Wilkinson & Murphy, 1995). The important Mesolithic site of

Star Carr is located in North Yorkshire, only approximately 10 km from the North Sea coast. Closer to the study area, a number of Mesolithic sites are known from the modern Northumbria coast, including Howick, Low Hauxley, and flint scatters at Newbiggin-By-Sea and Lynemouth (Waddington, 2015) (Wessex Archaeology, 2020). In addition, 'submerged forests' have also previously been identified close to the study area at South Beach, Blyth, during an unusually low tide in 2014 (Wessex Archaeology, 2020), and at Low Hauxley, which has been linked to contemporary Mesolithic activity (Wessex Archaeology, 2015). Submerged peats have also been identified in Hartlepool where organic peats and megafaunal remains, including a Southern Mammoth vertebra, were discovered suggesting that, although securely provenanced Upper Palaeolithic archaeology has yet to be discovered, the environmental conditions suggest there is the potential for the preservation of late glacial human activity within this area (Wessex Archaeology, 2021).

By the early Holocene, Mesolithic hunter-fisher-gatherers in Doggerland were active in a familiar ecosystem of mixed deciduous woodland with oak, elm, alder and lime populated by deer and a wide variety of other mammals (Tappin, et al., 2011).

Considerable attention has been paid to Mesolithic Doggerland in the last decade (Gaffney, Thomson, & Fitch, 2007) (Tappin, et al., 2011) and the geoarchaeology (Boomer, Waddington, & Hamilton, 2007), submerged forests (Hazell, 2008), and palaeo-river systems around the current North Sea coast (Wessex Archaeology 2013b, (Limpenny, et al., 2011) (Emu, 2009). Increasingly, a maritime perspective has developed for understanding the early prehistoric archaeological record, where coasts, estuaries and wetlands are key landscape elements (Ransley, Sturt, Dix, Adams, & Blue, 2013). Other key Mesolithic sites are located along the north east coast such as Seamer Carr, East Barns, Cramond, as well as Echline, Firth of Forth, where one of the oldest Mesolithic structures in the British Isles has been discovered (Wessex Archaeology, 2015). Mesolithic lithic scatterings and flint flakes have also been identified on Holy Island and the Farne Islands (Wessex Archaeology, 2015).

Investigations have shown that during the early Holocene, the coast in Northumberland was at least 1 km east of Howick around 8,000 years ago (Wessex Archaeology, 2015). Between 7,000 and 5,000 BP, much of the land was inundated by eustatically driven sea level change (Bicket & Tizzard, 2015), and by 6,000 BP sea level was only approximately 7 m below the present level (Cameron, et al., 1992). Around this time, Britain became an island again (Coles, 1998), although, due to its more northern location, the study area will have been mostly inundated before this time; potentially around 8,000 BP, with the exception of the most nearshore section (Shennan, Bradley, & Edwards, 2018). Settlements at the time were often transitory and seasonal, and therefore leave little trace in the archaeological record, however, new types of stone tools were introduced during this period.

The Holocene marine transgression resulted in the deposition of sands, gravels and muds, which represent the modern marine sediment, but can also incorporate reworked sediment from the underlying Pleistocene deposits. Post the Holocene marine transgression, the archaeological potential of the North Sea, including the study area, shifts to the maritime history of the UK, as discussed in Section 12.1.4.2.

Geophysical Paleogeographic Assessment Results

A total of 33 features of palaeogeographic interest have been identified within the geophysical study area. These features are discussed below, individually described in gazetteer format in Appendix B and illustrated in Figure 3 and Figure 4.

The identified geology within the geophysical study area has been divided into eight phases, as described in Table 7.
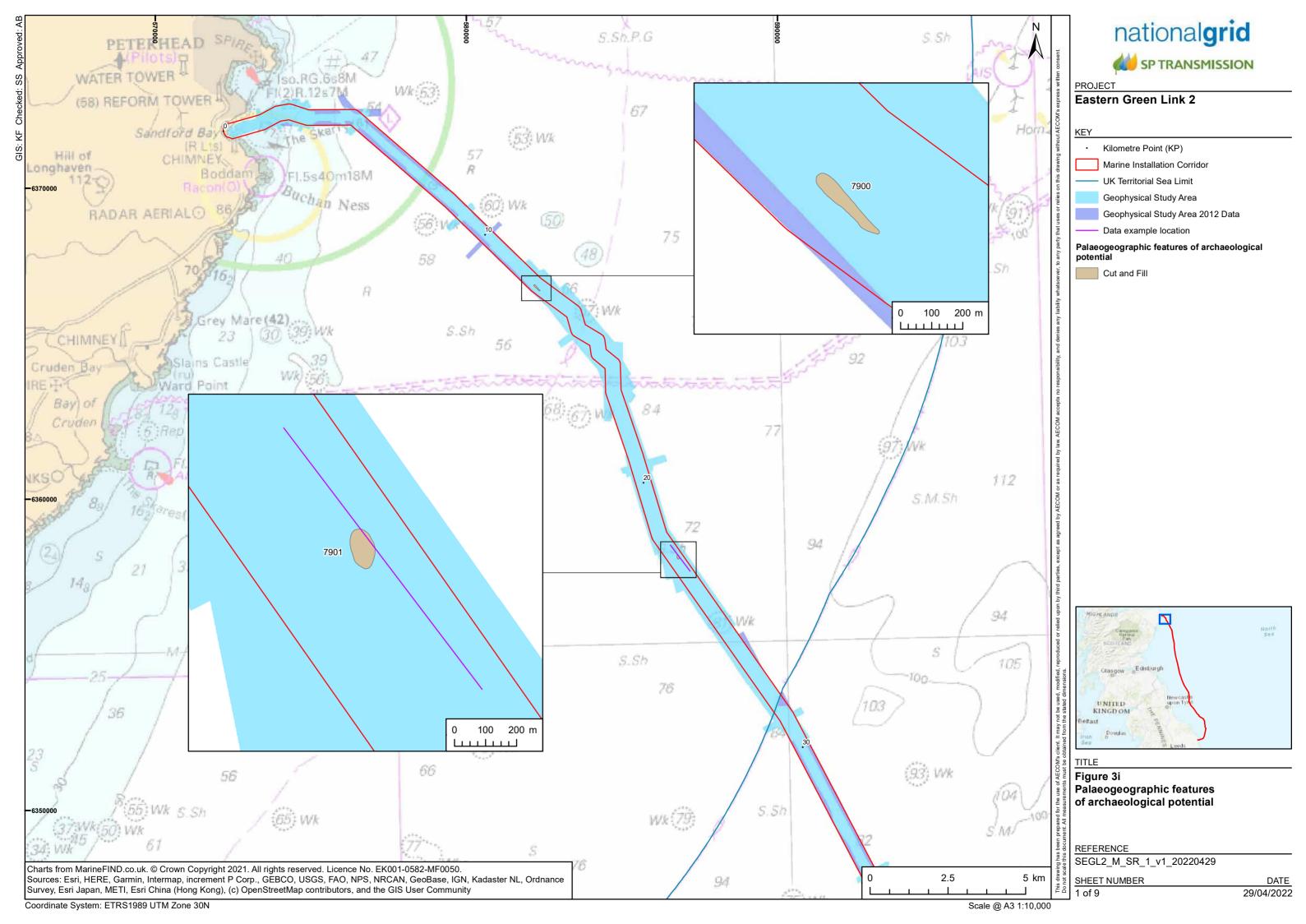
Table 7: Shallow stratigraphy of the geophysical study area
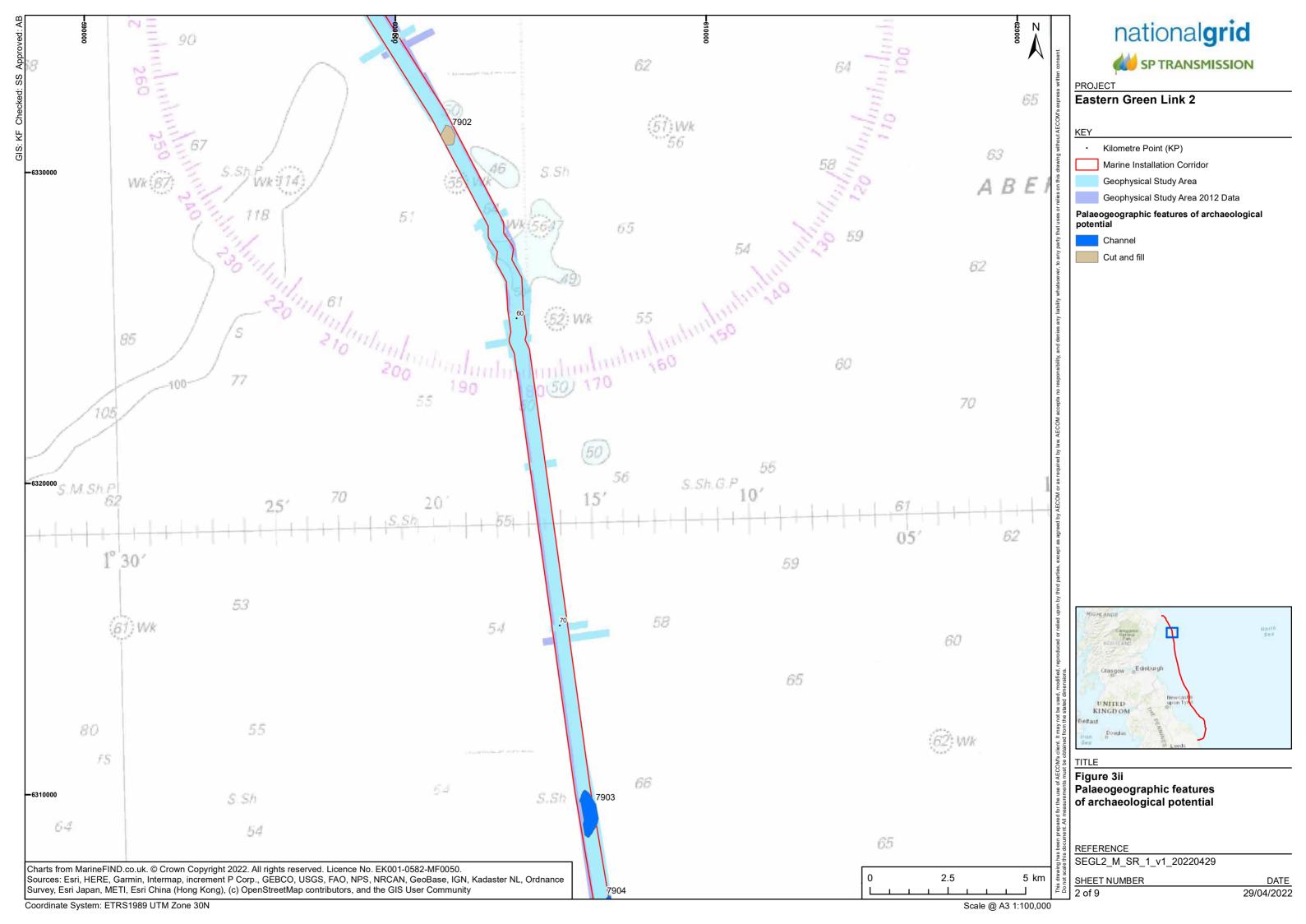
Unit	Unit Name	Geophysical Characteristics [1]	Sediment type [2]	Archaeological potential
7b	Holocene Seabed Sediments (post-transgression) (MIS 1)	Generally observed as a thin veneer across the study area. Boundary between surficial sediments and underlying units not always discernible	Variable, generally clayey silty sand with gravel	Considered of low potential in itself, but possibly contains re-worked artefacts and can cover wreck sites and other cultural heritage in areas with sufficient thickness
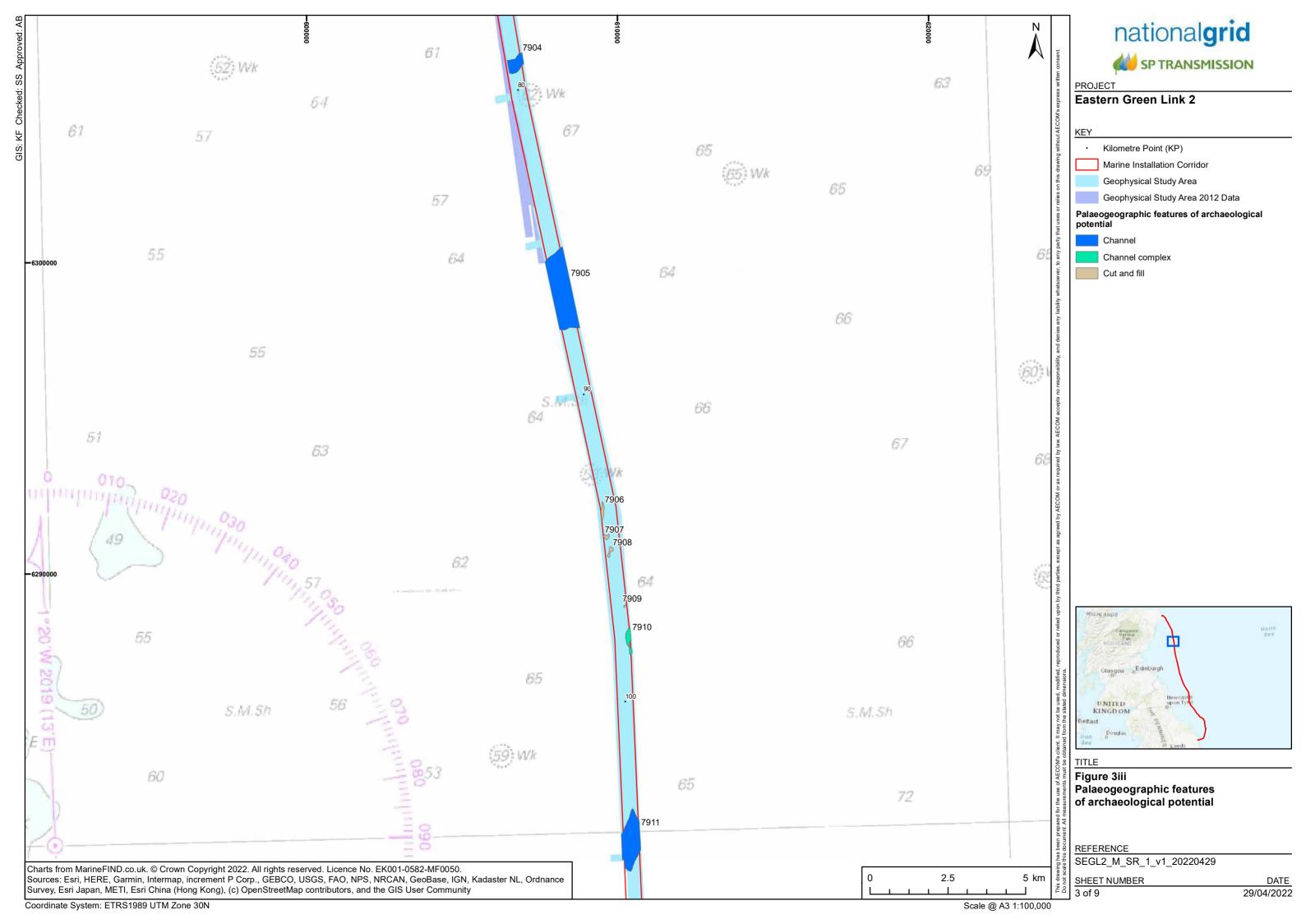
Unit	Unit Name	Geophysical Characteristics [1]	Sediment type [2]	Archaeological potential
7a	Holocene Sediments (pre-transgression) (MIS 2 to 1)	Shallow infilled cut and fills with fill characterised by sub-parallel internal reflectors, and possibly occasionally with unstructured fill.	Fluvial, estuarine and terrestrial deposits, generally extremely low to medium strength silty sandy clay.	Potential to contain in situ and derived archaeological material, and palaeoenvironmental material.
6	Forth Formation, St Andrews Bay (MIS 3 to 1)	Acoustically transparent/unstructured unit with occasional point contacts.	Interbedded sand and clay, fluviomarine and estuarine	Potential to contain derived archaeological and palaeoenvironmental material, and to protect underlying surfaces.
5	Botney Cut Formation (MIS 3 to 1)	Distinct channel features characterised by parallel internal reflectors	Sub-glacial channel fill, comprising a basal reworked till with upper glaciolacustrine / glaciomarine sediment	Lower fill unlikely to contain archaeological material, though upper fill potentially contains palaeoenvironmental material
4	Marr Bank Formation	Acoustically chaotic/unstructured unit	Glacimarine sediments- muds and clays with small pebbles	Unlikely to contain archaeological material.
3	Wee Bankie Formation (MIS 3)	Acoustically chaotic/unstructured unit	Devensian glacial lodgement till	Unlikely to contain archaeological material.
2	Bolders Bank Formation (MIS 3)	Intermittent deposit characterised by an irregular base and generally acoustically unstructured or chaotic fill	Devensian sandy gravelly till	Unlikely to contain archaeological material
1	Pre-Quaternary bedrock (Cretaceous to Permian)	Acoustically unstructured and sometimes stratified close to the surface	Pre-Quaternary bedrock	Not of archaeological interest
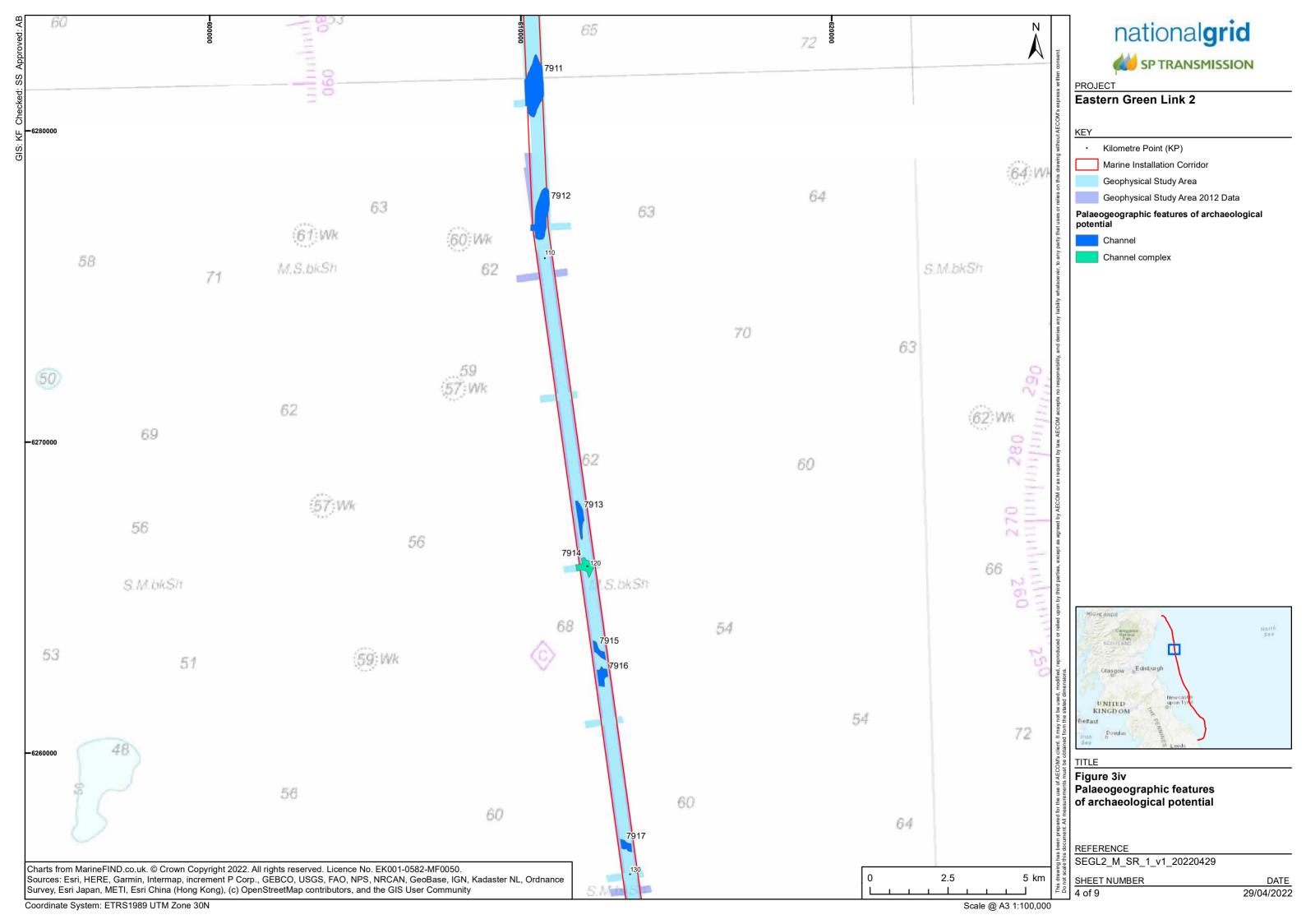
[1] Based on geophysical data
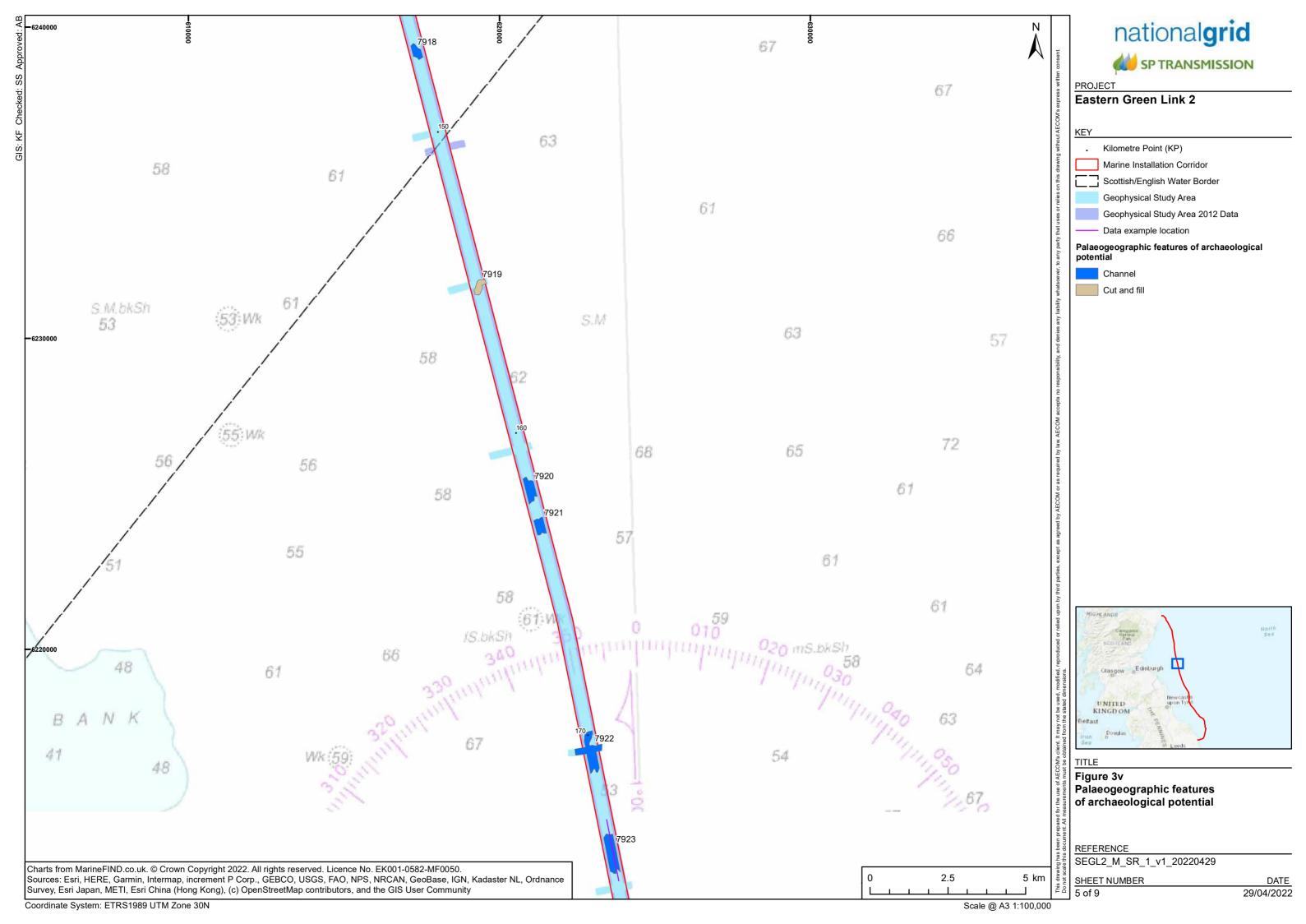
[2] Based on borehole data, (Cameron, et al., 1992) and (Gatliff, et al., 1994)

nationalgrid
SP TRANSMISSION

PROJECT

Eastern Green Link 2

KEY

- Kilometre Point (KP)
- Marine Installation Corridor
- UK Territorial Sea Limit
- Geophysical Study Area
- Geophysical Study Area 2012 Data
- Data example location

Palaeogeographic features of archaeological potential

- Cut and Fill

TITLE

Figure 3i
Palaeogeographic features of archaeological potential

REFERENCE

SEGL2_M_SR_1_v1_20220429

SHEET NUMBER   DATE

1 of 9   29/04/2022

Coordinate System: ETRS1989 UTM Zone 30N

Scale @ A3 1:10,000

national**grid**

SP TRANSMISSION

PROJECT

Eastern Green Link 2

KEY

- • Kilometre Point (KP)
- — Marine Installation Corridor
- Geophysical Study Area
- Geophysical Study Area 2012 Data

Palaeogeographic features of archaeological potential

- Channel
- Cut and fill

A B E R

TITLE

**Figure 3ii
Palaeogeographic features
of archaeological potential**

REFERENCE

SEGL2_M_SR_1_v1_20220429

SHEET NUMBER

2 of 9

DATE

29/04/2022

Coordinate System: ETRS1989 UTM Zone 30N

Scale @ A3 1:100,000

0   2.5   5 km

GIS: KF   Checked: SS   Approved: AB

nationalgrid
SP TRANSMISSION

PROJECT
Eastern Green Link 2

KEY

- Kilometre Point (KP)
- Marine Installation Corridor
- Geophysical Study Area
- Geophysical Study Area 2012 Data

Palaeogeographic features of archaeological potential

- Channel
- Channel complex
- Cut and fill

TITLE
Figure 3iii
Palaeogeographic features of archaeological potential

REFERENCE
SEGL2_M_SR_1_v1_20220429

SHEET NUMBER   DATE
3 of 9   29/04/2022

Coordinate System: ETRS1989 UTM Zone 30N

Scale @ A3 1:100,000

0   2.5   5 km

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Coordinate System: ETRS1989 UTM Zone 30N

Scale @ A3 1:100,000

nationalgrid

SP TRANSMISSION

PROJECT

Eastern Green Link 2

KEY

- Kilometre Point (KP)
- Marine Installation Corridor
- Scottish/English Water Border
- Geophysical Study Area
- Geophysical Study Area 2012 Data
- Data example location

Palaeogeographic features of archaeological potential

- Channel
- Cut and fill

TITLE

Figure 3v
Palaeogeographic features
of archaeological potential

REFERENCE

SEGL2_M_SR_1_v1_20220429

SHEET NUMBER

5 of 9

DATE

29/04/2022

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Coordinate System: ETRS1989 UTM Zone 30N

0   2.5   5 km

Scale @ A3 1:100,000

nationalgrid

SP TRANSMISSION

PROJECT
Eastern Green Link 2

KEY
- Kilometre Point (KP)
- Marine Installation Corridor
- Scottish/English Water Border
- Geophysical Study Area
- Geophysical Study Area 2012 Data

Palaeogeographic features of archaeological potential
- Channel
- Cut and fill

TITLE
Figure 3vi
Palaeogeographic features
of archaeological potential

REFERENCE
SEGL2_M_SR_1_v1_20220429

SHEET NUMBER   DATE
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Scale @ A3 1:100,000

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Coordinate System: ETRS1989 UTM Zone 30N

0   2.5   5 km

nationalgrid

SP TRANSMISSION

PROJECT
Eastern Green Link 2

KEY

- • Kilometre Point (KP)
- Marine Installation Corridor
- Scottish/English Water Border
- Geophysical Study Area

Palaeogeographic features of archaeological potential

- Cut and fill

FIRING PRACTICE AREA (D513/D513B)

(see Note)

Farn Deeps

220
77 Wk
78
67
58
76 Wk
81
cS.bkSh.G
58 Wk
87 Wk
60
62
79
94
67
75
TS
89
230
65
59
86
85
82
90 Wk
62
92
71
102
79
7927
M.S.Sh
87 TS.bkSh
57
30
240
105
99
98 Wk
82
91
60
94
97
86 Obstn
Wk 70
107
94
86 Wk
65
78
78 Wk

TITLE

Figure 3vii
Palaeogeographic features of archaeological potential

REFERENCE
SEGL2_M_SR_1_v1_20220429

SHEET NUMBER
7 of 9

DATE
29/04/2022

Coordinate System: ETRS1989 UTM Zone 30N

Scale @ A3 1:100,000

0   2.5   5 km

GIS: KF   Checked: SS   Approved: AB

national**grid**

SP TRANSMISSION

PROJECT
Eastern Green Link 2

KEY

- Kilometre Point (KP)
- Marine Installation Corridor
- Scottish/English Water Border
- Geophysical Study Area
- Data example location

Palaeogeographic features of archaeological potential

- Channel
- Infilled depression
- Acoustic blanking

TITLE
Figure 3viii
Palaeogeographic features of archaeological potential

REFERENCE
SEGL2_M_SR_1_v1_20220429

SHEET NUMBER
8 of 9

DATE
29/04/2022

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Coordinate System: ETRS1989 UTM Zone 30N

Scale @ A3 1:100,000

0   2.5   5 km

GIS: KF Checked: SS Approved: AB

nationalgrid

SP TRANSMISSION

PROJECT
Eastern Green Link 2

KEY

- Kilometre Point (KP)
- Marine Installation Corridor
- UK Territorial Sea Limit
- Geophysical Study Area
- Data example location

Palaeogeographic features of archaeological potential

- Cut and fill

7932

0   100   200 m

TITLE

**Figure 3ix
Palaeogeographic features
of archaeological potential**

REFERENCE
SEGL2_M_SR_1_v1_20220429

SHEET NUMBER   DATE
9 of 9   29/04/2022

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Coordinate System: ETRS1989 UTM Zone 30N

0   2.5   5 km

Scale @ A3 1:5,000

Figure 4i
Palaeogeographic feature data example – 7901

NW

SE

Approx. 4 m

Unit 6a
Holocene sediments

Base of Cut and Fill 7901

Seabed

Unit 3
Wee Bankie Formation

nationalgrid

SP TRANSMISSION

PROJECT
Eastern Green Link 2

KEY

— Marine Installation Corridor
Geophysical Study Area
— Data example location

Palaeogeographic features of archaeological potential
Cut and fill

7901

N

0   250   500 m

TITLE
**Figure 4i
Palaeogeographic feature
data example – 7901**

REFERENCE
SEGL2_M_SR_1_v1_20220429

SHEET NUMBER
1 of 4

DATE
29/04/2022

Coordinate System: ETRS1989 UTM Zone 30N

Inset scale @ A3 1:25,000

S   N

90 msec
95 msec
100 msec
105 msec

Approx. 4 m

110 msec

Seabed

Unit 7b
Seabed sediments

Unit 6
Forth Formation

Base of Channel 7923

Unit 4
Marr Bank Formation

nationalgrid
SP TRANSMISSION

PROJECT
Eastern Green Link 2

KEY

- ▭ Marine Installation Corridor
- ▮ Geophysical Study Area
- ▮ Geophysical Study Area 2012 Data
- — Data example location

Palaeogeographic features of archaeological potential

- ▮ Channel

7923

0   0.5   1 km
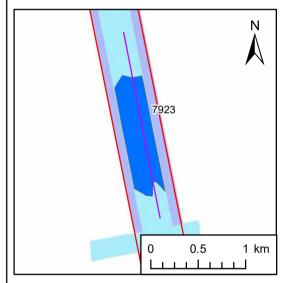
TITLE
Figure 4ii
Palaeogeographic feature data example – 7923

REFERENCE
SEGL2_M_SR_1_v1_20220429
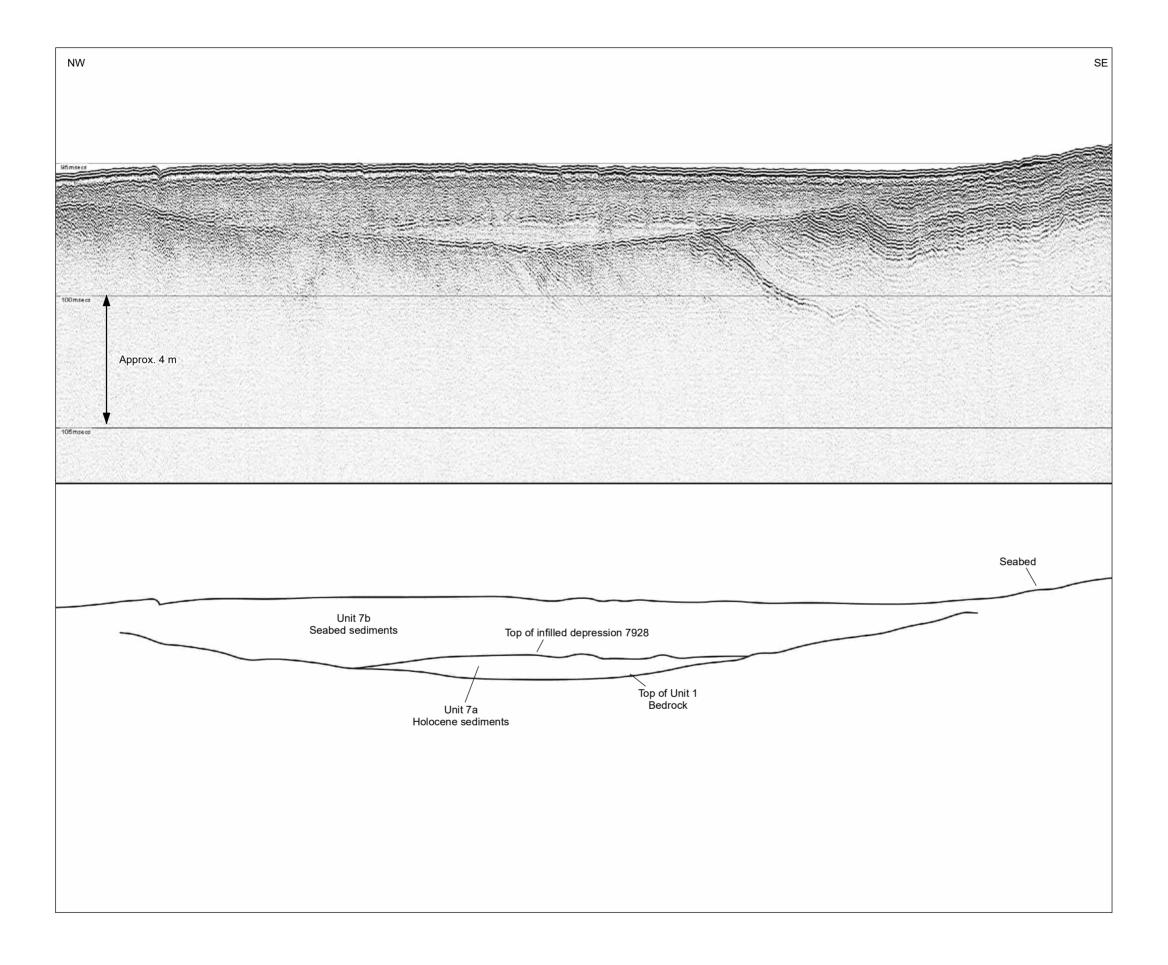
SHEET NUMBER   DATE
2 of 4   29/04/2022

Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Coordinate System: ETRS1989 UTM Zone 30N   Inset scale @ A3 1:40,000

NW

SE

95 msecs

100 msecs

Approx. 4 m

105 msecs

Seabed

Unit 7b
Seabed sediments

Top of infilled depression 7928

Top of Unit 1
Bedrock

Unit 7a
Holocene sediments

nationalgrid

SP TRANSMISSION

PROJECT
Eastern Green Link 2

KEY

Marine Installation Corridor

Geophysical Study Area

Data example location
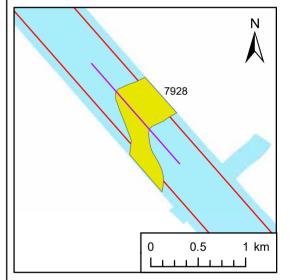
Palaeogeographic features of archaeological potential

Infilled depression

N

7928

0   0.5   1 km

TITLE
Figure 4iii
Palaeogeographic feature
data example – 7928

REFERENCE
SEGL2_M_SR_1_v1_20220429

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3 of 4   29/04/2022

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Coordinate System: ETRS1989 UTM Zone 30N

Inset scale @ A3 1:40,000

SW

NE

55 msecs

50 msecs

Approx. 4 m

65 msecs

Unit 7a
Holocene sediments

Seabed

Unit 2
Bolders Bank Formation

Base of Cut and Fill 7932

Unit 1
Bedrock

nationalgrid
SP TRANSMISSION

PROJECT
Eastern Green Link 2

KEY

☐ Marine Installation Corridor
☐ Geophysical Study Area
— Data example location

Palaeogeographic features of archaeological potential

☐ Cut and fill

N

7932

0   100   200 m
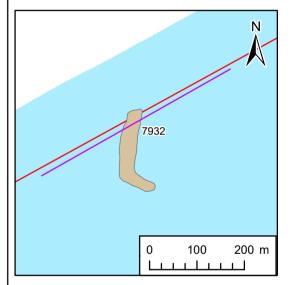
TITLE
**Figure 4iv
Palaeogeographic feature
data example – 7932**

REFERENCE
SEGL2_M_SR_1_v1_20220429

SHEET NUMBER   DATE
4 of 4   29/04/2022

Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

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Inset scale @ A3 1:8,000

As a long linear scheme that crosses a broad expanse of the North Sea, the stratigraphic sequence across the study area is relatively complex. The sequence presented in Table 7 contains some units that are laterally equivalent, e.g., Units 2 and 3 both formed during the Devensian glaciation, and Units 5 and 6 formed during erosion and re-deposition during deglaciation events. As such, the stratigraphic sequence as presented in Table 7 is not visible in its entirety in any one part of the geophysical study area.

Scottish Territorial Waters

The oldest interpreted unit within the geophysical study area is Unit 1, which comprises the solid, pre-Quaternary bedrock for the region. This is seen in the nearshore areas to outcrop close to the surface. This is then overlain by deposits of younger formations as the proposed route moves offshore, although may be present at, or just below, the seabed at numerous places within the geophysical study area.

As formations of Cretaceous and Permian age, Unit 1 is not considered of archaeological potential. However, the upper surfaces may have once been exposed as a terrestrial land surface upon which archaeological material could have been deposited.

The dominant shallow geological units present across the geophysical study area are the Wee Bankie Formation (Unit 3), the Marr Bank Formation (Unit 4) and further south the Bolders Bank Formation (Unit 2). Units 2 and 3 are glacial till deposits dating from the Devensian glaciation. In the SBP data, Unit 2 appears generally structureless or acoustically chaotic, although internal features are visible in a number of areas, particularly in the English territorial waters, as scattered areas of acoustic layering. These internal features are interpreted as the results of repeated, relatively small scale, ice sheet retreat and re-advance at a fluctuating ice sheet boundary. This has resulted in periods of till deposition during stadials, channel erosion and deposition of sand lenses during small scale retreat, and then deposition of further till after re-advancement.

Unit 3 appears in the SBP data as an acoustically unstructured, occasionally chaotic unit. BGS information (Gatliff, et al., 1994), suggests it is a lodgement till, and so was deposited beneath the Devensian ice sheet. As such, Units 2 and 3 are not considered to be of archaeological potential.

The Marr Bank Formation (Unit 4) is a glaciomarine deposit of sands and silts and appears in the SBP data as an acoustically unstructured unit. As an ice proximal marine deposit of late Devensian age, Unit 4 is not considered to be of archaeological potential.

The Botney Cut Formation (Unit 5) has not been definitely identified in the SBP data, however BGS information suggests it is present across the southern part of the geophysical study area (Cameron, et al., 1992). The Unit is described as a sub-glacial channel fill, comprising a basal reworked till with upper glaciolacustrine and glaciomarine sediment. The upper fills of this Unit have the potential to contain palaeoenvironmental material.

Unit 6 has been identified extensively across the study area in the SBP data and from geotechnical data (MMT, 2012). This Unit has been interpreted as the St. Andrews Bay member of the Forth Formation, visible as an acoustically unstructured deposit. This member, interpreted as comprising interbedded sands and clays of fluviomarine and estuarine origin (Gatliff, et al., 1994), is of Early Holocene age. As such, Unit 6 has the potential to contain derived artefacts and/or paleoenvironmental material.

Unit 7 has also been divided into two members, 7a and 7b. Unit 7a is possibly represented by features **7900** (KP12) and **7901** (KP23) two simple cut and fill features located in the Scottish territorial waters. Shallow cut and fill feature **7900** has a distinct, undulating basal reflector. The feature has an acoustically unstructured fill and is interpreted as being situated below a veneer of modern seabed sediments (Unit 7b).

Cut and fill feature **7901** has a relatively distinct basal reflector and steeply sloping sides, it has been identified on two survey lines. The feature has an acoustically unstructured fill and is interpreted as being situated below a veneer of modern seabed sediments (Unit 7b) (Figure 3i and Figure 4). Both of these features have been identified cutting into an acoustically unstructured unit which may represent the Forth Formation, St Andrews Bay deposits (Unit 6) or possibly the underlying till of the Wee Bankie Formation (Unit 3). These features may represent remnant fluvial features infilled with Unit 7a Holocene Sediments (pre-transgression) (MIS 2 to 1), or they may be internal features within the sand and clays and of no archaeological or palaeoenvironmental interest; however, as the origin of the features cannot be confirmed without further investigation, they have been retained as a precaution.

Scottish Offshore Waters

In the Scottish offshore waters, 17 features have been identified as features of palaeogeographic interest, two complex cut and fills, three simple cut and fills, 10 channels and two channel complexes. Complex cut and fill feature **7902** (KP54) has been identified cutting into an acoustically unstructured unit, interpreted to be Wee Bankie Formation (Unit 3). The feature has a slightly undulating basal reflector that is reasonably distinct, with two possible fills; the basal fill is chaotic and transparent on some lines, with the upper fill more chaotic. The lower deposit of this feature may represent a remnant fluvial feature infilled with Unit 6 and has the potential to contain deposits of palaeoenvironmental interest.

Simple cut and fill features **7906** (KP94), **7907** (KP95) and **7909** (KP97) contain a single fill that is characterised by parallel internal reflectors and have been identified cutting into Unit 4. The features are overlain by a veneer of modern seabed sediments (Unit 7b) and may represent remnant fluvial features infilled with Unit 6, or they may be internal features and of no archaeological or palaeoenvironmental interest; however, as the origin of the features cannot be confirmed without further investigation, they have been retained as a precaution and are considered of medium archaeological potential.

Channel features **7903** (KP76) and **7904** (KP79) both display a chaotic fill with a relatively distinct basal reflector overlain by modern seabed sediments. The infill of these features is interpreted to be Unit 6, and they have the potential to represent buried palaeochannels of palaeoenvironmental interest and are considered of medium archaeological potential.

Channel **7915** (KP123) has an indistinct and undulating basal reflector with a single fill characterised by distinct parallel internal reflectors, although it is also acoustically blank in places. Channel **7918** (KP147) has similar characteristics, both of these features are cutting into an acoustically unstructured unit interpreted to be Unit 4 and may be infilled with Unit 6 deposits. These are interpreted to represent buried palaeochannels of palaeoenvironmental interest and are considered of high archaeological potential.

Features **7910** (KP98) and **7914** (KP120) have been interpreted as channel complexes, both fills are characterised by distinct parallel internal reflectors, that may represent a number of smaller adjacent channels, some of which appear to crosscut each other. The feature is cutting into an acoustically unstructured unit interpreted to be Unit 4 and are situated below a thin veneer of modern seabed sediments (Unit 7b). These features may represent possible delta top or fluvial braid plain features of archaeological potential, and have the potential to contain paleoenvironmental material, they are considered to be of high archaeological potential.

English Offshore Waters

Within the northern extents of English offshore waters, the dominant shallow geological unit continues to be Unit 4, with Unit 3 becoming the dominant unit further south. A total of 13 features have been identified as of palaeogeographic interest; one complex cut and fill, two simple cut and fills, seven channels, two infilled depressions and an area of acoustic blanking.

Simple cut and fill **7924** (KP187) has a slightly chaotic fill with an undulating basal reflector and is situated below a veneer of Unit 7b. Cut and fill **7927** (KP233) has a slightly chaotic fill cutting into an acoustically unstructured unit interpreted to be Unit 3. These features may represent remnant fluvial features infilled with Unit 6, or they may be modern infilled sediments and of no archaeological or palaeoenvironmental interest; however, as the origin of the features cannot be confirmed without further investigation, they have been retained as a precaution and are considered are considered to be of medium archaeological potential.

Features **7922** (KP170/171) and **7923** (KP174) are interpreted to be channels cutting into Unit 4. Both features have a fill that is characterised by distinct parallel internal reflectors and are overlaid by modern seabed sediments (Unit 7b). The basal reflectors are undulating and indistinct in places. These features may be of a similar age and are interpreted to represent a buried palaeochannel of palaeoenvironmental interest and are considered of high archaeological potential (Figure 3v and Figure 4ii).

Two possible infilled depressions have been identified in the top of the interpreted bedrock (Unit 1) (**7928** (KP305) and **7929** (KP316)). The features display a distinct basal reflector overlain by a unit of generally acoustically blank fill. These features may represent modern sand infilling a depression at the

top of the bedrock and therefore might not be of archaeological or palaeoenvironmental interest; however, they may be composed of Unit 6a Holocene Sediments (pre-transgression) (MIS 2 to 1) and have the potential of being remnant terrestrial features and, as such, they have been retained as a precaution (Figure 3viii and Figure 4iii).

One area of acoustic blanking has been identified (**7930** (KP322)). This was visible as a slightly chaotic reflector that blanks the underlying interpreted upper bedrock surface reflector (Unit 1 and is present directly above the upper boundary of Unit 1 and within the modern seabed sediments (Unit 7b)). It is possible that this may just represent an internal reflector or a re-working of sediments; however, it has the potential to be shallow gas which may have been caused by the microbial breakdown of organic matter and therefore may contain sediments of palaeoenvironmental interest.

Channel feature **7931** (KP332) has been identified cutting into an acoustically unstructured unit interpreted to be Unit 3. The feature has a distinct basal reflector and an acoustically unstructured fill that appears slightly laminated in places. The feature is situated below modern seabed sediments Unit 7b and in an area with frequent outcropping bedrock (Unit 1). The feature may be infilled with unit 7a Holocene Sediments (pre-transgression) (MIS 2 to 1) or may be Bolders Bank Formation and of no archaeological or palaeoenvironmental interest; however, has the potential of being remnant of a fluvial feature and has therefore retained as a precaution.

English Territorial Waters

One cut and fill feature has been identified in the English territorial waters. Shallow cut and fill feature **7932** (KP419) has a relatively distinct basal reflector which is undulating, with gently sloping sides and is visible over a number of survey lines (Figure 3v and Figure 4iv). The feature has an acoustically unstructured fill and is interpreted as being situated below a veneer of modern seabed sediments (Unit 7b). The feature has been identified cutting into an acoustically unstructured unit, which may represent Unit 2. This may be an internal feature within the till and of no archaeological or palaeoenvironmental interest; however, it has the potential of being remnant of a fluvial feature and has therefore been retained as a precaution.

Unit 7b is present throughout most of the geophysical study area. It is generally observed as a veneer of sands and gravels <1 m thick, but large, mobile sand waves up to 10 m have been observed in the eastern extent of the Scottish territorial waters. This is interpreted as the modern, post-transgression seabed sediment. Unit 7b is not considered of archaeological potential in itself, but may contain reworked artefacts in a secondary context, and cover archaeological sites (e.g., shipwrecks) where it has been reworked into localised bedforms and/or attains sufficient thickness.

It should be noted that throughout the geophysical study area intermittent distinct high amplitude reflectors were observed above the interpreted bedrock (Unit 1). These reflectors were sporadic, localised, and difficult to trace between adjacent survey lines. The upper surface of Unit 1 was likely one exposed as a terrestrial land surface; these areas of high amplitude reflectors may represent localised hard grounds created by subaerial exposure and weathering or be pockets of terrestrial sediment (e.g., organic clay) that have survived reworking during marine transgression. Where present, these surviving terrestrial sediments would be considered of high archaeological and palaeoenvironmental potential, although any such deposits are likely to be very thin and localised within the geophysical study area.

Value

There are no known seabed prehistory sites within the study area. However, there is the potential for the presence of as yet undiscovered *in situ* prehistoric sites and finds. The values assigned to any potential heritage assets are outlined in Table 8.

Table 8: Value of seabed prehistory heritage assets

Asset Type	Definition	Value
Potential *in situ* prehistoric sites	Primary context features and associated artefacts and their physical setting (if found).	High
	Known submerged prehistoric sites and landscape features with the demonstrable potential to include artefactual material.	High
Potential submerged landscape features	Other known submerged palaeolandscape features and deposits likely to date to periods of prehistoric archaeological interest with the potential to contain *in situ* material.	High

Asset Type	Definition	Value
Potential derived prehistoric finds	Isolated discoveries of prehistoric archaeological material discovered within secondary contexts.	Medium
Potential palaeoenvironmental evidence	Isolated examples of palaeoenvironmental material	Low
	Palaeoenvironmental material associated with specific palaeolandscape features or archaeological material	High

On the basis of age and the rarity of Palaeolithic and Mesolithic finds underwater, if any sites or material were discovered, it would likely be of high, probably national archaeological importance. A guidance note published by English Heritage Identifying and Protecting Palaeolithic Remains: archaeological guidance for planning authorities and developers (English Heritage (now Historic England), 1998) indicated that sites containing Palaeolithic features are so rare in Britain that they should be regarded as of national importance and wherever possible should remain undisturbed.

In the event that prehistoric archaeological material discovered offshore is found *in situ* it should be considered of particularly high archaeological importance (Bailey, et al., 2020). As such, the features and deposits that have the potential to contain within them *in situ* material should be considered as high value assets.

Prehistoric archaeological material discovered within secondary contexts also has the potential to provide valuable information on patterns of human land use and demography in a field of study that is still little understood and rapidly evolving. They are, however, by their very nature derived and, as such, isolated prehistoric finds should be regarded as medium value assets.

Palaeo-environmental evidence in the context of an *in situ* prehistoric site (if found) will be of high value. More widely, palaeo-landsurfaces and palaeo-landscape features will be considered of high value for the purpose of this assessment owing to the Quaternary scientific potential of such sedimentary sequences, to contextualise the wider early prehistoric palaeogeography and the potential of palaeo-landscape features to preserve *in situ* artefacts and sites (Bicket & Tizzard, 2015). Palaeo-environmental evidence from isolated contexts will be regarded as low value.

12.1.4.2   Maritime and Aviation Archaeology

Introduction
The following section is based on records of known shipwrecks, aircraft crash sites and obstructions.

Relevant Designated Sites
There are no designated maritime or aviation assets that have been identified from the desk-based assessment within the Marine Installation Corridor.

Known Maritime and Aviation Sites

Scottish Territorial Waters
The section of the study area within Scottish territorial waters contains two charted wrecks, UKHO 74769 (**70278** (KP14)) and UKHO 2247(**70317** (KP25)). These two wrecks are covered by the geophysical survey data and have been given a unique identifier beginning with 70000 (see Section 12.1.4.2).

Scottish Offshore Waters
Within the study area located in the Scottish offshore waters there are two charted wrecks, UKHO 73633 (**70394** (KP80)) and UKHO 3170 (**70441** (KP93)). These are further discussed in Section 12.1.4.2.

English Offshore Waters
Within the study area located in the English offshore waters there is one charted wreck. This record of UKHO 6382 (**70675** (KP309)) is further discussed in Section 12.1.4.2 as this was covered by the geophysical survey data.

One other charted wreck located within the ASA consists of the record of UKHO 66411 (**2006**) possibly the position of the wreck of the *Straton*, a British registered fishing trawler that was sunk by U-boat in 1915. However, this is considered as dead, i.e., it has not been detected by repeated surveys and therefore is considered not to exist.

English Territorial Waters

There are six maritime heritage receptors in the section of the study area within English territorial waters (Figure 5). Three of these wrecks (**70931** (KP418), **70970** (KP422) and **71021** (KP428)) are discussed in Section 12.1.4.2, as these were covered by the geophysical survey data0.

Receptor UKHO 6675 (**2007** (KP403)) consists of foul ground that the UKHO now lists as dead, i.e., they have not been detected by repeated surveys and therefore they are considered not to exist. Receptor NRHE_1003390 (**2013** (KP419)) is listed as an unidentified seabed obstruction, whilst UKHO 5806 (2020 (KP433)) is foul ground that is probably a mass of scaffolding

The above assets are presented in a gazetteer format detailed in Appendix C. There are no known aircraft crash sites located within the Marine Installation Corridor. The potential for the discovery of previously unknown shipwreck sites and aircraft crash sites and material is discussed below.

Geophysical Seabed Features Assessment

The results of this assessment are collated in gazetteer format is detailed in Appendix D - Appendix G and illustrated in Figure 5 and Figure 6.

Scottish Territorial Waters

The results of this section of the assessment are collated in gazetteer format detailed in Appendix D and illustrated in Figure 5i – Figure 5ii.

A total of 326 features have been identified as being of possible archaeological potential within the geophysical study area and are discriminated as shown in Table 9. Where features have been identified outside of the geophysical study area, they are considered beyond the scope of this appraisal and have not been included or reported in this chapter.

Table 9: Anomalies of archaeological potential within the Scottish territorial waters

Archaeological Discrimination	Quantity	Interpretation
A1	14	Anthropogenic origin of archaeological interest
A2	311	Uncertain origin of possible archaeological interest
A3	1	Historic record of possible archaeological interest with no corresponding geophysical anomaly
Total	326	

Furthermore, these anomalies can be classified by probable type, which can further aid in assigning archaeological potential and importance (Table 10).

Table 10: Types of anomaly identified in Scottish territorial waters

Archaeological Classification	Definition	Number of Anomalies
Wreck	Areas of coherent structure including wrecks of ships, submarines and some aircraft (where coherent structure survives).	2
Debris field	A discrete area containing numerous individual debris items that are potentially anthropogenic and can include dispersed wreck sites for which no coherent structure remains.	33
Debris	Distinct objects on the seabed, generally exhibiting height or with evidence of structure, that are potentially anthropogenic in origin.	8
Seabed disturbance	An area of disturbance without individual, distinct objects. Potentially indicates wreck debris or other anthropogenic features buried just below the seabed.	11
Rope/chain	Curvilinear dark reflectors, often with a small amount of height, indicating rope or chain (if ferrous).	71
Dark reflector	Individual objects or areas of high reflectivity, displaying some anthropogenic characteristics. Precise nature is uncertain.	54
Mound	A mounded feature with height not considered to be natural. Mounds may form over wreck sites or other debris.	5
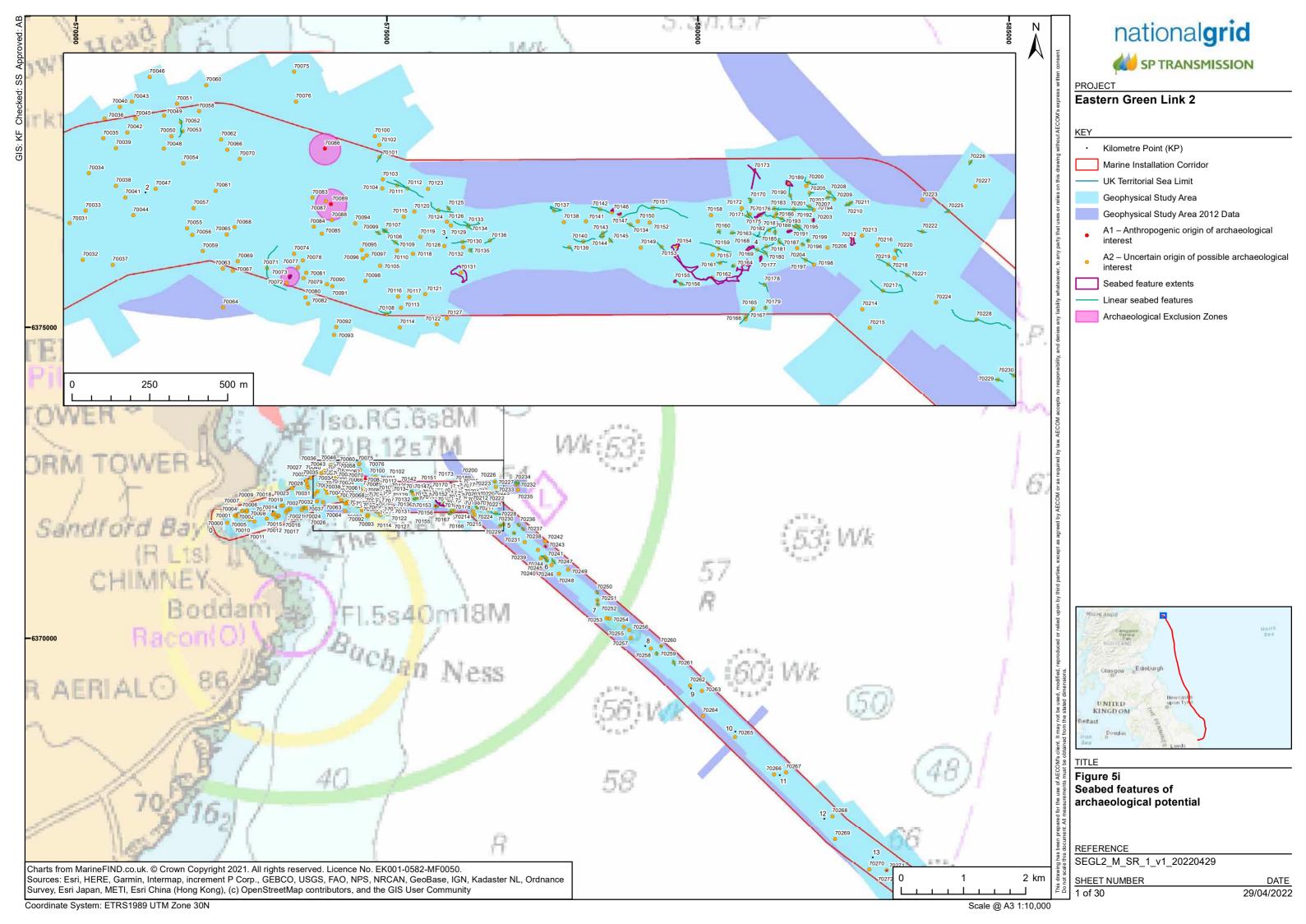
Archaeological Classification	Definition	Number of Anomalies
Magnetic trend	Linear trend of individual magnetic anomalies which appear to be associated, with no associated seabed surface expression, and have the potential to represent possible ferrous debris.	1
Magnetic	No associated seabed surface expression and have the potential to represent possible buried ferrous debris or buried wreck sites.	140
Recorded Wreck	Position of a recorded wreck at which previous surveys have identified definite seabed anomalies, but for which no associated feature has been identified within the current data set.	1
Total		326
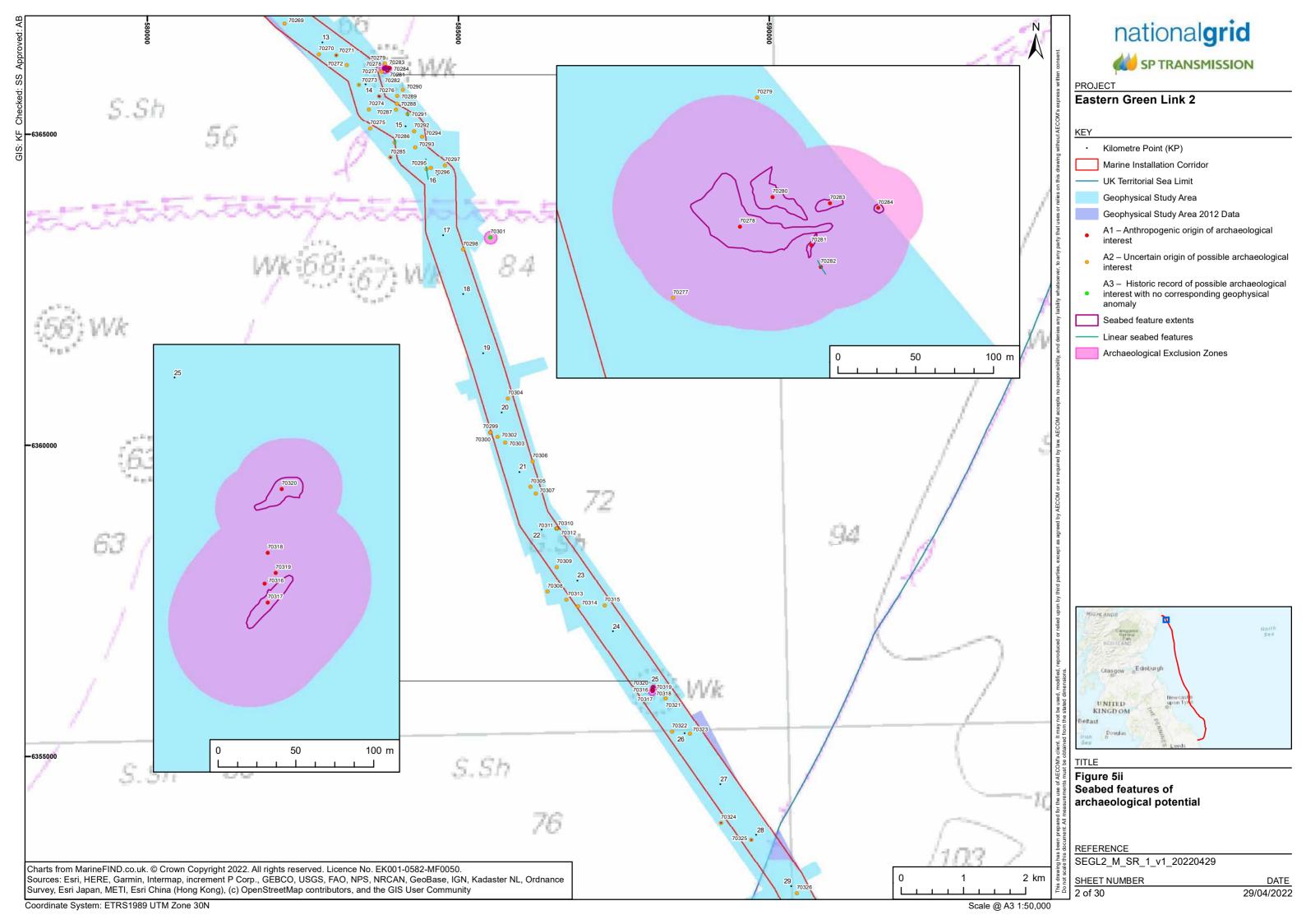
A total of 14 anomalies have been discriminated as A1 during this assessment.
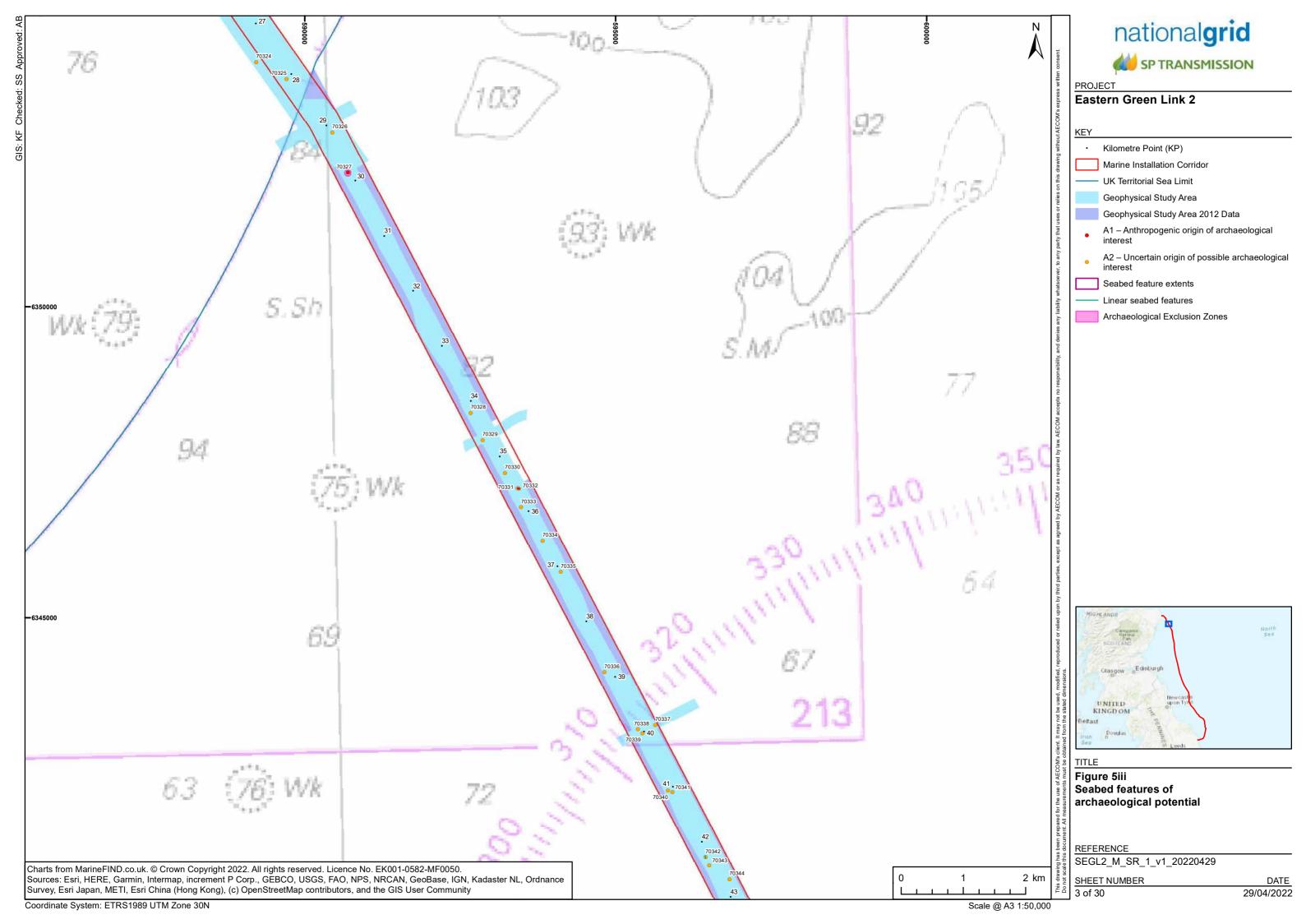
Wreck **70278** (KP14) is an unknown, recorded wreck that corresponds with UKHO record 74769 and Canmore record 324508 (Wreck Sheet 1). The wreck is visible in the SSS dataset as a large structure with distinct curvilinear dark reflectors that appear to be the hull outline, and multiple thin, linear internal dark reflectors with shadows that are possibly surviving deck structure, suggesting the wreck is upright. The wreck appears to be orientated approximately west north west to east south east and has multiple objects interpreted as debris surrounding it, suggesting it may be significantly broken up (**70280** – **70284** (KP14)). The wreck is situated within an area of mobile seabed sediment and the full extent of the wreck and its associated debris may be buried. This location was not directly covered by the MBES dataset. The wreck has a very large MAG anomaly associated with it measuring 8159 nT, indicating it is likely largely ferrous in construction.

In the UKHO record the wreck was first reported in 2010 as being degraded and lying in two parts, partly buried in sand waves, with the bow lying west south west. The wreck had a strong MAG anomaly associated with it and geophysical dimensions of 71.0 x 40.0 x 9.6 m. The smaller dimensions recorded in the 2021 datasets may indicate the wreck has degraded further and/or has experienced further burial, and the surrounding debris also suggests it is significantly broken up.
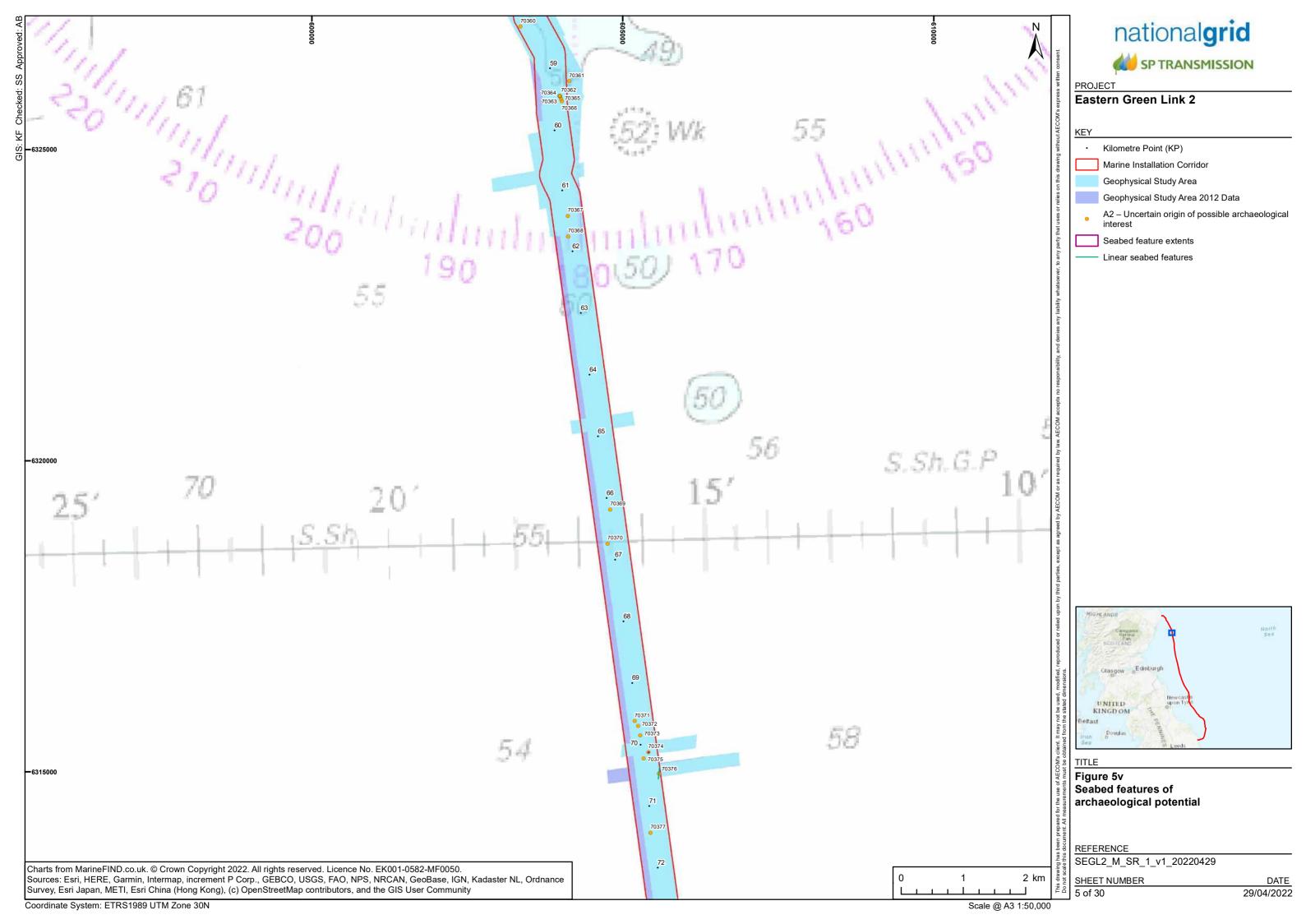
Four debris fields and one item of debris associated with wreck **70278** have been discriminated as A1 (**70280** - **70284**). The largest of these is debris field **70280**; this was identified in the SSS dataset as a group of irregular, elongate dark reflectors with shadows which measures 42.0 x 17.9 x 0.8 m. The feature is situated within an area of mobile sediment and its full extent may be buried. It is situated on the northern edge of wreck **70278** and may be collapsed structure. The smallest debris field associated with wreck **70278** is **70284**, the feature has dimensions of 5.6 x 5.5 m and no measurable height, it is visible in the SSS data as an indistinct, but angular dark reflector situated in a depression measuring 6.8 x 5.3 x -0.6 m, with some slight scour visible to the south east. The feature is situated at the edge of the data range and so the dimensions should be considered a minimum. The debris field is situated 37.0 m north east of wreck **70278**.

national grid

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PROJECT

Eastern Green Link 2

KEY

- • Kilometre Point (KP)
- Marine Installation Corridor
- UK Territorial Sea Limit
- Geophysical Study Area
- Geophysical Study Area 2012 Data
- ● A1 – Anthropogenic origin of archaeological interest
- ● A2 – Uncertain origin of possible archaeological interest
- Seabed feature extents
- Linear seabed features
- Archaeological Exclusion Zones

TITLE

Figure 5i
Seabed features of archaeological potential

REFERENCE

SEGL2_M_SR_1_v1_20220429

SHEET NUMBER   DATE

1 of 30   29/04/2022

Scale @ A3 1:10,000

Figure 5ii
Seabed features of archaeological potential

KEY

- Kilometre Point (KP)
- Marine Installation Corridor
- UK Territorial Sea Limit
- Geophysical Study Area
- Geophysical Study Area 2012 Data
- A1 – Anthropogenic origin of archaeological interest
- A2 – Uncertain origin of possible archaeological interest
- A3 – Historic record of possible archaeological interest with no corresponding geophysical anomaly
- Seabed feature extents
- Linear seabed features
- Archaeological Exclusion Zones

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Scale @ A3 1:50,000

National grid

SP TRANSMISSION

PROJECT

Eastern Green Link 2

KEY

- Kilometre Point (KP)
- Marine Installation Corridor
- UK Territorial Sea Limit
- Geophysical Study Area
- Geophysical Study Area 2012 Data
- A1 – Anthropogenic origin of archaeological interest
- A2 – Uncertain origin of possible archaeological interest
- Seabed feature extents
- Linear seabed features
- Archaeological Exclusion Zones

TITLE

Figure 5iii
Seabed features of archaeological potential

REFERENCE

SEGL2_M_SR_1_v1_20220429

SHEET NUMBER	DATE
3 of 30	29/04/2022

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Coordinate System: ETRS1989 UTM Zone 30N

Scale @ A3 1:50,000

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Coordinate System: ETRS1989 UTM Zone 30N

Scale @ A3 1:50,000

national grid

SP TRANSMISSION

PROJECT

Eastern Green Link 2

KEY

- · Kilometre Point (KP)
- Marine Installation Corridor
- Geophysical Study Area
- Geophysical Study Area 2012 Data
- · A2 – Uncertain origin of possible archaeological interest
- Seabed feature extents
- Linear seabed features

TITLE

**Figure 5v
Seabed features of archaeological potential**

REFERENCE

SEGL2_M_SR_1_v1_20220429

SHEET NUMBER   DATE

5 of 30   29/04/2022

Scale @ A3 1:50,000

PROJECT

Eastern Green Link 2

KEY

- · Kilometre Point (KP)
- Marine Installation Corridor
- Geophysical Study Area
- Geophysical Study Area 2012 Data
- • A1 – Anthropogenic origin of archaeological interest
- • A2 – Uncertain origin of possible archaeological interest
- Seabed feature extents
- Linear seabed features
- Archaeological Exclusion Zones

TITLE

Figure 5vi
Seabed features of archaeological potential

REFERENCE

SEGL2_M_SR_1_v1_20220429

SHEET NUMBER   **DATE**

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Coordinate System: ETRS1989 UTM Zone 30N

Scale @ A3 1:50,000

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PROJECT
Eastern Green Link 2

KEY

· Kilometre Point (KP)

▭ Marine Installation Corridor

▭ Geophysical Study Area

● A2 – Uncertain origin of possible archaeological interest

● A3 – Historic record of possible archaeological interest with no corresponding geophysical anomaly

▭ Seabed feature extents

— Linear seabed features

▭ Archaeological Exclusion Zones

TITLE
Figure 5vii
Seabed features of archaeological potential

REFERENCE
SEGL2_M_SR_1_v1_20220429

SHEET NUMBER   DATE
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PROJECT

Eastern Green Link 2

KEY

- Kilometre Point (KP)
- Marine Installation Corridor
- Geophysical Study Area
- Geophysical Study Area 2012 Data
- A2 – Uncertain origin of possible archaeological interest
- Seabed feature extents

TITLE

Figure 5viii
Seabed features of archaeological potential

REFERENCE

SEGL2_M_SR_1_v1_20220429

Coordinate System: ETRS1989 UTM Zone 30N

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Scale @ A3 1:50,000

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PROJECT

Eastern Green Link 2

KEY

• Kilometre Point (KP)

▭ Marine Installation Corridor

▨ Geophysical Study Area

▨ Geophysical Study Area 2012 Data

● A2 – Uncertain origin of possible archaeological interest

— Linear seabed features

TITLE

Figure 5ix
Seabed features of archaeological potential

REFERENCE

SEGL2_M_SR_1_v1_20220429

SHEET NUMBER   DATE

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Scale @ A3 1:50,000

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PROJECT

Eastern Green Link 2

KEY

- Kilometre Point (KP)
- Marine Installation Corridor
- Geophysical Study Area
- Geophysical Study Area 2012 Data
- A2 – Uncertain origin of possible archaeological interest

TITLE

Figure 5x
Seabed features of archaeological potential

REFERENCE

SEGL2_M_SR_1_v1_20220429

SHEET NUMBER: 10 of 30

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Scale @ A3 1:50,000

0   1   2 km

Coordinate System: ETRS1989 UTM Zone 30N

GIS: KF   Checked: SS   Approved: AB

National grid
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PROJECT
Eastern Green Link 2

KEY

- Kilometre Point (KP)
- Marine Installation Corridor
- Scottish/English Water Border
- Geophysical Study Area
- Geophysical Study Area 2012 Data
- A2 - Uncertain origin of possible archaeological interest

TITLE
Figure 5xi
Seabed features of archaeological potential

REFERENCE
SEGL2_M_SR_1_v1_20220429

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Scale @ A3 1:50,000

0   1   2 km

national**grid**

SP TRANSMISSION

PROJECT

Eastern Green Link 2

KEY

· Kilometre Point (KP)

▢ Marine Installation Corridor

— UK Territorial Sea Limit

▦ Geophysical Study Area

▦ Geophysical Study Area 2012 Data

● A2 – Uncertain origin of possible archaeological interest

▢ Seabed feature extents

— Linear seabed features

TITLE

Figure 5xii
Seabed features of archaeological potential

REFERENCE

SEGL2_M_SR_1_v1_20220429

SHEET NUMBER   DATE

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PROJECT
Eastern Green Link 2

KEY

• Kilometre Point (KP)

☐ Marine Installation Corridor

— UK Territorial Sea Limit

Geophysical Study Area

Geophysical Study Area 2012 Data

● A2 – Uncertain origin of possible archaeological interest

— Linear seabed features

TITLE
Figure 5xiii
Seabed features of archaeological potential

REFERENCE
SEGL2_M_SR_1_v1_20220429

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Coordinate System: ETRS1989 UTM Zone 30N

0   1   2 km

Scale @ A3 1:50,000

national grid
SP TRANSMISSION

PROJECT
Eastern Green Link 2

KEY
- Kilometre Point (KP)
- Marine Installation Corridor
- UK Territorial Sea Limit
- Geophysical Study Area
- Geophysical Study Area 2012 Data
- A2 – Uncertain origin of possible archaeological interest
- Seabed feature extents
- Linear seabed features

TITLE
Figure 5xiv
Seabed features of archaeological potential

REFERENCE
SEGL2_M_SR_1_v1_20220429

SHEET NUMBER
14 of 30

DATE
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GIS: KF   Checked: SS   Approved: AB

nationalgrid

SP TRANSMISSION

PROJECT

Eastern Green Link 2

KEY

· Kilometre Point (KP)

□ Marine Installation Corridor

— UK Territorial Sea Limit

▨ Geophysical Study Area

● A2 – Uncertain origin of possible archaeological interest

▢ Seabed feature extents

TITLE

Figure 5xv
Seabed features of archaeological potential

REFERENCE

SEGL2_M_SR_1_v1_20220429

SHEET NUMBER   DATE

15 of 30   29/04/2022

Scale @ A3 1:50,000

0   1   2 km

Figure 5xvi
Seabed features of archaeological potential

PROJECT

Eastern Green Link 2

KEY

- Kilometre Point (KP)
- Marine Installation Corridor
- UK Territorial Sea Limit
- Geophysical Study Area
- A2 – Uncertain origin of possible archaeological interest
- Seabed feature extents

TITLE

Figure 5xvi
Seabed features of archaeological potential

REFERENCE

SEGL2_M_SR_1_v1_20220429

SHEET NUMBER **DATE**

16 of 30 29/04/2022

Coordinate System: ETRS1989 UTM Zone 30N

Scale @ A3 1:50,000

0   1   2 km

GIS: KF   Checked: SS   Approved: AB

FIRING PRACTICE AREA (D513)

(see Note)

nationalgrid

SP TRANSMISSION

PROJECT

Eastern Green Link 2

KEY

· Kilometre Point (KP)

▭ Marine Installation Corridor

— UK Territorial Sea Limit

▭ Geophysical Study Area

● A2 – Uncertain origin of possible archaeological interest

▭ Seabed feature extents

— Linear seabed features

TITLE

Figure 5xvii
Seabed features of archaeological potential

REFERENCE

SEGL2_M_SR_1_v1_20220429

SHEET NUMBER   DATE

17 of 30   29/04/2022

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Scale @ A3 1:50,000

0   1   2 km

national grid

SP TRANSMISSION

PROJECT

Eastern Green Link 2

KEY

- Kilometre Point (KP)
- ▭ Marine Installation Corridor
- — UK Territorial Sea Limit
- � Geophysical Study Area
- ● A2 – Uncertain origin of possible archaeological interest
- ▭ Seabed feature extents
- — Linear seabed features

TITLE

Figure 5xviii
Seabed features of archaeological potential

REFERENCE

SEGL2_M_SR_1_v1_20220429

SHEET NUMBER
18 of 30

DATE
29/04/2022

Coordinate System: ETRS1989 UTM Zone 30N

Scale @ A3 1:50,000

0   1   2 km

Figure 5xix
Seabed features of
archaeological potential

KEY

- Kilometre Point (KP)
- Marine Installation Corridor
- UK Territorial Sea Limit
- Geophysical Study Area
- A2 – Uncertain origin of possible archaeological interest
- Seabed feature extents
- Linear seabed features

Coordinate System: ETRS1989 UTM Zone 30N

Scale @ A3 1:50,000

GIS: KF   Checked: SS   Approved: AB

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Coordinate System: ETRS1989 UTM Zone 30N

Scale @ A3 1:50,000

GIS: KF Checked: SS Approved: AB

GIS: KF   Checked: SS   Approved: AB

Ekofisk to Teesside Oil (see Note)

Coordinate System: ETRS1989 UTM Zone 30N

Scale @ A3 1:50,000

0   1   2 km

National grid
SP TRANSMISSION

PROJECT

Eastern Green Link 2

KEY

- Kilometre Point (KP)
- Marine Installation Corridor
- UK Territorial Sea Limit
- Geophysical Study Area
- A1 – Anthropogenic origin of archaeological interest
- A2 – Uncertain origin of possible archaeological interest
- A3 – Historic record of possible archaeological interest with no corresponding geophysical anomaly
- Seabed feature extents
- Archaeological Exclusion Zones

TITLE

**Figure 5xxii
Seabed features of archaeological potential**

REFERENCE

SEGL2_M_SR_1_v1_20220429

SHEET NUMBER	DATE
22 of 30	29/04/2022

Coordinate System: ETRS1989 UTM Zone 30N

Scale @ A3 1:50,000

GIS: KF Checked: SS Approved: AB

Baymans Hole

0   1   2 km

nationalgrid

SP TRANSMISSION

PROJECT

Eastern Green Link 2

KEY

- • Kilometre Point (KP)
- — Marine Installation Corridor
- — UK Territorial Sea Limit
- Geophysical Study Area
- • A2 – Uncertain origin of possible archaeological interest
- Seabed feature extents

TITLE

Figure 5xxiii
Seabed features of archaeological potential

REFERENCE

SEGL2_M_SR_1_v1_20220429

SHEET NUMBER   DATE
23 of 30   29/04/2022

Coordinate System: ETRS1989 UTM Zone 30N

Scale @ A3 1:50,000

0   1   2 km

Figure 5xxiv
Seabed features of archaeological potential

GIS: KF   Checked: SS   Approved: AB

Scale 0 — 1 — 2 km

nationalgrid

SP TRANSMISSION

PROJECT

Eastern Green Link 2

KEY

- Kilometre Point (KP)
- Marine Installation Corridor
- UK Territorial Sea Limit
- Geophysical Study Area
- A2 – Uncertain origin of possible archaeological interest
- Seabed feature extents

TITLE

Figure 5xxv
Seabed features of archaeological potential

REFERENCE

SEGL2_M_SR_1_v1_20220429

SHEET NUMBER	DATE
25 of 30	29/04/2022

GIS: KF Checked: SS Approved: AB

Coordinate System: ETRS1989 UTM Zone 30N

Scale @ A3 1:50,000

0   1   2 km

Figure 5xxvi
Seabed features of archaeological potential

Coordinate System: ETRS1989 UTM Zone 30N

Scale @ A3 1:50,000

PROJECT

Eastern Green Link 2

KEY

- · Kilometre Point (KP)
- Marine Installation Corridor
- UK Territorial Sea Limit
- Geophysical Study Area
- ● A2 – Uncertain origin of possible archaeological interest
- Seabed feature extents
- Linear seabed features

TITLE

**Figure 5xxvi
Seabed features of
archaeological potential**

REFERENCE

SEGL2_M_SR_1_v1_20220429

SHEET NUMBER	DATE
26 of 30	29/04/2022

nationalgrid

SP TRANSMISSION

PROJECT

Eastern Green Link 2

KEY

- • Kilometre Point (KP)
- Marine Installation Corridor
- UK Territorial Sea Limit
- Geophysical Study Area
- A2 – Uncertain origin of possible archaeological interest
- Seabed feature extents
- Linear seabed features

TITLE

Figure 5xxvii
Seabed features of
archaeological potential

REFERENCE

SEGL2_M_SR_1_v1_20220429

SHEET NUMBER: 27 of 30

DATE: 29/04/2022

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Coordinate System: ETRS1989 UTM Zone 30N

Scale @ A3 1:50,000

Figure 5xxviii
Seabed features of
archaeological potential

PROJECT
Eastern Green Link 2

KEY
· Kilometre Point (KP)
Marine Installation Corridor
UK Territorial Sea Limit
Geophysical Study Area
○ A2 – Uncertain origin of possible archaeological interest
▲ Recorded Wrecks
Linear seabed features

TITLE
Figure 5xxviii
Seabed features of
archaeological potential

REFERENCE
SEGL2_M_SR_1_v1_20220429

SHEET NUMBER: 28 of 30
DATE: 29/04/2022

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Coordinate System: ETRS1989 UTM Zone 30N

Scale @ A3 1:50,000

GIS: KF Checked: SS Approved: AB

Figure 5xxix
Seabed features of archaeological potential

KEY

- Kilometre Point (KP)
- Marine Installation Corridor
- Geophysical Study Area
- A1 – Anthropogenic origin of archaeological interest
- A2 – Uncertain origin of possible archaeological interest
- A3 – Historic record of possible archaeological interest with no corresponding geophysical anomaly
- Recorded Wrecks
- Seabed feature extents
- Linear seabed features
- Archaeological Exclusion Zones

GIS: KF   Checked: SS   Approved: AB

TITLE

Figure 5xxix
Seabed features of archaeological potential

REFERENCE
SEGL2_M_SR_1_v1_20220429

SHEET NUMBER
29 of 30

DATE
29/04/2022

Coordinate System: ETRS1989 UTM Zone 30N

Scale @ A3 1:4,000

national**grid**

SP TRANSMISSION

PROJECT

Eastern Green Link 2

KEY

- Kilometre Point (KP)
- Marine Installation Corridor
- Geophysical Study Area
- A1 – Anthropogenic origin of archaeological interest
- A2 – Uncertain origin of possible archaeological interest
- A3 – Historic record of possible archaeological interest with no corresponding geophysical anomaly
- Recorded Wrecks
- Seabed feature extents
- Archaeological Exclusion Zones

TITLE

**Figure 5xxx
Seabed features of archaeological potential**

REFERENCE

SEGL2_M_SR_1_v1_20220429

SHEET NUMBER: 30 of 30
DATE: 29/04/2022

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Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Coordinate System: ETRS1989 UTM Zone 30N

Scale @ A3 1:50,000

GIS: KF   Checked: SS   Approved: AB

Flamborough Head
VQ Bell
N. Smithic
North Smithic
South Smithic
Bridlington Bay
SW Smithic
S.G.P.R.Sh

0 100 200 m

0 50 100 m

0 1 2 km

Sidescan sonar image of debris field **70320**,
measuring 34.9 x 15.9 x 0.9 m

Sidescan sonar image of ferrous debris **70004**,
measuring 12.8 x 3.4 x 1.2 m

Sidescan sonar image of debris **70310**, measuring 7.8 x 0.7 x 0.1 m

Sidescan sonar image of seabed disturbance **70131**,
measuring 49.3 x 28.7 x 1.6 m

Sidescan sonar image of rope/chain **70179**,
measuring 10.1 x 0.2 x 0.1 m

Sidescan sonar image of dark reflector **70226**,
measuring 17.5 x 0.6 x 0.6 m

nationalgrid
SP TRANSMISSION

PROJECT
Eastern Green Link 2

KEY

TITLE
Figure 6i
Data examples of seabed features

REFERENCE
SEGL2_M_SR_1_v1_20211012

SHEET NUMBER   DATE

nationalgrid

SP TRANSMISSION

PROJECT
Eastern Green Link 2

KEY
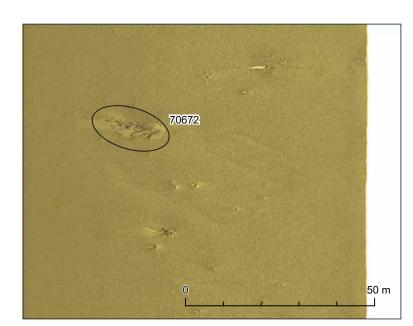
Sidescan sonar image of debris field **70405**, measuring
22.5 x 15.6 x 0.1 m and rope/chain **70406** measuring 19.1 x 0.5 x 0.1 m
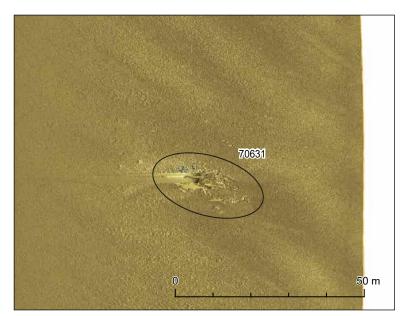
Sidescan sonar image of ferrous debris **70455**,
measuring 7.2 x 1.0 x 0.4 m
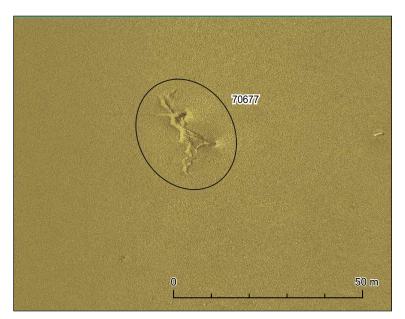
Sidescan sonar image of bright reflector **70358**, measuring 4.1 x 1.4 m

Sidescan sonar image of ferrous debris field **70672**,
measuring 16.4 x 9.4 x 0.5 m

Sidescan sonar image of debris field **70631**,
measuring 27.5 x 16.9 x 2.9 m

Sidescan sonar image of seabed disturbance **70677**,
measuring 47.9 x 7.5 x 0.6 m

TITLE
Figure 6ii
Data examples of seabed features

REFERENCE
SEGL2_M_SR_1_v1_20211012
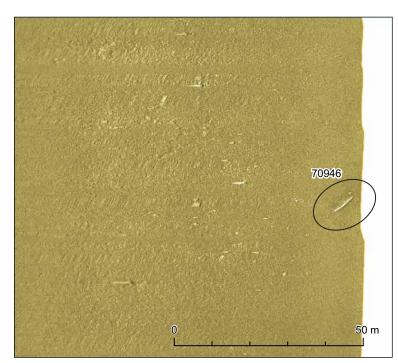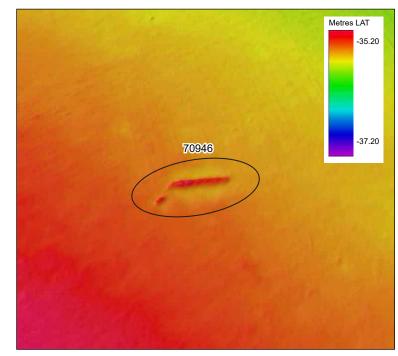
SHEET NUMBER   DATE
2 of 3   29/04/2022
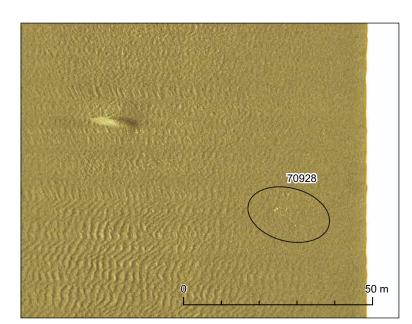
Sidescan sonar image of debris field **70907**,
measuring 15.6 x 11.2 x 0.1 m
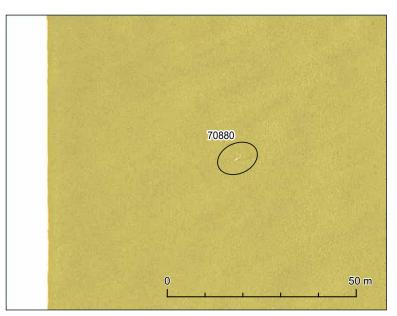
Sidescan sonar image of ferrous debris **70946**,
measuring 9.3 x 1.2 x 0.5 m
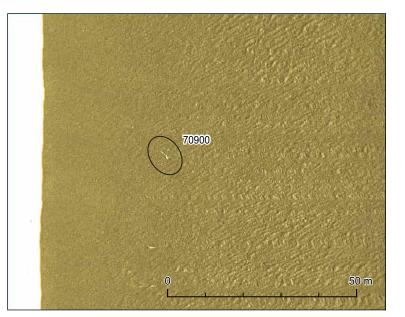
Multibeam bathymetry image of ferrous debris **70946**,
looking north, x1 vertical exaggeration

Sidescan sonar image of debris **70928**,
measuring 14.6 x 0.7 x 0.1 m

Sidescan sonar image of bright reflector **70880**,
measuring 3.4 x 0.6 m

Sidescan sonar image of dark reflector **70900**,
measuring 7.2 x 0.7 x 0.1 m

national grid
SP TRANSMISSION

PROJECT
Eastern Green Link 2

KEY

TITLE
Figure 6iii
Data examples of seabed features

REFERENCE
SEGL2_M_SR_1_v1_20211012

SHEET NUMBER   DATE
3 of 3   29/04/2022

One item of debris associated with wreck **70278** has been discriminated as A1 (**70282**). This was visible in the SSS dataset as a distinct, linear dark reflector with short, but bright shadow; the feature measures 11.0 x 0.3 x 0.1 m and is situated 14.0 m south east of wreck **70278**. None of these features (**70280** – **70284**) were directly covered by the MBES dataset and they have no corresponding MAG anomaly; however, the large anomaly associated with wreck **70278** may be masking any smaller anomalies in this area.

Wreck **70317** (KP25) corresponds with UKHO record 2247 and Canmore record 101745 for the fishing vessel *Adventure* (Wreck Sheet 2). The wreck is orientated approximately north east to south west on the seabed and is visible in the SSS data as a distinct, elliptical dark reflector hull outline that appears to be relatively intact. Multiple internal slatted and rounded dark reflectors are visible interpreted as deck structure, which suggests that the wreck is upright on the seabed. The wreck is visible in the MBES dataset as an intact wreck, with steeply sloping sides and an uneven peak. The wreck has a mounded feature at its south west end that may be the single boiler, and there is a collapsed area on its north eastern edge that may be impact related. The wreck has significant scouring visible to the north east and south west measuring over 200 m long (approximately 0.6 m depth) and is situated within sand waves. The wreck has a large MAG anomaly measuring 272 nT associated with it, indicating some ferrous material is present.

In the UKHO and Canmore records, *Adventure* is recorded as being a single boiler fishing vessel built in 1906, with build dimensions of 33.6 x 6.6 x 3.5 m. The vessel was sunk in 1922 after collision with a mine. The wreck was last surveyed in 2010 where it was reported as being intact and upright on the seabed with dimensions of 40.0 x 9.0 x 5.4 m, with the bow likely situated to the north east and a poor MAG anomaly associated. The slightly larger geophysical dimensions recorded may suggest that the wreck has degraded and collapsed since the last survey.

One debris field and three items of debris associated with wreck **70317** have been discriminated as A1 (**70316** (KP25), **70318** – **70320** (KP25)). Debris field **70320** (KP25) is situated 60 m north of wreck **70317** and was visible in the SSS dataset as a group of distinct, angular dark reflectors with bright, uneven shadows (Figure 6i). The feature is situated within large sand waves and measures 34.9 x 15.9 x 0.9 m, although its full extent may be buried. In the MBES dataset the debris field was visible as an area of irregular seabed. The largest item of debris associated with wreck **70317** is **70316** which measures 2.4 x 1.7 x 0.7 m. The feature was visible in the SSS dataset as a small, angular dark reflector with long and tapered shadow. The feature is situated on the north western edge of wreck **70317** and is likely to be parted structure. Neither of these features have a MAG anomaly associated, however, the MAG anomaly associated with wreck **70317** may be masking smaller anomalies in this area.

Debris field **70073** (KP3) has been discriminated as A1 due to its anomalous appearance and very large associated magnetic anomaly, measuring 1033 nT. This was visible in the 2021 and 2012 SSS dataset as an area of disturbed seabed comprising indistinct dark reflectors with shadows and bright reflectors. The feature is situated within an area of mobile sediments and was visible in the MBES dataset as a large, irregularly shaped low-lying mound. The feature has one distinct edge, with slight scour down its east side. This has been interpreted as a ferrous debris field.

Two magnetic anomalies have been discriminated as A1. Anomaly **70086** (KP3) has an amplitude of 1074 nT and anomaly **70089** (KP3) has an amplitude of 1126 nT. These have been interpreted as possible significant pieces of ferrous debris, that are either buried or with no surface expression, and have been classified as A1 due to their very large amplitudes.

One previously recorded wreck has been discriminated as A3 (**70301** (KP17)), which is the recorded position of the wreck of the *Mercator* (UKHO 2258, Canmore 101742; 101833). This position is situated outside of the geophysical study area and is not covered by either the 2012 or 2021 geophysical datasets; however, a 100 m Archaeological Exclusion Zone (AEZ) placed around this position will encroach upon the Marine Installation Corridor, and so it has been included in the gazetteer.

Mercator was a steam ship, sunk in 1939 after being torpedoed by a submarine. The UKHO states that in 1975 a Decca pipeline survey possibly located a wreck at this position; however, in a geophysical survey undertaken in 2010 the wreck was not located. The record has been amended to Dead; however as possible remains have been identified in the past and the position is not directly covered by either the 2012 or 2021 geophysical datasets, it has been retained in this gazetteer as a precaution as the location of a potential archaeological site.

The remaining 311 features within the geophysical study area have all been discriminated as A2 during this assessment.

Twenty-seven debris fields have been discriminated as A2 (for the full list see Appendix D). The largest of these is **70162** (KP4) which is spread over a wide area of seabed measuring approximately 312.0 x 1.0 x 0.1 m, this was identified in both the 2021 and 2012 SSS datasets as a group of long, thin and often indistinct curvilinear dark reflectors with short, bright shadows in places. The debris field is likely one continuous feature that is either buried or may be in pieces. There are a number of angular dark reflectors attached across the features extent, measuring approximately 1.0 x 0.3 m. The feature was not identified in the MBES or MAG datasets, however it is situated within an area of high magnetic responses which may be masking any smaller anomalies in this area. This has been interpreted as a debris field and may be fishing gear; however, this cannot be confirmed without visual inspection.

The smallest debris field identified was **70324** (KP28), visible in the SSS dataset as a small group of angular dark reflectors with irregular, bright shadows. The feature measures 8.8 x 3.5 x 0.2 m and is situated within large sand waves and may be broken up or partially buried. This location was not directly covered by the MBES or MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location.

Four items of debris have been identified within the geophysical study area and discriminated as A2 (**70004** (KP0), **70026** (KP2), **70095** (KP3) and **70310** (KP22)). The largest of these is **70004** (KP0) (Figure 6i), which measures 12.8 x 3.4 x 1.2 m. The feature was visible in the SSS dataset as a long, thin and distinct dark reflector with a very large, uneven shadow, possibly suggesting uneven height along its length. The feature was visible in the MBES dataset as an elongate, 'v' shaped mound, highly anomalous to the surrounding seabed and situated within a wider boulder field. The feature has a large MAG anomaly associated with it, measuring 359 nT, indicating some ferrous material is present. This has been interpreted to be possible ferrous debris and may be modern; however, this cannot be confirmed without visual inspection.

Debris **70310** (KP22) was visible in the SSS dataset as an elongate, thin and slightly curvilinear dark reflector with a bright shadow (Figure 6i). The feature measures 7.8 x 0.7 x 0.1 m and is situated on an uneven area of seabed, close to two features interpreted to be dark reflectors (**70311** (KP22) and **70312** (KP22)) and may be associated. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location, and it has been interpreted to be curvilinear debris.

Eleven seabed disturbances have been identified within the geophysical study area (for the full list see Appendix D). The smallest seabed disturbance identified is **70126** (KP3), which measures 2.1 x 1.5 x 0.1 m. This was visible in the SSS dataset as a distinct and compact area of disturbed seabed, comprising an irregularly shaped dark reflector with a slight shadow. In the MBES dataset the feature was visible as a slightly uneven mound. The feature has no corresponding MAG contact and has been interpreted as a possible natural feature or possible non-ferrous debris.

The largest seabed disturbance identified is **70131** (KP3), the feature measures 49.3 x 28.7 x 1.6 m (Figure 6i). This was identified in both the 2021 and 2012 SSS datasets as an area of disturbed seabed comprising angular, linear and curvilinear dark reflectors with associated shadows. The feature is situated within an area of mobile sediment and appears less distinct in the most recent SSS dataset, suggesting it may have since become buried. This location was not directly covered by the 2021 MBES dataset. In the 2012 MBES dataset the feature is visible as an elongate mound, with an uneven peak that is taller at its south west end. The feature is orientated north east to south west on the seabed and possibly within slight scour, although this is indistinct in the data. The feature has no corresponding MAG anomaly and has been interpreted as a possible natural feature or possible non-ferrous debris.

A total of 71 anomalies have been classified as lengths of rope or chain (for the full list see Appendix D). The longest rope or chain identified is **70295** (KP16) which measures 335.5 x 0.9 x 0.1 m. This was visible in the SSS dataset as a long and thin dark reflector with a slight shadow in parts. The feature is orientated approximately north to south on the seabed, cross cutting sand waves and may be buried in places. Given the length of the feature, it may be a modern feature such as a length of fishing gear or uncharted cable; however, as this cannot be confirmed without further investigation, the feature has been retained as a precaution.

The shortest rope or chain identified is **70179** (KP4), which measures 10.1 x 0.2 x 0.1 m (Figure 6i). This was visible in the SSS dataset as a short, thin and slightly curvilinear dark reflector with a bright shadow. The feature is situated within a wider boulder field. This location was not directly covered by the 2021 MBES or MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location, and it has been interpreted to be a possible length of rope or chain. These features may not be of archaeological potential in themselves, but they may be attached to archaeological features (e.g., anchors) or be snagged on mostly buried debris not visible in the SSS or MBES data.

A total of 54 A2 anomalies were classified as dark reflectors (for full list, please see Appendix D). The largest of these was **70226** (KP5) which measures 17.2 x 0.6 x 0.6 m, this was visible in the SSS dataset as an indistinct linear dark reflector with an uneven shadow, possibly suggesting uneven height (Figure 6i). The feature is more distinct towards the north eastern end. The location of this feature was not directly covered by the MBES or MAG dataset, so it is not possible to ascertain whether ferrous material is present. The smallest dark reflector identified was **70232** (KP5), which measures 1.1 x 1.0 x 0.9 m, this was visible in the SSS data as a dark reflector with a bright shadow and is possibly associated with a short linear feature **70233** (KP5), interpreted as a rope or chain. These features could be natural; however, they have the potential of representing items of debris.

Five mounds have been identified within the geophysical study area and discriminated as A2 (**70001** (KP0), **70012** (KP1), **70013** (KP1), **70262** (KP9) and **70271** (KP13)). The largest of these is **70271** (KP13), which measures 10.9 x 1.8 x 0.1 m, and was visible in the MBES dataset as an elongate, straight mound with a rounded peak, distinct to the surrounding featureless seabed. The feature was not visible in the SSS dataset and has no corresponding MAG anomaly, however it is situated within an area of high magnetic responses which may be masking any smaller anomalies in this area. It has been interpreted to be a possible natural feature or possible debris.

The smallest mound identified within the geophysical study area is **70013** (KP1), which measures 5.2 x 4.3 x 1.7 m, and was visible in the MBES dataset as a distinct, steep-sided mound with a flat peak. The feature is situated to the west of a boulder field; however, it appears anomalous and much larger than the surrounding natural features. The feature was not visible in the SSS dataset, and this location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. It has been interpreted to be a possible natural feature or possible debris.

One magnetic trend has been identified within the geophysical study area (**70071** (KP2)). This was identified in the MAG dataset as a curvilinear series of six MAG anomalies, extending over 187 m and aligned generally north to south. The MAG responses range between 55 and 268 nT. This linear trend of individual magnetic anomalies that appear to be associated have no corresponding SSS or MBES contacts and there is no charted infrastructure recorded at its location. It may represent a natural feature or may represent possible ferrous debris, that is either buried or with no surface expression.

The remaining 138 A2 anomalies have been classified as magnetic anomalies (for full list, please see Appendix D). These are anomalies that have been identified in the MAG data but have no anomalous corresponding features identified in the SSS or MBES data. These range in size from 7 nT (**70256** (KP8), **70263** (KP9), **70270** (KP13) and **70290** (KP15) to 666 nT (**70084** (KP3)) and are considered to be ferrous items of debris which are either buried or have no surface expression.

Scottish Offshore Waters

The results of this section of the assessment are collated in gazetteer format detailed in Appendix E and illustrated in Figure 5iii – Figure 5xi.

A total of 166 features have been identified as being of possible archaeological potential within the Scottish offshore waters and are discriminated as shown in Table 11. Where features have been identified outside of the geophysical study area, they are considered beyond the scope of this assessment and have not been included or reported on here.

Table 11: Anomalies of archaeological potential within the Scottish offshore waters

Archaeological Discrimination	Quantity	Interpretation
A1	9	Anthropogenic origin of archaeological interest
A2	156	Uncertain origin of possible archaeological interest

Archaeological Discrimination	Quantity	Interpretation
A3	1	Historic record of possible archaeological interest with no corresponding geophysical anomaly
Total	166	

Furthermore, these anomalies can be classified by probable type, which can further aid in assigning archaeological potential and importance (Table 12).

Table 12: Types of anomaly identified within the Scottish offshore waters

Archaeological Classification	Definition	Number of Anomalies
Wreck	Areas of coherent structure including wrecks of ships, submarines and some aircraft (where coherent structure survives).	1
Debris field	A discrete area containing numerous individual debris items that are potentially anthropogenic and can include dispersed wreck sites for which no coherent structure remains.	12
Debris	Distinct objects on the seabed, generally exhibiting height or with evidence of structure, that are potentially anthropogenic in origin.	21
Seabed disturbance	An area of disturbance without individual, distinct objects. Potentially indicates wreck debris or other anthropogenic features buried just below the seabed.	9
Rope/chain	Curvilinear dark reflectors, often with a small amount of height, indicating rope or chain (if ferrous).	10
Bright reflector	Individual objects or areas of low reflectivity, characteristic of materials that absorb acoustic energy, such as waterlogged wood or synthetic materials. Precise nature is uncertain.	1
Dark reflector	Individual objects or areas of high reflectivity, displaying some anthropogenic characteristics. Precise nature is uncertain.	58
Magnetic	No associated seabed surface expression and have the potential to represent possible buried ferrous debris or buried wreck sites.	53
Recorded Wreck	Position of a recorded wreck at which previous surveys have identified definite seabed anomalies, but for which no associated feature has been identified within the current data set.	1
Total		166

A total of nine anomalies have been discriminated as A1 within the Scottish offshore waters. One magnetic anomaly (**70327** (KP30)) has been discriminated as A1, due to its very large amplitude of 1350 nT. This has been interpreted as a possible significant piece of ferrous debris, that is either buried or with no surface expression.

Wreck **70394** (KP80) is an unknown, recorded wreck that corresponds with UKHO record 73633 and Canmore 324447. The wreck is visible in the SSS dataset as multiple distinct curvilinear dark reflectors that appear to be an interrupted hull outline, and multiple internal thin, linear dark reflectors with shadows that are possibly surviving deck structure. This suggests the wreck is upright but not intact. The wreck has measured dimensions of 70.7 x 20.7 x 4.0 m and has multiple objects interpreted as associated debris surrounding it (**70395-70402** (KP80)), suggesting it may be broken up. It is also situated within an area of mobile sediments, therefore the full extent of the wreck and its associated debris, may be buried (Wreck Sheet 3).

The wreck is visible in the MBES dataset as a distinct, generally compact, elliptical mound aligned north east to south west on the seabed. Upstanding mounds are visible at each end of the wreck; a pointed and angular mound at the north eastern end which may be the bow, and a large sub-rounded object at the south western end, which may be broken structure of the stern. Two, possibly three, very tall and generally angular mounds are located in the centre which are interpreted as funnels or boilers, with some further internal linear and irregular mounds visible. The south western edge of the wreck appears flatter with fewer mounds which may indicate possible damage to the hull. There is some scour visible surrounding each end of the structure and along the eastern edge, which flares towards the south east.

The wreck has some sediment build-up visible along the north western side that may be burying some of the vessel. The wreck has a very large MAG anomaly associated with it measuring 2490 nT, indicating it is likely largely ferrous in construction.

In the UKHO record the wreck is reported as being upright and intact with the bow to the north east and scouring visible at the bow and stern. The wreck was last surveyed in 2010 and had geophysical dimensions of 66.0 x 20.0 x 5.0 m. Difference in the wreck dimensions may suggest the wreck has degraded slightly or has been buried further by mobile sediments.

Seven items of debris associated with wreck **70394** have been discriminated as A1 (**70395-70398** and **70400-70402**). These features ranged in size from 1.0 x 0.6 x 0.3 m (**70402**), which was visible in the SSS data as a small, distinct round dark reflector with a bright tapered shadow, to 6.9 x 0.6 x 0.1 m (**70396**), which was visible as a distinct thin, linear dark reflector with a bright shadow situated directly on the northern edge of the wreck (**70394**) (Wreck Sheet 3). None of these features had corresponding MAG anomalies; however, the large anomaly associated with wreck **70394** may be masking any smaller anomalies in this area. These features are all considered to be likely associated wreck debris and, as such, have also been discriminated as A1. Wreck **70394** was identified within an area of large mobile sediments and, as such, there is potential for further debris to be located in the vicinity that has not been identified at this time.

One previously recorded wreck has been discriminated as A3 (**70441** (KP93)), which is the recorded position of an unknown wreck (UKHO 3170). This position is situated outside of the geophysical study area and is not covered by either the 2012 or 2021 geophysical datasets; however, a 100 m AEZ placed around this position will encroach upon the Marine Installation Corridor, and so it has been included in the gazetteer. The wreck is recorded as being upright and collapsed, oriented 15 degrees on the seabed, with the bow to the north and slight scour at the stern. The wreck was last surveyed in 2008 where a moderate MAG anomaly was recorded, and it had geophysical dimensions of 78.0 x 13.0 x 7.7 m. Three items of debris, two debris fields and a possible rope or chain feature discriminated as A2 have been identified over 60 m to the east of this recorded position and may or may not be associated (**70438-70440** (KP93) and **70442-70444** (KP93)).

The remaining 156 features within the geophysical study area have all been discriminated as A2 during this assessment.

Twelve debris fields have been discriminated as A2 (for the full list see Appendix E). Debris field **70405** (KP81) was identified in the SSS dataset as a group of distinct, curvilinear dark reflectors that appear to be attached to one another but are intermittent; some of the objects have short bright shadows, and the feature as a whole measures 22.5 x 15.6 x 0.1 m. The largest object measures 6.0 x 0.5 m and it is situated within an area of mobile sediments; as such, the full extents of the feature may be buried. The debris field is situated 10 m north west of interpreted rope or chain feature (**70406** (KP81)) and may be related (Figure 6ii). The feature was not visible in the MBES dataset and this location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location.

A totally of 14 items of debris have been discriminated as A2 (for the full list see Appendix E). Debris **70455** (KP98) was identified in the SSS dataset as a distinct, short, linear dark reflector with a bright shadow, and measures 7.2 x 1.0 x 0.4 m. The feature is isolated on a relatively featureless area of seabed and was not visible in the MBES dataset. The feature has a medium MAG anomaly associated with it measuring 50 nT, indicating some ferrous material is present, and it has been interpreted as possible ferrous debris (Figure 6ii). The smallest item of debris identified was **70362** (KP59); this was visible in the SSS data as an elongate dark reflector with a short shadow. The feature is situated within mobile sediments and appears slightly disjointed, measuring 3.5 x 0.2 x 0.1 m. The feature has a small MAG anomaly associated with it measuring 10 nT, indicating some ferrous material is present, and it has been interpreted as possible ferrous debris.

Nine seabed disturbances have been identified within the geophysical study area and have been discriminated as A2 (for the full list see Appendix E). The smallest seabed disturbance identified is **70457** (KP100); it measures 7.3 x 3.3 x 0.6 m and was identified in the SSS dataset as a group of indistinct dark reflectors with shadows, situated within a depression. One object is possibly right-angled and has an uneven shadow, possibly suggesting uneven height. This feature was also identified in the MBES dataset as a sub-angular mound, distinct from the surrounding sand waves. The feature has no

corresponding MAG anomaly and has been interpreted as a possible natural feature or possible non-ferrous debris.

A total of 10 A2 anomalies have been classified as lengths of rope or chain (for the full list see Appendix E) The longest of these was **70376** (KP71), which was identified in the SSS dataset as a long, thin and slightly curvilinear dark reflector with a slight shadow, measuring 178.0 x 0.3 x 0.1 m. The feature is orientated north north east to south south west on the seabed and appears intermittent; it is situated within mobile sediments and may be partially buried. The feature was not visible in the MBES dataset, and this location was only partially covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present across its entire extents.

Rope or chain **70399** (KP80) measures 48.7 x 1.2 x 0.1 m and was identified in the SSS dataset as a long, thin and slightly intermittent dark reflector with a small shadow in places. The feature has some indistinct dark and bright reflectors attached along its length and its southern end appears to be snagged on wreck **70394** (KP80). This feature maybe modern, or associated with wreck **70394**, however this cannot be confirmed without further investigation (Wreck Sheet 3).

One bright reflector has been discriminated as A2 (**70358** (KP57)) and was identified in the SSS data as a slightly right-angled bright reflector situated within an area of mobile sediments (Figure 6ii). The feature measures 4.1 x 1.4 m and is anomalous to the surrounding seabed. The feature was not visible in the MBES dataset and has no corresponding MAG contact. Bright reflectors have the potential of representing debris items but may be natural features.

A total of 58 A2 anomalies were classified as dark reflectors (for full list, please see Appendix E). The largest of these was **70489** (KP142), which was identified in the SSS dataset as a sub-angular, slightly elongate dark reflector with an irregular shadow, measuring 8.4 x 2.2 x 0.3 m. The feature was not visible in the MBES dataset, and this location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present and it has been interpreted as a possible natural feature or possible debris.

The remaining 52 anomalies have been classified as magnetic anomalies (for the full list, see Appendix E). These are anomalies that have been identified in the MAG data but have no anomalous corresponding features identified in the SSS or MBES data. These range in size from 5 nT (**70461** (KP101) to 89 nT (**70472** (KP121**))** and are considered to be ferrous items of debris which are either buried or have no surface expression.

English Offshore Waters

The results of this section of the assessment are collated in gazetteer format detailed in Appendix F and illustrated in Figure 6xii – Figure 6xxvii.

A total of 353 features have been identified as being of possible archaeological potential within the geophysical study area and are discriminated as shown in Table 13. Where features have been identified outside of the geophysical study area, they are considered beyond the scope of this assessment and have not been included or reported on here.

Table 13: Anomalies of archaeological potential within the English offshore waters

Archaeological Discrimination	Quantity	Interpretation
A1	1	Anthropogenic origin of archaeological interest
A2	351	Uncertain origin of possible archaeological interest
A3	1	Historic record of possible archaeological interest with no corresponding geophysical anomaly
Total	353	

Furthermore, these anomalies can be classified by probable type, which can further aid in assigning archaeological potential and importance (Table 14).

Table 14: Types of anomaly identified within the English offshore waters

Archaeological Classification	Definition	Number of Anomalies
Debris field	A discrete area containing numerous individual debris items that are potentially anthropogenic and can include dispersed wreck sites for which no coherent structure remains.	9
Debris	Distinct objects on the seabed, generally exhibiting height or with evidence of structure, that are potentially anthropogenic in origin.	12
Seabed disturbance	An area of disturbance without individual, distinct objects. Potentially indicates wreck debris or other anthropogenic features buried just below the seabed.	19
Rope/chain	Curvilinear dark reflectors, often with a small amount of height, indicating rope or chain (if ferrous).	13
Dark reflector	Individual objects or areas of high reflectivity, displaying some anthropogenic characteristics. Precise nature is uncertain.	72
Mound	A mounded feature with height not considered to be natural. Mounds may form over wreck sites or other debris.	28
Magnetic	No associated seabed surface expression and have the potential to represent possible buried ferrous debris or buried wreck sites.	199
Recorded Wreck	Position of a recorded wreck at which previous surveys have identified definite seabed anomalies, but for which no associated feature has been identified within the current data set.	1
Total		353

One anomaly has been discriminated as A1 within the English offshore waters. Debris field **70672** (KP309) was identified in the SSS dataset as a distinct group of dark reflectors comprising several elongate and irregular objects, measuring 16.4 x 9.4 x 0.5 m. The feature was identified in the MBES dataset as multiple irregularly shaped mounds within an area of scour extending for 14.1 m; the larger mounds measure 5.3 x 3.1 x 1.6 m and 7.1 x 2.7 x 1.1 m. The debris field has a very large MAG anomaly associated with it, measuring 5080 nT, indicating ferrous material is present, and it has been interpreted to be a ferrous debris field (Figure 6ii).

One previously recorded wreck has been discriminated as A3 (**70675** (KP309)) and is the recorded position of an unknown wreck (UKHO 6382). This position is situated outside of the geophysical study area and is not covered by either the 2012 or 2021 geophysical datasets; however, a 100 m AEZ placed around this position will encroach upon the Marine Installation Corridor, and so it has been included in the gazetteer. The wreck is recorded as lying in two sections and was last surveyed in 1988, with the two sections reported as being 10.0 m apart in a general depth of 67.0 m. The previously reported geophysical dimensions were 45.0 x 12.0 x 7.9 m.

The remaining 351 features within the geophysical study area have all been discriminated as A2 during this assessment.

Of these A2 anomalies, eight features have been classified as debris fields (for the full list, see Appendix F). Debris field **70631** (KP274) was identified in the SSS dataset as group of distinct dark reflectors with shadows, comprising multiple sub-angular, linear and curvilinear objects, measuring a total of 27.5 x 16.9 x 2.9 m. The feature appears highly anthropogenic (Figure 6ii). The largest object is very angular and measures 3.3 x 2.9 x 2.9 m. The feature was also identified in the MBES dataset as two distinct mounds with a series of smaller, less distinct mounds and slightly irregular seabed surrounding these. There is some scour visible to the north east of the feature that is 0.1 m deep and extends for 5.4 m. This location was not directly covered by the MAG dataset so it is not possible to ascertain whether ferrous material is present at this location.

A total of 12 A2 anomalies have been classified as items of debris (for the full list, see Appendix F). The largest of these was **70663** (KP301), which was identified in the SSS dataset as a distinct linear dark reflector with a slight shadow. The feature appears disjointed and may be broken up or partially buried by mobile sediment, and measures 13.0 x 0.5 x 0.1 m. The feature was not directly covered by the MBES dataset. The smallest item of debris identified is **70736** (KP344), which was identified in the SSS dataset as an elongate, sub-angular dark reflector with a long, tapered shadow, and measures 2.3 x

0.3 x 1.7 m. The feature was also identified in the MBES dataset as a rounded mound with some shallow scour extending for 19.7 m and 0.1 m deep. Neither of these features were covered by the MAG dataset and therefore it is not possible to ascertain whether ferrous material is present at these locations.

A total of 19 A2 anomalies have been classified as seabed disturbances (for the full list, see Appendix F). The largest of these was **70677** (KP311), which was identified in the SSS dataset as a distinct, irregular area of disturbed seabed comprising indistinct linear and irregularly shaped dark reflectors with associated shadows; the feature measures 47.9 x 7.5 x 0.6 m. This location was not directly covered by the MBES or MAG datasets so it is not possible to ascertain whether ferrous material is present, and the feature has been interpreted as a possible natural feature or possibly partially buried debris (Figure 6ii).

A total of 13 A2 anomalies have been classified as lengths of rope or chain (for full list, please see Appendix F). The longest of these was **70588** (KP259), which measures 237.7 x 0.6 x 0.1 and was identified in the SSS dataset as a distinct curvilinear dark reflector with a slight shadow along most of its length. The feature is orientated north north east to south south west on the seabed and may be related to debris field **70590** situated at its south west end. The feature was partially covered by the MBES dataset and had no corresponding MBES anomaly, and this location was not directly covered by the MAG dataset. Lengths of rope and chain may not be of archaeological potential in themselves, but they may be attached to archaeological features (e.g., anchors) or be snagged on mostly buried debris not visible in the SSS or MBES data.

A total of 72 A2 anomalies were classified as dark reflectors (for full list, please see Appendix F). The smallest of these was **70577** (KP256), which was identified in the SSS data as a small, slightly elongate dark reflector with long narrow shadow. The feature is distinct to the surrounding seabed, measures 0.7 x 0.5 x 0.8 m, and has been interpreted to be a possible natural feature or possible debris. The largest dark reflector is **70527** (KP203), which measures 9.9 x 0.4 x 0.1 m and was identified in the SSS dataset as a long, curvilinear dark reflector with a short, intermittent shadow. The feature was not visible in the MBES dataset and had no associated MAG anomaly.

A total of 28 A2 anomalies have been classified as mounds (for full list, please see Appendix F). The largest of these was **70513** (KP189), which measures 26.2 x 7.2 x 0.3 m. This was identified in the 2012 MBES dataset as a large oval mound slightly distinct to the surrounding seabed. The feature had no corresponding SSS contact, and this location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. It has been retained as a precaution as it was not directly covered by the 2021 MBES dataset, and it has been interpreted as a possible natural feature or may be possible debris.

The remaining 199 A2 anomalies have been classified as magnetic anomalies (for full list, please see Appendix F). These are anomalies that have been identified in the MAG data but have no anomalous corresponding features identified in the SSS or MBES data. These range in size from 5 nT (**70562** (KP227), **70582** (KP256), **70583** (KP256), **70585** (KP257), **70599** (KP261), **70603** (KP264) and **70842** (KP395)) to 306 nT (**70804** (KP377)) and are considered to be ferrous items of debris which are either buried or have no surface expression.

English Territorial Waters
The results of this section of the assessment are collated in gazetteer format detailed in Appendix G and illustrated in Figure 5xxviii – Figure 5xxx.

A total of 208 features have been identified as being of possible archaeological potential within the geophysical study area and are discriminated as shown in Table 15. Where features have been identified outside of the geophysical study area, they are considered beyond the scope of this appraisal and have not been included or reported in this chapter.

Table 15: Anomalies of archaeological potential within the English territorial waters

Archaeological Discrimination	Quantity	Interpretation
A1	2	Anthropogenic origin of archaeological interest
A2	205	Uncertain origin of possible archaeological interest

Archaeological Discrimination	Quantity	Interpretation
A3	1	Historic record of possible archaeological interest with no corresponding geophysical anomaly
Total	208	

Furthermore, these anomalies can be classified by probable type, which can further aid in assigning archaeological potential and importance (Table 16).

Table 16: Types of anomaly identified within English territorial waters

Archaeological Classification	Definition	Number of Anomalies
Wreck	Areas of coherent structure including wrecks of ships, submarines and some aircraft (where coherent structure survives).	2
Debris field	A discrete area containing numerous individual debris items that are potentially anthropogenic and can include dispersed wreck sites for which no coherent structure remains.	9
Debris	Distinct objects on the seabed, generally exhibiting height or with evidence of structure, that are potentially anthropogenic in origin.	14
Seabed disturbance	An area of disturbance without individual, distinct objects. Potentially indicates wreck debris or other anthropogenic features buried just below the seabed.	4
Rope/chain	Curvilinear dark reflectors, often with a small amount of height, indicating rope or chain (if ferrous).	5
Bright reflector	Individual objects or areas of low reflectivity, characteristic of materials that absorb acoustic energy, such as waterlogged wood or synthetic materials. Precise nature is uncertain.	1
Dark reflector	Individual objects or areas of high reflectivity, displaying some anthropogenic characteristics. Precise nature is uncertain.	67
Mound	A mounded feature with height not considered to be natural. Mounds may form over wreck sites or other debris.	12
Magnetic trend	Linear trend of individual magnetic anomalies which appear to be associated, with no associated seabed surface expression, and have the potential to represent possible ferrous debris.	4
Magnetic	No associated seabed surface expression and have the potential to represent possible buried ferrous debris or buried wreck sites.	89
Recorded Wreck	Position of a recorded wreck at which previous surveys have identified definite seabed anomalies, but for which no associated feature has been identified within the current data set.	1
Total		208

A total of two anomalies have been discriminated as A1 during this assessment.

Wreck **71021** (KP428) is a recorded wreck that corresponds with UKHO record 5807 of the *Brabant*, a 1492 tonne steam ship sunk in 1917 (Wreck Sheet 5). The wreck is situated outside of the geophysical study area and is only directly covered by the SSS data; however, a 50 m AEZ will bring it within. In the SSS data the wreck is visible as an indistinct dark reflector with a dull shadow that is situated on a generally featureless area of seabed. The wreck is situated in a depression and orientated approximately north east to south west on the seabed. There are some possible linear, or slatted objects visible within the feature, however it is situated at the edge of the data range so this is unclear, and its dimensions of 14.4 x 9.5 x 0.8 m should be considered a minimum. This location was not directly covered by the MBES or MAG datasets, however a broad MAG anomaly, with an amplitude of 33 nT, is visible on the closest line (44 m north west) and may be a halo response. In the UKHO record, the steam ship had built dimensions of 73.5 x 10.7 x 6.1 m and carried a cargo of wood. The wreck was last surveyed in 2011, where only the stern section and two boilers were visible in the data, with geophysical dimensions of 58.0 x 19.0 x 5.0 m, all of which suggests the wreck extends considerably beyond the SSS data extents.

Wreck **70931** (KP418) is a recorded wreck orientated approximately north east to south west and measuring approximately 10.5 x 7.1 x 0.7 m (Wreck Sheet 4). In the SSS data the wreck is visible as an oval area of disturbed seabed, comprising bright reflectors and small dark reflectors, with some areas of measurable height. The feature is situated in an area of sand mega ripples and appears anomalous to the surrounding seabed. In the MBES dataset the wreck is visible as a large and distinct mound, with gently sloping sides and an uneven peak. The wreck has one possible item of associated debris (**70928** (KP418)) identified 70.0 m north east. The wreck corresponds with UKHO record 85842, an unknown wreck first identified in 2016. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location; however, the UKHO record indicates that a survey undertaken in 2016 did not detect a magnetic anomaly, indicating it may be wooden. In the UKHO record the wreck has recorded geophysical dimensions of 10.0 x 7.7 x 1.0 m and is described as being mostly buried and orientated 030/210° on the seabed. In the 2021 geophysical data, there are no distinguishable wreck characteristics visible, it may be upturned, however this cannot be confirmed without further investigation. If the wreck is of a wooden composition, it is likely to be highly degraded and in a poor state of preservation. The lower height measurement recorded in the 2021 data (-0.3 m), since the 2016 survey may indicate the wreck has since experience further burial and the location of the wreck within sand mega ripples suggests it is likely to have a higher possibility for burial.

One previously recorded wreck has been discriminated as A3. Record **70970** (KP422) is the position of an unknown, but previously reported steam ship that was first reported in 1980 (UKHO 6161). In 2002 the UKHO record states that the wreck was known locally as 'Winch', dived over 10 years ago, the bell was recovered with no name and elements of the wreck were identifiable, situated in sand. The wreck was not located in MBES data during a 2016 geophysical survey, and as such the record was amended to Dead. This location was covered by the 2021 SSS, MBES and MAG datasets and no remains were identified. However, this area of seabed has frequent mounds visible in the MBES data, which have been interpreted as natural features. The record has been retained as a precaution as the location of a potential archaeological site, which may be buried at present.
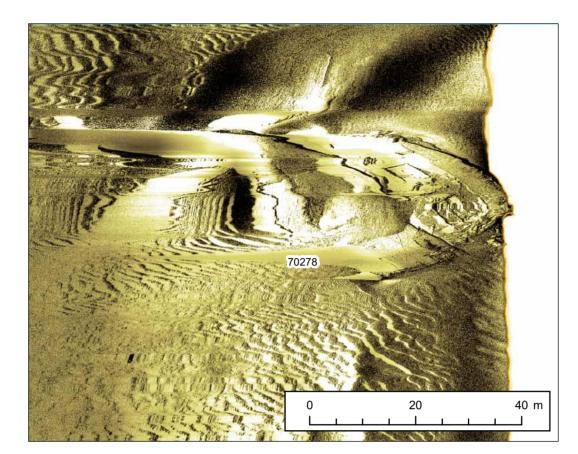
The remaining 205 features within the geophysical study area have all been discriminated as A2 during this assessment.

A total of nine A2 anomalies have been classified as debris fields (for full list, please see Appendix G). The largest of these is anomaly **71038** (KP432), which is spread over a wide area of seabed measuring approximately 212.9 x 0.4 m. This was identified in the SSS dataset as a very long, thin and curvilinear dark reflector that is coiled in places and with a shadow visible in parts. The feature has numerous, angular dark reflectors with shadows attached across its extent; these measure approximately 1.2 x 0.8 m individually. The feature was also identified in the MBES dataset as a long, thin and slightly curvilinear mound, orientated north east to south west, with some of the associated objects visible in the MBES dataset. A number of small MAG anomalies are associated where the MAG lines cross the feature, indicating some ferrous material is present. This has been interpreted as a partially ferrous debris field, and may be fishing gear, however, this cannot be confirmed without visual inspection.
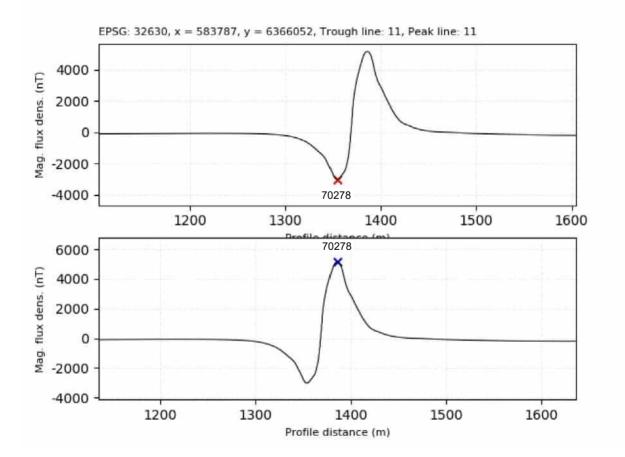
ID 70278 – UKHO 74769 – *Unknown*

Location	583806 E 6366053 N	Area	EL2 - Scottish Territorial Waters
Archaeological Importance	High		
Geophysical survey dimensions and notes	Wreck **70278** is a recorded, unknown wreck associated with UKHO record 74769 and Canmore 324508. The wreck is visible in the SSS dataset as a large wreck with distinct curvilinear dark reflectors that appear to be the hull outline and internally multiple thin, linear dark reflectors with shadows that are possibly surviving deck structure, suggesting the wreck is upright. The wreck has dimensions of 77.1 x 33.4 x 5.3 m and appears to be orientated approximately WNW to ESE. The wreck has multiple objects interpreted to be debris surrounding it and in the vicinity. The wreck is situated within an area of mobile sediments and therefore the full extent of the wreck and its associated debris may be buried. This location was not directly covered by the MBES dataset. The wreck has a very large magnetic anomaly measuring 8,159 nT associated with it, indicating it is likely ferrous in construction.		

Build	**Type**	Unknown
	Construction	Unknown, likely steel
	Dimensions (m)	Unknown
	Shipyard	Unknown
Loss	**Cause**	Unknown

Extent of Survival	Recorded by UKHO as an unknown wreck first reported in 2010. The wreck was recorded as being degraded and in two parts, partly buried in sand waves, with the bow lying WSW. The wreck had a strong magnetic anomaly associated and geophysical dimensions of 71.0 x 40.0 x 9.6 m. Differences in the wreck dimensions may suggest that the wreck has either become more degraded since the 2010 survey, or has been buried further by mobile sediments. The are multiple associated debris fields surrounding the wreck, suggesting it is poorly preserved. Furthermore, it is situated within an area of mobile sediment, which may intermittently cover the wreck and bury further associated debris items.

Sidescan sonar waterfall image, 100 m range per channel

Coordinate System: ETRS1989 UTM Zone 30N

nationalgrid
SP TRANSMISSION

PROJECT
Eastern Green Link 2

KEY

TITLE
Sheet 1
ID 70278 – UKHO 74769 – Unknown

REFERENCE
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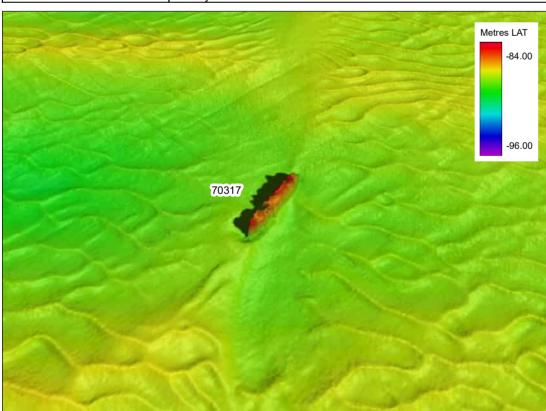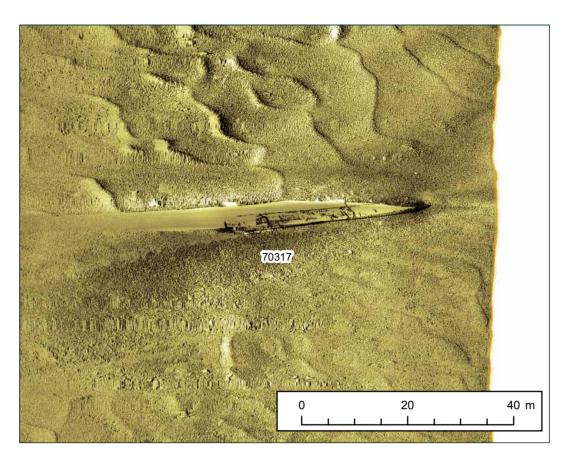
SHEET NUMBER	DATE
1 of 5	29/04/2022

Location	588121 E 6356046 N	**Area**	EL2 - Scottish Territorial Waters
Archaeological Importance	High		
Geophysical survey dimensions and notes	Wreck **70317** is a recorded wreck orientated approximately north-east to south-west on the seabed and corresponds with UKHO record 2247, *Adventure*. The wreck is also recorded in Canmore (101745). The wreck is visible in the SSS data as a distinct, elliptical dark reflector, interpreted as the ships hull, which appears to be relatively intact. Multiple internal slatted and rounded dark reflectors are visible interpreted as deck structure, which suggests that the wreck is upright on the seabed. The wreck has dimensions of 43.6 x 8.0 x 5.5 m. The wreck appears to be relatively intact, with some possibly associated debris visible in the vicinity of the wreck. In the MBES dataset the wreck is visible as an intact wreck, with steeply sloping sides and an uneven peak. The wreck has a mounded feature at its south-west end that may be the single boiler, there is also a collapsed area on its north-eastern edge, that may be impact related although this cannot be confirmed without further investigation. The wreck has significant scouring visible to the north-east and south-west measuring over 200 m (approximately 0.6 m depth) and is situated within sand waves, which may intermittently cover the wreck and any associated debris. The wreck has a large magnetic anomaly associated with it, measuring 272 nT, indicating some ferrous material is present.		
Build	**Type**	Fishing vessel	
	Construction	Unknown	
	Dimensions (m)	33.6 x 6.6 x 3.5 m	
	Shipyard	Unknown	
Loss	**Cause**	Collision with a mine	
Extent of Survival	The wreck is associated with a UKHO and Canmore record (2247 and 101745) for *Adventure*, a single boiler fishing vessel built in 1906. The wreck was sunk in 1922 after collision with a mine. The wreck was last surveyed in 2010 where it was recorded as being intact and upright on the seabed with dimensions of 40.0 x 9.0 x 5.4 m, with the bow likely situated to the north-east and a poor magnetic anomaly associated. The slightly larger geophysical dimensions recorded may suggest that the wreck has degraded since last surveyed.		

Sidescan sonar waterfall image, 100 m range per channel
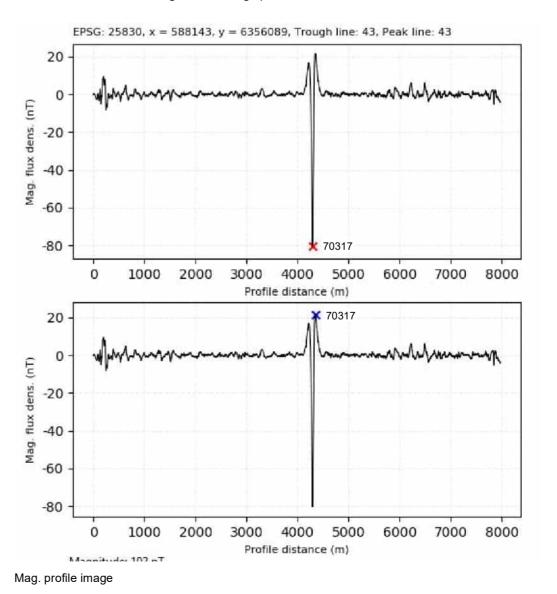
MBES grid image, x1 vertical exaggeration, looking south

Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Coordinate System: ETRS1989 UTM Zone 30N

EPSG: 25830, x = 588143, y = 6356089, Trough line: 43, Peak line: 43

Mag. profile image

nationalgrid

SP TRANSMISSION

PROJECT

Eastern Green Link 2

KEY

TITLE

Sheet 2
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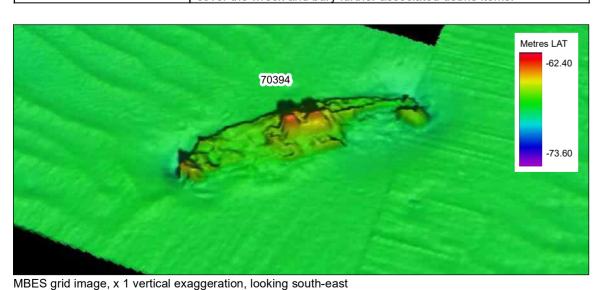
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SEGL2_M_SR_1_v1_20220429

SHEET NUMBER	DATE
2 of 5	29/04/2022
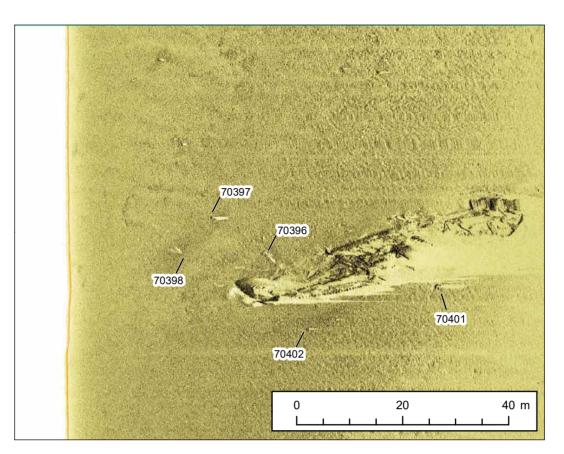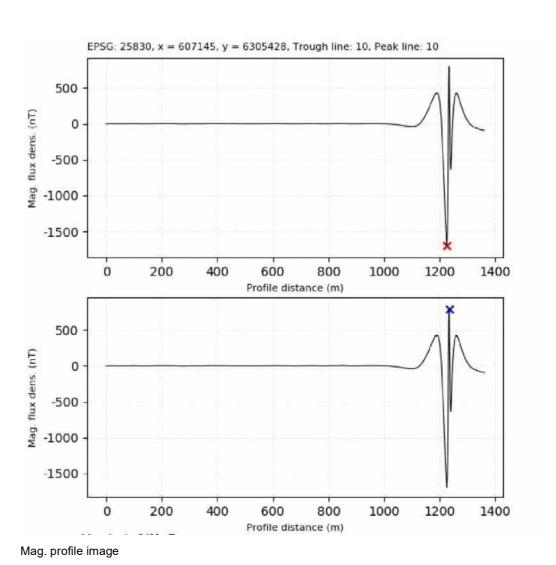
ID 70394 – UKHO 73633 – Unknown

Location	607131 E 6305403 N	Area	EL2 - Scottish EEZ
Archaeological Importance	High		

Geophysical survey dimensions and notes	Wreck **70394** is an unknown wreck associated with UKHO record 73633 and Canmore record 324447.

The wreck is visible in the SSS dataset as multiple distinct curvilinear dark reflectors that appear to be an interrupted hull outline and multiple internal thin, linear dark reflectors with shadows that are possibly surviving deck structure, suggesting the wreck is upright but not intact. The wreck has measured dimensions of 70.7 x 20.7 x 4.0 m and is oriented approximately north-east to south-west on the seabed. There are multiple objects interpreted to be debris within the immediate vicinity. The wreck is situated within an area of mobile sediments and therefore the full extents, and further associated debris, may be buried.

In the MBES dataset the wreck is visible as a generally compact, elliptical mound of varying height. Upstanding mounds are visible at each end; pointed and angular at the north-eastern end which may be the bow, and a large sub-rounded object at the south-western end, which may be broken structure of the stern. Two, possibly three, very tall and generally angular mounds are located at the centre which are interpreted as possible funnels or boilers, with some further surrounding internal linear and irregular mounds visible which may represent the deck. There is some scour visible surrounding each end of the structure and along the eastern edge, which flares towards the south-east. Some sediment build-up is visible along the north-western side and the wreck may be slightly settled and partially buried.

The wreck has a very large magnetic anomaly measuring 2490 nT associated with it, indicating it is likely ferrous in construction. |

Build	Type	Unknown
	Construction	Unknown, likely steel
	Dimensions (m)	Unknown
	Shipyard	Unknown
Loss	Cause	Unknown

Extent of Survival	Recorded by UKHO as an unknown wreck which is reported as being upright and intact with the bow to the north-east and scouring at the bow and stern. The wreck was last surveyed in 2010 and had geophysical dimensions of 66.0 x 20.0 x 5.0 m and an associated strong magnetic anomaly. Differences in the wreck dimensions may suggest that the wreck has either become more degraded or collapsed which causes 'spread' since the 2010 survey, or has become uncovered and possibly scoured out underneath.

There are multiple associated items of interpreted debris surrounding the wreck, suggesting it may be poorly preserved. Furthermore, it is situated within an area of mobile sediment, which may intermittently cover the wreck and bury further associated debris items. |

Sidescan sonar waterfall image, 100 m range per channel

MBES grid image, x 1 vertical exaggeration, looking south-east

EPSG: 25830, x = 607145, y = 6305428, Trough line: 10, Peak line: 10

Mag. profile image

national grid

SP TRANSMISSION

PROJECT

Eastern Green Link 2

KEY

TITLE

**Sheet 3
ID 70394 – UKHO 73633 – Unknown**

REFERENCE
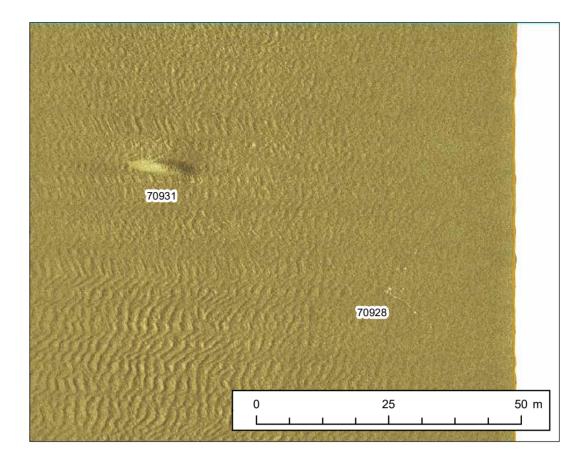
SEGL2_M_SR_1_v1_20220429

SHEET NUMBER	DATE
3 of 5	29/04/2022
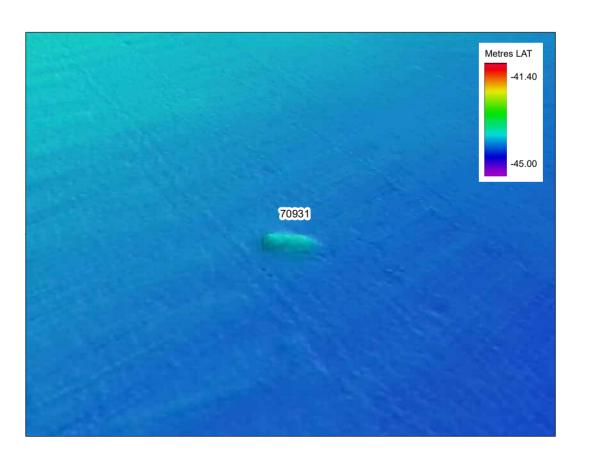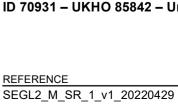
ID 70931 – UKHO 85842 - Unknown

Location	699178 E 5997464 N	**Area**	EL2 - English Territorial Waters
Archaeological Importance	High		

Geophysical survey dimensions and notes		Wreck **70931** is a recorded wreck that corresponds with UKHO record 85842, an unknown wreck, first identified in 2016.
		In the SSS data the wreck is visible as an oval area of disturbed seabed, comprising bright reflectors and small dark reflectors, with some areas of measurable height. The feature is situated in an area of mobile sands and appears anomalous to the surrounding seabed. The wreck extents measure approximately 10.5 x 7.1 x 0.7 m and is orientated approximately north-east to south-west on the seabed.
		In the MBES dataset the wreck is visible as a large and distinct mound with gently sloping sides and an uneven peak.
		This location was not directly covered by the Mag. dataset, so it is not possible to ascertain whether ferrous material is present at this location, although the UKHO record indicates that a survey undertaken in 2016 did not detect a magnetic anomaly, indicating it may be non-ferrous.
		The wreck has one possible item of associated debris identified in the vicinity (**70928**).

Build	**Type**	Unknown
	Construction	Unknown
	Dimensions (m)	Unknown
	Shipyard	Unknown
Loss	**Cause**	Unknown

Extent of Survival	Recorded by UKHO as an unknown wreck, first identified in 2016 with geophysical dimensions of 10.0 x 7.7 x 1.0 m and no associated magnetic anomaly. The wreck was described as being mostly buried and orientated 030/210° on the seabed.
	In the 2021 geophysical datasets, there are no distinguishable wreck characteristics visible suggesting it may be upturned or largely disintegrated, however this cannot be confirmed without further investigation. If the wreck is of a wooden composition, it is likely highly degraded and in a poor state of preservation.
	The lower height measurement recorded in the 2021 data (-0.3 m), since the 2016 survey may indicate the wreck has since experienced further burial, or may be more degraded. The location of the wreck within mobile sands suggests it is likely to have a higher possibility for burial.

Sidescan sonar waterfall image, 100 m range per channel

MBES grid image, x4 vertical exaggeration, looking west

nationalgrid

SP TRANSMISSION

PROJECT
Eastern Green Link 2

KEY

Metres LAT
-41.40
-45.00

N

TITLE
Sheet 4
ID 70931 – UKHO 85842 – Unknown

REFERENCE
SEGL2_M_SR_1_v1_20220429

SHEET NUMBER	DATE
3 of 5	29/04/2022

ID 71021 – UKHO 5807 – *Brabant*

Location	690003 E 5993981 N	**Area**	EL2 - English Territorial Waters
Archaeological Importance	High		

Geophysical survey dimensions and notes	Wreck **71021** is a recorded wreck orientated approximately north-east to south-west on the seabed and corresponds with UKHO record 5807, the *Brabant*. The wreck is also recorded in the National Record of the Historic Environment (NRHE 907941). The wreck is partially covered by the SSS data and is visible as a spread of indistinct dark reflectors with a faint shadow, situated on a featureless area of seabed. There are some possible linear, or slatted objects within the extents of the feature, however it is situated at the edge of the data range so this is unclear. The dimensions of the wreck measure 14.4 x 9.5 x 0.8 m in the SSS data; however, as the wreck is only partially covered, these should be considered a minimum. The wreck is not directly covered by the MBES or Mag. datasets; however, a broad negative monopole is visible on the closest magnetometer line, 44 m north-west, and may be associated.

Build	**Type**	Steam ship
	Construction	Unknown, likely steel
	Dimensions (m)	73.5 x 10.7 x 6.1 m, 1492 tonnes (gross)
	Shipyard	Unknown
Loss	**Cause**	Mine laid by UC-43

Extent of Survival	Recorded by UKHO as the wreck of the *Brabant* (5807), a steam ship built in 1907. The wreck was reported to have sunk on passage to London, after striking a mine laid by UC-43 in 1917. After sinking, the masts, funnel and other works were visible above the water. The most recent survey in 2011 reported only the stern and two boilers were visible on the seabed, situated in deep scour, with geophysical dimensions of 58.0 x 19.1 x 5.0 m. The wreck was only partially covered by the 2021 SSS data and the recorded dimensions suggest the wreck extends considerably beyond the data extents. No discernible superstructure was visible, however some linear features were identified which may be part of the deck. The wreck is situated on a relatively featureless area of seabed, suggesting it is always exposed.

Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Coordinate System: ETRS1989 UTM Zone 30N

Sidescan sonar waterfall image, 50 m range per channel

nationalgrid

PROJECT
Eastern Green Link 2

KEY

TITLE
Sheet 5
ID 71021 – UKHO 5807 – *Brabant*

REFERENCE
SEGL2_M_SR_1_v1_20220429

SHEET NUMBER	DATE
5 of 5	29/04/2022

Debris field **70907** (KP415) has been identified within an area of sand mega ripples and its full extent may be buried. In the SSS data, it appears highly anthropogenic and was visible in the SSS data as a group of straight, curvilinear and slightly angular dark reflectors with shadows. The feature measures 15.6 x 11.2 x 0.1 m, however its full extent may be buried (Figure 6iii). The feature was visible in the MBES dataset as an uneven area of slightly disrupted sand waves. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location.

A total of 14 A2 anomalies have been classified as items of debris (for full list, please see Appendix G). Debris **70946** (KP420) was identified in the SSS dataset as a long, thin, and distinct dark reflector with a bright shadow, measuring 9.3 x 1.2 x 0.5 m. The feature is orientated approximately east to west on the seabed. The feature was visible in the MBES dataset as an elongate mound, within an area of irregular seabed comprising depressions and rounded mounds. The feature is associated with a large MAG anomaly measuring 216 nT and has been interpreted as possible ferrous debris (Figure 6iii).

The largest item of debris identified (**70928** (KP418)) measures 14.6 x 0.7 x 0.1 m. This was visible in the SSS dataset as an elongate, thin and slightly curvilinear dark reflector with a bright shadow. The feature is situated within an area of sand mega ripples. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. This feature is situated 70 m north east of wreck **70931** (KP418), and may be associated debris (Figure 6iii).

A total of four anomalies have been classified as seabed disturbances (**71039** (KP432), **70919** (KP417), **70906** (KP415) and **70861** (KP401)). The largest of these is feature **70906**, which measures 18.1 x 9.6 x 0.6 m. This was identified in the SSS dataset as an area of disturbed seabed comprising two angular dark reflectors with long shadows situated within an area of sand mega ripples. The objects measure approximately 1.9 x 0.6 x 0.5 and 1.7 x 1.4 x 0.6 m individually. The feature was visible in the MBES dataset as three small mounds within a depression and is relatively isolated on an uneven area of seabed. As this location was not directly covered by the MAG dataset, it is not possible to ascertain whether ferrous material is present at this location. These features could be natural; however, they have the potential of representing items of debris buried just beneath the superficial seabed sediment.

A total of five anomalies have been classified as lengths of rope or chain (**70935** (KP420), **71047** (KP434), **70942** (KP419), **70918** (KP417), **70913** (KP415)). Feature **71047** (KP434) was identified in the SSS dataset as a long, thin and slightly curvilinear dark reflector with a small shadow. The anomaly is situated on a featureless area of seabed and measures 23.7 x 0.1 x 0.1 m. The feature is covered by the MAG dataset at its southern end and is associated with a small magnetic anomaly measuring 6 nT, indicating some ferrous material may be present. It has been interpreted as a possible length of partially ferrous rope or chain. These features may not be of archaeological potential in themselves, but they may be attached to archaeological features (e.g., anchors) or be snagged on mostly buried debris not visible in the SSS or MBES data.

One A2 anomaly has been classified as a bright reflector (**70880** (KP409)); this was identified in the SSS dataset as an elongate bright reflector, with measurements of 3.4 x 0.6 m (Figure 6iii). The feature was not visible in the MBES dataset, and this location was not directly covered by the MAG dataset so it is not possible to ascertain whether ferrous material is present at this location. This has the potential of representing an item of debris but may be a natural feature.

A total of 67 A2 anomalies were classified as dark reflectors (for full list, please see Appendix G). The largest of these was **70900** (KP412) which was identified in the SSS data as an indistinct, thin and slightly curved dark reflector with a bright, short shadow, measuring 7.2 x 0.7 x 0.1 m. The feature is situated within an area of sand mega ripples (Figure 6iii). This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present.

The smallest dark reflector identified measures 0.7 x 0.6 x 0.5 m (**70957** (KP422)), this was visible in the SSS dataset as a small but distinct, angular dark reflector with a bright, slightly irregular shadow, possibly suggesting uneven height. The feature was also visible as a mound in the MBES dataset. These features could be natural; however, they have the potential of representing items of debris.

A total of 12 A2 anomalies have been classified as mounds (for full list, please see Appendix G). The largest of these is feature **70860** (KP401), which was identified in the MBES dataset as a large, rounded mound with a flat top, measuring 4.1 x 2.8 x 0.4 m. The mound is situated on an otherwise featureless

area of seabed and appears anomalous. These features could be natural; however, they have the potential of representing items of debris.

Four magnetic trends have been identified in the geophysical study area (**71035** (KP431), **71026** (KP430), **71025** (KP429), **70845** (KP397)). The largest of these is **71035 (**KP431), this was identified in the MAG dataset as a north east to south west curvilinear trend of magnetic responses, approximately 300 m long. The largest amplitude (41 nT) was recorded at the north east end and its central position in the geophysical study area has been retained for positioning. These linear trends of individual magnetic anomalies that appear to be associated have no corresponding SSS or MBES contacts and there is no charted infrastructure recorded at their locations. They may represent natural features or may represent possible ferrous debris, that is either buried or with no surface expression.

The remaining 89 A2 anomalies have been classified as magnetic anomalies (for full list, please see Appendix G). These are anomalies that have been identified in the MAG data but have no anomalous corresponding features identified in the SSS or MBES data. These range in size from 6 nT (**70909** (KP415)) to 499 nT (**70953** (KP421)) and are considered to be ferrous items of debris which are either buried or have no surface expression.

Maritime Archaeological Potential

The assessment of potential for the discovery of shipwreck and shipwreck-derived material within the study area draws on the results of the geophysical survey and desk-based research combined with further research of the wider ASA. As an island nation, the UK has a long maritime history with potential for the archaeological evidence of maritime sites from the late Mesolithic through to the present day. Maritime sites are defined for the purposes of this assessment as either wrecks, either seagoing vessels or aircraft, an/or material that has been accidentally or deliberately lost overboard from a vessel or aircraft. The Marine Installation Corridor lies close to some of the historic shipping routes for British vessels travel along the Scottish east coast and between north east of England and London, with vessels stopping at intermediate ports, particularly in Aberdeen, Peterhead, Blyth, East Anglia and Humberside. The main drivers for these routes were the trade in coal, ship building, the steel industry, and the fishing industry.

Maritime archaeological finds from the medieval period and earlier will be of national interest and will hold special significance. Any post medieval finds would also be of special interest, but such finds are more common than those of earlier dates. More examples of boats and ships exist from the modern period; therefore, more discrimination would be required to determine the importance of any remains discovered. Due to the considerable changes in ship/boat building during this period, any remains discovered showing evidence of this could be considered as being of particular interest.

The losses attributed to the two World Wars have been considered as significant due to the magnitude of the loss endured by all countries involved and for their potential to be categorised as war graves under the PMRA 1986.

Prehistoric Potential

Identified human occupation sites in north west Europe imply that sea voyages were conducted as early as 7,000 BC, though no archaeological remains of vessels that pre-date the Mesolithic have been found in Western Europe. This may reflect the very low probability of organic remains of this type surviving, with the record currently consists of log boats. Hide boats are believed to have been used to colonise North America c.30,000-20,000 BP and therefore it seems probable that similar vessels would have been used in Mesolithic north west Europe. The oldest log boat in Europe is dated to 7,920 - 6,470 BC. Primarily used for transport or fishing in inland and sheltered waters they are generally considered to be unsuited to the open sea.

Prehistoric Potential Scotland

There is evidence of Mesolithic, early Neolithic and Becker activity at Longhaven, near Peterhead, suggestive of established early human occupation. The earliest log boat identified in Scotland comes from Dumfriesshire dating to the early Bronze Age. A log boat with a separate transom and dating to about 1,500 BC has been found in Loch Tay, with a late Bronze Age log boat also found in the Tay Estuary, dating to between 1,130 BC to 970 BC. No prehistoric boats of complex construction or capable of being reliably used in open, maritime water have currently been found in Scotland. (ScARF, 2012).

Prehistoric Potential North East England

During the Bronze Age (2,400 BC to 700 BC) technological changes increased the opportunities for coastal and open sea voyaging. In addition to the established form of the log boat, with a late Bronze Age example found at Brigg in Lincolnshire, new construction methods were employed in the form of sewn plank boats. Five are known from the central North Sea coastal region, at Brigg, North Ferriby, and Kilnsea, with a possible additional vessel from Hartlepool's submerged forest identified. Coastal and continental trade, along with sea fishing increased during the Neolithic, Bronze, and Iron Age, with small ports or anchorages developed as this activity grew. (Wessex Archaeology, 2013a) (p.3).

Romano-British Potential

Iron Age vessels are known from eastern England from Iron Age coin evidence, the writings of Julius Caesar and the recovery of a sophisticated anchor off Dorset. In the period preceding the Claudian invasion in AD 43 the Greek geographer Strabo mentions trade from Britain and lists a variety of goods typically exported to various points on continental Europe, again implying sea-travel.

The Romano-British period (43 AD to 410 AD) saw an increase in seaborne trade and naval activity around the coast of the Roman province of Britannia and to mainland Europe. In north east Scotland the extent to which the scale and character of pre-existing maritime transport and trade was affected is not known. It probably continued much as before, except perhaps in times of war or tension. The Romans invaded Britain in AD 43 quickly seizing the south of England and pushed northwards, reaching the Humber by AD 47. They seem to have had the north east and Yorkshire under control by the reign of Hadrian, from AD 117. The presence of a wide range of imported goods from both latter Iron Age and Roman contexts suggest that prior to the invasion there were already strong coastal trade links. (Wessex Archaeology, 2013a) (p.5).

Romano-British Potential Scotland

Although it is not a safe anchorage, Aberdeen Bay is likely to have been traversed by coastal trading vessels and fishing boats throughout this period. The existence of the riverside Devana settlement somewhere in the area may mean that this activity was at a relatively high level for the north east coast of Scotland. In addition, the marching camp at Normandykes may have been supplied by sea, with ships approaching through the Dee Estuary. The region around modern Aberdeen appears to have been dominated by Pictish tribes during the Early historic period. The Picts are known to have been seafarers and depictions of their vessels are known, such as from St Orland's Stone from Cossans in Angus. (ScARF, 2012).

Romano-British Potential North East England

Excavated examples of Romano-British (AD 43 to AD 410) vessels show that larger, iron fastened, plank-built ships were in use, capable of ocean voyages, although it is likely that smaller local craft also continued in use. The archaeological evidence for the Romano-British period in the coastal region of the North East is relatively sparse. It has been argued that the legionary fortress at South Shields may have had an associated port facility as part of its role as a supply centre. Tacitus described the activities of the British fleet in the north of Britain in the 1st century AD and there appears to have been a significant increase in maritime traffic from the Hadrianic period onwards (2nd century AD). Two possible wreck sites in the North East from this period have been suggested, at Herd Sands, South Shields, and Hartlepool Bay.

By the end of the 4th century, Britain's eastern coast was coming under attack from Germanic raiders leading the Romans to build signal stations along the south and east coasts. The signal station at Saltburn was one of a line of five on the Yorkshire coast with others at Goldsborough, Ravenscar, Scarborough, and Filey. There will have also been Roman naval activity at various times to support expeditionary and occupation forces and probably to suppress attacks on merchant shipping. It is also probably safe to assume that Roman military garrisons will have depended to some extent upon supplies arriving by sea. Their presence may also have stimulated some trade between the areas temporarily occupied and the rest of the province.

Medieval Potential

The volume and nature of shipping activity following the collapse of the Roman Empire is poorly understood with a lack of evidence from the early medieval period (AD 410 to AD 1066), particularly in the earlier part of the period. Maritime activity within the area would have included both coastal shipping and movement across the North Sea. The military use of ships by the Kingdom of Northumbria is recorded in the 7th century when Northumbria was the most powerful kingdom in Britain. The 7th and

8th centuries were mainly ones of peace which allowed commerce to flourish and prosper and ports to develop in some cases into undefended urban complexes.

The 5th to 9th centuries saw immense changes around the North Sea, beginning with the great movement of Germanic peoples from the continent to England, the adoption of Christianity and the formation of states under royal rule, the resurgence of international trade and finally, the Viking incursions. From the late 8th century raiding activity by the Vikings is historically attested, with records of raids on the monasteries at Monkwearmouth and Lindisfarne in this period. Frequent voyaging across the North Sea for raiding, colonisation and trading can be assumed and therefore the potential for wrecks can also be assumed. Their activities effectively disrupted trade in the 9th century and may have been instrumental in the desertion of several formerly important ports.

Medieval Potential Scotland

Aberdeen appears to have been a significant port during this period and is clearly crucial to the maritime significance of the area. By 1136 it was busy enough for David I to grant Bishop Nechtan of Aberdeen the right to levy a charge on shipping using the harbour. It was also significant enough to attract hostile attention and in the late 12th century was attacked from Scandinavia. During the reign of Alexander II (1241-1286), Aberdeen gained a reputation for its fish export (herring industry). In 1290 Aberdeen fish was being shipped to Yarmouth, then the premier fishing port of England and onto Norway. Aberdeen's earliest recorded trade with mainland Europe was with Flanders. This trade, based upon the export of wool, appears to have been well established by the late 13th century when Philip IV of France allowed Scottish merchants freedom to trade in Flanders. Piracy seems also to have been a problem off the Scottish east coast during the 14th century impacting the number of vessels trading with Aberdeen.

Medieval Potential North East England

Over the course of the medieval period (AD 1066 – AD 1499) there was significant development of quayside facilities at Newcastle and Hartlepool, indicating the growth of trade. Other changes include an apparent change to and intensification of fishing for deep water fish species. Other ports such as Blyth were principally fishing villages during this period. Long distance trade was initially dominated by routes to France and Flanders, with the Baltic and German trade becoming more important through the period. The coal trade also began in the medieval period.

Many ships during this period were also provided periodically to the crown for military use and would have moved through the area during the various Anglo-Scottish wars, sometimes transporting troops, but mainly to supply English campaigns and garrisons. The first castle at Scarborough was built in 1135 and it developed into one of the most powerful castles in the north of England; the medieval town originating in a borough founded by Henry II in about 1163. The founding of Scarborough was part of a much wider trend towards urban generation along the east coast of both Scotland and England during the medieval period as economic factors led to the expansion of ports, some developing from pre-conquest towns and others planned as new towns on unoccupied sites. Shipping was important along the North East coast in the medieval period where it supplied the domestic needs of villages, towns and abbeys and brought in goods that were difficult to bring by road.

By 1300 England's east coast fisheries were a large, complex, highly regulated, and widely dispersed industry. They were of international importance, supplying not only local demand but also supporting a major export trade. In Yorkshire, Hull was the principal trading port while Scarborough led in fishing, the main fishing trade concentrated on herring and cod. Towards the 15th century there was a trend away from inshore to distant-water fishing because of improved curing techniques allowing vessels to stay at sea longer. (Wessex Archaeology, 2013a).

Post Medieval Potential Scotland

Trade activity intensified in the wider region during the post-medieval period (AD 1500 to 1799). Much of this related to an increase in intensity of coal extraction, with improvements and extensions to facilities made to established ports in the region at this time. Blyth for example becoming an active coal port during this period, with new infrastructure including a ballast quay and a coal quay. Fishing continued to be very important to the local economies, though by the early 17th century the English fishery was waning as a result of competition from foreign vessels, especially the Dutch herring fleets.

Trade between Aberdeen and the Baltic appears to have expanded greatly during the 16th century. A crane was built in Aberdeen harbour in 1582. These are rare in ports of this date and demonstrates the importance of the port. A second crane was built in 1637-8. Competition arose during the 16th century

as Peterhead, Newburgh (14 miles north of Aberdeen) and smaller harbours in the area all sought to compete for business.

Peterhead's development as a fishing and trading port started in 1593 with the construction of Port Henry, with further improvements through the 1600s, and further piers built in the 1700s, improving access and protection to vessels in the harbour. The port developed its specialist whaling fleet from around 1788, eventually becoming the largest whaling port in the UK.

Aberdeen was caught up in the turbulence of the early to mid-17th century and trade suffered, particularly after the 1651 Navigation Act. Shipping movements at Aberdeen fluctuated throughout the century, although the number of ship entries and departures during the 17th century was on average greater than during the last decade of the 16th century. In 1626 the port possessed only ten vessels, averaging 40 tons, with the largest less than 60 tons. Ships of the period rarely exceeded 100 tons burthen and in 1692 the entire Aberdeen fleet comprised only two vessels of 30 tons each.

The Act of Union of 1707 opened the English market, particularly London and the English colonies, to Scottish merchants. Trade with the American colonies became particularly important, with woollen and linen goods, salmon, salted herrings, and French wine being exported, together with emigrants.

Post Medieval Potential North East England

Alum was Britain's first chemical industry beginning in the early 1600s in the north east of England. Alum production required large quantities of fuel supplied by colliers sailing from the Tyne and Wear, and the wider regions ports. Whitby's share grew steadily throughout the 18th century due mainly to the fact that at high tide it possessed one of the best harbours of refuge on the east coast. The emergence of Whitby as a highly skilled shipbuilding town was another factor which contributed to its dominance of the shipping industry during this period, although Whitby's shipbuilding declined from the 1830s due to the size limitations placed on it by the bridge. Scarborough became Britain's first seaside resort following the discovery of springs in 1620 and its subsequent development as a spa.

Despite England, and subsequently the UK, being involved in significant number of maritime conflicts during this period, no major naval actions occurred within the study area. Other military actions, however, including activity targeting merchant vessels, such as privateering, may have led to unrecorded losses within the area.

18th-19th Century Potential Scotland

During the latter part of the 19th century the Aberdeen fleet gradually moved offshore and into trawling. Chief amongst the offshore catch was the herring, and the herring boom from the 1870s and the First World War brought seasonally hectic activity to the port. By 1910, 217 of the Scottish fleet of 320 steam trawlers operated out of Aberdeen.

Between 1815-1850 Peterhead's herring fleet also grew more than fivefold, with a corresponding development of the harbour for both trade and fishing, along with the wider town, and its commercial operations.

18th-19th Century Potential North East England

Whaling from Whitby began in 1753 and lasted until around 1837. By the late 18th century, the Whitby fleet comprised between ten and twenty vessels. Stockton, at this time the most important port on the Tees, also had a couple of whaling ships, and Scarborough had one. The Aberdeen whaling businesses were active by 1752 and by 1817 there were 14 Aberdeen whaling ships operating.

The period following the end of the Napoleonic Wars saw dramatic revolutions in ship design as first iron, and then steel, replaced wood in ship construction, and steam replaced sail as the principle means of propulsion. Tramp sail and then steamships dominated maritime trade in the 19th and early 20th centuries. The first steamship service to Aberdeen commenced in 1821 and by 1855, 16 steamers were operating from the port. By the turn of the century this number had grown to 83.

Between 1840 and 1860, trawling expanded dramatically as the principal means of capturing white fish and by the mid-1870s, the expansion of the smack trawl fishery was nearing its peak. In summer, trawlers visited grounds off the Danish, German, Dutch and Belgian coasts. In winter, they mainly worked banks adjacent to the Dogger. Around Britain's coastline there were still thousands of small craft propelled by sail and oar; but in the Irish Sea, the Channel, and the North Sea, fleets of steam-powered trawlers were operating.

20th Century Potential

The industrial centre at Hartlepool made it a key target for Germany during the First World War and the stretch of water between the Humber and the Tees was also a particularly dangerous place for shipping during that war. As well as attacking Hartlepool in December 1914, the German Navy also targeted Whitby and Scarborough. In the first decade of the 20th century 'one quarter of the global output of the shipbuilding industry was produced on the banks of the north east region's three principal rivers, the Tyne, Wear and Tees'. After the First World War trade inevitably declined, as did demands for shipping services and new ships. The onset of rearmament before the Second World War helped to revive the industry for a while, but the shipping and shipbuilding industries were severely damaged by bombing during the war itself. Many shipyards needed extensive overhauling, as did numerous ports and inland waterways, and merchant fleets suffered heavy losses. Reconstruction after the Second World War fundamentally changed the traditional economic and transport patterns of the North Sea region. Nevertheless, coal and timber remained the most important North Sea cargoes well into the 1950s. (Wessex Archaeology, 2011).

During the latter part of the First World War and all through the Second World War coastal convoys were instituted by the government using the East Coast War Channels. These moved north and south along the east coast, and coal was a major component of the cargoes carried, essential to keep industries in southern Britain, including war industries, in action. The types of losses associated with both wars include merchant vessels that might have sailed in the escorted convoys or sailed independently, lost to a variety of enemy threats including surface vessels, submarines, and mines. During the Second World War, aircraft losses were particularly significant along the east coast because of the relative proximity of German-held airfields to the North Sea. During both wars, large numbers of steam trawlers and drifters were bought or hired by the Admiralty to supplement the Royal Navy with significant losses due to enemy action. The most notable naval action within the region was probably the 1914 German raid on Scarborough, Whitby, and Hartlepool.

The aftermath of the Second World War, along with factors such as the European fisheries policy, has led to a decline in the fishing, shipbuilding and other industries down the east coast of the UK, though Peterhead retains its dominance as a major fishing port, and the oil and gas industries have led to revivals for some communities after decades of underinvestment.

Recorded Losses

Recorded Losses can be considered as an indication of the potential for archaeological maritime remains to exist within the study area and the type and number of wrecks that could be present. These records relate to vessels reportedly lost of for which no physical wreck remains have ever been identified. Table 17 shows the distribution of these documented losses according to the date of loss for those records whose positions fall within the Marine Installation Corridor. Details regarding these losses are presented in Appendix H.

Table 17: Summary of Recorded Losses by Period

Period	Number of Records of Ships	Number of Records of Aircraft
Post-medieval	2	Nil
19th century	12	Nil
Modern	3	Nil
Unknown	Nil	Nil
Total	**17**	**Nil**

Recorded Losses are predominantly reported to have stranded in coastal areas, around Peterhead and Buchan Ness. Thirteen of the 17 losses are in Scottish territorial waters, the other four located within the offshore waters.

No Recorded Losses are recorded prior to the beginning of the post-medieval period, and while this to some extent could represent a significant increase in shipping during the post medieval period, it could also be a reflection of the improvements in record keeping, and the maintaining of those records, having improved significantly.

There are no recorded losses located in the ASA within English territorial waters, however, there are likely to be numerous records located close to the ASA, particularly around Flamborough Head,

including that of the First World War wrecks of *Caroline* (MHU22815), *Dirk* (NRHE907955) and *Manchester Engineer* (NRHE907947), and late 20th century wreck *Hannah Louisa* (MHU23577).

Overview of Potential

There is potential for discoveries of maritime craft from the Mesolithic to the modern period. Post-medieval and modern wrecks, as they were generally made of more substantial material, are more likely to have been discovered through surveys undertaken by UKHO and others, and thus recorded in the archaeological record. However, there is still potential for discovery of previously unrecorded wreck sites, particularly of wooden wrecks, broken up wrecks or partially buried wrecks that are more difficult to detect through geophysical survey. The key areas of potential are summarised in Table 18 below, which have based on the approach outlined.

Table 18: Summary of maritime potential for key time periods

Period	Summary
Pre-1500 AD	Low potential for material associated with prehistoric maritime activities. Prehistoric maritime activities include coastal travel, fishing and the exploitation of other marine and coastal resources. Vessels of this period include rafts, hide covered watercraft and log boats.
	Low potential for material associated with later prehistoric maritime activities, including seaworthy watercraft suitable for overseas voyages to facilitate trade and the exploitation of deep-water resources. Such remains are likely to comprise larger boat types, including those representing new technologies such as the Bronze Age sewn plank boats which are associated with a growing scale of seafaring activities.
	Low potential for material of Romano-British date, associated with the expansion and diversification of trade with the Continent. Watercraft of this period, where present, may be representative of a distinct shipbuilding tradition known as 'Romano-Celtic' shipbuilding, often considered to represent a fusion of Roman and northern European methods.
	Low potential for material associated with coastal and seafaring activity in the 'Dark Ages', associated with the renewed expansion of trade routes and Germanic and Norse invasion and migration. Vessels of this period may be representative of new shipbuilding traditions such as the technique.
	Low potential for material associated with medieval maritime activity, including that associated with increasing trade between the UK and Europe, the development of established ports around the southern North Sea and the expansion of fishing fleets and the herring industry. Vessels of this period are representative of a shipbuilding industry which encompassed a wide range of vessel types (comprising both larger ships and vernacular boats). Such wrecks may also be representative of new technologies (e.g., the use of flush-laid strakes in construction), developments in propulsion, the development of reliable navigation techniques and the use of ordnance.
1501 to 1815	Medium potential for post-medieval shipwrecks representative of continuing technological advances in the construction, fitting and arming of ships, and in navigation, sailing and steering techniques. Vessels of this period continued to variously represent both the clinker techniques and construction utilising the flush-laid strakes technique.
	Medium potential for post-medieval shipwrecks associated with the expansion of transoceanic communications and the opening up of the New World.
	Medium potential for post-medieval shipwrecks associated with the establishment of the Royal Navy during the Tudor period and the increasing scale of battles at sea.
	Medium potential for post-medieval shipwrecks associated with continuing local trade and marine exploitation including the transport of goods associated with the agricultural revolution.
1816 to 1913	Higher potential for the discovery of shipwrecks associated with the introduction of iron and later steel in shipbuilding techniques. Such vessels may also be representative of other fundamental changes associated with the industrial revolution, particularly with regards to propulsion and the emergence of steam propulsion and the increasing use of paddle and screw propelled vessels.
	Higher potential for the discovery of shipwrecks demonstrating a diverse array of vernacular boat types evolved for use in specific environments.
	Higher potential for wrecks associated with large scale worldwide trade, the fishing industry or coastal maritime activity including marine exploitation.
1914 to 1945	Higher potential for the discovery of shipwrecks associated with the two world wars including both naval vessels and merchant ships. Wrecks of this period may also be associated with the increased shipping responding to the demand to fulfil military requirements. A large number of vessels dating to this period were lost as a result of enemy action.

Period	Summary
Post-1946	Potential for wrecks associated with a wide range of maritime activities, including military, commerce, fishing and leisure. Although ships and boats of this period are more numerous, loses decline due to increased safety coupled with the absence of any major hostilities. Vessels dating to this period are predominantly lost as a result of any number of isolated or interrelated factors including human error, adverse weather conditions, collision with other vessels or navigational hazards or mechanical faults.

Value

The present assessment of the value of known and potential archaeology within the study area is based on data from the UKHO, NRHE and HER and the archaeological assessment of geophysical survey data. This assessment is based on the criteria for assessing archaeological value as set out within Table 6, and based on available guidance (Wessex Archaeology, 2011).

Each wreck should be assessed on a case-by-case basis, in order to take into account the full range of criteria for assessing value (such as period, rarity, documentation, group value, survival / condition, potential, build, use, loss, and investigation), however it is also possible to provide a broad assessment of the sites, based on date categories defined by the Marine Class Description and principles of selection (Wessex Archaeology, 2008b).

Two wrecks have been identified and named, the oldest wreck is the *Adventure* (**70317** (KP25)), which sank in 1922. This fishing vessel was built in 1906 by Hall, Russell & Co. Ltd Aberdeen. This Peterhead fishing trawler was propelled by means of sail and steam, with a triple expansion steam engine, single boiler and ketch rigged. It sunk after colliding with a mine SSE of Buchan Ness. The other wreck is that of *Brabant* (**71021** (KP428)), a Norwegian passenger/cargo steamship. This steamship was built in 1907 by Fredrikstad Mekaniske Verksted A/S and was propelled by means of a triple expansion engine with two single boilers. At the time of sinking, in 1917, the steamship was en-route from Kristiania to London with a general cargo when the vessel hit a mine from a German submarine and sank off Flamborough Head.

These ships belong to a period when there were great changes being made to the way in which vessels were built and used, and although examples of vessels from this period are generally more numerous in the archaeological record, those that contribute to an understanding of these changes would be considered as having increased value. It is likely that these two vessels are considered to be of **medium** value.

Similarly, the wreck of the *Mercator* (**70301** (KP17)) should be considered of **medium** value until more information becomes available. This previously recorded wreck of the *Mercator* (**70301**) sits just outside of the ASA, 0.2 km due east of the Marine Scheme. The *Mercator* was a Finnish cargo steamship, built in 1904 by Furness Withy & Co. Ltd. West Hartlepool, Sunderland. It was propelled by a triple expansion engine and had three single boilers. At the time of loss in 1939, the steamship was on route from Buenos Aires and Leith for Helsinki with a cargo of coffee, maize, linseed, casein and groundnut meal, when the vessel was torpedoed by submarine U-21. This record has been discriminated as A3 as the location is not directly covered by either the 2012 or 2021 geophysical datasets, however, it has been retained as a precaution as the location of a potential archaeological site.

For the wrecks and possible wrecks that have not been named and that are of unknown date (**70278** (KP14), **70394** (KP80), **70441** (KP93), **70672** (KP309), **70675** (KP309), **70931** (KP418), **70970** (KP422)), their value is presently unknown, but should be considered as **high** until proven otherwise.

The anomalies that have not been identified during the archaeological assessment of the 2012 or 2021 geophysical datasets and are listed as unidentified obstructions by the UKHO (**2013**), can be considered of **low** value.

The anomalies that have not been identified during the archaeological assessment of the 2012 or 2021 geophysical datasets and are now listed as Dead by the UKHO (**2007**) can be considered to have a **low** value.

The probable mass of scaffolding (**2020**) can be considered to have a **low** value.

As there is insufficient information to assess the value of each individual unidentified A2 anomaly, identified in the archaeological assessment of the 2012 or 2021 geophysical datasets, all of these

additional anomalies must be considered to have **high** archaeological value until more information becomes available.

As the value of potential wrecks cannot be evaluated until they are discovered, potential wrecks of all periods should be expected to be of **high** value, in accordance with the precautionary approach.

Aviation Archaeological Potential

Marine aviation archaeology receptors comprise the remains or associated remains of military and civilian aircraft that have been lost at sea. Evidence is divided into three primary time periods based on major technological advances in aircraft design: pre-1939; 1939-1945; and post-1945.

Although there are currently no known aircraft crash sites located within the Marine Scheme there is the potential for the discovery of previously unknown aircraft material, particularly in relation to Second World War. Aircraft crash sites are also difficult to identify through archaeological assessments of geophysical survey, although past experience indicates material from the site, such as engines or other material may be recorded as small obstructions or anomalies.

A guidance note published by English Heritage (now Historic England) entitled Military Aircraft Crash Sites (English Heritage (now Historic England), 2002) outlined a case for recognising the importance of aircraft crash sites, specifically with regard to existing and planned development proposals which may have an impact on such sites. The guidance note argues that aircraft crash sites not only have significance for remembrance and commemoration, but also have an implicit cultural value as historic artefacts, providing information on the aircraft itself and also the circumstances of its loss (ibid.: 2). All aircraft that crashed while in military service are automatically protected under the Protection of Military Remains Act 1986.

There is the potential for aircraft crash sites dating from the early 1900s to the present day. Early aircraft construction was characterised by lightweight aircraft, constructed of canvas covered wooden frames. These aircraft were extremely fragile and were known to break up mid-flight. The fragility of these airframes alongside the relative scarcity of flights over water mean that any aircraft remains dating to this period are rare.

The regular use of aircraft over the battlefields of the Western Front by the end of the First World War, however, prompted the mass-production of fixed wing aircraft in large numbers, spurring technological advances in aircraft design. A total of 28 fixed wing aircraft and 15 airships were lost by the German Imperial Air Service and Navy during the raids on the UK mainland during the First World War (Wessex Archaeology, 2009)(p.65) and a further 34 aircraft from the British Home Defence Squadrons are also recorded to have been lost during this period (Holyoak, 2002) (p.659). It is possible that some of these losses occurred at sea, particularly within regions that attracted intense aircraft hostility such as the East Coast.

During the interwar period, civil aviation increased significantly, with overseas services established to a number of European and worldwide destinations (Wessex Archaeology, 2009) (p.16). The Department of Transport's Air Accident Investigation Branch (AAIB) records 20 civil aircraft losses at sea between 1920 and 1939, though this is not regarded as being a comprehensive record (Wessex Archaeology, 2009) (p.65). Technological advances in aircraft design during this period meant that the low-powered wood and cloth bi-planes of the early 20th century had been replaced by high-powered monoplanes made of aluminium by 1939 (Wessex Archaeology, 2009) (p.65).

During the Second World War, aircraft activity increased drastically and the highest potential for aircraft material on the seafloor is from this period. By the Second World War, aircraft were more heavily built and therefore material from their crash sites is more likely to survive in the archaeological record.

During the Second World War airpower became increasingly important at a strategic and operational level. Forming the frontier between the Allies and Axis, the North Sea became a significant focus for a high volume of aviation activity in the First World War with hostile aircraft activity particularly concentrated off the east and south coasts of England (Wessex Archaeology, 2008c) (p.16).

The Aircraft Crash Sites at Sea project (Wessex Archaeology, 2008c) considered a selection of sources which may be considered to indicate the potential for aircraft remains of this period to exist within the study area. One of the most complete sources of information was provided by published aviation researcher Ross McNeill, who identified 11,090 RAF aircraft losses in the North Atlantic, North Sea,

English Channel, Irish Sea and Biscay areas between 1939 and 1990, the majority of which occurred during the Second World War (Wessex Archaeology, 2008c) (p.18).

After the Second World War, there is still potential for aircraft to have been lost in the area, however any military losses during this period are more likely to have been lost due to training accidents rather than combat operations (Wessex Archaeology, 2008c)(p.166), and civilian losses are likely to have been reported and recorded.

Recorded Losses

A number of recorded losses are located within the wider area; at least 45 recorded aircraft crash sites have been identified at sea within English territorial waters, including one that lies within 1 km of the ASA, as recorded in the HER's for the area. The record (NRHE_1341161) consists of a Halifax MKIII MZ286 British bomber from 1944. As these are recorded losses the positional data is unreliable and serve only to provide an indication of the types of aircraft that flew over this coastline. In many cases the location is only a set of general coordinates, a general distance and bearing from a landmark, or the location of the crew's dinghy, or recovered remains.

North Yorkshire was home to 37 airfields during the Second World War that saw significant aircraft traffic in the area during this period. Similarly, there are at least 11 airfields in Northumberland dating to the Second World War or before, combining both training and active airfields with corresponding levels of loss through accidents or battle damage both overland and on the journey to and from the European mainland.

Overview of Potential

There is potential for the presence of aviation material dating from the early 20th century until more recent times, with a concentration dating to the World Wars and in particular to the Second World War. Discoveries may occur anywhere within the ASA, but potential may increase nearer the coastlines in the vicinity of coastal defence networks protecting the strategically important military and civil infrastructure on England's east coast.

Under Hitler's War Directive No. 9 the North East of England and Scotland was subject to strategic bombing. Many aircraft were intercepted over the North Sea, with raids carrying on through to 1945. These raids affected all the towns and cities along the East Coast. Although the Marine Installation Corridor lies outside of the areas of highest aircraft activity during World War Two, the area would still have seen significant activity: shipbuilding facilities in the North East would have been a target for Luftwaffe attack, as would the coastal convoys, and in addition to aircraft defending against this, there would also have been patrol activity, both by Fighter Command and Coastal Command aircraft. As such there is considerable potential for undiscovered aircraft remains to be impacted by the Marine Scheme.

There were also a significant number of training squadrons and airfield within the wider area, and with loss rates of around 15% from training accidents (Wessex Archaeology, 2008a) there is the potential for a wide range of allied aircraft types to be found within the Marine Installation Corridor, in addition to both Allied and Axis losses during combat, and losses from other mishaps.

The key areas of aviation potential that may be uncovered within the Marine Installation Corridor are summarised in Table 19.

Table 19: Summary of aviation potential for key time periods

Period	Summary
Pre-1939	Minimum potential for material associated with the early development of aircraft. Aircraft of this period may represent early construction techniques (e.g., those constructed of canvas covered wooden frames) or may be associated with the mass-production of fixed wing aircraft in large numbers during the First World War.
	Minimum potential for material associated with the development of civil aviation during the 1920s and 1930s, associated with the expansion of civilian flight from the UK to a number of European and worldwide destinations.
1939 to 1945	Very high potential for Second World War aviation remains, particularly as the east coast acted as a hub for hostile activity. Aircraft of this period are likely to be representative of technological innovations propelled by the necessities of war which extended the reliability and range of aircraft.

Period	Summary
Post-1945	Potential for aviation remains associated with military activities dominated by the Cold War, the evolution of commercial travel and recreational flying and the intensification of offshore industry (including helicopter remains). Aircraft of this period may be representative of advances in aerospace engineering and the development of the jet engine.

Value

The present assessment of the value of known and potential archaeology within the study area is based on data from the UKHO, NRHE and HER and the archaeological assessment of geophysical survey data. This assessment is based on the criteria for assessing archaeological value as set out within Table 6, and based on available guidance (Wessex Archaeology, 2011).

As it is currently unknown whether the remains of any aircraft are in the ASA, it is not known whether there are any aircraft which crashed while in military service, and therefore automatically protected under the PMRA 1986. Aircraft are considered to have significance for remembrance and commemoration, but also have an implicit heritage value as historic artefacts, providing information on the aircraft itself and also the circumstances of it use and loss ((English Heritage (now Historic England), 2002). On this basis, all potential aircraft sites are considered to be of **high** value.

It is also conceivable that any of the 1,023 unidentified geophysical anomalies could be identified as aircraft crash sites, and subsequently are presently considered of **high** archaeological value.

It is known that there were a significant number of airfields in the region during the Second World War, therefore, there is a higher potential for aircraft material to be discovered along this stretch of coastline and offshore.

Isolated aircraft finds are considered as being of **medium** archaeological value as they may provide insight into patterns of historical aviation across the ASA or indicate the presence of uncharted aircraft crash sites.

12.1.4.3   Intertidal Heritage Assets and Potential

There is only one known site that falls within the Marine Installation Corridor; **1004** located in the intertidal zone at the English landfall (Figure 7, Appendix I).
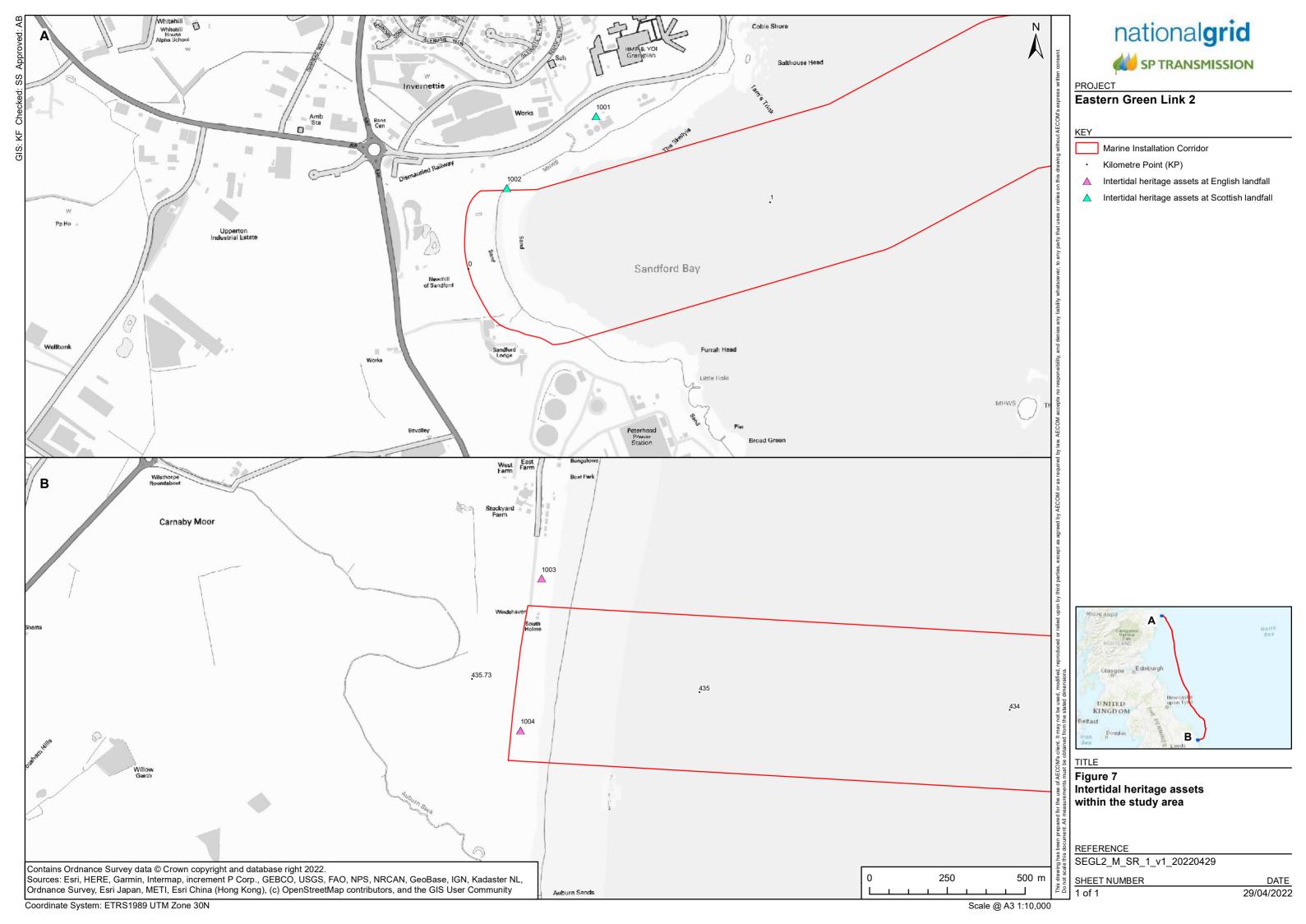
Three other known sites fall within the ASA; two in the intertidal zone at the Scottish landfall, and one site in the intertidal zone at the English landfall.

At the Scottish landfall, the local HER polygon for CANMORE 305324 (**1001**) is the site of the village of Burnhaven, depicted on the Ordnance Survey (OS) 1st and 2nd edition maps in the mid-19th and early 20th centuries. There was a harbour and jetty, located in the intertidal zone, situated at the mouth of the burn that originally flowed into the sea. This was demarked by a stone jetty. The site of the village is now occupied by a sewage works, and the harbour is no longer shown on OS maps after the 2nd edition. There are, however, some remains of the harbour quay visible at lower tides. Record NK14SW0228 (**1002**) represents the remains of structures on the beach and lies slightly to the west of the **1001**. These were reported in 2019, and no structures at this location are visible on the OS historic maps.

At the English landfall record MHU21018 (**1003**) is the location of Second World War beach defences, termed 'scaffolding', that are visible on aerial photographs. Other Second World War beach defences, including numerous pillboxes and anti-tank blocks, are located within 500 m of the English landfall but above the intertidal zone. Record NRHE 1516561 (**1004**) is the site of the Auburn to Bridlington Road which has mostly been destroyed by erosion. This was originally the main road to Bridlington from the south but was replaced by what is now the A165.

Value

Of the records located within the intertidal zone, the value of these sites is unlikely to be affected as some have either been previously impacted by development or are no longer present. The beach defences that are located above the intertidal zone dating to the Second World War should be considered as being of **high** archaeological value.

Figure 7
Intertidal heritage assets within the study area

nationalgrid
SP TRANSMISSION

PROJECT
Eastern Green Link 2

KEY

— Marine Installation Corridor
· Kilometre Point (KP)
▲ Intertidal heritage assets at English landfall
▲ Intertidal heritage assets at Scottish landfall

TITLE

Figure 7
Intertidal heritage assets
within the study area

REFERENCE
SEGL2_M_SR_1_v1_20220429

SHEET NUMBER   DATE
1 of 1   29/04/2022

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Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Coordinate System: ETRS1989 UTM Zone 30N

Scale @ A3 1:10,000

0   250   500 m

12.1.4.4   Historic Seascape Character

Scotland

No Historic Seascape Characterisation studies have been carried out within Scotland as explained in Section 0, and therefore an HSC assessment has not been undertaken for the area within Scottish territorial waters, or the full extent of the EEZ. The seascape within the study area in Scottish territorial waters is likely to have been heavily shaped by similar processes to that described within English waters, particularly fisheries, as Peterhead is currently the largest fishing port in the UK for total landings and has been a major fishing port for most of the post-medieval period since the construction of its first harbour in 1593.

England

In 2009 a project was initiated to demonstrate the implementation of the HSC methodology in an area of sea stretching from Northumberland to Yorkshire (Merritt & Dellino-Musgrave, 2009). It therefore covers part of the study area, the area located within English territorial waters and a section of area located within the English offshore waters.

The method assesses and defines areas with HSC types that promote an understanding of historic trends and processes in order to inform the sustainable management of change over time. This is achieved by addressing the multi-level character of the sea by splitting the marine zone into four tiered levels: the sea surface, the water column, the sea floor and the sub-sea floor. The characterisation is GIS-based, enabling key characteristics within the study area to be identified, and are summarised below.

The known and potential prehistoric, maritime and aviation heritage assets that form part of the HSC have been discussed in the relevant baseline characterisations above. The character descriptions below refer only to the cultural processes which have shaped the historic seascape of the study area.

Table 20: HSC – primary cultural processes around the Marine Scheme

Broad Character Types	Character Sub-Types
Navigation	Navigation route/area
	Dredged channel/area
Industry	Hydrocarbon pipeline
	Dumping spoil ground
Fisheries and mariculture	Fixed netting
	Longlining
	Demersal trawling
	Fishing ground
	Potting
	Pelagic trawling
Military	Military practice area
Recreation	Leisure sailing
Communications	Submarine cable

Value

The local seascape characters located around and within the Marine Scheme are considered to be of **medium** archaeological value due to the areas' important and prolonged maritime history and its continued use today.

12.1.5 Environmental Appraisal and Recommendation

12.1.5.1   High-level Environmental Appraisal

Archaeological assets relating to seabed prehistory, maritime and aviation archaeology have been identified within the Marine Scheme, as has the potential for further assets to be discovered. The proposed project has the potential to physically and adversely impact known and potential

archaeological receptors within the installation footprint and area of effect of indirect physical effects such as changes in seabed sediment regimes, scour etc.

Typically, adequate and appropriate mitigation is required to ensure that the archaeological value of the baseline within this report is maintained. Recommendations for appropriate mitigation are set out below.

12.1.5.2   Recommendations

Avoidance

The primary mitigation for the protection of known archaeological assets is avoidance. This is achieved through the implementation and monitoring of AEZs, which are proposed for identified high value seabed features of anthropogenic origin (i.e., A1 classified geophysical anomalies).

The mitigation will establish appropriately sized AEZs around assets which have been considered to be of high archaeological potential, in consultation with Historic Environment Scotland and Historic England. These areas would be out of bounds to construction activities and to anchoring. Monitoring of any AEZs to ensure there is no disturbance to them will be part of this mitigation.

Reduction

Reduction of impact can be achieved by means of appropriate mitigation identified through potential opportunities for further investigation of assets (e.g., during UXO survey and clearance). Further investigations mean that anomalies can either have their archaeological value removed, if they prove to be of non-anthropogenic nature or modern, or their value as archaeological assets confirmed. If their value is confirmed, mitigation in the form of either avoidance (which may be enacted by the implementation of an AEZ) or through remedying or offsetting measures as identified through a Written Scheme of Investigation (WSI) which includes a Protocol for Archaeological Discoveries.

Remedying and Offsetting

In cases where avoidance is either inappropriate or impossible, the damage to archaeological assets should be offset. In the case of seabed prehistoric features, this can be achieved by undertaking a palaeoenvironmental assessment of deposits with high geoarchaeological potential, principally peat deposits. Pollen and macrofossil assessment, supported by radiocarbon dating, will provide information on age and vegetation history of the terrestrial environment, providing a landscape context to any prehistoric activity within the area. Recovery of artefacts and/or other archaeological assets should be a final resort, when all other mitigation has failed. Any recovery should be completed under the supervision of an appropriately qualified and experienced marine archaeologist. Recovery methods are identified through the WSI. Due to the vast differences in practice and implementation between these methods, each will be covered by a specific Method Statement, approved by the Archaeological Curator, should they be implemented

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12.1.7 Acronyms and Abbreviations

Abbreviation	Definition
AD	Anno Domini
AEZ	Archaeological Exclusion Zone
AMAA	Ancient Monuments and Archaeological Areas Act 1979
BCE	Before Common Era
BP	Before Present
BGS	British Geological Survey
BULSI	Build, Use, Loss, Survival and Investigation
CIfA	Charted Institute for Archaeologists
DECC	Department of Energy and Climate Change
DCLG	Department for Communities and Local Government
DEFRA	Department for Environment, Food and Rural Affairs
EEZ	Exclusive Economic Zone
EIA	Environment Impact Assessment
ES	Environment Statement
ETRS	European Terrestrial Reference System
GIS	Geographic Information System
HE	Historic England
HER	Historic Environment Record
HES	Historic Environment Scotland
HSC	Historic Seascape Characterisation
JNAPC	Joint Nautical Archaeology Policy Committee
LGM	Last Glacial Maximum
MAG	Magnetometer
MBES	Multibeam Echosounder
MCAA	Marine and Coastal Access Act 2009
MHWS	Mean High Water Spring
MMO	Marine Management Organisation
MPS	Marine Policy Statement
MSA	Merchant Shipping Act 1995
MS-LOT	Marine Scotland Licensing Organisation Team
nT	nanotesla
NM	Nautical Mile
NPPF	National Planning Policy Framework
NRHE	National Record of the Historic Environment
PMRA	Protection of Military Remains Act 1986
PWA	Protection of Wrecks Act 1973
SBP	Sub-bottom Profiler
SSS	Sidescan Sonar

Abbreviation	Definition
UKHO	United Kingdom Hydrographic Office
UNESCO	United Nations Educational, Scientific and Cultural Organisation
UTM	Universal Transverse Mercator
WGS	World Geodetic System
WSI	Written Scheme of Investigation

Appendix A Chronology

Where reference to in the text, the main archaeological periods in Britain are broadly defined by the following data ranges:

Period	Date Range
Palaeolithic	c. 970,000–9500 BC
Early Post-glacial	9500–8500 BC
Mesolithic	8500–4000 BC
Neolithic	4000–2400 BC
Bronze Age	2400–700 BC
Iron Age	700 BC–AD 43
Romano-British	AD 43–410
Saxon	AD 410–1066
Medieval	AD 1066–1500
Post-medieval	AD 1500–1800
19th century	AD 1800–1899
Modern	1900–present day

The geological periods and associated Marine Isotope Stages are defined by the following date ranges:

Period	Date Range	Marine Isotope Stages
Holocene	11,700 – present day	1
Devensian	115,000 – 11,700 BP	5d - 2
Ipswichian	130,000 – 115,000 BP	5e
Saalian	374,000 – 130,000 BP	10 - 6
Hoxnian	424,000 – 374,000 BP	11
Anglian	478,000 – 424,000 BP	12
Pre-Anglian	>478,000 BP	>12

Appendix B Palaeogeographic features of archaeological potential

ID	Classification	Archaeological Discrimination	Depth Range (mBSB)		Description	Nearest KP	Distance to Marine Installation Corridor (m)
			From	To			
7900	Cut and fill	P2	0.5	2.1	A possible cut and fill feature with a distinct, undulating basal reflector. The feature has acoustically unstructured fill and is interpreted as being situated below a veneer of modern seabed sediments. The feature is identified cutting into an acoustically unstructured unit which may represent Forth Formation, St Andrews Bay deposits or possibly underlying till of the Wee Bankie Formation. Feature may represent a remnant fluvial feature infilled with Unit 6a Holocene Sediments (pre-transgression) (MIS 2 to 1) or may be an internal feature within the sand and clays and of no archaeological or palaeoenvironmental interest; however, as the origin of the feature cannot be confirmed without further investigation, it has been retained as a precaution.	250.769574	12
7901	Cut and fill	P2	0.3	1.9	A possible cut and fill feature that has a relatively distinct basal reflector and steeply sloping sides, visible on two survey lines. The feature has acoustically unstructured fill and is interpreted as being situated below a veneer of modern seabed sediments. The feature has been identified cutting into an acoustically unstructured unit which may represent Forth Formation deposits or possibly underlying till of the Wee Bankie Formation. May be part of unit 6a Holocene Sediments (pre-transgression) (MIS 2 to 1) or may be an internal feature within the sand and clays and of no archaeological or palaeoenvironmental interest; however, has the potential of being remnant of a fluvial feature and has therefore retained as a precaution.	262.470665	23
7902	Cut and fill	P2	0.4	4.2	A complex cut and fill feature cutting into an acoustically unstructured unit, which may represent till of the Wee Bankie Formation. The feature has a slightly undulating basal reflector that is reasonably distinct across survey lines, with two possible fills, the basal fill is chaotic and transparent on some lines, with the upper fill more chaotic. The lower deposit of this feature may represent a remnant fluvial feature infilled with Forth Formation deposits of palaeoenvironmental interest.	132.567634	54
7903	Channel	P2	0.3	7.3	A possible channel feature that has a chaotic fill with a relatively distinct basal reflector. The feature has been identified cutting into an acoustically unstructured unit interpreted Marr Bank Formation and is overlain by modern seabed sediments. The feature may represent Forth Formation deposits or Marr Bank Formation; however this is uncertain. The feature has the potential to represent a buried palaeochannel of palaeoenvironmental interest.	0	76

ID	Classification	Archaeological Discrimination	Depth Range (mBSB)		Description	Nearest KP	Distance to Marine Installation Corridor (m)
			From	To			
7904	Channel	P2	0.3	5.2	A possible channel feature that has a chaotic fill with a relatively distinct basal reflector. The feature has been identified cutting into an acoustically unstructured unit interpreted to be Marr Bank Formation. The feature may represent Forth Formation deposits or Marr Bank Formation; however this is uncertain. The feature has the potential to represent a buried palaeochannel of palaeoenvironmental interest.	3.179481	79
7905	Channel	P2	0.6	9.1	A channel feature that has a complex fill characterised by parallel internal reflectors and is chaotic in some areas. The feature has been identified cutting into an acoustically unstructured unit interpreted to be Marr Bank Formation. The feature may be infilled with Forth Formation deposits and may represent a buried palaeochannel and contain preserved material of palaeoenvironmental interest.	0	86/87
7906	Cut and fill	P2	0.7	2.8	A simple cut and fill that has a fill characterised by parallel internal reflectors and a reasonably distinct basal reflector that is cutting into an acoustically unstructured unit interpreted to be Marr Bank Formation. The feature is overlain by a thin veneer of modern seabed sediments and may represent a remnant fluvial feature. May represent a remnant fluvial feature infilled with Forth Formation deposits or it may be an internal feature and of no archaeological or palaeoenvironmental interest; however, as the origin of the feature cannot be confirmed without further investigation, it has been retained as a precaution.	178.237044	94
7907	Cut and fill	P2	0.6	3.2	A simple cut and fill that has a fill characterised by parallel internal reflectors and a reasonably distinct basal reflector that is sometimes unclear or not defined in the dataset. The feature is cutting into an acoustically unstructured unit interpreted Marr Bank Formation and is overlain by a veneer of modern seabed sediments. May represent a remnant fluvial feature infilled with Forth Formation deposits or it may be an internal feature and of no archaeological or palaeoenvironmental interest; however, as the origin of the feature cannot be confirmed without further investigation, it has been retained as a precaution.	287.276709	95
7908	Cut and fill	P2	0.5	3.8	A complex cut and fill feature with a basal fill characterised by parallel internal reflectors, a chaotic secondary fill is visible in some areas. The basal reflector of the feature is not always discernible and is cutting into an acoustically unstructured unit interpreted to be Marr Bank Formation. May represent a remnant fluvial feature infilled with Forth Formation deposits or it may be an internal feature and of no archaeological or palaeoenvironmental interest; however, as the origin of the feature cannot be confirmed without further investigation, it has been retained as a precaution.	18.720983	95

ID	Classification	Archaeological Discrimination	Depth Range (mBSB)		Description	Nearest KP	Distance to Marine Installation Corridor (m)
			From	To			
7909	Cut and fill	P2	0.5	1.3	A simple cut and fill that has a fill characterised by parallel internal reflectors and an indistinct basal reflector. The feature is cutting into an acoustically unstructured unit interpreted to be Marr Bank Formation and is overlain by a thin veneer of modern seabed sediments. May represent a remnant fluvial feature infilled with Forth Formation deposits or it may be an internal feature and of no archaeological or palaeoenvironmental interest; however, as the origin of the feature cannot be confirmed without further investigation, it has been retained as a precaution.	148.223375	97
7910	Channel complex	P1	0.5	3.8	A channel feature that has a complex fill characterised by parallel internal reflectors, that may represent a number of smaller adjacent channels, some of which appear to crosscut each other. The feature is cutting into an acoustically unstructured unit interpreted to be Marr Bank Formation and situated below a veneer of modern seabed sediments. May represent a possible delta top or fluvial braid plain feature of archaeological potential, and has the potential to contain paleoenvironmental material	108.400646	98
7911	Channel	P2	0.4	3.7	A channel feature that has a complex fill generally characterised by parallel internal reflectors but is sometimes chaotic. The feature has a relatively distinct basal reflector and has been identified cutting into an acoustically unstructured unit interpreted to be Marr Bank Formation. The feature may be infilled with Forth Formation deposits, and it is situated beneath a veneer of modern seabed sediments. This feature may represent a buried palaeochannel, and the infill deposits may contain material of palaeoenvironmental interest.	0	104/105
7912	Channel	P2	0.6	6.8	A channel feature that has a complex fill generally characterised by parallel internal reflectors, but is sometimes chaotic, the feature has an undulating basal reflector that is not always discernible in the dataset. The feature has been identified cutting into an acoustically unstructured unit interpreted to be Marr Bank Formation and may be infilled with Forth Formation deposits, beneath a veneer of modern seabed sediments. This feature may represent a buried palaeochannel, and the infill deposits may contain material of palaeoenvironmental interest.	0	109
7913	Channel	P2	0.9	4.6	A channel feature that has a fill that is acoustically unstructured in parts and characterised by parallel internal reflectors in others. The feature has been identified cutting into an acoustically unstructured unit interpreted to be Marr Bank Formation and may be infilled with Forth Formation deposits, situated beneath a veneer of modern seabed sediments. This feature may represent a buried palaeochannel, and the infill deposits may contain material of palaeoenvironmental interest.	0	118

ID	Classification	Archaeological Discrimination	Depth Range (mBSB)		Description	Nearest KP	Distance to Marine Installation Corridor (m)
			From	To			
7914	Channel complex	P1	0.7	3.6	A channel feature that has a fill characterised by parallel internal reflectors, that may represent a number of smaller adjacent channels, some of which appear to crosscut each other. The feature is cutting into an acoustically unstructured unit interpreted to be Marr Bank formation and situated below a veneer of modern seabed sediments. May represent a possible delta top or fluvial braid plain feature of archaeological potential, and the infill deposits may contain material of palaeoenvironmental interest.	0	120
7915	Channel	P1	0.6	5.8	A channel feature that has a fill that is characterised by distinct parallel internal reflectors, it is also acoustically blank in places. The feature is cutting into an acoustically unstructured unit interpreted to be Marr Bank formation. The feature may represent Forth Formation deposits and has the potential to represent a buried palaeochannel, and the infill deposits may contain material of palaeoenvironmental interest.	51.421666	123
7916	Channel	P2	0.5	3.8	A possible channel feature with a distinct basal reflector and a fill characterised by parallel internal reflectors. The feature has been identified cutting into an acoustically unstructured unit interpreted to be Marr Bank formation. The feature may represent Forth Formation deposits and has the potential to represent a buried palaeochannel, and the infill deposits may contain material of palaeoenvironmental interest.	91.538289	124
7917	Channel	P2	0.4	2	A possible channel feature with an indistinct, undulating basal reflector and a fill characterised by parallel internal reflectors. The feature has been identified cutting into an acoustically unstructured unit interpreted to be Marr Bank formation. May represent a remnant fluvial feature infilled with Forth Formation deposits, or it may be internal features and of no archaeological or palaeoenvironmental interest; however, as the origin of the feature cannot be confirmed without further investigation, it has been retained as a precaution.	0	129
7918	Channel	P1	0.7	7.4	A distinct channel feature that has a fill that is characterised by distinct parallel internal reflectors, it is also acoustically blank in parts. The feature is cutting into an acoustically unstructured unit interpreted to be Marr Bank formation. The feature may represent Forth Formation deposits and has the potential to represent a buried palaeochannel, and the infill deposits may contain material of palaeoenvironmental interest.	70.214683	147
7919	Cut and fill	P2	0.3	4.2	A complex cut and fill feature cutting into an acoustically unstructured unit interpreted to be the Marr Bank formation. The basal reflector is undulating, with an acoustically unstructured basal fill and chaotic upper fill, the feature is situated below a veneer of modern seabed sediments. May represent a remnant fluvial feature infilled with Forth Formation deposits or it may be modern infilled sediments and of no archaeological or palaeoenvironmental interest; however, as the origin of the feature cannot be confirmed without further investigation, it has been retained as a precaution.	1.204939	155

ID	Classification	Archaeological Discrimination	Depth Range (mBSB)		Description	Nearest KP	Distance to Marine Installation Corridor (m)
			From	To			
7920	Channel	P2	0.9	7.1	A possible channel feature with an indistinct, undulating basal reflector, the fill is complex and characterised by indistinct parallel internal reflectors in the basal fill and appears more chaotic in the upper fill. The feature is cutting into an acoustically unstructured unit interpreted to be Marr Bank Formation. The feature may represent Forth Formation deposits and has the potential to represent a buried palaeochannel, and the infill deposits may contain material of palaeoenvironmental interest.	0	162
7921	Channel	P2	1.3	7.8	A possible channel feature with an indistinct, undulating basal reflector, the fill is chaotic. The feature is cutting into an acoustically unstructured unit interpreted to be Marr Bank Formation and overlaid by modern seabed sediments. The feature may represent Forth Formation deposits and has the potential to represent a buried palaeochannel, and the infill deposits may contain material of palaeoenvironmental interest.	0	163
7922	Channel	P1	0.5	9.1	A channel feature with an undulating and distinct basal reflector in places, in others it is unclear. The fill is characterised by indistinct parallel internal reflectors, it is also acoustically blank in parts. The feature is cutting into an acoustically unstructured unit interpreted to be Marr Bank formation. The feature may represent Forth Formation deposits and has the potential to represent a buried palaeochannel, and the infill deposits may contain material of palaeoenvironmental interest.	0	170/171
7923	Channel	P1	0.8	11	A distinct channel feature with an indistinct basal reflector, the fill is characterised by distinct parallel internal reflectors and is overlaid by modern seabed sediments. The feature is cutting into an acoustically unstructured unit interpreted to be Marr Bank formation. The feature may represent Forth Formation deposits and has the potential to represent a buried palaeochannel, and the infill deposits may contain material of palaeoenvironmental interest.	0	174
7924	Cut and fill	P2	1	2.6	A simple cut and fill feature with a chaotic fill that is cutting into an acoustically unstructured unit interpreted to be Marr Bank formation. The feature is situated below a veneer of modern seabed sediments. May represent a remnant fluvial feature infilled with Forth Formation deposits or it may be modern infilled sediments and of no archaeological or palaeoenvironmental interest; however, as the origin of the feature cannot be confirmed without further investigation, it has been retained as a precaution.	0	187
7925	Channel	P2	0.5	3.1	A channel feature with a distinct basal reflector and a chaotic fill cutting into an acoustically unstructured unit interpreted to be Marr Bank formation. The feature is situated below a veneer of modern seabed sediments. May represent a remnant fluvial feature infilled with Forth Formation deposits or it may be modern infilled sediments and of no archaeological or palaeoenvironmental interest; however, as the origin of the feature cannot be confirmed without further investigation, it has been retained as a precaution.	273.82778	192

ID	Classification	Archaeological Discrimination	Depth Range (mBSB)		Description	Nearest KP	Distance to Marine Installation Corridor (m)
			From	To			
7926	Channel	P2	0.5	7.6	A distinct channel feature that has a fill that is characterised by indistinct parallel internal reflectors, it is also acoustically blank in parts. The feature is cutting into an acoustically unstructured unit interpreted to be Wee Bankie Formation and is situated beneath a layer of modern seabed sediments, up to 2.5 m deep. The feature may represent Forth Formation deposits and has the potential to represent a buried palaeochannel, and the infill deposits may contain material of palaeoenvironmental interest.	0	208
7927	Cut and fill	P2	1	2.9	A simple cut and fill feature with a slightly chaotic fill cutting into an acoustically unstructured unit interpreted to be Wee Bankie Formation and overlain by modern seabed sediments. May represent a remnant fluvial feature infilled with Forth Formation deposits or it may be modern infilled sediments and of no archaeological or palaeoenvironmental interest; however, as the origin of the feature cannot be confirmed without further investigation, it has been retained as a precaution.	150.520594	233
7928	Infilled depression	P2	1.6	2.8	An isolated infilled depression with an acoustically blank fill situated above interpreted bedrock and below modern seabed sediments. May be part of unit 7a Holocene Sediments (pre-transgression) (MIS 2 to 1) or may be Bolders Bank Formation and of no archaeological or palaeoenvironmental interest; however, has the potential of being remnant of a terrestrial feature and has therefore retained as a precaution.	0	305
7929	Infilled depression	P2	1.1	2.6	An isolated infilled depression with an acoustically blank fill situated above interpreted bedrock and below modern seabed sediments. May be part of unit 7a Holocene Sediments (pre-transgression) (MIS 2 to 1) or may be Bolders Bank Formation and of no archaeological or palaeoenvironmental interest; however, has the potential of being remnant of a terrestrial feature and has therefore retained as a precaution.	0	316
7930	Acoustic blanking	P2	1	2.2	An area of acoustic blanking visible as a slightly chaotic reflector that disturbs the interpreted bedrock. It is possible that this may just represent an internal reflector or a re-working of sediments; however, it has the potential to be shallow gas which may have been caused by the microbial breakdown of organic matter and therefore may contain sediments of palaeoenvironmental interest.	383.098737	322
7931	Channel	P2	0.9	7.7	A possible channel with a distinct basal reflector and a fill that is characterised by indistinct parallel internal reflectors in places, but mainly acoustically unstructured, situated below modern seabed sediments and in an area with frequent bedrock outcropping at the surface. May be part of unit 7a Holocene Sediments (pre-transgression) (MIS 2 to 1) or may be Bolders Bank Formation and of no archaeological or palaeoenvironmental interest; however, has the potential of being remnant of a fluvial feature and has therefore retained as a precaution.	0	332

ID	Classification	Archaeological Discrimination	Depth Range (mBSB)		Description	Nearest KP	Distance to Marine Installation Corridor (m)
			From	To			
7932	Cut and fill	P2	0.2	1.4	A simple cut and fill feature that has a relatively distinct basal reflector, which is undulating, with gently sloping sides and is visible over a number of survey lines. The feature has an acoustically unstructured fill and is interpreted as being situated below a veneer of modern seabed sediments. The feature has been identified cutting into an acoustically unstructured unit which may represent Bolders Bank Formation. May be an internal feature within the till and of no archaeological or palaeoenvironmental interest; however, has the potential of being remnant of a fluvial feature and has therefore retained as a precaution.		

Appendix C Known shipwrecks and obstructions on the seabed within the Marine Installation Corridor

WA ID	External References	Description	Eastings	Northings	Nearest KP	Distance to MIC (m)
2007	UKHO 6675; NRHE 908464	Recorded foul ground in UKHO record. This is now considered dead (not detected by repeated surveys, therefore considered not to exist). Nothing was identified in the geophysical survey data.	704318.547	6011647.246	403	0
2013	NRHE 1003390; Humber MHU22876	Unidentified seabed obstruction reported by fishermen. This was covered by the geophysical survey data as a recorded obstruction.	698044.69	5997278.694	419	0
2020	UKHO 5806	Foul ground, probably a mass of scaffolding. Nothing was identified in the geophysical survey data.	684905.819	5993062.932	433	0

Appendix D Scotland (up to 12 NM): Seabed features of archaeological potential

ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	External references	Nearest KP	Distance to Marine Installation Corridor (m)
70000	Dark reflector	572430	6371854	A2	5.0	1.7	1.0	-	Identified in the 2021 SSS dataset as a distinct, rounded dark reflector with a large shadow. The feature is slightly anomalous to the surrounding natural features on this area of seabed. Visible as a square shaped mound in the MBES dataset. This location was not directly covered by the 2021 or 2012 MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	-	0.00	0
70001	Mound	572552	6371973	A2	6.0	5.7	3.0	-	Identified in the 2021 MBES dataset as a distinct steep-sided mound with an irregular peak. The feature is situated within a wider boulder field, however, appears slightly anomalous and much larger. No corresponding SSS contact. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	-	0	0
70002	Magnetic	572585	6371959	A2	-	-	-	30	Identified in the 2021 MAG dataset as a small asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts, though this is situated within a boulder field. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris either buried or with little surface expression.	-	0	0
70003	Dark reflector	572608	6371992	A2	3.6	0.6	1.0	-	Identified in the 2021 SSS dataset as an elongate dark reflector with a large shadow and significant height. The feature is situated 5.8 m from debris **70004** and may be related. No corresponding MBES or may anomaly, however this is situated within a high magnetic response associated with **70004** which may be masking smaller anomalies. Interpreted as a possible natural feature or possible debris.	-	0	0
70004	Debris	572615	6371990	A2	12.8	3.4	1.2	359	Identified in the 2021 SSS dataset as a long thin and distinct dark reflector with a very large uneven shadow, possibly suggesting uneven height. Visible in the MBES dataset as an angular 'v' shaped mound, distinct from the surrounding seabed and situated within a wider boulder field. Associated with a large negative monopole with peak and trough on one profile line, indicating some ferrous material is present. Interpreted as possible ferrous debris and may be modern, however, this cannot be confirmed without visual inspection.	-	0	0
70005	Magnetic	572655	6371934	A2	-	-	-	25	Identified in the 2021 MAG dataset as a small positive monopole with peak and trough on one profile line. No associated SSS or MBES contact. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris either buried or with no surface expression.	-	0	0
70006	Dark reflector	572674	6372049	A2	3.7	2.4	0.8	-	Identified in the 2021 SSS dataset as a distinct dark reflector dark reflector with a very long shadow and significant height. Situated 6.7 m from similar anomaly **70007** and may be related. The feature is visible as a mound in the MBES dataset. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	-	1	0
70007	Dark reflector	572677	6372043	A2	2.4	2.0	1.1	-	Identified in the 2021 SSS dataset as a distinct dark reflector with a very long shadow and significant height. Situated 6.7 m from similar anomaly **70006** and may be related. Visible as a mound in the MBES dataset. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	-	1	0
70008	Magnetic	572741	6372030	A2	-	-	-	24	Identified in the 2021 MAG dataset as a small asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts, though this is situated within a boulder field. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris either buried or with little surface expression.	-	1	0
70009	Dark reflector	572749	6372052	A2	2.0	1.2	1.2	-	Identified in the 2021 SSS dataset as a distinct subrounded dark reflector with a bright shadow. Visible as a mound in the MBES dataset. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	-	1	0
70010	Magnetic	572795	6371905	A2	-	-	-	36	Identified in the 2021 MAG dataset as a small positive monopole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	1	0
70011	Magnetic	572866	6371877	A2	-	-	-	25	Identified in the 2021 MAG dataset as a small asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	1	0

ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	External references	Nearest KP	Distance to Marine Installation Corridor (m)
70012	Mound	573067	6371921	A2	6.4	1.3	0.3	-	Identified in the 2021 MBES dataset as an elongate curvilinear mound, distinct from the surrounding featureless seabed. No corresponding SSS or MAG contact, however this is situated within an area of high magnetic responses which may be masking any smaller anomalies in this area. Retained as a precaution. Interpreted as a possible natural feature or possible debris and may be modern, however, this cannot be confirmed without visual inspection.	-	1	0
70013	Mound	573164	6371984	A2	5.2	4.3	1.7	-	Identified in the 2021 MBES dataset as a distinct steep-sided mound with a flat peak. The feature is situated to the west of a wider boulder field, however, appears slightly anomalous and much larger. No corresponding SSS contact. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Retained as a precaution due to size. Interpreted as a possible natural feature or possible debris.	-	1	0
70014	Magnetic	573185	6372006	A2	-	-	-	92	Identified in the 2021 MAG dataset as a medium, sharp asymmetric dipole with peak and trough on two profile lines. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	1	0
70015	Magnetic	573220	6371937	A2	-	-	-	27	Identified in the 2021 MAG dataset as a small asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts, though this is situated within a boulder field. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris either buried or with little surface expression.	-	1	0
70016	Dark reflector	573247	6371976	A2	8.1	6.4	3.7	-	Identified in the 2021 SSS dataset as a distinct curvilinear dark reflector with a very large, bright shadow and significant height. The feature is situated within a wider boulder field. Identified in the MBES dataset as an anomalous, steep-sided mound with a relatively flat peak. No corresponding MAG contact. Retained as a precaution due to size. Interpreted as a possible natural feature or possible non-ferrous debris.	-	1	0
70017	Magnetic	573256	6371961	A2	-	-	-	59	Identified in the 2021 MAG dataset as a medium, sharp asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts, though this is situated within a boulder field. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris either buried or with little surface expression.	-	1	0
70018	Magnetic	573299	6372124	A2	-	-	-	121	Identified in the 2021 MAG dataset as a large, sharp asymmetric dipole with peak and trough on one profile line. Possibly related to MAG anomaly **70019** 25 m ENE. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	1	0
70019	Magnetic	573323	6372132	A2	-	-	-	50	Identified in the 2021 MAG dataset as a medium, sharp asymmetric dipole with peak and trough on one profile line. Possibly related to MAG anomaly **70018** 25 m WSW. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	1	0
70020	Magnetic	573373	6372029	A2	-	-	-	19	Identified in the 2021 MAG dataset as a small, sharp asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts, though this is situated within a boulder field. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris either buried or with little surface expression.	-	1	0
70021	Magnetic	573402	6372060	A2	-	-	-	73	Identified in the 2021 MAG dataset as a medium, sharp asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts, though this is situated within a boulder field. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris either buried or with little surface expression.	-	1	0
70022	Magnetic	573442	6372076	A2	-	-	-	35	Identified in the 2021 MAG dataset as a small asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts, though this is situated within a boulder field. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris either buried or with little surface expression.	-	1	0
70023	Magnetic	573471	6372415	A2	-	-	-	63	Identified in the 2021 MAG dataset as a medium, sharp positive monopole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	1	0
70024	Magnetic	573631	6372063	A2	-	-	-	190	Identified in the 2021 MAG dataset as a large, sharp symmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts, though this is situated within a boulder field. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris either buried or with little surface expression.	-	1	0
70025	Dark reflector	573660	6372098	A2	14.2	0.5	-	-	Identified in the 2021 SSS dataset as a fairly indistinct curvilinear dark reflector with no measurable height. No corresponding MBES or MAG contact. Interpreted as a possible natural feature or may be possible length of non-ferrous rope or chain.	-	1	0

ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	External references	Nearest KP	Distance to Marine Installation Corridor (m)
70026	Debris	573695	6372093	A2	4.0	2.4	1.0	205	Identified in the 2021 MBES dataset as a distinct, oval shaped mound, this appears anomalous to the surrounding, featureless seabed. Associated with a large, sharp asymmetric dipole with peak and trough on one profile line, indicating some ferrous material is present. No corresponding SSS contact. Interpreted as possible ferrous debris	-	2	0
70027	Magnetic	573707	6372526	A2	-	-	-	49	Identified in the 2021 MAG dataset as a small negative monopole with peak and trough over two profile lines. No corresponding SSS or MBES contacts, though this is situated within a boulder field. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris either buried or with little surface expression.	-	2	0
70028	Magnetic	573717	6372470	A2	-	-	-	94	Identified in the 2021 MAG dataset as a medium asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris either buried or with little surface expression.	-	2	0
70029	Magnetic	573731	6372427	A2	-	-	-	34	Identified in the 2021 MAG dataset as a small asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	2	0
70030	Magnetic	573778	6372579	A2	-	-	-	153	Identified in the 2021 MAG dataset as a large, sharp symmetric dipole with peak and trough on two profile lines. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	2	0
70031	Magnetic	573833	6372318	A2	-	-	-	122	Identified in the 2021 MAG dataset as a large asymmetric dipole with peak and trough over multiple profile lines. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	2	0
70032	Magnetic	573876	6372199	A2	-	-	-	33	Identified in the 2021 MAG dataset as a small asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	2	0
70033	Magnetic	573885	6372357	A2	-	-	-	20	Identified in the 2021 MAG dataset as a small, asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris either buried or with no surface expression.	-	2	0
70034	Magnetic	573895	6372477	A2	-	-	-	118	Identified in the 2021 MAG dataset as a large, sharp positive monopole with peak and trough on one profile line. No corresponding SSS or MBES contacts, though this is situated within a boulder field. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris either buried or with little surface expression.	-	2	0
70035	Magnetic	573942	6372589	A2	-	-	-	175	Identified in the 2021 MAG dataset as a large, sharp asymmetric dipole with peak and trough on one profile line No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	2	0
70036	Magnetic	573946	6372654	A2	-	-	-	136	Identified in the 2021 MAG dataset as a large negative monopole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	2	7.169665
70037	Dark reflector	573972	6372183	A2	4.3	2.1	2.3	-	Identified in the 2012 SSS dataset as a distinct, angular dark reflector with a large bright shadow and significant height, situated within a wider boulder field. Identified in the MBES dataset as a distinct angular mound with steeply sloping sides. No corresponding MAG contact. Interpreted as a possible natural feature or possible non-ferrous debris.	-	2	0
70038	Magnetic	573982	6372437	A2	-	-	-	37	Identified in the 2021 MAG dataset as a small, sharp asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	2	0
70039	Magnetic	573982	6372558	A2	-	-	-	125	Identified in the 2021 MAG dataset as a large, sharp asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts, though this is situated within a boulder field. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris either buried or with little surface expression.	-	2	0
70040	Magnetic	573995	6372690	A2	-	-	-	31	Identified in the 2021 MAG dataset as a small asymmetric dipole with peak and trough on one profile line. No associated SSS or MBES contact. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris either buried or with no surface expression.	-	2	34.431115
70041	Magnetic	574013	6372400	A2	-	-	-	121	Identified in the 2021 MAG dataset as a large negative monopole with peak and trough on two profile lines. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	2	0
70042	Magnetic	574019	6372608	A2	-	-	-	47	Identified in the 2021 MAG dataset as a small symmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	2	0

ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	External references	Nearest KP	Distance to Marine Installation Corridor (m)
70043	Magnetic	574034	6372708	A2	-	-	-	379	Identified in the 2021 MAG dataset as a large, sharp asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	2	45.627186
70044	Magnetic	574038	6372342	A2	-	-	-	25	Identified in the 2021 MAG dataset as a small asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts, though this is situated within a boulder field. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris either buried or with little surface expression.	-	2	0
70045	Magnetic	574046	6372653	A2	-	-	-	70	Identified in the 2021 MAG dataset as a medium, sharp asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts, however a mound is visible in the MBES dataset in the vicinity and may be associated. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris.	-	2	0
70046	Magnetic	574090	6372787	A2	-	-	-	233	Identified in the 2021 MAG dataset as a large, sharp positive monopole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	2	113.546941
70047	Magnetic	574110	6372428	A2	-	-	-	31	Identified in the 2021 MAG dataset as a small, sharp asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts, though this is situated within a boulder field. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris either buried or with little surface expression.	-	2	0
70048	Magnetic	574136	6372557	A2	-	-	-	238	Identified in the 2021 MAG dataset as a large, sharp asymmetric dipole with peak and trough on one profile line. Complex anomaly or two probable associated responses. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	2	0
70049	Magnetic	574137	6372662	A2	-	-	-	42	Identified in the 2021 MAG dataset as a small, sharp asymmetric dipole with peak and trough on multiple profile lines. No associated SSS or MBES contact. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris either buried or with no surface expression.	-	2	0
70050	Magnetic	574161	6372596	A2	-	-	-	399	Identified in the 2021 MAG dataset as a large, sharp asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	2	0
70051	Magnetic	574179	6372700	A2	-	-	-	194	Identified in the 2021 MAG dataset as a large, sharp asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	2	13.394225
70052	Rope/chain	574191	6372641	A2	27.6	0.3	0.1	-	Identified in the 2021 SSS dataset as a distinct curvilinear dark reflector with a slight shadow along some of its length. Possible related to rope or chain 70053 directly to the south. No corresponding MBES or MAG contact. Interpreted as a possible length of non-ferrous rope or chain.	-	2	0
70053	Rope/chain	574196	6372612	A2	48.5	0.1	0.1	-	Identified in the 2021 SSS dataset as a distinct curvilinear dark reflector with a slight shadow along some of its length. Possible related to rope or chain 70052 directly to the north. No corresponding MBES or MAG contact. Interpreted as a possible length of non-ferrous rope or chain.	-	2	0
70054	Magnetic	574199	6372509	A2	-	-	-	209	Identified in the 2021 MAG dataset as a large, sharp asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	2	0
70055	Magnetic	574211	6372301	A2	-	-	-	36	Identified in the 2021 MAG dataset as a small, sharp asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts, though this is situated within an area of outcropping geology. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris either buried or with little surface expression.	-	2	0
70056	Magnetic	574228	6372279	A2	-	-	-	49	Identified in the 2021 MAG dataset as a small, sharp asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts, though this is situated within a boulder field. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris either buried or with little surface expression.	-	2	0
70057	Magnetic	574232	6372365	A2	-	-	-	45	Identified in the 2021 MAG dataset as a small asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	2	0
70058	Magnetic	574250	6372677	A2	-	-	-	194	Identified in the 2021 MAG dataset as a large, sharp asymmetric dipole with peak and trough on one profile line. Complex anomaly or two probable associated responses. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	2	0

ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	External references	Nearest KP	Distance to Marine Installation Corridor (m)
70059	Magnetic	574262	6372227	A2	-	-	-	162	Identified in the 2021 MAG dataset as a large, sharp symmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts, though this is situated within an area of outcropping geology. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris either buried or with little surface expression.	-	2	0
70060	Magnetic	574273	6372760	A2	-	-	-	93	Identified in the 2021 MAG dataset as a medium asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	2	57.910581
70061	Magnetic	574303	6372421	A2	-	-	-	179	Identified in the 2021 MAG dataset as a large, sharp asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	2	0
70062	Magnetic	574321	6372586	A2	-	-	-	76	Identified in the 2021 MAG dataset as a medium, sharp asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts, though this is situated within an area of sand waves. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris either buried or with little surface expression.	-	2	0
70063	Magnetic	574326	6372171	A2	-	-	-	134	Identified in the 2021 MAG dataset as a large, sharp symmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris either buried or with little surface expression.	-	2	12.53942
70064	Dark reflector	574327	6372046	A2	4.0	0.7	1.2	-	Identified in the 2012 SSS dataset as an angular dark reflector with a large bright shadow and significant height, situated within a wider boulder field. No corresponding MBES contact. This location was not directly covered by the 2021 datasets or the 2012 MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	-	2	131.367571
70065	Magnetic	574338	6372281	A2	-	-	-	44	Identified in the 2021 MAG dataset as a small negative monopole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris either buried or with little surface expression.	-	2	0
70066	Magnetic	574340	6372553	A2	-	-	-	194	Identified in the 2021 MAG dataset as a large, sharp asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts, though this is situated within an area of sand waves. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris either buried or with little surface expression.	-	2	0
70067	Magnetic	574358	6372164	A2	-	-	-	156	Identified in the 2021 MAG dataset as a large, sharp asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts, though this is situated within an area of outcropping geology. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris either buried or with little surface expression.	-	2	9.520514
70068	Magnetic	574364	6372304	A2	-	-	-	76	Identified in the 2021 MAG dataset as a medium, sharp asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	2	0
70069	Magnetic	574374	6372194	A2	-	-	-	90	Identified in the 2021 MAG dataset as a medium positive monopole with peak and trough on one profile line. No corresponding SSS or MBES contacts, though this is situated within a boulder field. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris either buried or with little surface expression.	-	2	0
70070	Magnetic	574380	6372523	A2	-	-	-	82	Identified in the 2021 MAG dataset as a medium, sharp asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts, though this is situated within an area of sand waves. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris either buried or with little surface expression.	-	2	0
70071	Magnetic Trend	574468	6372172	A2	187.0	-	-	268	Identified in the 2021 MAG dataset as a curvilinear linear series of six MAG anomalies, extending over 187 m and aligned generally north to south. The MAG responses range between 55 and 268 nT. No corresponding SSS or MBES contacts. Retained as a precaution. May represent a natural linear trend or may represent possible ferrous debris.	-	2	0
70072	Dark reflector	574532	6372125	A2	2.5	1.0	0.6	-	Identified in the 2021 SSS dataset as a distinct irregular elongate dark reflector with a bright shadow. The feature is situated within large sand waves and possibly related to debris field **70073** situated 16 m north. Visible in the MBES dataset as an angular mound. No corresponding MAG contact, however, this is situated within an area of high magnetic responses which may be masking any smaller anomalies in this area. Interpreted as a possible natural feature or possible debris	-	3	0

ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	External references	Nearest KP	Distance to Marine Installation Corridor (m)
70073	Debris field	574542	6372145	A1	13.9	5.2	1.5	1033	Identified in the 2021 and 2012 SSS dataset as an area of disturbed seabed comprising indistinct dark reflectors with shadows and bright reflectors, situated within large mega ripples. Visible in the MBES dataset as a large, irregularly shaped low-lying mound. The feature has one distinct edge, with slight scour down its east side. Associated with a very large negative monopole with peak and trough on multiple profile lines, indicating some ferrous material is present. Interpreted as a ferrous debris field	-	3	0
70074	Magnetic	574555	6372219	A2	-	-	-	70	Identified in the 2021 MAG dataset as a medium, sharp asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts, though this is situated within an area of mega ripples. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris either buried or with little surface expression.	-	3	0
70075	Magnetic	574555	6372804	A2	-	-	-	206	Identified in the 2021 MAG dataset as a large, sharp asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts, though this is situated within an area of outcropping geology. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris either buried or with little surface expression.	-	2	160.085597
70076	Magnetic	574561	6372708	A2	-	-	-	294	Identified in the 2021 MAG dataset as a large, sharp asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	2	70.409931
70077	Magnetic	574568	6372175	A2	-	-	-	187	Identified in the 2021 MAG dataset as a large, sharp asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts, though this is situated within sand waves. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris either buried or with little surface expression.	-	3	0
70078	Magnetic	574583	6372197	A2	-	-	-	56	Identified in the 2021 MAG dataset as a medium, sharp asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts, though this is situated within an area of mega ripples. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris either buried or with little surface expression.	-	3	0
70079	Dark reflector	574586	6372141	A2	3.5	2.4	0.9	-	Identified in the 2021 and 2012 SSS dataset as a distinct, angular dark reflector with a long bright shadow. The feature is situated within large sand waves. Visible in the MBES dataset as an angular mound with scour. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Retained as a precaution due to height and proximity to debris field 62322 situated 36 m west. Interpreted as a possible natural feature or possible debris.	-	3	0
70080	Magnetic	574592	6372078	A2	-	-	-	32	Identified in the 2021 MAG dataset as a small, sharp symmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts, though this is situated within an area of mega ripples. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris either buried or with little surface expression.		3	20.622745
70081	Magnetic	574594	6372158	A2	-	-	-	330	Identified in the 2021 MAG dataset as a large, sharp asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts, though this is situated within sand waves. Retained as a precaution. May be a halo response from large MAG anomaly 62322 or may be possible ferrous debris that is either buried or with no surface expression.	-	3	0
70082	Magnetic	574600	6372058	A2	-	-	-	71	Identified in the 2021 MAG dataset as a medium, sharp asymmetric dipole with peak and trough on two profile lines. No corresponding SSS or MBES contacts. No corresponding SSS or MBES contacts, though this is situated within an area of mega ripples. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris either buried or with little surface expression.	-	3	37.261141
70083	Magnetic	574614	6372399	A2	-	-	-	441	Identified in the 2021 MAG dataset as a large, sharp asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	3	0
70084	Magnetic	574619	6372305	A2	-	-	-	666	Identified in the 2021 MAG dataset as a very large, sharp positive monopole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	3	0
70085	Magnetic	574644	6372283	A2	-	-	-	117	Identified in the 2021 MAG dataset as a large, sharp asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts, though this is situated within an area of sand waves. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris either buried or with little surface expression.	-	3	0
70086	Magnetic	574654	6372556	A1	-	-	-	1074	Identified in the 2021 MAG dataset as a very large, sharp asymmetric dipole with peak and trough on two profile lines. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	3	0

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70087	Magnetic	574658	6372387	A2		-	-	251	Identified in the 2021 MAG dataset as a large, sharp negative monopole with peak and trough on one profile line. No corresponding SSS or MBES contacts, though this is situated within sand waves. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris either buried or with little surface expression.	-	3	0
70090	Magnetic	574661	6372121	A2	-	-	-	117	Identified in the 2021 MAG dataset as a large, sharp asymmetric dipole with peak and trough on one profile line. Situated 18 m north west of similar sized MAG anomaly 62491 and may be related. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	3	0
70089	Magnetic	574674	6372378	A1	-	-	-	1126	Identified in the 2021 MAG dataset as a very large, sharp symmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts, though this is situated within an area of sand waves. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris either buried or with little surface expression.	-	3	0
70088	Magnetic	574676	6372326	A2	-	-	-	174	Identified in the 2021 MAG dataset as a large negative monopole with peak and trough on two profile lines. No corresponding SSS or MBES contacts, though this is situated within an area of sand waves. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris either buried or with little surface expression.	-	3	0
70091	Magnetic	574678	6372114	A2	-	-	-	97	Identified in the 2021 MAG dataset as a medium, sharp symmetric dipole with peak and trough on one profile line. Situated 18 m south east of similar sized MAG anomaly 62490 and may be related. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	3	0
70093	Magnetic	574684	6371958	A2	-	-	-	70	Identified in the 2021 MAG dataset as a medium, sharp asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts, though this is situated within an area of sand waves. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris either buried or with little surface expression.	-	3	107.129039
70092	Magnetic	574691	6371983	A2	-	-	-	81	Identified in the 2021 MAG dataset as a medium negative monopole with peak and trough on one profile line. No corresponding SSS or MBES contacts, though this is situated within an area of sand waves. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris either buried or with little surface expression.	-	3	81.183105
70094	Magnetic	574752	6372316	A2	-	-	-	90	Identified in the 2021 MAG dataset as a medium, sharp asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	3	0
70095	Debris	574773	6372230	A2	5.7	1.9	0.6	249	Identified in the 2021 SSS dataset as an indistinct, curved dark reflector with a large uneven shadow, possibly suggesting uneven height. The feature is situated within sand waves and within a wider boulder field. Visible in the MBES dataset as a slightly elongate, irregularly shaped mound. Associated with a large, sharp asymmetric dipole with peak and trough on one profile line, indicating some ferrous material is present. Interpreted as possible ferrous debris.	-	3	0
70096	Dark reflector	574777	6372203	A2	1.3	1.2	0.2	-	Identified in the 2021 SSS dataset as a distinct, oval shaped dark reflector with a bright shadow. No corresponding MBES or MAG contact. Interpreted as a possible natural feature or possible debris.	-	3	0
70098	Magnetic	574785	6372131	A2	-	-	-	142	Identified in the 2021 MAG dataset as a large, sharp asymmetric dipole with peak and trough on two profile lines. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	3	0
70097	Dark reflector	574789	6372213	A2	1.2	0.9	0.3	-	Identified in the 2021 SSS dataset as a distinct, oval shaped dark reflector with a bright shadow. No corresponding MBES or MAG contact. Interpreted as a possible natural feature or possible debris.	-	3	0
70100	Magnetic	574815	6372596	A2	-	-	-	23	Identified in the 2021 MAG dataset as a small asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris either buried or with little surface expression.	-	3	40.584858
70099	Rope/chain	574826	6372286	A2	22.1	0.3	0.1	-	Identified in the 2021 SSS dataset as a thin and curvilinear, indistinct dark reflector with a shadow in places. Situated on an uneven area of seabed. No corresponding MBES or MAG contact. Interpreted as a possible length of rope or chain.	-	3	0
70101	Rope/chain	574830	6372529	A2	34.4	0.3	0.1	-	Identified in the 2021 SSS dataset as a long, thin and slightly curvilinear dark reflector with a short, bright shadow. The feature is situated within a wider boulder field. No corresponding MBES or MAG contact, however this is situated within an area of high magnetic responses which may be masking any smaller anomalies in this area. Interpreted as a possible length of rope or chain.	-	3	0

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70102	Magnetic	574830	6372568	A2	-	-	-	28	Identified in the 2021 MAG dataset as a small asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris either buried or with little surface expression.	-	3	18.44182
70105	Magnetic	574832	6372180	A2	-	-	-	164	Identified in the 2021 MAG dataset as a large, sharp symmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	3	0
70104	Magnetic	574839	6372429	A2	-	-	-	252	Identified in the 2021 MAG dataset as a large negative monopole with peak and trough over two profile lines. Possibly related to MAG anomaly **70103** situated 27 m north. No corresponding SSS or MBES contacts, though this is situated within a boulder field. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris either buried or with little surface expression.	-	3	0
70103	Magnetic	574841	6372457	A2	-	-	-	514	Identified in the 2021 MAG dataset as a very large, sharp asymmetric dipole with peak and trough on one profile line. May be associated with rope or chain anomalies **70111** and **70112**, situated 12 m east and Mag anomaly **70104** situated 27 m south. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	3	0
70106	Rope/chain	574845	6372291	A2	12.1	0.2	0.1	-	Identified in the 2021 SSS dataset as a thin and slightly curvilinear, indistinct dark reflector with a shadow in places. Situated on an uneven area of seabed and close to similar anomaly **70107**. No corresponding MBES or MAG contact. Interpreted as a possible length of rope or chain.	-	3	0
70107	Rope/chain	574850	6372293	A2	27.1	0.2	0.1	-	Identified in the 2021 SSS dataset as a thin and slightly curvilinear, indistinct dark reflector with a shadow in places. Situated on an uneven area of seabed and close to similar anomaly **70106**. No corresponding MBES or MAG contact. Interpreted as a possible length of rope or chain.	-	3	0
70108	Debris field	574853	6372026	A2	72.4	0.6	0.1	-	Identified in the 2012 SSS dataset as an indistinct, curvilinear dark reflector with a shadow in places, there is an angular object attached at one point measuring 2.0 x 1.0 x 0.7 m, with a long shadow. The feature is possibly coiled and situated within sand waves. No corresponding MBES or MAG contact. Interpreted as a non-ferrous debris field and may be fishing gear however, this cannot be confirmed without visual inspection.	-	3	0
70109	Rope/chain	574881	6372255	A2	29.0	0.2	0.1	-	Identified in the 2021 SSS dataset as a distinct curvilinear dark reflector with a slight shadow, situated in a wider boulder field. No corresponding MBES or MAG contact. Interpreted as a possible length of rope or chain.	-	3	0
70110	Magnetic	574886	6372229	A2	-	-	-	80	Identified in the 2021 MAG dataset as a medium, sharp asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	3	0
70111	Rope/chain	574887	6372440	A2	80.0	0.4	-	-	Identified in the 2021 SSS dataset as a distinct curvilinear dark reflector with no discernible height. This feature overlies rope or chain **70112** and may be related. No corresponding MBES contact. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location, although a MAG anomaly (**70103**) situated at the western end of this feature may be related. Interpreted as a possible length of rope or chain.		3	0
70116	Magnetic	574890	6372081	A2	-	-	-	28	Identified in the 2021 MAG dataset as a small asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris either buried or with little surface expression.	-	3	0
70114	Dark reflector	574896	6371982	A2	3.8	0.4	0.1	-	Identified in the 2021 SSS dataset as a distinct linear dark reflector with a short bright, slightly irregular shadow. No corresponding MBES or MAG contact. Interpreted as a possible natural feature or possible non-ferrous debris.	-	3	38.853482
70113	Magnetic	574899	6372045	A2	-	-	-	62	Identified in the 2021 MAG dataset as a medium asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris either buried or with little surface expression.	-	3	0
70115	Magnetic	574908	6372337	A2	-	-	-	59	Identified in the 2021 MAG dataset as a medium, sharp asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris either buried or with little surface expression.	-	3	0

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70112	Rope/chain	574920	6372429	A2	109.1	0.5	-	-	Identified in the 2021 SSS dataset as a distinct curvilinear dark reflector with no discernible height. This feature overlies rope or chain **70111** and may be related. No corresponding MBES contact. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location, although a MAG anomaly (**70103**) situated at the western end of this feature may be related. Interpreted as a possible length of rope or chain.	-	3	0
70117	Magnetic	574926	6372080	A2	-	-	-	206	Identified in the 2021 MAG dataset as a large, sharp symmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	3	0
70118	Magnetic	574938	6372219	A2	-	-	-	66	Identified in the 2021 MAG dataset as a small symmetric dipole with peak and trough on two profile lines. No corresponding SSS or MBES contacts. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris either buried or with little surface expression.	-	3	0
70120	Magnetic	574942	6372354	A2	-	-	-	74	Identified in the 2021 MAG dataset as a medium, sharp symmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris either buried or with little surface expression.	-	3	0
70119	Magnetic	574962	6372273	A2	-	-	-	61	Identified in the 2021 MAG dataset as a medium negative monopole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	3	0
70121	Magnetic	574977	6372089	A2	-	-	-	121	Identified in the 2021 MAG dataset as a large, sharp positive monopole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	3	0
70123	Magnetic	574986	6372428	A2	-	-	-	66	Identified in the 2021 MAG dataset as a medium, sharp asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris either buried or with little surface expression.	-	3	0
70122	Dark reflector	575014	6371992	A2	3.3	0.7	0.5	-	Identified in the 2021 SSS dataset as a distinct, elongate dark reflector with a bright shadow. The feature is situated within an area of frequent natural features, however, appears slightly anomalous. Visible as a mound in the MBES dataset. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	-	3	29.382193
70124	Debris field	575019	6372358	A2	90.0	0.3	0.1	-	Identified in the 2021 SSS dataset as a distinct curvilinear dark reflector. The feature possibly has some angular dark reflectors attached along its length, the largest measures 1.7 x 0.9 x 0.9 m. Possibly associated with rope or chain **70125** situated 5 m north. Visible in the MBES dataset as several small subrounded mounds connected by an indistinct curvilinear mound. No corresponding Mag contact. Interpreted as a non-ferrous debris field and may be fishing gear however, this cannot be confirmed without visual inspection.	-	3	0
70128	Magnetic	575039	6372243	A2	-	-	-	74	Identified in the 2021 MAG dataset as a medium, sharp asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	3	0
70126	Seabed disturbance	575047	6372322	A2	2.1	1.5	0.1	-	Identified in the 2021 SSS dataset as a distinct and compact area of disturbed seabed, comprising an irregularly shaped dark reflector with a slight shadow. Visible as a slightly uneven mound in the MBES dataset. No corresponding MAG contact. Interpreted as a possible natural feature or possible non-ferrous debris.	-	3	0
70127	Magnetic	575047	6372011	A2	-	-	-	35	Identified in the 2021 MAG dataset as a small asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. This location was not directly covered by the 2021 MBES dataset. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	3	10.530215
70125	Rope/chain	575052	6372364	A2	16.8	0.2	0.1	-	Identified in the 2021 SSS dataset as a fairly indistinct curvilinear dark reflector with a slight shadow along some of its length. Possibly associated with debris field **70124** situated 5 m south. No corresponding MBES or MAG contact. Interpreted as a possible length of non-ferrous rope or chain.	-	3	0
70129	Dark reflector	575060	6372309	A2	1.5	1.1	0.4	-	Identified in the 2021 SSS dataset as a distinct dark reflector with a bright shadow, the feature is possibly hollow. Visible as a slight mound in the MBES dataset. No corresponding MAG contact. Interpreted as a possible natural feature or possible non-ferrous debris.	-	3	0

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70130	Rope/chain	575097	6372257	A2	72.1	0.5	0.1	82	Identified in the 2021 SSS dataset as a long, thin and curvilinear dark reflector with a bright shadow, situated on an uneven area of the seabed. The feature is indistinct in places and may be buried within sand waves. No corresponding MBES contact. Possibly associated with a medium, sharp positive monopole with peak and trough on one profile line at its north eastern end, indicating some ferrous material is present. Interpreted as a possible length of partially ferrous rope or chain.	-	3	0
70131	Seabed disturbance	575092	6372158	A2	49.3	28.7	1.6	-	Identified in the 2021 and 2012 SSS dataset as an area of disturbed seabed comprising angular, linear and curvilinear dark reflectors with associated shadows. The feature is situated within sand mega ripples and appears less distinct in the most recent SSS dataset, suggesting it may have since become buried. This location was not directly covered by the 2021 MBES dataset. In the 2012 MBES dataset this is visible as an elongate mound with an uneven peak that is taller at its south west end, the feature is orientated north east to south west on the seabed, possibly within slight scour although this is indistinct in the data. No corresponding MAG anomaly. Interpreted as a possible natural feature or possible non-ferrous debris.	-	3	0
70132	Dark reflector	575100	6372240	A2	4.0	0.3	0.1	-	Identified in the 2021 SSS dataset as a straight dark reflector with a bright, slightly curved shadow, situated close to an area of sand waves. No corresponding MBES contact, this location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	-	3	0
70133	Rope/chain	575116	6372310	A2	99.7	0.4	0.1	377	Identified in the 2021 SSS dataset as a distinct, curvilinear dark reflector with a slight shadow. The feature is likely related to rope or chain 70134 and is situated on a sand wave rich area of seabed. No corresponding MBES contact. Associated with a large, sharp asymmetric dipole with peak and trough on one profile line, indicating some ferrous material is present. Interpreted as a possible length of partially ferrous rope or chain.	-	3	0
70134	Rope/chain	575115	6372307	A2	43.5	0.4	0.1	-	Identified in the 2021 SSS dataset as a distinct, curvilinear dark reflector with a slight shadow. The feature is likely related to rope or chain 70133 and is situated on a sand wave rich area of seabed. No corresponding MBES or Mag contact, however, may be associated with the large MAG anomaly associated with 70133. Interpreted as a possible length of rope or chain.	-	3	0
70135	Rope/chain	575122	6372230	A2	18.2	0.2	0.1	-	Identified in the 2021 SSS dataset as an indistinct curvilinear dark reflector with a slight shadow. No corresponding MBES or MAG contact. Interpreted as a possible length of non-ferrous rope or chain.	-	3	0
70136	Rope/chain	575185	6372261	A2	36.9	0.4	0.1	-	Identified in the 2021 SSS dataset as a distinct curvilinear dark reflector with a slight shadow across its extent. The feature is situated on an uneven area of seabed. No corresponding MBES or MAG contact. Interpreted as a possible length of non-ferrous rope or chain.	-	3	0
70137	Rope/chain	575392	6372357	A2	85.3	0.3	-	-	Identified in the 2021 SSS dataset as a number of curvilinear dark reflectors with slight shadows that appears to be attached to one another. No corresponding MBES or MAG contact. Interpreted as a possible length of non-ferrous rope or chain.	-	3	0
70138	Magnetic	575423	6372320	A2	-	-	-	41	Identified in the 2021 MAG dataset as a small asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris either buried or with little surface expression.	-	3	0
70139	Rope/chain	575441	6372239	A2	37.2	0.5	0.5	-	Identified in the 2021 SSS dataset as a thin and curvilinear, distinct dark reflector with a shadow in places, situated on an uneven area of the seabed. The feature possibly has angular dark reflectors with shadows attached, however this is unclear in the dataset. No corresponding MBES contact, this location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible length of rope or chain.	-	3	0
70140	Rope/chain	575486	6372258	A2	74.2	0.5	0.1	-	Identified in the 2021 SSS dataset as a long and thin curvilinear dark reflector with a bright shadow, situated on an uneven area of the seabed. The feature possibly has some angular dark reflectors attached across its extent; however this is unclear and they may be natural features. No corresponding MAG or MBES contact. Interpreted as a possible length of non-ferrous rope or chain.	-	3	0
70141	Magnetic	575494	6372323	A2	-	-	-	47	Identified in the 2021 MAG dataset as a small negative monopole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris either buried or with little surface expression.	-	3	0
70142	Rope/chain	575540	6372362	A2	63.7	0.6	0.1	-	Identified in the 2021 SSS dataset as a long, indistinct curvilinear dark reflector with a slight shadow, the feature is slightly intermittent in places. No corresponding MBES or MAG contact. Interpreted as a possible length of non-ferrous rope or chain.	-	3	0

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70143	Rope/chain	575549	6372285	A2	32.6	0.2	0.1	-	Identified in the 2021 SSS dataset as a fairly distinct, curvilinear dark reflector with a slight shadow. Close to similar anomaly **70144** and may be related. No corresponding MBES or MAG contact. Interpreted as a possible length of non-ferrous rope or chain.	-	4	0
70144	Rope/chain	575546	6372274	A2	15.7	0.2	0.1	-	Identified in the 2021 SSS dataset as a fairly distinct curvilinear dark reflector with a slight shadow. Close to similar anomaly **70143** and may be related. No corresponding MBES or MAG contact. Interpreted as a possible length of non-ferrous rope or chain.	-	4	0
70145	Rope/chain	575573	6372261	A2	18.3	0.3	0.1	-	Identified in the 2021 SSS dataset as a thin and curvilinear dark reflector with a bright shadow, situated on an uneven area of seabed. No corresponding MAG or MBES anomaly. Interpreted as a possible length of non-ferrous rope or chain.	-	4	0
70146	Seabed disturbance	575578	6372352	A2	10.9	6.6	0.4	-	Identified in the 2021 SSS dataset as an area of disturbed seabed comprising indistinct linear, curvilinear, and irregularly shaped dark reflectors with shadows. The feature is situated within an area with frequent rope and chain anomalies and may be related. No corresponding MBES or MAG contact. Interpreted as a possible natural feature or possible non-ferrous debris.	-	4	0
70147	Seabed disturbance	575603	6372346	A2	14.9	1.1	0.1	-	Identified in the 2021 SSS dataset as an indistinct area of seabed disturbance comprising a curvilinear and possibly smaller irregular dark reflectors with slight shadows. No corresponding MBES or MAG contact. Interpreted as a possible natural feature or possible non-ferrous debris.	-	4	0
70134	Rope/chain	575637	6372312	A2	60.3	0.4	0.1	-	Identified in the 2021 SSS dataset as a distinct linear dark reflector with a slight shadow. The feature is situated within a wider boulder field. No corresponding MBES or MAG contact. Interpreted as a possible length of rope or chain.	-	4	0
70150	Magnetic	575661	6372323	A2	-	-	-	29	Identified in the 2021 MAG dataset as a small negative monopole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	4	0
70149	Magnetic	575670	6372238	A2	-	-	-	32	Identified in the 2021 MAG dataset as a small symmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris either buried or with little surface expression.	-	4	0
70151	Debris field	575709	6372367	A2	250.1	0.3	0.1	-	Identified in the 2021 SSS dataset as a distinct, curvilinear dark reflector with a slight shadow. The feature has some angular dark reflectors with shadows attached across its extent, the largest measures approximately 4.4 x 1 x 0.5 m. No corresponding MBES or MAG contact. Interpreted as a non-ferrous debris field and may be fishing gear however, this cannot be confirmed without visual inspection.	-	4	0
70152	Magnetic	575699	6372319	A2	-	-	-	60	Identified in the 2021 MAG dataset as a medium, sharp symmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	4	0
70153	Rope/chain	575737	6372241	A2	52.8	0.4	0.1	34	Identified in the 2021 SSS dataset as an indistinct linear dark reflector with no measurable height. No corresponding MBES contact. Associated with a small, sharp asymmetric dipole with peak and trough on one profile line, indicating some ferrous material is present. Interpreted as a possible length of partially ferrous rope or chain.	-	4	0
70155	Seabed disturbance	575780	6372130	A2	8.9	4.4	0.8	-	Identified in the 2021 SSS dataset as a distinct area of disturbed seabed, comprising several angular dark reflectors with shadows, situated within a wider boulder field. The feature is situated at the western end of possible rope or chain (**70156**) and may be related. This location was not directly covered by the 2021 MBES or MAG data. No corresponding MBES or MAG contact in the 2012 datasets. Interpreted as a possible natural feature or possible non-ferrous debris.	-	4	0
70154	Debris field	575785	6372242	A2	30.7	20.1	0.5	-	Identified in the 2021 SSS dataset as an area of distinct, angular bright and dark reflectors with shadows and curvilinear dark reflectors with shadows connecting some of these. In the MBES dataset some angular mounds are visible at this location. No corresponding MAG contact, however, this is situated within an area of high magnetic responses which may be masking any smaller anomalies in this area. Interpreted as a non-ferrous debris field and may be fishing gear however, this cannot be confirmed without visual inspection.	-	4	0
70156	Rope/chain	575800	6372122	A2	54.5	0.2	0.1	-	Identified in the 2021 SSS dataset as an indistinct, curvilinear dark reflector with a slight shadow. The feature has a possible seabed disturbance (**70155**) at its western end and may be associated. This location was not directly covered by the 2021 MBES or MAG data. No corresponding contact in the 2012 SSS, MBES or MAG datasets. Interpreted as a possible length of non-ferrous rope or chain.	-	4	0
70158	Magnetic	575896	6372343	A2	-	-	-	92	Identified in the 2021 MAG dataset as a medium negative monopole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	4	0

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70157	Magnetic	575901	6372216	A2	-	-	-	41	Identified in the 2021 MAG dataset as a small, sharp asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	4	0
70159	Rope/chain	575920	6372236	A2	131.8	0.3	0.1	-	Identified in the 2021 SSS dataset as a distinct curvilinear dark reflector with a slight shadow. The feature is situated within a wider boulder field. No corresponding MBES or MAG contact. Interpreted as a possible length of rope or chain.	-	4	0
70160	Rope/chain	575922	6372291	A2	17.7	0.3	0.2	-	Identified in the 2021 SSS dataset as a distinct curvilinear dark reflector with a slight shadow across its extent. No corresponding MBES contact. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible length of rope or chain.	-	4	0
70161	Rope/chain	575926	6372190	A2	45.9	0.4	0.0	-	Identified in the 2021 SSS dataset as a distinct curvilinear dark reflector with a slight shadow, situated in a wider boulder field. No corresponding MBES or MAG contact. Interpreted as a possible length of non-ferrous rope or chain.	-	4	0
70162	Debris field	575900	6372142	A2	312.0	1.0	0.1	-	Identified in the 2021 and 2012 SSS dataset as a series of long thin and in places indistinct curvilinear dark reflectors with short, bright shadows. The feature is indistinct in places, however, is likely one continuous feature that is either buried or in pieces. There are a number of angular dark reflectors attached across its extent, measuring approximately 1.0 x 0.3 m. No corresponding MBES or MAG contact, however this is situated within an area of high magnetic responses which may be masking any smaller anomalies in this area, this location was only partially covered by the 2021 MBES dataset. Interpreted as a debris field and may be fishing gear however, this cannot be confirmed without visual inspection.	-	4	0
70163	Rope/chain	575965	6372286	A2	18.4	0.3	0.1	-	Identified in the 2021 SSS dataset as a thin, slightly curvilinear dark reflector with a bright shadow, situated on an uneven area of the seabed. The feature. No corresponding MBES or MAG contact, however this is situated within an area of high magnetic responses which may be masking any smaller anomalies in this area. Interpreted as a possible length of rope or chain.	-	4	0
70164	Rope/chain	575969	6372180	A2	17.0	0.2	0.1	-	Identified in the 2021 SSS dataset as an indistinct curvilinear dark reflector with a slight shadow. No corresponding MBES contact. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible length of rope or chain.	-	4	0
70172	Magnetic	575995	6372365	A2	-	-	-	90	Identified in the 2021 MAG dataset as a medium, sharp asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	4	0
70166	Dark reflector	576007	6372008	A2	2.3	0.3	0.1	-	Identified in the 2021 SSS dataset as a distinct curvilinear dark reflector with a bright shadow. Situated to the south of possible rope or chain 70167 and may be associated. This location was not directly covered by the MBES or MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	-	4	17.830744
70167	Rope/chain	576009	6372016	A2	65.6	0.1	0.1	-	Identified in the 2021 SSS dataset as a long, thin and slightly curvilinear dark reflector with a bright shadow, situated on a rough and uneven area of seabed, orientated north east to south west on the seabed. Possibly associated with dark reflectors 70165 and 70166. No corresponding MBES or MAG contact, this location was not directly covered by the 2021 MBES dataset. Interpreted as a possible length of non-ferrous rope or chain.	-	4	9.839784
70168	Seabed disturbance	576020	6372238	A2	27.9	7.5	1.4	-	Identified in the 2021 and 2012 SSS dataset as an area of disturbed seabed comprising multiple indistinct dark reflectors with bright, irregular shadows and bright reflectors. In the 2012 SSS data the feature is visible as a right angled, linear dark reflector with a bright shadow. Possibly related to rope or chain 70169. Visible in the MBES dataset as an irregular area of seabed, distinct from relatively featureless seabed. No corresponding MAG contact. Interpreted as a possible natural feature or possible non-ferrous debris.	-	4	0
70174	Magnetic	576021	6372346	A2	-	-	-	222	Identified in the 2021 MAG dataset as a large negative monopole with peak and trough on one profile line. No corresponding SSS or MBES contacts, although may be associated with rope or chain 70171. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	4	0
70170	Rope/chain	576023	6372391	A2	26.3	0.4	0.1	-	Identified in the 2021 SSS dataset as a distinct curvilinear dark reflector with a slight shadow. The feature is situated within a wider boulder field. No corresponding MBES or MAG contact. Interpreted as a possible length of non-ferrous rope or chain.	-	4	0
70171	Rope/chain	576015	6372341	A2	92.1	0.5	0.1	-	Identified in the 2021 SSS dataset as a long and thin, curvilinear dark reflector with a bright shadow. The feature forks into two and is situated on an uneven area of the seabed, with frequent boulders and is possibly associated with nearby anomalies 70175 and 70176 to the east. No corresponding MBES or MAG contact, although may be associated with large MAG anomaly 70174. Interpreted as a possible length of rope or chain.	-	4	0

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70165	Dark reflector	576032	6372043	A2	1.8	0.7	0.4	-	Identified in the 2021 SSS dataset as an indistinct dark reflector, with a bright, rounded shadow. Situated at the north eastern end of a possible length or rope or chain (**70167**) and may be related. No corresponding MBES or MAG contact, this location was not directly covered by the 2021 MBES dataset. Interpreted as a possible natural feature or possible non-ferrous debris.	-	4	0
70173	Debris field	576036	6372485	A2	65.6	0.3	0.1	-	Identified in the 2021 SSS dataset as a long thin and in places indistinct linear dark reflector with a short, bright shadow, the feature is criss-crossed with a similar linear dark reflector that measures 59.7 x 0.3 x 0.1, these appear to be joined at the centre. This location was not directly covered by the 2021 MBES dataset. No corresponding 2012 MBES or MAG contact, however this is situated within an area of high magnetic responses which may be masking any smaller anomalies in this area. Interpreted as a debris field and may be fishing gear however, this cannot be confirmed without visual inspection.	-	4	0
70169	Rope/chain	576045	6372231	A2	42.0	0.5	0.2	-	Identified in the 2021 SSS dataset as a long thin and curvilinear dark reflector with a short, bright shadow. Possibly related to seabed disturbance **70168**. No corresponding MBES contact. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible length of rope or chain.	-	4	0
70175	Debris field	576057	6372344	A2	175.0	1.0	0.1	-	Identified in the 2021 SSS dataset as a large spread of linear and curvilinear dark reflectors, some with shadows and some without that appear to be related to one another. The features extents are indistinct in places, and there are possible angular dark reflectors attached to the linear features, however it is situated within a wider boulder field and so these may be natural features. Possibly associated with debris field **70176**. Indistinct linear and curvilinear low-lying mounds are visible in the MBES dataset. No corresponding MAG contact. Interpreted as a non-ferrous debris field and may be fishing gear however, this cannot be confirmed without visual inspection.	-	4	0
70176	Debris field	576052	6372344	A2	51.8	6.4	1.0	-	Identified in the 2021 SSS dataset as an area of disturbed seabed comprising multiple angular dark reflectors with uneven shadows, possibly suggesting varying height. The feature has a long length of possible rope or chain associated. The feature is situated at the western edge of possible debris field **70175** and may be related. Identified in the MBES dataset as an area of irregularly shaped mounds, with an associated low-lying curvilinear mound extending approximately 92 m toward the east. Associated with a large, sharp asymmetric dipole with peak and trough on one profile line, indicating some ferrous material is present. Interpreted as a ferrous debris field and may be fishing gear however, this cannot be confirmed without visual inspection.	-	4	0
70177	Debris field	576056	6372204	A2	17.6	5.0	0.3	179	Identified in the 2021 SSS dataset as a possible debris field comprising angular and intermittent linear dark reflectors with bright shadows. The feature is situated within a wider boulder field and appears slightly anomalous. No corresponding MBES contact. Associated with a large, broad negative monopole with peak and trough on one profile line, indicating some ferrous material is present. Interpreted as a ferrous debris field and may be fishing gear however, this cannot be confirmed without visual inspection.	-	4	0
70178	Debris field	576069	6372120	A2	48.9	0.2	0.1	-	Identified in the 2021 SSS dataset as a long, thin and indistinct curvilinear dark reflector with a short, bright shadow, the feature has dark reflectors attached across its extent, measuring approximately 0.8 x 0.6 m. No corresponding MBES or MAG contact, however this is situated within an area of high magnetic responses which may be masking any smaller anomalies in this area and this location was not directly covered by the 2021 MBES dataset. Interpreted as a debris field and may be fishing gear however, this cannot be confirmed without visual inspection.	-	4	0
70179	Rope/chain	576071	6372045	A2	10.1	0.2	0.1	-	Identified in the 2021 SSS dataset as a short, thin and slightly curvilinear dark reflector with a bright shadow, situated within a wider boulder field. No corresponding MBES contact, this location was not directly covered by the 2021 MBES or MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible length of rope or chain.	-	4	0
70180	Rope/chain	576071	6372221	A2	27.8	0.3	0.1	-	Identified in the 2021 SSS dataset as a long thin and in places indistinct curvilinear dark reflector with a short, bright shadow. Possibly related to rope or chain **70181**. No corresponding MBES contact. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible length of rope or chain.	-	4	0
70181	Rope/chain	576075	6372242	A2	47.7	0.2	0.1	-	Identified in the 2021 SSS dataset as a long thin and curvilinear dark reflector with a short, bright shadow. Possibly related to rope or chain **70180**. No corresponding MBES contact. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible length of rope or chain.	-	4	0

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70182	Debris field	576083	6372295	A2	223.6	0.6	0.1	-	Identified in the 2021 SSS dataset as a large spread of linear and curvilinear dark reflectors, some with shadows and some without that appear to be related to one another. The features extents are indistinct in places, and there are possible angular dark reflectors attached to the linear features, however it is situated within a wider boulder field and so these may be natural features. No corresponding MBES or MAG contact. Interpreted as a non-ferrous debris field and may be fishing gear however, this cannot be confirmed without visual inspection.	-	4	0
70183	Rope/chain	576100	6372364	A2	30.8	0.3	0.1	-	Identified in the 2021 SSS dataset as a fairly distinct curvilinear dark reflector with a slight shadow. No corresponding MBES contact. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible length of rope or chain.	-	4	0
70184	Dark reflector	576101	6372338	A2	2.5	0.9	0.9	-	Identified in the 2021 SSS dataset as a distinct elongate dark reflector with a bright shadow and significant height. The feature is visible in the MBES dataset as a distinct mound with steeply sloping sides, larger than the surrounding likely natural features. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	-	4	0
70185	Rope/chain	576102	6372289	A2	17.6	0.2	0.1	-	Identified in the 2021 SSS dataset as a long and thin curvilinear dark reflector with a bright shadow, situated on a rough and uneven area of the seabed. Possibly related to debris field 62510, situated at its northern end. No corresponding MBES or MAG contact. Interpreted as a possible length of non-ferrous rope or chain.	-	4	0
70186	Debris field	576108	6372347	A2	9.3	0.3	0.1	-	Identified in the 2021 SSS dataset as a distinct curvilinear dark reflector with a slight shadow. The feature has an associated dark reflector with shadow attached at its north east end, measuring 2.0 x 0.5 x 0.6 m, which is visible as a mound in the MBES dataset. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a debris field and may be fishing gear however, this cannot be confirmed without visual inspection.	-	4	0
70187	Debris field	576117	6372255	A2	55.7	0.4	0.1	-	Identified in the 2021 SSS dataset as a long, thin and curvilinear dark reflector with a slight shadow, the feature has an angular dark reflector associated with it measuring 3.2 x 0.2 x 0.1 m. No corresponding MBES or MAG contact. Interpreted as a debris field and may be fishing gear however, this cannot be confirmed without visual inspection.	-	4	0
70188	Rope/chain	576123	6372332	A2	32.3	0.9	0.1	-	Identified in the 2021 SSS dataset as a distinct curvilinear dark reflector with a slight shadow. The feature is situated within a wider boulder field and possibly related to rope or chain **70182** situated at its south east end. No corresponding MBES or MAG contact. Interpreted as a possible length of non-ferrous rope or chain.	-	4	0
70189	Debris field	576146	6372445	A2	26.8	12.6	0.2	-	Identified in the 2021 SSS dataset as a distinct area comprising several elongate and irregular dark reflectors with shadows. Also visible on the MBES dataset as an area of small mounds. No corresponding MAG contact, however, this is situated within an area of high magnetic responses which may be masking any smaller anomalies in this area. Interpreted as a possible debris field and may relate to rope/chain **70190**.	-	4	0
70191	Seabed disturbance	576147	6372291	A2	16.3	5.4	0.1	-	Identified in the 2021 SSS dataset as an area of disturbed seabed comprising several curvilinear and angular dark reflectors, some with shadows. No corresponding MBES or MAG contact. Interpreted as a possible natural feature or possible non-ferrous debris.	-	4	0
70190	Rope/chain	576151	6372406	A2	72.2	0.7	0.1	-	Identified in the 2021 SSS dataset as a distinct linear dark reflector with a slight shadow. No corresponding MBES or MAG contacts, however this is situated within an area of high magnetic responses which may be masking any smaller anomalies in this area. Interpreted as a non-ferrous rope or chain feature and may relate to debris field **70189**.	-	4	0
70192	Rope/chain	576163	6372361	A2	115.7	0.5	0.1	-	Identified in the 2021 SSS dataset as a long, thin and distinct curvilinear dark reflector with a slight shadow. The feature is situated within a wider boulder field and possibly associated with dark reflector **70194** situated at its eastern end. No corresponding MBES or MAG contact. Interpreted as a possible length of non-ferrous rope or chain.	-	4	0
70193	Rope/chain	576166	6372305	A2	40.2	0.2	0.1	-	Identified in the 2021 SSS dataset as a distinct curvilinear dark reflector with a slight shadow. The feature is situated within a wider boulder field. No corresponding MBES or MAG contact. Interpreted as a possible length of non-ferrous rope or chain.	-	4	0
70204	Magnetic	576173	6372237	A2	-	-	-	78	Identified in the 2021 MAG dataset as a medium symmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	4	0
70195	Rope/chain	576179	6372305	A2	76.1	0.5	0.1	-	Identified in the 2021 SSS dataset as a long, thin and distinct curvilinear dark reflector with a slight shadow. The feature is situated within a wider boulder field. No corresponding MBES or MAG contact. Interpreted as a possible length of non-ferrous rope or chain.	-	4	0

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70196	Rope/chain	576191	6372249	A2	11.0	0.4	0.1	-	Identified in the 2021 SSS dataset as a distinct curvilinear dark reflector with a slight shadow. No corresponding MBES or MAG contact. Interpreted as a possible length of non-ferrous rope or chain.	-	4	0
70197	Rope/chain	576201	6372198	A2	54.0	0.7	0.1	-	Identified in the 2021 SSS dataset as a long and thin, slightly curvilinear dark reflector with a bright shadow in places. The feature is situated on an uneven area of the seabed, may have an object attached at its south eastern end (**70198**). No corresponding MBES or MAG contact, however this is situated within an area of high magnetic responses which may be masking any smaller anomalies in this area. Interpreted as a possible length of rope or chain.	-	4	0
70205	Dark reflector	576203	6372436	A2	3.3	0.8	0.5	-	Identified in the 2021 SSS dataset as a distinct elongate dark reflector with a bright shadow. The feature is situated in an area with multiple objects interpreted as rope or chains, but this anomaly is distinct in shape and size. No corresponding MBES or MAG contacts, however this is situated within an area of high magnetic responses which may be masking any smaller anomalies in this area. Interpreted as possible natural feature or possible debris.	-	4	0
70199	Rope/chain	576209	6372261	A2	15.6	0.3	0.1	-	Identified in the 2021 SSS dataset as a distinct curvilinear dark reflector, that may be coiled, with a slight shadow. No corresponding MBES contact. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible length of rope or chain.	-	4	0
70200	Rope/chain	576210	6372447	A2	55.8	0.3	0.1	-	Identified in the 2021 SSS dataset as a distinct linear dark reflector in a sinuous form, with intermittent shadows along its length. No corresponding MBES or MAG contacts, however this is situated within an area of high magnetic responses which may be masking any smaller anomalies in this area. Interpreted as a rope or chain feature.	-	4	0
70201	Rope/chain	576213	6372370	A2	24.9	0.3	0.0	-	Identified in the 2021 SSS dataset as a very indistinct linear dark reflector with no shadow. No corresponding MBES or MAG contact. Interpreted as a possible length of non-ferrous rope or chain.	-	4	0
70202	Rope/chain	576214	6372413	A2	22.9	0.6	0.2	-	Identified in the 2021 SSS dataset as a distinct curvilinear dark reflector with a shadow discernible at its northern end. No corresponding MBES or MAG contact. Interpreted as a possible length of non-ferrous rope or chain.	-	4	0
70203	Seabed disturbance	576225	6372326	A2	9.1	3.0	1.5	-	Identified in the 2021 SSS dataset as a distinct area of disturbed seabed, comprising multiple dark reflectors with shadow, the largest dark reflector measures 3.0 x 2.5 x 1.4 m to the south of the area, with smaller objects discernible. Also identified in the MBES dataset as subangular mound within an area of slight scour, distinct from a featureless seabed. No corresponding MAG contact. Interpreted as a possible natural feature or possible non-ferrous debris.	-	4	0
70194	Dark reflector	576226	6372360	A2	2.8	2.4	1.3	-	Identified in the 2021 SSS dataset as a distinct angular dark reflector with a bright shadow and significant height. The feature is situated close to possible rope and chain features (**70192** and **70201**) and may be associated. Identified in the MBES dataset as a steep-sided mound with angled top, situated within an area of scour. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Retained as a precaution due to height. Interpreted as a possible natural feature or possible debris.	-	4	0
70198	Dark reflector	576227	6372184	A2	2.9	0.7	0.3	-	Identified in the 2021 SSS dataset as a distinct, slightly curved dark reflector with a bright shadow that extends beyond the edge of the data range. The object is situated on an uneven area of seabed and may be associated with rope or chain 62464, however this is unclear and so they have been retained as separate features. No corresponding MBES or MAG contact, however this is situated within an area of high magnetic responses which may be masking any smaller anomalies in this area. Interpreted as a possible natural feature or possible debris.	-	4	0
70206	Dark reflector	576271	6372238	A2	9.2	1.2	0.1	-	Identified in the 2021 SSS dataset as a distinct right angled dark reflector with a short, bright shadow. No corresponding MBES or MAG contact. Interpreted as a possible natural feature or possible non-ferrous debris.	-	4	0
70207	Rope/chain	576272	6372400	A2	22.4	0.2	0.1	-	Identified in the 2021 SSS dataset as a fairly indistinct curvilinear dark reflector with a slight shadow along some of its length. No corresponding MBES or MAG contact. Interpreted as a possible length of non-ferrous rope or chain.	-	4	0
70208	Rope/chain	576277	6372416	A2	61.1	0.8	0.0	-	Identified in the 2021 SSS dataset as a distinct linear dark reflector in an S-shaped curve, with a dark reflector **70209** at the south eastern end which may be associated. No corresponding MBES or MAG contacts, however this is situated within an area of high magnetic responses which may be masking any smaller anomalies in this area. Interpreted as a rope or chain feature.	-	4	0

ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	External references	Nearest KP	Distance to Marine Installation Corridor (m)
70209	Dark reflector	576292	6372394	A2	2.7	0.8	0.5	-	Identified in the 2021 SSS dataset as a distinct elongate dark reflector with a bright shadow. Located at the south eastern end of possible rope or chain feature **70208** and may be associated. Also visible on the MBES dataset as a small mound. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as possible natural feature or possible debris.	-	4	0
70210	Rope/chain	576335	6372377	A2	21.5	0.2	0.1	-	Identified in the 2021 SSS dataset as a fairly distinct curvilinear dark reflector with a slight shadow. Situated 8 m west of rope or chain **70211** and may be related. No corresponding MBES or MAG contact, however this is situated within an area of high magnetic responses which may be masking any smaller anomalies in this area. Interpreted as a possible length of non-ferrous rope or chain.	-	4	0
70211	Rope/chain	576346	6372382	A2	11.8	0.4	0.1	-	Identified in the 2021 SSS dataset as a fairly indistinct curvilinear dark reflector with no measurable height. Situated 8 m east of rope or chain **70210** and may be related. No corresponding MBES or MAG contact, however this is situated within an area of high magnetic responses which may be masking any smaller anomalies in this area. Interpreted as a possible length of non-ferrous rope or chain.	-	4	0
70212	Debris field	576352	6372262	A2	29.1	15.3	0.3	30	Identified in the 2021 SSS dataset as a group of indistinct dark reflectors, some with shadows, irregularly shaped bright reflectors and a distinct curvilinear dark reflector. The feature has some possible scour on either side towards its northern extent. Also identified in the MBES dataset as an angular, elongate mound. Associated with a small asymmetric dipole with peak and trough on one profile line, indicating some ferrous material is present. Interpreted as possible partially ferrous debris field.	-	4	0
70213	Magnetic	576382	6372277	A2	-	-	-	53	Identified in the 2021 MAG dataset as a medium positive monopole with peak and trough on one profile line. No corresponding MBES or SSS contacts. Interpreted as possible ferrous debris either buried or with no surface expression.	-	4	0
70214	Dark reflector	576383	6372040	A2	2.1	0.8	1.3	-	Identified in the 2012 SSS dataset as a distinct, slightly curved dark reflector with a large, bright shadow and significant height. No corresponding MBES contact. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as possible natural feature or possible debris.	-	4	0
70215	Magnetic	576407	6371980	A2	-	-	-	105	Identified in the 2021 MAG dataset as a large negative monopole with peak and trough on one profile line. No corresponding MBES or SSS contacts. Interpreted as possible ferrous debris either buried or with no surface expression.	-	4	0
70216	Magnetic	576431	6372246	A2	-	-	-	27	Identified in the 2021 MAG dataset as a small negative monopole with peak and trough on one profile line. No corresponding MBES or SSS contacts. Interpreted as possible ferrous debris either buried or with no surface expression.	-	4	0
70217	Debris field	576449	6372099	A2	143.9	0.6	0.6	-	Identified in the 2012 and 2021 SSS dataset as an indistinct, slightly curvilinear dark reflector with a short shadow, with three small, angular dark reflectors with shadows attached across its extent, including one possible debris item measuring 2.8 x 0.5 x 0.6 m. No corresponding MBES or MAG contacts. Interpreted as a non-ferrous debris field and may be fishing gear however, this cannot be confirmed without visual inspection.	-	4	0
70218	Debris field	576467	6372184	A2	74.0	0.6	0.1	-	Identified in the 2012 SSS dataset as a long thin and slightly curvilinear dark reflector with a short shadow, may have some small angular dark reflectors with shadows along its length. The feature appears slightly broken up or partially buried in the centre. No corresponding MBES or MAG contacts, however this is situated within an area of high magnetic responses which may be masking any smaller anomalies in this area. Interpreted as a debris field and may be fishing gear however, this cannot be confirmed without visual inspection.	-	4	0
70219	Dark reflector	576486	6372205	A2	6.3	1.6	0.9	-	Identified in the 2012 SSS dataset as a distinct angular dark reflector with a rounded edge and a bright, slightly irregular shadow, possibly suggesting uneven height. Also visible on the MBES dataset as an elongate mound. No corresponding MAG contacts. Interpreted as possible natural feature or non-ferrous debris.	-	4	0
70220	Rope/chain	576490	6372229	A2	46.9	0.9	-	-	Identified in the 2021 SSS dataset as a distinct curvilinear dark reflector, with some possible dark reflectors at each end, however this is unclear. No corresponding MBES contacts. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a rope or chain feature.	-	4	0
70221	Debris field	576528	6372150	A2	60.9	0.4	0.1	-	Identified in the 2021 SSS dataset as a distinct linear dark reflector with a slight shadow. Also visible on the 2012 SSS dataset as a long thin and slightly curvilinear dark reflector with a short shadow, may have some small angular dark reflectors with shadows associated. No corresponding MBES or MAG contacts. Interpreted as a non-ferrous debris field and may be fishing gear however, this cannot be confirmed without visual inspection.	-	5	0

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70222	Rope/chain	576576	6372290	A2	31.0	0.2	0.0	-	Identified in the 2021 SSS dataset as an indistinct curvilinear dark reflector with no shadow. This location was not directly covered 2021 MBES data, no corresponding MBES or MAG contact. Interpreted as a possible length of non-ferrous rope or chain.	-	4	0
70223	Dark reflector	576576	6372391	A2	6.2	0.6	0.2	-	Identified in the 2012 SSS dataset as an indistinct slightly curvilinear dark reflector with a short shadow. No corresponding MBES contact. This location was not directly covered by the 2021 or 2012 MAG datasets, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as possible natural feature or possible debris.	-	4	0
70224	Magnetic	576620	6372062	A2	-	-	-	30	Identified in the 2021 MAG dataset as a small positive monopole with peak and trough on one profile line. No corresponding MBES or SSS contacts. Interpreted as possible ferrous debris either buried or with no surface expression.	-	5	0
70225	Rope/chain	576660	6372355	A2	26.8	0.4	0.1	-	Identified in the 2021 SSS dataset as a distinct curvilinear dark reflector with a slight shadow across its extent. No corresponding MBES contact. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible length of rope or chain.	-	5	0
70226	Dark reflector	576730	6372513	A2	17.2	0.6	0.6	-	Identified in the 2021 SSS dataset as an indistinct linear dark reflector with an uneven shadow, possibly suggesting uneven height. The feature is more distinct towards the north eastern end and may be an object a short rope or chain attached. This location was not directly covered by the MBES or MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as possible natural feature or possible debris.	-	5	163.567988
70227	Magnetic	576747	6372435	A2	-	-	-	43	Identified in the 2012 MAG dataset as a small, broad asymmetric dipole with peak and trough on one profile line. No corresponding MBES or SSS contacts. Interpreted as possible ferrous debris either buried or with no surface expression.	-	5	115.68056
70228	Debris field	576750	6372007	A2	219.6	1.8	0.1	53	Identified in the 2021 SSS dataset as a distinct linear dark reflector with a slight shadow, and some indistinct, possibly attached dark reflectors along its length. Corresponds with a medium asymmetric dipole with peak and trough on one profile line on the 2021 MAG dataset, at the western end of the feature. No corresponding MBES contacts. Interpreted as a partially ferrous debris field and may be fishing gear however, this cannot be confirmed without visual inspection.	-	5	0
70229	Rope/chain	576819	6371814	A2	30.6	1.4	0.1	-	Identified in the 2021 SSS dataset as a fairly distinct curvilinear dark reflector with a slight shadow. No corresponding MBES contact. This location was not directly covered by the 2021 or 2012 MAG datasets, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a rope or chain feature.	-	5	0
70230	Rope/chain	576870	6371827	A2	26.8	0.5	0.1	-	Identified in the 2021 SSS dataset as a distinct, curvilinear dark reflector with a slight shadow. No corresponding MBES or MAG contact, however this is situated within an area of high magnetic responses which may be masking any smaller anomalies in this area. Interpreted as a rope or chain feature.	-	5	0
70231	Debris field	577039	6371688	A2	41.5	0.5	0.1	-	Identified in the 2012 SSS dataset as a long thin and slightly curvilinear dark reflector with a short shadow, may have some small angular dark reflectors with shadows associated, however this is unclear. No corresponding MBES or MAG contacts, however this is situated within an area of high magnetic responses which may be masking any smaller anomalies in this area. Interpreted as a debris field and may be fishing gear however, this cannot be confirmed without visual inspection.	-	5	0
70232	Dark reflector	577082	6372471	A2	1.1	1.0	0.9	-	Identified in the 2012 SSS dataset as a small dark reflector with a bright shadow possibly attached to the end of short linear feature **70233**. This location was not directly covered by the 2012 or 2021 MBES or MAG datasets, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as possible natural feature or possible debris.	-	5	362.008492
70233	Rope/chain	577087	6372477	A2	16.0	0.2	0.2	-	Identified in the 2012 SSS dataset as a thin and indistinct dark reflector with a short shadow, which may relate to dark reflector **70232** which lies at the southern end. This location was not directly covered by the MBES or MAG datasets, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a rope or chain feature.	-	5	369.817456
70234	Rope/chain	577094	6372500	A2	248.6	0.5	0.1	-	Identified in the 2012 SSS dataset as a long, thin and slightly curvilinear dark reflector with a shadow in places. This location was not directly covered by the 2012 or 2021 MBES or MAG datasets, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a rope or chain feature.	-	5	391.794656
70235	Dark reflector	577106	6372382	A2	4.8	0.3	0.4	-	Identified in the 2012 SSS dataset as an indistinct elongate dark reflector with a bright shadow. This location was not directly covered by the 2012 or 2021 MBES or MAG datasets, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as possible natural feature or possible debris.	-	5	310.377848

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70236	Rope/chain	577115	6371821	A2	64.8	0.4	0.1	-	Identified in the 2012 SSS dataset as a long thin and slightly curvilinear dark reflector with a short shadow. No corresponding MBES or MAG contacts, however this is situated within an area of high magnetic responses which may be masking any smaller anomalies in this area. Interpreted as a rope or chain feature.	-	5	0
70237	Debris field	577188	6371758	A2	58.8	0.4	0.1		Identified in the 2012 SSS dataset as a long thin and slightly curvilinear dark reflector with a short shadow, with some possible associated angular dark reflectors with shadows along its length. No corresponding MBES or MAG contacts, however this is situated within an area of high magnetic responses which may be masking any smaller anomalies in this area. Interpreted as a debris field and may be fishing gear however, this cannot be confirmed without visual inspection.		5	0
70238	Magnetic	577215	6371545	A2	-	-	-	40	Identified in the 2021 MAG dataset as a small asymmetric dipole with peak and trough on one profile line. No corresponding MBES or SSS contacts. Interpreted as possible ferrous debris either buried or with no surface expression.	-	5	0
70239	Dark reflector	577425	6371417	A2	4.6	1.4	1.0	-	Identified in the 2012 and 2021 SSS dataset as a distinct subrounded dark reflector with a bright shadow. The feature is very distinct and situated within an area of mobile sediments, which suggest it could potentially be partially buried. Visible in the MBES dataset as a small mound. This location was not directly covered by the MAG datasets, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as possible natural feature or possible debris.	-	6	0
70240	Magnetic	577473	6371287	A2	-	-	-	36	Identified in the 2021 MAG dataset as a small asymmetric dipole with peak and trough on one profile line. No corresponding MBES or SSS contacts. Interpreted as possible ferrous debris either buried or with no surface expression.	-	6	0
70241	Rope/chain	577530	6371302	A2	116.0	0.7	0.2	-	Identified in the 2012 and 2021 SSS dataset as a fairly indistinct curvilinear dark reflector, situated in slight sand waves and may be partially buried. No corresponding MBES or MAG contacts. Interpreted as a non-ferrous rope or chain feature.	-	6	0
70242	Dark reflector	577538	6371559	A2	5.1	1.3	1.1	-	Identified in the 2012 SSS dataset as an indistinct elongate dark reflector with a bright shadow and significant height. This location was not directly covered by the 2021 or 2012 MAG datasets, so it is not possible to ascertain whether ferrous material is present at this location No corresponding MBES contact. Interpreted as possible natural feature or possible debris.	-	6	0
70243	Seabed disturbance	577546	6371476	A2	29.5	5.3	1.5	-	Identified in the 2012 SSS dataset as an area of disturbed seabed comprising dark reflectors with shadows on an area of seabed with slight sand ripples. Tentatively observed in the MBES dataset as a series of elongate mounds. This location was not directly covered by the 2021 or 2012 MAG datasets, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as possible natural feature or possible debris.	-	6	0
70244	Magnetic	577557	6371280	A2	-	-	-	13	Identified in the 2021 MAG dataset as a small, broad asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts, though this is situated within an area of sand waves. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris either buried or with little surface expression.	-	6	0
70245	Rope/chain	577571	6371244	A2	38.0	0.4	0.1	-	Identified in the 2021 SSS dataset as a distinct curvilinear dark reflector with a slight shadow, there may be a dark reflector with a shadow attached, however this is unclear. No corresponding MBES or MAG contacts. Interpreted as a non-ferrous rope or chain feature.	-	6	0
70246	Magnetic	577644	6371174	A2	-	-	-	45	Identified in the 2021 MAG dataset as a small, sharp asymmetric dipole with peak and trough on one profile line. No corresponding MBES or SSS contacts. Interpreted as possible ferrous debris either buried or with no surface expression.	-	6	0
70247	Debris field	577676	6371236	A2	115.9	0.4	0.1	-	Identified in the 2021 SSS dataset as a distinct curvilinear dark reflector with a slight shadow, the feature has some possible objects attached across its length. No corresponding MBES or MAG contacts. Interpreted as a non-ferrous debris field and may be fishing gear however, this cannot be confirmed without visual inspection	-	6	0
70248	Magnetic	577763	6371035	A2	-	-	-	35	Identified in the 2021 MAG dataset as a small asymmetric dipole with peak and trough on one profile line. No corresponding MBES or SSS contacts. Interpreted as possible ferrous debris either buried or with no surface expression.	-	6	0
70249	Dark reflector	577908	6371099	A2	3.5	0.3	0.4	-	Identified in the 2012 SSS dataset as a short, narrow dark reflector with an angular shadow, situated in an area of seabed with frequent boulders but a little anomalous. No corresponding MBES contacts. This location was not directly covered by the MAG datasets, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as possible natural feature or possible debris.	-	6	0

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70250	Debris field	578380	6370736	A2	64.7	0.7	0.1	-	Identified in the 2012 SSS dataset as a long thin and slightly curvilinear dark reflector with a short shadow. Some indistinct, small angular dark reflectors with shadows are visible and may be associated, but this is unclear. No corresponding MBES or MAG contacts. Interpreted as a non-ferrous debris field and may be fishing gear however, this cannot be confirmed without visual inspection	-	7	0
70251	Debris field	578384	6370612	A2	22.3	0.3	0.1	-	Identified in the 2021 SSS dataset as a fairly indistinct linear dark reflector with an elongate dark reflector with a dull shadow at the southern end measuring approximately 6.1 x 0.3 x 0.1 m. No corresponding MBES contact. This location was not directly covered by the 2021 or 2012 MAG datasets, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a debris field and may be fishing gear however, this cannot be confirmed without visual inspection	-	7	0
70252	Rope/chain	578387	6370548	A2	30.3	0.3	0.1	-	Identified in the 2012 SSS dataset as an indistinct, thin curvilinear dark reflector with a slight shadow. No corresponding MBES or MAG contacts. Interpreted as a non-ferrous rope or chain feature.	-	7	0
70253	Dark reflector	578529	6370322	A2	4.0	2.0	1.2	-	Identified in the 2021 SSS dataset as a distinct large subrounded dark reflector with a bright shadow. In an area of seabed with varying reflectivity, possibly mobile sediments. Visible on the MBES dataset as a subangular mound with irregular top, within slight scour extending approximately 23 m north and 9 m south. No corresponding MAG contacts. Interpreted as possible natural feature or non-ferrous debris.	-	7	0
70254	Magnetic	578572	6370316	A2	-	-	-	8	Identified in the 2021 MAG dataset as a small, broad asymmetric dipole with peak and trough on one profile line. No corresponding MBES or SSS contacts. Interpreted as possible ferrous debris either buried or with no surface expression.	-	7	0
70255	Magnetic	578807	6370182	A2	-	-	-	158	Identified in the 2021 MAG dataset as a large, sharp symmetric dipole with peak and trough on one profile line. No corresponding MBES or SSS contacts. Interpreted as possible ferrous debris either buried or with no surface expression.	-	8	0
70256	Magnetic	578894	6370132	A2	-	-	-	7	Identified in the 2021 MAG dataset as a small negative monopole with peak and trough on one profile line. No corresponding MBES or SSS contacts. Interpreted as possible ferrous debris either buried or with no surface expression.	-	8	0
70257	Magnetic	578921	6370003	A2	-	-	-	19	Identified in the 2021 MAG dataset as a small negative monopole with peak and trough on one profile line. No corresponding MBES or SSS contacts. Interpreted as possible ferrous debris either buried or with no surface expression.	-	8	0
70258	Magnetic	579242	6369830	A2	-	-	-	12	Identified in the 2021 MAG dataset as a small, broad asymmetric dipole with peak and trough on one profile line. Also visible on other profile lines. No corresponding MBES or SSS contacts. Interpreted as possible ferrous debris either buried or with no surface expression.	-	8	0
70259	Rope/chain	579336	6369756	A2	56.7	0.6	0.1	-	Identified in the 2021 SSS dataset as a distinct linear dark reflector with a slight shadow. The feature is situated in an area of seabed with mobile sediments. No corresponding MBES or MAG contacts. Interpreted as a non-ferrous rope or chain feature.	-	8	0
70260	Rope/chain	579407	6369873	A2	33.6	0.8	0.1	-	Identified in the 2021 SSS dataset as an indistinct, curvilinear dark reflector with a slight shadow, situated in an area of mobile sediments. No corresponding MBES contacts. This location was not directly covered by the 2021 or 2012 MAG datasets, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a rope or chain feature.	-	8	0
70261	Rope/chain	579611	6369611	A2	97.5	1.7	0.1	-	Identified in the 2021 SSS dataset as a distinct linear dark reflector with a slight shadow. No corresponding MBES or MAG contacts. Interpreted as a non-ferrous rope or chain feature.	-	9	0
70262	Mound	579871	6369237	A2	8.9	5.5	0.4	-	Identified in the 2021 MBES dataset as an elongate mound with relatively steep sloping sides, situated at the end of a large linear geological outcrop. The feature is orientated north east to south west and distinct to the surrounding seabed. No corresponding SSS contact. This location was not directly covered by the MAG datasets, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as possible natural feature or possible debris.	-	9	0
70263	Magnetic	580061	6369148	A2	-	-	-	7	Identified in the 2021 MAG dataset as a small, broad asymmetric dipole with peak and trough on one profile line. No corresponding MBES or SSS contacts. Interpreted as possible ferrous debris either buried or with no surface expression.	-	9	0
70264	Dark reflector	580081	6368753	A2	2.5	0.6	0.6	-	Identified in the 2012 SSS dataset as a distinct, slightly elongate dark reflector with a bright shadow. The feature is relatively isolated and situated close to an area of sand waves. No corresponding MBES contact. This location was not directly covered by the MAG datasets, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as possible natural feature or possible debris.	-	9	0

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70265	Magnetic	580598	6368410	A2	-	-	-	87	Identified in the 2021 MAG dataset as a medium, sharp asymmetric dipole with peak and trough on one profile line. No corresponding MBES or SSS contacts. Interpreted as possible ferrous debris either buried or with no surface expression.	-	10	0
70266	Magnetic	581221	6367813	A2	-	-	-	24	Identified in the 2021 MAG dataset as a small asymmetric dipole with peak and trough on one profile line. No corresponding MBES or SSS contacts. Interpreted as possible ferrous debris either buried or with no surface expression.	-	11	0
70267	Magnetic	581418	6367846	A2	-	-	-	42	Identified in the 2021 MAG dataset as a small positive monopole with peak and trough on one profile line. No corresponding MBES or SSS contacts. Interpreted as possible ferrous debris either buried or with no surface expression.	-	11	0
70268	Magnetic	582161	6367138	A2	-	-	-	73	Identified in the 2021 MAG dataset as a medium asymmetric dipole with peak and trough on two profile lines. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.		12	0
70269	Dark reflector	582206	6366777	A2	4.5	2.6	1.6	-	Identified in the 2021 and 2012 SSS dataset as a distinct and angular dark reflector with a large bright shadow and significant height. The feature has scouring orientated north to south measuring 12 m. Also identified in the MBES dataset as a rounded mound within depression 0.5 m deep, distinct from an otherwise featureless seabed. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as possible natural feature or possible debris.		12	0
70270	Magnetic	582755	6366283	A2	-	-	-	7	Identified in the 2021 MAG dataset as a small, asymmetric dipole with peak and trough on one profile line, situated within an area of high magnetic responses. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	13	0
70271	Mound	583034	6366269	A2	10.9	1.8	0.1	-	Identified in the 2021 MBES dataset as a elongate, straight mound with a rounded peak, distinct to the surrounding featureless seabed. No corresponding SSS or MAG contact, however this is situated within an area of high magnetic responses which may be masking any smaller anomalies in this area. Interpreted as a possible natural feature or possible debris.	-	13	0
70272	Magnetic	583206	6366112	A2	-	-	-	33	Identified in the 2021 MAG dataset as a small positive monopole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	14	0
70273	Rope/chain	583401	6365795	A2	13.7	0.3	0.1	-	Identified in the 2021 SSS dataset as a thin, slightly curvilinear dark reflector with variable shadow, situated on sand waves. No corresponding MBES or MAG contacts, however this is situated within an area of high magnetic responses which may be masking any smaller anomalies in this area. Interpreted as a possible length of rope or chain.	-	14	0
70274	Magnetic	583561	6365400	A2	-	-	-	32	Identified in the 2021 MAG dataset as a small, sharp asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	14	0
70275	Magnetic	583582	6365094	A2	-	-	-	34	Identified in the 2021 MAG dataset as a small asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	15	64.550376
70276	Seabed disturbance	583724	6365611	A2	21.7	8.2	-	-	Identified in the 2021 MBES dataset as an area of disturbed seabed comprising small, rounded depressions and mounds within sand waves. The features measure between approximately 1.5 m x 1.5 m x -0.1 m, and 1.3 m x 1.2 m x -0.1 m. No corresponding SSS or MAG contact, however this is situated within an area of high magnetic responses which may be masking any smaller anomalies in this area. Interpreted as a possible natural feature or possible debris.	-	14	0
70277	Dark reflector	583763	6366007	A2	1.3	1.1	0.2	-	Identified in the 2021 SSS dataset as a small subangular dark reflector with a bright shadow, situated 48 m south west of wreck **70278**. No corresponding MBES or MAG anomaly, however the large anomaly associated with wreck **70278** may be masking any smaller anomalies in this area. Interpreted as a possible natural feature or possible debris.	-	14	55.945507

ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	External references	Nearest KP	Distance to Marine Installation Corridor (m)
70278	Wreck	583806	6366053	A1	77.1	33.4	5.3	8159	Identified in the 2021 SSS dataset as a large wreck with distinct curvilinear dark reflectors that appear to be the hull outline and internally multiple thin, linear dark reflectors with shadows that are possibly surviving deck structure, suggesting the wreck is upright. The wreck appears distorted in the SSS data, is orientated approximately WNW to ESE and has multiple objects interpreted as debris surrounding it, suggesting it may be significantly broken up. The wreck is situated within an area of mobile sediments and the full extent of the wreck and its associated debris may be buried. This location was not directly covered by the MBES dataset. The wreck has a very large, sharp asymmetric dipole with peak and trough on multiple profile lines associated at its western edge, indicating it is likely ferrous. Associated with the location of an unknown, recorded wreck (UKHO 74769 and Canmore 324508), first reported in 2010. The wreck was recorded as being degraded and in two parts, partly buried in sand waves, with the bow lying WSW. The wreck had a strong magnetic anomaly associated and geophysical dimensions of 71 x 40 x 9.6 m. There are multiple associated debris fields surrounding the wreck (**70280-70284**).	UKHO 74769, Canmore 324508, WA 2001	14	110.119358
70279	Dark reflector	583817	6366136	A2	3.4	1.1	-	-	Identified in the 2021 SSS dataset as an angular dark reflector with no shadow, situated within mobile sediment. This location was not directly covered by the MAG or MBES datasets, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris, however the data appears distorted, and this may be a data artefact. It has been retained as a precaution due to its proximity to wreck **70278** situated 53 m south.	-	14	144.382839
70280	Debris field	583827	6366072	A1	42.0	17.9	0.8	-	Identified in the 2021 SSS dataset as an area of irregular, elongate dark reflectors with shadows. The feature is situated within an area of mobile sediment and its full extent may be buried; it is situated on the northern edge of wreck **70278**. This location was not directly covered by the MBES dataset. No corresponding MAG anomaly however the large anomaly associated with wreck **70278** may be masking any smaller anomalies in this area. Interpreted as a possible debris field associated with wreck **70278**.	-	14	135.604688
70281	Debris field	583852	6366041	A1	14.6	2.8	2.5	-	Identified in the 2021 SSS dataset as a series of angular dark reflectors with shadows and one longer curvilinear dark reflector with a bright shadow. The feature is situated within mobile sediments and its full extent may be buried; it is situated at the eastern edge of wreck **70278**. This location was not directly covered by the MBES dataset. No corresponding MAG anomaly however the large anomaly associated with wreck **70278** may be masking any smaller anomalies in this area. Interpreted as a possible debris field associated with wreck **70278**.	-	14	150.908828
70282	Debris	583858	6366027	A1	11.0	0.3	0.1	-	Identified in the 2021 SSS dataset as a distinct, linear dark reflector with short, but bright shadow. The feature is situated 14 m south east of wreck **70278** This location was not directly covered by the MBES dataset. No corresponding MAG anomaly however the large anomaly associated with wreck **70278** may be masking any smaller anomalies in this area. Interpreted as linear debris associated with wreck **70278**.	-	14	152.742305
70283	Debris field	583864	6366068	A1	18.9	6.3	0.3	-	Identified in the 2021 SSS dataset as a series of small dark reflectors with shadows and one larger dark reflector. The feature is situated within an area of mobile sediments and its full extent may be buried and located 16 m north of wreck **70278**. This location was not directly covered by the MBES dataset. No corresponding MAG anomaly however the large anomaly associated with wreck **70278** may be masking any smaller anomalies in this area. Interpreted as a possible debris field associated with wreck **70278**.	-	14	169.998559
70284	Debris field	583895	6366065	A1	5.6	5.5	-	-	Identified in the 2021 SSS dataset as an indistinct, but angular dark reflector situated in a depression measuring 6.8 x 5.3 m with some slight scour to the south east. The feature is situated at the edge of the data range and so the dimensions should be considered a minimum. The debris field is situated 37 m north east of wreck **70278**. This location was not directly covered by the MBES dataset. No corresponding MAG anomaly however the large anomaly associated with wreck **70278** may be masking any smaller anomalies in this area. Interpreted as a possible debris field associated with wreck **70278**.	-	14	198.913569
70285	Debris field	583906	6364629	A2	14.6	3.3	0.8	-	Identified in the 2021 SSS dataset as an irregular area of seabed comprising indistinct, subrounded dark reflectors with bright, irregular shadows, possibly suggesting uneven height. The feature is situated within an area of sand waves and has some associated scouring to the north and south. This location was not directly covered by the MBES or MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible debris field	-	15	104.937748

ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	External references	Nearest KP	Distance to Marine Installation Corridor (m)
70286	Debris field	583975	6364871	A2	77.6	0.9	0.3	45	Identified in the 2021 SSS dataset as a long thin and indistinct dark reflector with a shadow in places, with small, angular dark reflectors attached across its extent, measuring approximately 1.3 x 0.7 x 0.3 m, the feature curves back on itself. No corresponding MBES contact. Associated with a small positive monopole with peak and trough on one profile line at its southern end, indicating some ferrous material is present. Interpreted as a partially ferrous debris field and may be fishing gear however, this cannot be confirmed without visual inspection.	-	15	3.085548
70287	Magnetic	583998	6365393	A2	-	-	-	50	Identified in the 2021 MAG dataset as a medium asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	15	0
70288	Dark reflector	584009	6365493	A2	2.7	1.8	0.2	-	Identified in the 2021 SSS dataset as an angular dark reflector with a small shadow within a depression or scour measuring 3.4 x 1.1 m. The feature is situated on an uneven area of seabed. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. No corresponding MBES anomaly. Interpreted as a possible natural feature or possible debris.	-	15	0
70289	Dark reflector	584019	6365614	A2	3.4	1.7	0.2	-	Identified in the 2021 SSS dataset as an elongate, slightly curved dark reflector with an irregular shadow, situated close to an area of sand mega ripples. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. No corresponding MBES anomaly. Interpreted as a possible natural feature or possible debris.	-	15	105.486535
70290	Magnetic	584107	6365713	A2	-	-	-	7	Identified in the 2021 MAG dataset as a small, broad asymmetric dipole with peak and trough on one profile line. No corresponding SSS contact. This location was not covered by the MBES dataset. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	15	235.495631
70291	Rope/chain	584181	6365328	A2	64.0	0.7	0.2	-	Identified in the 2021 SSS dataset as a long, thin and slightly curved dark reflector with a shadow in places, situated with mobile sediments. The feature appears to have a small indistinct dark reflector with a shadow attached at its northern end and is orientated north to south on the seabed. The feature is faintly visible in the MBES dataset as a thin linear mound. No corresponding MAG contact, however, this is situated within an area of high magnetic responses which may be masking any smaller anomalies in this area. Interpreted as a possible length of rope or chain and may be a modern anthropogenic feature such as fishing gear; however, as this cannot be proven without further investigation, feature has been retained as a precaution.	-	15	0
70292	Magnetic	584288	6365047	A2	-	-	-	13	Identified in the 2021 MAG dataset as a small, broad asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	15	0
70293	Magnetic	584306	6364787	A2	-	-	-	9	Identified in the 2021 MAG dataset as a small, broad asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris either buried or with no surface expression.	-	15	0
70294	Magnetic	584416	6364961	A2	-	-	-	15	Identified in the 2021 MAG dataset as a small, broad asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	15	0
70295	Rope/chain	584486	6364436	A2	335.5	0.9	0.1	-	Identified in the 2021 SSS dataset as a long and thin dark reflector with a slight shadow in parts. The feature is orientated approximately north to south on the seabed, cross cutting sand waves and may be buried in places. No corresponding MBES or MAG anomaly. Interpreted as a length of rope or chain. Given the length of the feature, it may be more likely to be a modern feature such as a length of fishing gear or uncharted cable; however, as this cannot be confirmed without further investigation, the feature has been retained as a precaution.	-	16	0
70296	Magnetic	584558	6364459	A2	-	-	-	14	Identified in the 2021 MAG dataset as a small, broad asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris either buried or with no surface expression.	-	16	0
70297	Magnetic	584783	6364501	A2	-	-	-	25	Identified in the 2021 MAG dataset as a small negative monopole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	16	0
70298	Magnetic	585075	6363149	A2	-	-	-	43	Identified in the 2021 MAG dataset as a small asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris either buried or with no surface expression.	-	17	0

ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	External references	Nearest KP	Distance to Marine Installation Corridor (m)
70299	Dark reflector	585514	6360208	A2	2.9	0.7	0.3	-	Identified in the 2021 SSS dataset as an elongate dark reflector with an uneven, bright shadow, possibly suggesting uneven height. Situated within an area of sand waves and close to similar feature 62088 and may be related. This location was not directly covered by the MBES or MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	-	20	12.779874
70300	Dark reflector	585515	6360204	A2	5.6	0.5	0.3	-	Identified in the 2021 SSS dataset as an elongate dark reflector with an uneven, bright shadow, possibly suggesting uneven height. Situated within an area of sand waves and close to similar feature 62087 and may be related. This location was not directly covered by the MBES or MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	-	20	12.982032
70301	Recorded wreck	585516	6363341	A3	-	-	-	-	The position of a recorded wreck (UKHO 2258), *Mercator*, a steam ship that sunk in 1939 after being torpedoed by a submarine. The UKHO states that in 1975 a Decca pipeline survey possibly located a wreck at this position, however in a geophysical survey in 2010 the wreck was not located. The record has been amended to Dead, however as possible remains have been identified in the past and the position is not directly covered by either the 2012 or 2021 geophysical datasets, it has been retained in this gazetteer as a precaution as the location of a potential archaeological site. A 100 m AEZ would be recommended which encroaches on the study area and therefore this is has been retained as a precaution.	UKHO 2258, Canmore 101742, 101833	17	461.239278
70302	Dark reflector	585629	6360136	A2	2.2	1.4	0.5	-	Identified in the 2021 SSS dataset as a curvilinear dark reflector with rounded shadow, distinct from surrounding sand waves. The feature has some scouring on its northern edge. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. No corresponding MBES contact. Interpreted as a possible natural feature or possible debris.	-	20	0
70303	Dark reflector	585752	6360042	A2	3.4	0.9	0.5	-	Identified in the 2021 SSS dataset as an angular dark reflector with broad, pointed shadow. The feature is situated within an area of sand waves. Visible as a low-lying mound in the MBES dataset. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	-	20	0
70304	Magnetic	585796	6360751	A2	-	-	-	25	Identified in the 2021 MAG dataset as a small asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris either buried or with no surface expression.	-	20	0
70305	Magnetic	586159	6359334	A2	-	-	-	69	Identified in the 2021 MAG dataset as a medium, sharp asymmetric dipole with peak and trough on two profile lines. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	21	0
70306	Dark reflector	586193	6359740	A2	4.2	2.2	1.3	-	Identified in the 2021 SSS dataset as a distinct, angular dark reflector with broad tapered shadow and significant height, distinct from the surrounding sand waves. Also identified in the MBES dataset as a distinct, oval mound with scouring orientated north east to south west and measuring 31 x 11 x -0.6 m. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	-	21	1.448889
70307	Dark reflector	586245	6359224	A2	4.1	2.4	0.4	-	Identified in the 2021 SSS dataset as a distinct, angular dark reflector with long irregular shadow, the feature is situated within an area of sand waves. No corresponding MBES or MAG contact. Interpreted as a possible natural feature or possible non-ferrous debris.	-	21	0
70308	Dark reflector	586432	6357649	A2	2.0	2.0	1.0	-	Identified in the 2021 SSS dataset as a distinct dark reflector with long tapered shadow. The feature has significant height and scouring to the north east and south west, situated in a slight depression. This location was not directly covered by the MBES or MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	-	23	243.80131
70310	Debris	586577	6358658	A2	7.8	0.7	0.1	-	Identified in the 2021 SSS dataset as an elongate, thin and slightly curvilinear dark reflector with a bright shadow. Situated on an uneven area of seabed and located close to similar features **70311** and **70312** and may be related. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. No corresponding MBES anomaly. Interpreted as curvilinear debris.	-	22	0
70309	Magnetic	586584	6358041	A2	-	-	-	63	Identified in the 2021 MAG dataset as a medium negative monopole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	23	0

ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	External references	Nearest KP	Distance to Marine Installation Corridor (m)
70311	Dark reflector	586584	6358660	A2	3.6	0.7	0.1	-	Identified in the 2021 SSS dataset as an elongate narrow dark reflector with short shadow. The object is situated close to similar features **70310** and **70312** and may be related. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. No corresponding MBES anomaly. Interpreted as a possible natural feature or possible debris.	-	22	0
70312	Dark reflector	586587	6358658	A2	6.8	1.1	0.1	-	Identified in the 2021 SSS dataset as an irregular, elongate dark reflector with an uneven shadow, possibly suggesting uneven height. Situated on an uneven area of seabed and located close to similar features **70310** and **70311** and may be related. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. No corresponding MBES anomaly. Interpreted as a possible natural feature or possible debris.	-	22	0
70313	Dark reflector	586736	6357521	A2	3.7	1.3	0.4	-	Identified in the 2021 SSS dataset as a rounded dark reflector with broad, bright shadow. The feature is situated within an area of sand waves. No corresponding MBES or MAG contact. Interpreted as a possible natural feature or possible non-ferrous debris.	-	23	68.676262
70314	Magnetic	586926	6357414	A2	-	-	-	31	Identified in the 2021 MAG dataset as a small asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	23	0
70315	Dark reflector	587354	6357427	A2	3.0	1.6	0.5	-	Identified in the 2021 SSS dataset as an angular dark reflector with long tapered shadow, the feature is situated within sand waves and slightly anomalous to the surrounding seabed. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. No corresponding MBES contact. Interpreted as a possible natural feature or possible debris.	-	24	0
70316	Debris	588119	6356058	A1	2.4	1.7	0.7	-	Identified in the 2021 SSS dataset as a small, angular dark reflector with long and tapered shadow. The feature is situated on the north western edge of wreck **70317** and is likely to be parted structure. No corresponding MBES or MAG contact, however this is situated within an area of high magnetic responses which may be masking any smaller anomalies in this area. Interpreted as possible debris associated with wreck **70317**	-	25	0
70317	Wreck	588121	6356046	A1	43.6	8.0	5.5	272	Identified in the 2021 SSS dataset as a distinct, elliptical dark reflector hull outline that appears to be relatively intact. Multiple internal slatted and rounded dark reflectors are visible interpreted as deck structure, which suggests that the wreck is upright on the seabed. The wreck has significant height and is orientated north east to south west on the seabed. Also identified in the MBES dataset as an intact wreck, with steeply sloping sides and an uneven peak. The wreck has a mounded feature at its south west end that may be the single boiler, there is also a collapsed area on its north eastern edge, that may be impact related. The wreck has significant scouring visible to the north east and south west measuring over 200 m (approximately 0.6 m depth) and is situated within sand waves. Associated with a large asymmetric dipole with peak and trough on multiple profile lines, indicating some ferrous material is present. The wreck is associated with a UKHO and Canmore record (2247 and 101745) for *Adventure*, a single boiler fishing vessel built in 1906, with build dimensions of 33.6 x 6.6 x 3.5 m, the wreck was sunk in 1922 after a collision with a mine. The wreck was last surveyed in 2010 where it was recorded as being intact and upright on the seabed with dimensions of 40 x 9.0 x 5.4 m, with the bow likely situated to the north east and a poor magnetic anomaly. The larger geophysical dimensions recorded may suggest that the wreck has degraded and collapsed since the last survey.	UKHO 2247, Canmore 101745, WA 2002	25	0
70318	Debris	588121	6356078	A1	1.6	1.0	0.2	-	Identified in the 2021 SSS dataset as a small rounded dark reflector with broad round-ended shadow. The feature is situated 11 m north west of wreck **70317** and may be associated debris. No corresponding MBES or MAG contact, however this is situated within an area of high magnetic responses which may be masking any smaller anomalies in this area. Interpreted as possible debris associated with wreck **70317**	-	25	0
70319	Debris	588126	6356065	A1	2.3	0.9	0.5	-	Identified in the 2021 SSS dataset as an elongate dark reflector with broad shadow, distinct from surrounding seabed. The feature is situated on the north western edge of wreck **70317** and is likely to be parted structure. No corresponding MBES or MAG contact, however this is situated within an area of high magnetic responses which may be masking any smaller anomalies in this area. Interpreted as possible debris associated with wreck **70317**	-	25	0
70320	Debris field	588130	6356119	A1	34.9	15.9	0.9	-	Identified in the 2021 SSS dataset as a group of multiple dark reflectors with height, situated within large sand waves and the full extent of the feature may be buried. The debris field is situated 60 m north of wreck **70317** and is likely related. No corresponding MAG contact however, this is located within a large MAG anomaly associated with wreck **70317** and so any smaller anomalies may be masked. Visible as an irregular area of seabed within sand waves in the MBES dataset. Interpreted as a possible debris field associated with wreck **70317**.	-	25	0

ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	External references	Nearest KP	Distance to Marine Installation Corridor (m)
70321	Magnetic	588333	6355932	A2	-	-	-	20	Identified in the 2021 MAG dataset as a small, broad asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris either buried or with no surface expression.	-	25	0
70322	Dark reflector	588438	6355397	A2	1.7	0.6	0.3	-	Identified in the 2021 SSS dataset as a small, straight dark reflector with long narrow shadow, situated within an area of sand waves. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. No corresponding MBES contact. Interpreted as a possible natural feature or possible debris.	-	26	0
70323	Dark reflector	588724	6355362	A2	3.7	0.7	0.2	-	Identified in the 2021 SSS dataset as a distinct curvilinear dark reflector with a bright, variable shadow, situated in-between sand waves. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. No corresponding MBES anomaly. Interpreted as a possible natural feature or possible debris.	-	26	0
70324	Debris field	589222	6353933	A2	8.8	3.5	0.2	-	Identified in the 2021 SSS dataset as a small group of angular dark reflectors with irregular shadows, situated within large sand waves. The feature may be broken up or partially buried. This location was not directly covered by the MBES or MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible debris field.	-	28	97.746761
70325	Seabed Disturbance	589709	6353659	A2	10.4	6.0	0.3	-	Identified in the 2021 SSS dataset as a seabed disturbance comprising two indistinct curved dark reflectors with irregular shadows, situated within an area of sand waves. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. No corresponding MBES contact. Interpreted as a possible natural feature or possible debris.	-	28	0

Appendix E Scotland (beyond 12 NM): Seabed features of archaeological potential

ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	External references	Nearest KP	Distance to MIC (m)
70326	Magnetic	590444	6352796	A2	-	-	-	41	Identified in the MAG dataset as a small, broad asymmetric dipole with peak and trough on one profile line. No corresponding MBES or SSS contacts. Interpreted as possible ferrous debris either buried or with no surface expression.	-	29	0
70327	Magnetic	590692	6352156	A1	-	-	-	1350	Identified in the MAG dataset as a very large, sharp asymmetric dipole with peak and trough over three profile lines. Situated within a region with frequent, large sand waves. No corresponding MBES or SSS contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	30	0
70328	Dark reflector	592669	6348291	A2	6.0	1.5	1.6	-	Identified in the SSS dataset as a distinct straight dark reflector with a large, broad tapered shadow, situated in a depression with scouring to the north and south measuring 35 m long. The feature is distinct from the surrounding sand waves and possibly has another smaller subangular dark reflector within its shadow. This position was not directly covered by the MBES or MAG datasets, so it is not possible to ascertain whether ferrous material is present in this area. Interpreted as a possible natural feature or possible debris.	-	34	0
70329	Dark reflector	592859	6347853	A2	2.3	1.7	1.0	-	Identified in the SSS dataset as a distinct square shaped dark reflector with an angular shadow situated in an area of mobile sediments, with scour orientated to the south measuring 24 m in length. Faintly visible as a low-lying mound in the MBES dataset. This location was not directly covered by the MAG dataset so it is not possible to ascertain whether ferrous material is present in this area. Interpreted as a possible natural feature or possible debris.	-	35	0
70330	Dark reflector	593222	6347330	A2	1.1	0.5	0.2	-	Identified in the SSS dataset as a small sub-angular elongate dark reflector with broad irregular shadow, distinct from surrounding seabed. No corresponding MBES or MAG contacts. Interpreted as a possible natural feature or possible debris.	-	35	0
70331	Debris field	593425	6347080	A2	7.7	3.0	0.9	8	Identified in the SSS dataset as a small group of irregular indistinct dark reflectors. One object has a long broad triangular shadow and possibly small, angular objects within its shadow. The feature is situated within an area of mobile sediments. Also identified in the MBES dataset as a sub-angular elongate mound, distinct from surrounding seabed. May be related to debris field 70332 situated 20 m south east. Associated with a small, broad asymmetric dipole with peak and trough on one profile line, indicating some ferrous material is present. Interpreted as a possible partially ferrous debris field.	-	36	0
70332	Debris field	593446	6347074	A2	11.6	5.8	0.9	-	Identified in the SSS dataset as a group of sub-rounded and elongate dark reflectors with broad tapered shadows. The feature is situated within an area of mobile sediments. Also identified in the MBES dataset as a sub-angular elongate mound, distinct from the surrounding seabed. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Situated south east of debris field 70331 and may be related. Interpreted as a possible natural feature or possible debris.	-	36	0
70333	Dark reflector	593479	6346776	A2	5.5	0.6	0.4	-	Identified in the SSS dataset as a sub-angular elongate dark reflector with broad angular shadow suggesting varying height, distinct from surrounding seabed. No corresponding MBES or MAG contacts. Interpreted as a possible natural feature or possible non-ferrous debris.	-	36	0
70334	Magnetic	593826	6346237	A2	-	-	-	23	Identified in the MAG dataset as a small, broad positive monopole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	37	0
70335	Magnetic	594117	6345735	A2	-	-	-	17	Identified in the MAG dataset as a small, broad asymmetric dipole with peak and trough over two profile lines. No corresponding MBES or SSS contacts, however it is situated within an area of sand waves. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris either buried or with little surface expression.	-	37	0
70336	Dark reflector	594819	6344123	A2	2.6	1.5	1.0	-	Identified in the SSS dataset as a slightly ovoid dark reflector with a long-tapered shadow and significant height. The feature is situated within a scour and is distinct from the surrounding seabed. No corresponding MBES contact. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	-	39	0
70337	Dark reflector	595638	6343274	A2	1.6	1.5	0.7	-	Identified in the SSS dataset as a small sub-rounded dark reflector with broad rounded shadow, the feature is distinct from surrounding mobile sediments. No corresponding MBES or MAG contacts. Retained as a precaution. Interpreted as a possible natural feature or possible non-ferrous debris.	-	40	0
70338	Dark reflector	595357	6343208	A2	3.2	0.5	0.3	-	Identified in the SSS dataset as an elongate dark reflector with long broad shadow, distinct from surrounding sand waves. Visible as a slight mound in the MBES dataset. No corresponding MAG contact. Interpreted as a possible natural feature or possible non-ferrous debris.	-	40	0

ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	External references	Nearest KP	Distance to MIC (m)
70339	Dark reflector	595432	6343144	A2	1.6	1.0	0.3	-	Identified in the SSS dataset as a small sub-rounded dark reflector with broad rounded shadow, distinct from surrounding sand waves. No corresponding MBES or MAG contacts. Interpreted as a possible natural feature or possible non-ferrous debris.	-	40	0
70340	Dark reflector	595840	6342220	A2	3.1	0.7	1.0	-	Identified in the SSS dataset as a distinct sub-angular dark reflector with a long-tapered shadow and significant height. There is a possible indistinct bright reflector measuring 5.0 x 0.6 m that may be an object attached, or part of a sand wave. No corresponding MBES contact. This location was not directly covered by the MAG dataset so it is not possible to ascertain whether ferrous material is present in this area. Retained as a precaution. Interpreted as a possible natural feature or possible debris.	-	41	0
70341	Magnetic	595912	6342199	A2	-	-	-	9	Identified in the MAG dataset as a small, broad negative monopole with peak and trough on one profile line. No corresponding MBES or SSS contacts. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris either buried or with little surface expression.	-	41	0
70342	Rope/chain	596446	6341148	A2	48.8	0.4	0.1	-	Identified in the SSS dataset as a long thin dark reflector with a short shadow. The feature is situated in an area of mobile sediments and is distinct in places but slightly intermittent so it may be partially buried. No corresponding MBES or MAG contacts. Interpreted as a non-ferrous rope or chain.	-	42	0
70343	Debris	596507	6341019	A2	5.2	1.0	0.4	-	Identified in the SSS dataset as a sub-angular dark reflector with a straight object attached and an uneven shadow, possibly suggesting uneven height. The feature is distinct to the surrounding sand waves. No corresponding MBES or MAG contacts. Interpreted as a possible item of non-ferrous debris.	-	42	0
70344	Dark reflector	596829	6340797	A2	3.9	1.2	0.7	-	Identified in the SSS dataset as an irregular sub-rounded dark reflector with large irregular shadow, somewhat distinct to the surrounding seabed. No corresponding MBES contact. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	-	43	0
70345	Magnetic	597136	6340244	A2	-	-	-	82	Identified in the MAG dataset as a medium, sharp asymmetric dipole with peak and trough on one profile line. No corresponding MBES or SSS contacts. Interpreted as possible ferrous debris either buried or with no surface expression.	-	43	0
70346	Dark reflector	597442	6339560	A2	3.4	0.4	0.4	-	Identified in the SSS dataset as an irregular sub-rounded dark reflector with long irregular shadow, distinct from the surrounding seabed. No corresponding MBES contact. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	-	44	0
70347	Magnetic	597511	6339511	A2	-	-	-	18	Identified in the MAG dataset as a small asymmetric dipole with peak and trough on one profile line. No corresponding MBES or SSS contacts. Interpreted as possible ferrous debris either buried or with no surface expression.	-	44	0
70348	Magnetic	598044	6338509	A2	-	-	-	15	Identified in the MAG dataset as a small, broad asymmetric dipole with peak and trough on one profile line. No corresponding MBES or SSS contacts, though this is situated within an area of sand waves. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris either buried or with little surface expression.	-	45	0
70349	Dark reflector	598038	6338105	A2	2.1	0.9	1.1	-	Identified in the SSS dataset as a subangular elongate dark reflector with long broad tapered shadow, somewhat distinct from surrounding seabed. No corresponding MBES or MAG contacts. Interpreted as a possible natural feature or possible non-ferrous debris.	-	46	0
70350	Magnetic	598306	6336850	A2	-	-	-	15	Identified in the MAG dataset as a small, broad symmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	47	121.006866
70351	Magnetic	599185	6335065	A2	-	-	-	38	Identified in the MAG dataset as a small asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	49	0
70352	Dark reflector	599648	6333990	A2	4.1	2.4	0.6	-	Identified in the SSS dataset as a sub-rounded to elongate dark reflector with a clear, tapered shadow. Some slight linear disturbances in the immediate vicinity. The object is located amongst small sand waves. No corresponding MBES contact. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as possible debris or possibly a natural feature.	-	50	84.156019
70353	Dark reflector	601239	6331845	A2	8.0	2.5	1.1	-	Identified in the SSS dataset as a rounded dark reflector with a straight object attached on one end, the feature has a large bright uneven shadow possibly suggesting uneven height and is situated within mobile sediments. No corresponding MBES contact. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris	-	53	0

ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	External references	Nearest KP	Distance to MIC (m)
70354	Magnetic	601411	6331617	A2	-	-	-	21	Identified in the MAG dataset as a small, broad asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris that is either buried with no surface expression.	-	53	0
70355	Magnetic	601628	6331260	A2	-	-	-	24	Identified in the MAG dataset as a small asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	53	0
70356	Dark reflector	602294	6329903	A2	4.9	1.6	0.6	-	Identified in the SSS dataset as a relatively large, angular dark reflector with a bright tapered shadow. No corresponding MBES or MAG contacts. Interpreted as a possible natural feature or possible non-ferrous debris.	-	55	0
70357	Dark reflector	602923	6328529	A2	6.7	5.9	0.2	-	Identified in the SSS dataset as an indistinct but irregularly shaped dark reflector with a very small shadow which is isolated on the seabed. Also identified in the MBES dataset as a sub-rounded irregular mound. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as possible natural feature or possible debris.	-	56	0
70358	Bright reflector	603055	6328565	A2	4.1	1.4	0.0	-	Identified in the SSS dataset as a slightly right-angled bright reflector situated with sand waves, the feature is anomalous to the surrounding seabed. No corresponding MBES or MAG contacts. Interpreted as possible natural feature or possible non-ferrous debris.	-	57	0
70359	Magnetic	603132	6327738	A2	-	-	-	11	Identified in the MAG dataset as a small, broad asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris that is either buried or with no surface expression.	-	57	0
70360	Magnetic	603356	6326976	A2	-	-	-	31	Identified in the MAG dataset as a small asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris either buried or with no surface expression.	-	58	0
70361	Magnetic	604138	6326099	A2	-	-	-	9	Identified in the MAG dataset as a small, broad asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris either buried or with no surface expression.	-	59	49.508561
70362	Debris	603981	6325865	A2	3.5	0.2	0.1	10	Identified in the SSS dataset as an elongate dark reflector with a short shadow, the feature is situated within mobile sediments and appears slightly disjointed. No corresponding MBES contact. Possibly associated with a small, broad symmetrical dipole with a peak and trough on one profile line, indicating some ferrous material is present. Interpreted as possible ferrous debris.	-	59	0
70363	Dark reflector	603987	6325861	A2	5.5	0.9	0.1	-	Identified in the SSS dataset as an elongate dark reflector with a short shadow, situated within mobile sediments and may be broken up or more than one object, close to similar anomalies. No corresponding MBES or MAG contacts. Interpreted as a possible natural feature or possible non-ferrous debris.	-	59	0
70364	Dark reflector	603989	6325858	A2	2.5	1.1	0.0	-	Identified in the SSS dataset as an elongate dark reflector with a short shadow, situated within mobile sediments and may be broken up or more than one object, close to similar anomalies. No corresponding MBES or MAG contacts. Interpreted as a possible natural feature or possible non-ferrous debris.	-	59	0
70365	Dark reflector	604005	6325817	A2	2.4	1.1	0.8	-	Identified in the SSS dataset as a distinct angular dark reflector with a shadow, situated in a large depression measuring approximately 16.5 x 6.0 m and within mobile sediments. Also identified in the MBES dataset as an irregular elongate mound with a rounded depression on its south side, distinct from surrounding sand forms. No corresponding MAG contact. Interpreted as a possible natural feature or possible non-ferrous debris.	-	59	0
70366	Magnetic	604019	6325776	A2	-	-	-	21	Identified in the MAG dataset as a small symmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris either buried or with no surface expression.	-	60	0
70367	Magnetic	604115	6323935	A2	-	-	-	15	Identified in the MAG dataset as a small asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris either buried or with no surface expression.	-	61	0
70368	Dark reflector	604121	6323600	A2	4.5	1.1	0.3	-	Identified in the SSS dataset as an angular dark reflector with an irregular shadow, isolated on an otherwise featureless seabed. No corresponding MBES contact. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as possible natural feature or possible debris.	-	62	0
70369	Magnetic	604797	6319211	A2	-			24	Identified in the MAG dataset as a small negative monopole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris either buried or with no surface expression.		66	0

ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	External references	Nearest KP	Distance to MIC (m)
70370	Dark reflector	604754	6318666	A2	2.5	2.4	1.5	-	Identified in the SSS dataset as an elliptical dark reflector with a clear, tapered but slightly asymmetric shadow. Also identified in the MBES dataset as an angular mound with steep slope on the south and shallow slope on the north side, highly distinct from the surrounding seabed. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as possible natural feature or possible debris.	-	67	0
70371	Magnetic	605190	6315814	A2	-	-	-	34	Identified in the MAG dataset as a small asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris either buried or with no surface expression.	-	70	0
70372	Dark reflector	605245	6315735	A2	6.1	2.5	0.6	-	Identified in the SSS datasets as a distinct angular and elongate dark reflector with some slight internal texture and with a bright, tapered shadow. Also identified in the MBES dataset as a small sub-rounded mound, somewhat distinct from the surrounding seabed. No corresponding MAG contact. Interpreted as a possible natural feature or possible non-ferrous debris.	-	70	0
70373	Magnetic	605282	6315584	A2	-	-	-	12	Identified in the MAG dataset as a small, broad asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris either buried or with little surface expression.	-	70	0
70374	Seabed disturbance	605414	6315312	A2	13.7	7.4	0.0	-	Identified in the SSS dataset as a slightly textured, compact area of linear and curved features located within an area of mobile sediments. No corresponding MBES contact. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or may contain possible debris.	-	70	0
70375	Magnetic	605336	6315214	A2	-	-	-	21	Identified in the MAG dataset as a small negative monopole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris either buried or with no surface expression.	-	70	0
70376	Rope/chain	605580	6314971	A2	178.0	0.3	0.1	-	Identified in the SSS dataset as a long, thin and slightly curvilinear dark reflector with a slight shadow. The feature is orientated NNE to SSW and appears intermittent; it is situated in mobile sediments and may be partially buried. No corresponding MBES contact. This location was only partially covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present across its entire extents. Interpreted as a possible length of rope or chain.	-	71	0
70377	Magnetic	605445	6314018	A2	-	-	-	9	Identified in the MAG dataset as a small, broad asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris either buried or with little surface expression.	-	71	0
70378	Dark reflector	605827	6311928	A2	3.4	1.9	0.4	-	Identified in the SSS dataset as a sub-rounded dark reflector with an uneven shadow, possibly suggesting uneven height. Also identified in the MBES dataset as a small sub-rounded mound within a slight depression. The feature is distinct from the surrounding sand waves and isolated on the seabed. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	-	74	0
70379	Magnetic	605745	6311588	A2	-	-	-	7	Identified in the MAG dataset as small, broad asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris either buried or with no surface expression.	-	74	0
70380	Dark reflector	605879	6310259	A2	2.8	0.7	0.2	-	Identified in the SSS dataset as a distinct elongate dark reflector with a shadow situated in a depression. No corresponding MBES contact. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	-	75	0
70381	Dark reflector	606017	6310030	A2	6.0	0.8	0.2	-	Identified in the SSS dataset as an elongate dark reflector with a short, tapered shadow only at one end. This feature may comprise multiple objects. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	-	75	0
70382	Dark reflector	606354	6308823	A2	4.5	2.4	0.1	-	Identified in the SSS dataset as a distinct angular dark reflector with a bright, uneven shadow possibly suggesting uneven height. The feature is situated in a depression within mobile sediments. No corresponding MBES or MAG contacts. Interpreted as a possible natural feature or possible non-ferrous debris.	-	77	0
70383	Debris field	606255	6308703	A2	8.3	7.6	0.1	-	Identified in the SSS dataset as a group of distinct dark reflectors comprising a thick, curvilinear dark reflector with a bright shadow and smaller linear objects aligned at right angles. The feature is situated on an uneven area of seabed within large mobile sediments. No corresponding MBES or MAG contacts. Interpreted as a possible non-ferrous debris field.	-	77	0

ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	External references	Nearest KP	Distance to MIC (m)
70384	Rope/chain	606258	6308274	A2	59.5	1.3	0.0	13	Identified in the SSS dataset as a long and relatively straight linear dark reflector with no shadow, the feature is indistinct in places and may be partially buried by sand waves. Visible as a linear depression within sand waves in the MBES dataset, orientated north east to south west. Associated with a small negative monopole with peak and trough on one profile line, indicating some ferrous material is present. Interpreted as a possible length of partially ferrous rope or chain.	-	77	0
70385	Dark reflector	606536	6308107	A2	4.7	0.5	0.1	-	Identified in the SSS dataset as an elongate, curvilinear dark reflector with a short shadow, close to another dark reflector 70386 and may be related. The feature is situated in an area of mobile sediments. No corresponding MBES contact. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	-	77	0
70386	Dark reflector	606537	6308125	A2	1.1	0.5	0.1	-	Identified in the SSS dataset as a curvilinear dark reflector with a short shadow, close to another dark reflector 70385 and may be related. The feature is situated in an area of mobile sediments. No corresponding MBES contact. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	-	77	0
70387	Dark reflector	606671	6307946	A2	4.8	0.5	0.2	-	Identified in the SSS dataset as an elongate dark reflector with a short shadow. The feature is possibly made up of multiple objects and situated within an area of mobile sediments. No corresponding MBES contact. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	-	78	24.23243
70388	Dark reflector	606636	6307457	A2	1.5	0.5	0.7	-	Identified in the SSS dataset as an angular dark reflector with a large, bright shadow. The feature has slight scouring to the north and south and is situated in a depression. Visible as a depression within large sand waves in the MBES dataset. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	-	78	0
70389	Debris	606611	6307258	A2	5.0	0.5	0.1	-	Identified in the SSS dataset as a distinct curvilinear dark reflector with a short, bright shadow. The feature is situated within slight scour and 12 m south east of dark reflector 70390 and may be associated. No corresponding MBES contact. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as possible curvilinear debris.	-	78	0
70390	Dark reflector	606620	6307250	A2	2.8	0.7	0.1	-	Identified in the SSS dataset as a slightly elongate, indistinct dark reflector with a short shadow. The feature is situated 12 m north west of debris 70389 and may be associated. No corresponding MBES contact. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	-	78	0
70391	Dark reflector	606526	6306768	A2	7.2	2.7	0.6	-	Identified in the SSS dataset as an indistinct dark reflector with a large bright uneven shadow possibly suggesting uneven height. No corresponding MBES contact. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	-	79	0
70392	Debris field	606769	6305827	A2	7.9	7.3	0.1	-	Identified in the SSS dataset as a group of distinct dark reflectors comprising at least two thin curvilinear objects, almost circular in plan but disjointed, with two further thin elongate dark reflectors within. The objects have slight shadows and are situated within an area of mobile sediments. Visible as an uneven area of seabed within the MBES dataset. No corresponding MAG contacts. Interpreted as a possible non-ferrous debris field.	-	80	0
70393	Magnetic	607043	6305479	A2	-	-	-	29	Identified in the MAG dataset as a small positive monopole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Situated 110 m north west of wreck 70394 and may be associated. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	80	0

ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	External references	Nearest KP	Distance to MIC (m)
70394	Wreck	607131	6305403	A1	70.7	20.7	4.0	2490	Identified in the SSS dataset as a large wreck with distinct curvilinear dark reflectors that appear to be the hull outline. Visible internally are multiple thin, linear dark reflectors with shadows that are possibly surviving deck structure, suggesting the wreck is upright. The wreck has multiple objects interpreted as debris surrounding it, suggesting it may be broken up. The wreck is situated within an area of mobile sediments and the outer extents of the wreck, and its associated debris may be buried. Also identified in the MBES dataset as a distinct, generally compact, elliptical mound aligned north east to south west. Upstanding mounds are visible at each end; pointed and angular at the north eastern end which may be the bow, and a large subrounded object at the south western end, which may be broken structure. Two, possibly three, very tall and generally angular mounds are located at the centre which are interpreted as funnels or boilers, with some further internal linear and irregular mounds visible, especially around the centre. The south western edge appears flatter with fewer mounds which may indicate possible damage to the hull. There is some scour visible surrounding each end of the structure and along the eastern edge, which flares towards the south east. Some sediment build-up is visible along the north western side which may be burying some of the wreck or associated debris Some small mounds visible in the surrounding area may represent possible associated debris. The wreck is associated with a very large, sharp, asymmetric dipole on multiple profile lines in the MAG dataset. Associated with the location of an unknown, recorded wreck (UKHO 73633 and Canmore 324447) which is reported as being upright and intact with the bow to the north east and scouring at the bow and stern. The wreck was last surveyed in 2010 and had geophysical dimensions of 66 x 20 x 5.0 m. The lower height measurement recorded in the 2021 data may indicate the wreck has degraded slightly and there are multiple associated items of debris surrounding the wreck.	UKHO 73633, Canmore 324447, WA 2003	80	53.582449
70395	Debris	607151	6305410	A1	2.4	1.4	0.1		Identified in the MBES dataset as a small elongate mound within a slight scour. Located approximately 5 m east of wreck 70394 and may be associated debris. No corresponding SSS contact. No corresponding MAG anomaly but the large anomaly associated with wreck 70394 may be masking any smaller anomalies in this area. This position is situated outside of the Study Area however an AEZ will bring it within, and it has been retained in this gazetteer. Interpreted as debris associated with wreck 70394.	-	80	74.46991
70396	Debris	607109	6305392	A1	6.9	0.6	0.1	-	Identified in the SSS dataset as a distinct thin linear dark reflector with a bright shadow situated directly on the northern edge of wreck 70394. No corresponding MBES contact. No corresponding MAG anomaly but the large anomaly associated with wreck 70394 may be masking any smaller anomalies in this area. Interpreted as debris associated with wreck 70394.	-	80	30.05576
70397	Debris	607094	6305409	A1	1.7	1.6	0.7	-	Identified in the SSS dataset as a distinct angular dark reflector with a bright shadow. Also identified in the MBES dataset as a small elongate mound, possibly two adjacent rounded mounds, within a slight scour. Located approximately 24 m north west of wreck 70394. No corresponding MAG anomaly but the large anomaly associated with wreck 70394 may be masking any smaller anomalies in this area. Interpreted as debris associated with wreck 70394.	-	80	18.101747
70398	Rope/chain	607086	6305392	A2	48.7	1.2	0.1	-	Identified in the SSS dataset as a long, thin and intermittent dark reflector with a shadow in parts. The feature has some indistinct dark and bright reflectors attached along its length and its southern end appears to be attached to wreck 70394. No corresponding MBES contact. No corresponding MAG anomaly but the large anomaly associated with wreck 70394 may be masking any smaller anomalies in this area. Interpreted as a length of rope or chain that may be modern and snagged on 70394 or may be associated.	-	80	7.378022
70399	Debris	607120	6305368	A1	2.5	2.0	0.1	-	Identified in the MBES dataset as a slight, small elongate mound, located approximately 14 m south of wreck 70394. No corresponding SSS contact. No corresponding MAG anomaly but the large anomaly associated with wreck 70394 may be masking any smaller anomalies in this area. Interpreted as debris associated with wreck 70394.	-	80	36.002965
70400	Debris	607140	6305435	A1	3.7	2.3	0.1	-	Identified in the MBES dataset as a small elongate mound with an irregular peak and possibly within a slight scour. The feature is located 4 m from the north west side of the north east end of wreck 70394. No corresponding SSS contact. No corresponding MAG anomaly but the large anomaly associated with wreck 70394 may be masking any smaller anomalies in this area. This position is situated outside of the Study Area however an AEZ will bring it within, and it has been retained in this gazetteer. Interpreted as debris associated with wreck 70394.	-	80	67.794353
70401	Debris	607142	6305388	A1	2.0	0.9	0.6	-	Identified in the SSS dataset as a distinct rounded dark reflector with large bright shadow; the object is possibly broken up. No corresponding MBES contact. No corresponding MAG anomaly but the large anomaly associated with wreck 70394 may be masking any smaller anomalies in this area. This position is situated outside of the Study Area however an AEZ will bring it within, and it has been retained in this gazetteer. Interpreted as debris associated with wreck 70394.	-	80	61.741692

ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	External references	Nearest KP	Distance to MIC (m)
70402	Debris	607123	6305363	A1	1.0	0.6	0.3	-	Identified in the SSS dataset as a small but distinct rounded dark reflector with a bright tapered shadow. The feature is situated 17 m south of the south west end of wreck 70394 and may be associated. No corresponding MBES contact. No corresponding MAG anomaly but the large anomaly associated with wreck 70394 may be masking any smaller anomalies in this area. Interpreted as debris associated with wreck 70394.	-	80	37.875222
70403	Rope/chain	606914	6304756	A2	35.6	0.9	0.2	-	Identified in the SSS dataset as a long thin and slightly curvilinear dark reflector with a slight shadow, the feature is indistinct in places. No corresponding MBES or MAG contacts. Interpreted as a possible length of non-ferrous rope or chain.	-	81	0
70404	Dark reflector	606983	6304539	A2	3.9	2.3	0.2	-	Identified in the SSS dataset as an elongate dark reflector, indistinct in the centre and with a short, rounded shadow more distinct at its western edge. Also identified in the MBES dataset as a sub-rounded mound within a slight depression and situated within an area of large sand waves. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	-	81	0
70405	Debris field	607033	6304241	A2	22.5	15.6	0.1	-	Identified in the SSS dataset as a group of multiple distinct, curvilinear dark reflectors that appear to be attached to one another but intermittent; some objects have short bright shadows. The largest object measures 6.0 x 0.5 m and the feature is situated within an area of mobile sediments so the outer extents of the feature may be buried. This is situated 10 m north west of possible rope or chain 70406 and may be related. No corresponding MBES contact. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible debris field.	-	81	0
70406	Rope/chain	607052	6304225	A2	19.1	0.5	0.1	-	Identified in the SSS dataset as a long, curvilinear dark reflector with a bright shadow. The feature appears to be intermittent and may be broken up or partially buried by mobile sediments. This is situated 10 m south east of debris field 70405 and may be related. No corresponding MBES contact. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible length of rope or chain.	--	81	0
70407	Dark reflector	607316	6304117	A2	6.9	1.0	0.1	-	Identified in the SSS dataset as an irregular, elongate dark reflector with a dull shadow situated within an area of mobile sediments. Situated 10 m NNE of dark reflector 70408 and may be related. No corresponding MBES contact. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	-	82	0
70408	Dark reflector	607314	6304107	A2	5.1	0.6	0.1	-	Identified in the SSS dataset as an elongate dark reflector with a dull shadow situated within an area of mobile sediments. Situated 10 m SSW of dark reflector 70407 and may be related. No corresponding MBES contact. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	-	82	0
70409	Debris field	607341	6302968	A2	31.8	7.1	0.2	-	Identified from the SSS dataset as a group of distinct dark reflectors comprising long, thin, curvilinear objects and multiple angular dark reflectors with shadows at either end of the curvilinear feature which may be broken up or partially buried. The feature is situated within an area of mobile sediments. No corresponding MBES contact. This location is not covered by the MAG dataset so it cannot be ascertained if there is ferrous material at this location. Interpreted as a possible debris field.	-	83	0
70410	Dark reflector	607398	6302952	A2	3.8	0.1	0.1	-	Identified in the SSS dataset as an indistinct, thin elongate dark reflector with a slight shadow. The feature is anomalous to the surrounding seabed. No corresponding MBES or MAG contacts. Interpreted as a possible natural feature or possible non-ferrous debris.	-	83	0
70411	Magnetic	607516	6302247	A2	-	-	-	8	Identified in the MAG dataset as a small, broad asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris either buried or with little surface expression.	-	83	0
70412	Magnetic	607710	6301954	A2	-	-	-	9	Identified in the MAG dataset as a small, broad asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	84	0
70413	Dark reflector	607785	6301756	A2	4.1	0.7	0.1	-	Identified in the SSS dataset as an elongate dark reflector with a slight shadow situated within an area of mobile sediments. No corresponding MBES contacts. This location is not covered by the MAG dataset so it cannot be ascertained if there is ferrous material at this location. Interpreted as a possible natural feature or possible debris.	-	84	0
70414	Dark reflector	607747	6301748	A2	5.6	1.9	0.5	-	Identified in the SSS dataset as a distinct curvilinear dark reflector with a tapered shadow. Also identified in the MBES dataset as a sub-rounded mound situated within large sand waves. No corresponding MAG contact. Interpreted as a possible natural feature or possible non-ferrous debris.	-	84	0

ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	External references	Nearest KP	Distance to MIC (m)
70415	Debris	607375	6300662	A2	8.5	0.2	0.1	-	Identified in the SSS dataset as a short, thin and slightly curved dark reflector with a bright shadow, situated in an area of mobile sediments and close to similar features (70416-8) that may be associated. No corresponding MBES contact. This location was not directly covered by the MAG datasets, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as possible debris.	-	85	212.08831
70416	Debris	607364	6300665	A2	8.1	0.9	0.1	-	Identified in the SSS dataset as a short, thin and slightly curved dark reflector with a bright shadow, situated in an area of mobile sediments and close to similar features (70415, 70417 and 70418) that may be associated. This location was not directly covered by the MAG datasets, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as possible debris.	-	85	222.202703
70417	Debris	607370	6300680	A2	5.7	0.3	0.1	-	Identified in the SSS dataset as a short, thin and slightly curved dark reflector with a small shadow, situated in an area of mobile sediments and close to similar features (70415, 70416 and 70418) that may be associated. No corresponding MBES contact. This location was not directly covered by the MAG datasets, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as possible debris.	-	85	213.160169
70418	Dark reflector	607364	6300678	A2	2.8	1.0	0.0	-	Identified in the SSS dataset as an indistinct, straight dark reflector with no shadow, situated in an area of mobile sediments and close to similar features (70415-7) that may be associated. No corresponding MBES contact. This location was not directly covered by the MAG datasets, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	-	85	219.447732
70419	Rope/chain	607192	6300572	A2	8.5	0.3	0.2	-	Identified in the SSS dataset as a short, thin and slightly curved dark reflector with a short shadow situated in an area of mobile sediments. No corresponding MBES or MAG contacts. Interpreted as a non-ferrous rope or chain feature.	-	85	410.004676
70420	Dark reflector	607122	6300463	A2	3.3	0.6	0.2	-	Identified in the SSS dataset as a slightly elongate dark reflector with a bright shadow, situated within an area of mobile sediments. No corresponding MBES contact. This location was not directly covered by the MAG datasets, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	-	85	501.514125
70421	Magnetic	607960	6299815	A2	-	-	-	10	Identified in the MAG dataset as a small negative monopole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris either buried or with no surface expression.	-	86	0
70422	Debris field	608326	6299860	A2	6.8	5.5	0.1	-	Identified in the SSS dataset as a group of distinct curvilinear dark reflectors with shadows. The feature is slightly coiled and situated within an area of mobile sediments. This location was not directly covered by the MBES or MAG datasets, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible debris field.	-	86	47.350968
70423	Debris	608230	6297814	A2	17.0	1.1	-	-	Identified in the SSS dataset as an indistinct curvilinear dark reflector with no shadow, the feature is situated within an area of mobile sediment and may be partially buried. No corresponding MBES contact. This location was not directly covered by the MAG datasets, however a small MAG anomaly (70424) is located 18 m to the south east and may be related. Interpreted as possible debris which may have some ferrous content.	-	88	0
70424	Magnetic	608249	6297799	A2	-	-	-	13	Identified in the SSS dataset as a small asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts, however an item of debris (70423) is located 18 m to the north west and may be related. Interpreted as possible ferrous debris either buried or with no surface expression.	-	88	0
70425	Seabed disturbance	608574	6297744	A2	11.3	0.3	0.1	-	Identified in the SSS dataset as an indistinct long curvilinear dark reflector and a slight shadow situated within sediment disturbance and within an area of mobile sediments. The dark reflector is more distinct at one end than the other and may be partially buried. No corresponding MBES contact. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as possible natural feature or possible debris.	-	88	0
70426	Seabed disturbance	608712	6297180	A2	7.6	6.2	0.1	-	Identified in the SSS dataset as an oval area of disturbed seabed comprising indistinct, thin curvilinear intermittent dark reflectors with shadows. The feature is situated within mobile sediments. No corresponding MBES contacts. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as possible natural feature or possible debris.	-	89	0
70427	Dark reflector	608598	6296906	A2	2.8	1.1	0.4	-	Identified in the SSS dataset as an indistinct, angular or slightly broken up dark reflector with a dull tapered shadow. The feature is situated in a large depression with scour to the north and south measuring 28 m. No corresponding MBES or MAG contacts. Interpreted as a possible natural feature or possible non-ferrous debris.	-	89	0

ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	External references	Nearest KP	Distance to MIC (m)
70428	Dark reflector	608951	6296355	A2	6.1	2.5	0.7	-	Identified in the SSS dataset as a distinct angular dark reflector with a long, bright uneven shadow, possibly suggesting uneven height. The feature is situated in a slight depression in mobile sediments, with scouring to the north and south measuring 27 m. Also identified in the MBES dataset as a sub-angular mound, distinct from the surrounding sand waves. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as possible natural feature or possible debris.	-	89	0
70429	Dark reflector	608876	6296106	A2	5.7	0.7	0.7	-	Identified in the SSS dataset as a distinct elongate and slightly curvilinear dark reflector with a bright uneven shadow, possibly suggesting uneven height. Isolated on an otherwise featureless seabed. Also identified in the MBES dataset as an elongate sub-rounded mound. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as possible natural feature or possible debris.	-	90	0
70430	Dark reflector	608840	6295409	A2	3.9	2.9	0.8	-	Identified in the SSS dataset as a distinct, angular to elongate dark reflector with a long bright tapered shadow. Also identified in the MBES dataset as a sub-angular mound within a slight depression, distinct from the surrounding seabed. No corresponding MAG contact. Interpreted as possible natural feature or possible non-ferrous debris.	-	90	0
70431	Rope/chain	609031	6294952	A2	28.4	0.5	0.1	-	Identified in the SSS dataset as a distinct long and curvilinear dark reflector with a short shadow, the feature appears to be coiled and may be related to a nearby item of debris (70432). No corresponding MBES contact. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible length of rope or chain.	-	91	0
70432	Debris	609038	6294941	A2	5.2	0.7	0.1	-	Identified in the SSS dataset as a distinct curvilinear dark reflector with a slight shadow, possibly related to nearby rope or chain 70431. No corresponding MBES contact. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible item of debris.	-	91	0
70433	Seabed disturbance	609290	6293941	A2	8.9	4.4	0.1	-	Identified in the SSS dataset as a indistinct group of approximately five dark reflectors with shadows, two elongate objects and smaller dark reflectors are visible, situated on an uneven area of seabed. No corresponding MBES contact. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as possible natural feature or area containing possible debris.	-	92	0
70434	Debris	609623	6293950	A2	10.7	0.4	0.1	-	Identified in the SSS dataset as a long thin and slightly curved dark reflector with a slight shadow situated within mobile sediments. This location was not directly covered by the MBES or MAG datasets, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as possible linear item of debris.	-	92	62.439899
70435	Debris field	609648	6293444	A2	7.7	5.5	0.1	-	Identified in the SSS dataset as a group of elongate dark reflectors with shadows situated within an area of mobile sediments. There are approximately eight objects, with the largest measuring 2.8 x 0.5 m. No corresponding MBES or MAG contacts. Interpreted as possible non-ferrous debris field.	-	92	0
70436	Magnetic	609288	6293297	A2	-	-	-	30	Identified in the MAG dataset as a small asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris either buried or with no surface expression.	-	93	0
70437	Magnetic	609616	6293313	A2	-	-	-	42	Identified in the MAG dataset as a small symmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris either buried or with no surface expression.	-	93	0
70438	Debris field	609225	6293154	A2	14.6	9.5	0.1	-	Identified in the SSS dataset as a group of indistinct curvilinear and angular dark reflectors with bright shadows, situated in an area of mobile sediments. No corresponding MBES contacts. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. One of a number of items of debris identified in this area, it is situated 110 m east of the position of a recorded wreck in the UKHO database (70441) that is not covered by the 2021 or 2012 geophysical datasets. There is potential that this feature may be associated with that wreck, however this cannot be confirmed without visual inspection. Interpreted as a possible debris field.	-	93	0
70439	Debris	609213	6293153	A2	10.1	0.6	0.1	-	Identified in the SSS dataset as a distinct, short linear dark reflector with a bright shadow. The feature is situated on an uneven area of seabed directly west of debris field 70438 and may be related. No corresponding MBES contact. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. One of a number of items of debris identified in this area, it is situated 100 m east of the position of a recorded wreck in the UKHO database (70441) that is not covered by the 2021 or 2012 geophysical datasets. There is potential that this may be associated with that wreck, however this cannot be confirmed without visual inspection. Interpreted as a possible item of debris.	-	93	7.148604

ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	External references	Nearest KP	Distance to MIC (m)
70440	Debris	609184	6293120	A2	8.5	0.5	0.1	-	Identified in the SSS dataset as a distinct short linear dark reflector with a bright shadow, situated on an uneven area of seabed. No corresponding MBES contact. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. One of a number of items of debris identified in this area, it is situated 70 m east of the position of a recorded wreck in the UKHO database (70441) that is not covered by the 2021 or 2012 geophysical datasets. There is potential that this may be associated, however this cannot be confirmed without visual inspection. Interpreted as a possible item of debris.	-	93	42.48331
70441	Recorded wreck	609117	6293115	A3	-	-	-	-	The recorded position of an unidentified wreck (UKHO 3170) described as being upright and collapsed with the bow to the north and slight scour at the stern. The wreck was last surveyed in 2008 when a moderate MAG anomaly was recorded along with geophysical dimensions of 78 x 13 x 7.7 m. The wreck was orientated 15 degrees on the seabed. This position is not directly covered by either the 2012 or 2021 geophysical datasets and is situated outside of the Study Area however an AEZ will bring it within, and this feature has been retained in this gazetteer.	UKHO 3170, WA 2004	93	109.021132
70442	Debris	609200	6293103	A2	9.6	0.8	0.1	-	Identified in the SSS dataset as a distinct slightly disjointed linear dark reflector with a bright shadow, situated on an uneven area of seabed. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. One of a number of items of debris identified in this area, it is situated 80 m east of the position of a recorded wreck in the UKHO database (70441) that is not covered by the 2021 or 2012 geophysical datasets. There is potential that this may be associated, however this cannot be confirmed without visual inspection. Interpreted as a possible item of debris.	-	93	30.449374
70443	Debris field	609252	6293126	A2	10.0	4.9	0.1	-	Identified in the SSS dataset as a group of indistinct elongate and curvilinear dark reflectors with bright shadows. The largest object measures 6.0 x 0.5 x 0.1 m. The feature is situated at the north western end of a linear item of debris (70444) and may be related. No corresponding MBES or MAG contacts. One of a number of items of debris identified in this area, it is situated 130 m east of the position of a recorded wreck in the UKHO database (70441) that is not covered by the 2021 or 2012 geophysical datasets. There is potential that this may be associated, however this cannot be confirmed without visual inspection. Interpreted as a possible non-ferrous debris field.	-	93	0
70444	Rope/chain	609300	6293080	A2	87.7	1.2	0.2	-	Identified in the SSS dataset as a distinct, though intermittent, linear arrangement of dark reflectors with short bright shadows orientated north west to south east on the seabed. The feature is situated within mobile sediments and is possibly broken up or partially buried across its extent. No corresponding MBES or MAG contacts, though the feature is only covered by a single MAG line. One of a number of items of debris identified in this area, it is situated 160 m east of the position of a recorded wreck in the UKHO database (70441) that is not covered by the 2021 or 2012 geophysical datasets. There is potential that this may be associated, however this cannot be confirmed without visual inspection. Interpreted as possible non-ferrous length of rope or chain.	-	93	0
70445	Magnetic	609417	6293026	A2	-	-	-	13	Identified in the MAG dataset as a small symmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris either buried or with no surface expression.	-	93	0
70446	Magnetic	609338	6292799	A2	-	-	-	14	Identified in the MAG dataset as a small, broad asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris either buried or with no surface expression.		93	0
70447	Debris field	609847	6291878	A2	14.0	7.8	0.2	-	Identified in the SSS dataset as a group of distinct dark reflectors, some of which have slight shadows. One right-angled object is visible and some curvilinear objects. The largest object measures 3.7 x 0.4 m. No corresponding MBES contact. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible debris field.	-	94	0
70448	Magnetic	610106	6290632	A2	-	-	-	27	Identified in the MAG dataset as a small asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris either buried or with no surface expression.	-	95	0
70449	Dark reflector	610106	6290124	A2	1.9	1.9	1.1	-	Identified in the SSS dataset as a distinct slightly angular dark reflector with a long bright shadow and significant height. The feature has scouring to the north and south measuring 32 m. Also identified in the MBES dataset as a sub-rounded mound within a depression, distinct from surrounding seabed. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as possible natural feature or possible debris.	-	96	0
70450	Magnetic	609794	6289728	A2	-	-	-	8	Identified in the MAG dataset as a small, broad asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or without surface expression.	-	96	0

ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	External references	Nearest KP	Distance to MIC (m)
70451	Seabed disturbance	609688	6289398	A2	14.6	8.1	0.1	-	Identified in the SSS dataset as an area of disturbed seabed containing indistinct straight and curvilinear dark reflectors, some with shadows and in slight depressions. The feature is slightly anomalous to the surrounding seabed. This location was not directly covered by the MBES or MAG datasets, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as possible natural feature or area containing possible debris.	-	96	54.706379
70452	Magnetic	609870	6288942	A2	-			11	Identified in the MAG dataset as a small, broad asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or without surface expression.	-	97	0
70453	Debris field	610039	6288431	A2	10.0	8.8	0.1	-	Identified in the SSS dataset as a group of curvilinear dark reflectors with short bright shadows making up a circular feature that may be broken up or partially buried. No corresponding MBES contact. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible debris field.	-	97	0
70454	Dark reflector	610091	6288116	A2	2.3	1.3	0.2	-	Identified in the SSS dataset as an irregularly shaped, slightly indistinct dark reflector with a tapered shadow, in a depression measuring 5.3 x 2.8 m. Visible as a mound in the MBES dataset. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as possible natural feature or possible debris.	-	98	0
70455	Debris	610313	6287918	A2	7.2	1.0	0.4	50	Identified in the SSS dataset as a distinct, short, linear dark reflector with a bright shadow. The feature is isolated on a relatively featureless area of seabed. No corresponding MBES contact. Associated with a medium asymmetric dipole with peak and trough on one profile line, indicating some ferrous material is present. Identified as possible ferrous debris.	-	98	0
70456	Magnetic	610024	6286018	A2	-	-	-	16	Identified in the MAG dataset as a small, broad asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris either buried or with little surface expression.	-	100	0
70457	Seabed disturbance	610260	6285819	A2	7.3	3.3	0.6	-	Identified in the SSS dataset as a group of indistinct dark reflectors with shadows, situated within scour or a depression. One object is right-angled with an uneven shadow, possibly suggesting uneven height. Also identified in the MBES dataset as a sub-angular mound, distinct from the surrounding sand waves. No corresponding MAG contacts. Interpreted as possible natural feature or possible non-ferrous debris.	-	100	0
70458	Magnetic	610170	6285537	A2	-	-	-	10	Identified in the MAG dataset as a small, broad asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or without surface expression.	-	100	0
70459	Dark reflector	610170	6284620	A2	5.9	4.0	0.7	-	Identified in the SSS dataset as an indistinct, irregularly shaped dark reflector with a bright tapered shadow. The feature has scouring oriented to the south measuring 28 m and is visible as an angular mound in the MBES dataset. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. However, there is a MAG anomaly (70460) situated 21 m west that may or may not be associated. Interpreted as possible natural feature or possible debris.	-	101	0
70460	Magnetic	610148	6284618	A2	-	-	-	27	Identified in the MAG dataset as a small asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or without surface expression.	-	101	0
70461	Magnetic	610149	6284591	A2	-	-	-	5	Identified in the MAG dataset as a small, broad asymmetric dipole with peak and trough on one profile line. May be associated with MAG anomaly 70460 situated 27 m north. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or without surface expression.	-	101	0
70462	Magnetic	610167	6282659	A2	-	-	-	10	Identified in the MAG dataset as a small, broad asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts, however a mound interpreted to be natural is situated 8 m south of this position. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris either buried or with little surface expression.	-	103	0
70463	Seabed disturbance	610346	6282493	A2	8.5	7.0	0.5	-	Identified in the SSS dataset as an area of disturbed seabed comprising an irregular dark reflector and very angular bright reflector directly adjacent, or possibly an irregular shadow but this is unclear. Visible as a small, pointed mound in the MBES dataset. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as possible natural feature or possible area containing debris.	-	103	0
70464	Dark reflector	610540	6280406	A2	5.8	3.4	0.8	-	Identified in the SSS dataset as a distinct angular dark reflector with a bright pointed shadow. Also identified in the MBES dataset as an elongate sub-rounded mound situated within a depression. This location was not directly covered by MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as possible natural feature or possible debris.	--	105	0

ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	External references	Nearest KP	Distance to MIC (m)
70465	Seabed disturbance	610825	6279417	A2	26.6	12.7	1.2	-	Identified in the SSS dataset as a group of indistinct dark reflectors with dull shadows, situated at the edge of the data range. This location was not directly covered by MBES or MAG datasets, so it is not possible to ascertain whether ferrous material is present at this location. Retained as a precaution. Interpreted as possible natural feature or area containing possible debris.	-	106	50.703629
70466	Magnetic	610652	6276987	A2	-	-	-	9	Identified in the MAG dataset as a small, broad asymmetric dipole with peak and trough on one profile line. No corresponding MBES or SSS contacts. Interpreted as a possible item of ferrous debris that is either buried or has no surface expression.	--	109	0
70467	Seabed disturbance	611055	6276856	A2	14.9	9.8	0.4	-	Identified in the SSS dataset as an area of disturbed seabed comprising indistinct rounded and elongate dark reflectors with bright reflectors that are anomalous to the surrounding seabed. This location was not directly covered by MBES or MAG datasets, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as possible natural feature or possibly contains debris.	-	109	164.863969
70468	Dark reflector	610790	6276712	A2	6.5	0.6	0.3	-	Identified in the SSS dataset as a distinct curvilinear dark reflector with a shadow of varying length, possibly suggesting uneven height. The feature may comprise multiple small dark reflectors aligned together or an intermittent feature. No corresponding MBES or MAG contacts. Interpreted as possible natural feature or possible non-ferrous debris.	-	109	0
70469	Rope/chain	611843	6268337	A2	36.9	0.3	0.1	-	Identified in the SSS dataset as a long, curvilinear dark reflector which deviates slightly at the northern edge, with a short shadow along its length. No corresponding MBES contact. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible length of rope or chain.	-	118	0
70470	Debris	611761	6265922	A2	6.9	0.3	0.2	-	Identified in the SSS dataset as a short linear dark reflector with a short shadow consistent in height along its length. This location was not directly covered by the MBES or MAG datasets, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible linear item of debris.	-	120	137.719547
70471	Magnetic	612332	6265157	A2	-	-	-	73	Identified in the MAG dataset as a medium, sharp asymmetric dipole with peak and trough on one profile line. One of a north-south line of three MAG anomalies, along with 70472 and 70473, that may be related. No corresponding MBES or SSS contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.		121	0
70472	Magnetic	612345	6265068	A2	-	-	-	89	Identified in the MAG dataset as a medium, sharp asymmetric dipole with peak and trough on one profile line. One of a north-south line of three MAG anomalies, along with 70471 and 70473, that may be related. No corresponding MBES or SSS contacts. Interpreted as possible item of ferrous debris that is either buried or with no surface expression.	--	121	0
70473	Magnetic	612353	6265014	A2	-	-	-	23	Identified in the MAG dataset as a small, broad asymmetric dipole with peak and trough on one profile line. One of a north-south line of three MAG anomalies, along with 70471 and 70472, that may be related. No corresponding MBES or SSS contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	121	0
70474	Magnetic	612260	6264734	A2	-	-	-	17	Identified in the MAG dataset as a small asymmetric dipole with peak and trough on one profile line. No corresponding MBES or SSS contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	121	0
70475	Dark reflector	613182	6259736	A2	2.1	0.8	0.5	-	Identified in the SSS dataset as a distinct angular dark reflector with a short shadow, the feature is situated in a depression measuring 10.3 x 6.3 m. Visible as a mound in the MBES dataset. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present here. Interpreted as a possible natural feature or possible debris.	-	126	0
70476	Dark reflector	612915	6259676	A2	0.5	0.4	0.0	-	Identified in the SSS dataset as a small but distinct dark reflector with no discernible shadow situated in a distinct depression measuring 9.4 x 6.8 m. No corresponding MBES contact. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present here. Retained as a precaution. Interpreted as a possible natural feature or possible debris.	-	126	0
70477	Dark reflector	612863	6259280	A2	3.8	0.4	0.7	-	Identified in the SSS dataset as an intermittent narrow elongate dark reflector with a large, rounded shadow, anomalous to the surrounding seabed. No corresponding MBES contact. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	-	127	0
70478	Magnetic	613076	6258832	A2	-	-	-	12	Identified in the MAG dataset as a small, broad asymmetric dipole with peak and trough on one profile line. Similar MAG anomaly 70479 situated 50 m to the south may be related. No corresponding MBES or SSS contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	127	0
70479	Magnetic	613083	6258780	A2	-	-	-	13	Identified in the MAG dataset as a small, broad asymmetric dipole with peak and trough on one profile line. Similar MAG anomaly 70478, situated 50 m to the north may be related. No corresponding MBES or SSS contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	127	0

ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	External references	Nearest KP	Distance to MIC (m)
70480	Dark reflector	612977	6258589	A2	0.5	0.5	0.0	-	Identified in the SSS dataset as a small but distinct dark reflector with no discernible shadow situated in a distinct depression measuring 4.1 x 3.2 m, the feature is anomalous for this area of seabed. No corresponding MBES contact. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Retained as a precaution. Interpreted as a possible natural feature or possible debris.	-	127	0
70481	Dark reflector	613193	6257012	A2	4.7	0.2	0.5	-	Identified in the SSS dataset as an indistinct curved dark reflector with a broad rounded shadow, distinct from the surrounding featureless seabed. No corresponding MBES contact. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Retained as a precaution. Interpreted as a possible natural feature or possible debris.	-	129	0
70482	Magnetic	613439	6256668	A2	-	-	-	43	Identified in the MAG dataset as a small, broad asymmetric dipole with peak and trough on one profile line, complex anomaly. No corresponding SSS or MBES contacts. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris either buried or with no surface expression.	-	129	0
70483	Magnetic	614313	6251098	A2	-	-	-	34	Identified in the MAG dataset as a small asymmetric dipole with peak and trough on one profile line. No corresponding MBES or SSS contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	135	0
70484	Magnetic	614770	6249374	A2	-	-	-	35	Identified in the MAG dataset as a small asymmetric dipole with peak and trough on one profile line. No corresponding MBES or SSS contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	137	0
70485	Magnetic	615054	6248242	A2	-	-	-	32	Identified in the MAG dataset as a small positive monopole with peak and trough on one profile line. No corresponding MBES or SSS contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	138	0
70486	Magnetic	615189	6247267	A2	-	-	-	14	Identified in the MAG dataset as a small asymmetric dipole with peak and trough on one profile line. No corresponding MBES or SSS contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	139	0
70487	Dark reflector	615434	6246256	A2	5.1	0.7	0.1	-	Identified in the SSS dataset as a short curvilinear feature dark reflector with a small dark reflector with shadow attached. The feature is isolated on an otherwise featureless seabed. No corresponding MBES or MAG contacts. Interpreted as a possible natural feature or possible non-ferrous debris.	-	140	0
70488	Dark reflector	615778	6244765	A2	5.5	2.5	0.4	-	Identified in the SSS dataset as an indistinct, slightly right-angled dark reflector with a wide, clear shadow. No corresponding MBES contact. This location was not directly covered by the MAG dataset so is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible non-ferrous debris.	-	142	0
70489	Dark reflector	615838	6244537	A2	8.4	2.2	0.3	-	Identified in the SSS dataset as a sub-angular, elongate dark reflector with a slightly irregular shadow. No corresponding MBES contact. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	-	142	0
70490	Dark reflector	615961	6244427	A2	5.7	3.9	0.6	-	Identified in the SSS dataset as a large, triangular dark reflector with rounded edges and a short, clear, slightly tapered shadow. Also identified in the MBES dataset as a sub-rounded mound, distinct from the surrounding seabed. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	-	142	0
70491	Magnetic	617556	6238707	A2	-	-	-	9	Identified in the MAG dataset as a small, broad symmetric dipole with peak and trough on one profile line. No corresponding MBES or SSS contacts. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris either buried or with no surface expression.	-	148	0

Appendix F England (beyond 12 NM): Seabed features of archaeological potential

ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	External references	Nearest KP	Distance to MIC (m)
70492	Debris	619119	6231933	A2	7.7	5.2	1.6	-	Identified in the SSS datasets as a large, irregularly shaped dark reflector which is indistinct in places and has a large irregular shadow implying uneven height, the feature has scour extending over 20 m to the south. Also identified in the MBES dataset as a sub-rounded mound within depression, distinct from surrounding seabed. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible item of debris.	-	155	0
70493	Dark reflector	619249	6231769	A2	2.9	0.4	0.2	-	Identified in the SSS dataset as a small elongate dark reflector with a short shadow, situated in an area with frequent natural features but appears slightly anomalous. No corresponding MBES or MAG contacts. Interpreted as a possible natural feature or possible non-ferrous debris.	-	155	0
70494	Dark reflector	620189	6229088	A2	1.1	0.3	1.1	-	Identified in the SSS dataset as a distinct angular dark reflector with a long-tapered shadow, adjacent to anomaly 70495 and may be related. No corresponding MBES contact. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Retained as a precaution. Interpreted as a possible natural feature or possible debris.	-	158	0
70495	Dark reflector	620191	6229085	A2	2.8	0.2	0.1	-	Identified in the SSS dataset as a slightly elongate dark reflector with a slight shadow, adjacent to anomaly 70494 and may be related. No corresponding MBES contact. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Retained as a precaution. Interpreted as a possible natural feature or possible debris.	-	158	0
70496	Magnetic	620487	6226852	A2	-	-	-	17	Identified in the MAG dataset as a small, broad asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris either buried or with no surface expression.	-	160	0
70497	Seabed disturbance	620902	6225470	A2	12.1	5	0.6	-	Identified in the SSS dataset as an indistinct and irregularly shaped dark reflector with a clear, forked shadow suggesting varying heights. The feature is situated within mobile sediments and may be partially buried. Also identified in the MBES dataset as a sub-rounded mound, distinct from surrounding seabed. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	-	162	0
70498	Rope/chain	621690	6222140	A2	13.8	0.2	0.1	-	Identified in the SSS dataset as an indistinct curvilinear dark reflector with a partial shadow across its length. Three smaller indistinct elongate dark reflectors are in close proximity (70499, 70500 and 70501) which may be related. No corresponding MBES contact. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible length of rope or chain.	-	165	0
70499	Dark reflector	621690	6222157	A2	7.2	1.2	0	-	Identified in the SSS dataset as an indistinct, elongate dark reflector with no shadow, may be related to nearby rope or chain feature 70498 and dark reflectors 70500 and 70501. No corresponding MBES contact. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	-	165	0
70500	Dark reflector	621695	6222159	A2	2.6	0.5	0	-	Identified in the SSS dataset as an indistinct, elongate dark reflector with no shadow, may be related to nearby rope or chain feature 70498 and dark reflectors 70499 and 70501. No corresponding MBES contact. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	-	165	0
70501	Dark reflector	621702	6222160	A2	5.7	1.1	0	-	Identified in the SSS dataset as an indistinct, elongate dark reflector with no shadow, may be related to nearby rope or chain feature 70498 and dark reflectors 70499 and 70500. No corresponding MBES contact. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	-	165	0
70502	Magnetic	622780	6217806	A2	-	-	-	19	Identified in the MAG dataset as a small symmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or without surface expression.	-	169	0
70503	Rope/chain	623264	6216373	A2	20.9	0.7	0.1	-	Identified in the SSS dataset as a long, thin and indistinct slightly curvilinear dark reflector with no shadow. No corresponding MBES contact. This location is not covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Retained as a precaution. Interpreted as a possible length of rope or chain.	-	171	0
70504	Dark reflector	623488	6213622	A2	1.2	0.4	0.2	-	Identified in the SSS dataset as a distinct, slightly elongate dark reflector with a bright uneven shadow. The object is isolated on a featureless seabed. No corresponding MBES or MAG contacts. Interpreted as a possible natural feature or possible non-ferrous debris.	-	174	0

ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	External references	Nearest KP	Distance to MIC (m)
70505	Dark reflector	623290	6212201	A2	5.8	1.7	0.5	-	Identified in the SSS dataset as an angular dark reflector with a bright, irregular shadow, possibly suggesting uneven height. The feature is wider at one end than the other. Also identified in the MBES dataset as a distinct sub-rounded mound. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	-	175	304.94784
70506	Dark reflector	624629	6207930	A2	3.7	2.1	1.5	-	Identified in the SSS dataset as a distinct, slightly right-angled dark reflector with a bright tapered shadow and significant height. Also identified in the MBES dataset as a sub-angular mound. No corresponding MAG contact. Interpreted as a possible natural feature or possible non-ferrous debris.	-	179	0
70507	Mound	624859	6206964	A2	2.5	1.9	1.1	-	Identified in the MBES dataset as angular conical feature, highly distinct from surrounding seabed. No corresponding SSS or MAG contacts. Interpreted as a possible natural feature or possible non-ferrous debris.	-	180	0
70508	Magnetic	624947	6206408	A2	-	-	-	17	Identified in the MAG dataset as a small, broad symmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris either buried or with no surface expression.	-	181	0
70509	Magnetic	624977	6206265	A2	-	-	-	27	Identified in the MAG dataset as a small, broad asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris either buried or with no surface expression.	-	181	0
70510	Magnetic	625656	6202507	A2	-	-	-	20	Identified in the MAG dataset as a small, broad asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris either buried or with no surface expression.	-	185	0
70511	Debris	626460	6199702	A2	8.6	0.9	0.2	-	Identified in the SSS dataset as an indistinct, elongate dark reflector with a bright uneven shadow, possibly suggesting uneven height. No corresponding MBES contact. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as possible debris.	-	188	0
70512	Dark reflector	626357	6199192	A2	2.9	0.6	0.4	-	Identified in the SSS dataset as a short and straight dark reflector with a bright shadow. No corresponding MBES contact. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	-	188	0
70513	Mound	626732	6199129	A2	26.2	7.2	0.3	-	Identified in the MBES dataset as a large oval mound, the feature is slightly distinct from the surrounding seabed. No corresponding SSS contact. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Retained as a precaution as this location was not directly covered by the 2021 MBES dataset. Interpreted as a possible natural feature or may be possible debris.	-	189	0
70514	Rope/chain	626575	6198867	A2	37.7	0.5	0.1	-	Identified in the SSS dataset as a sinuous, curvilinear dark reflector with a consistent short shadow. No corresponding MBES contact. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible length of rope or chain.	-	189	0
70515	Rope/chain	626969	6198077	A2	20.8	0.6	0.1	-	Identified in the SSS dataset as a slightly curvilinear dark reflector which is very indistinct but with a clear, short shadow. Slight offset at the northern end suggests it is in two parts. No corresponding MBES contact. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible length of rope or chain.	-	190	8.64598
70516	Magnetic	626959	6197701	A2	-	-	-	13	Identified in the MAG dataset as a small, broad asymmetric dipole with peak and trough on one profile line. No corresponding MBES or SSS contacts. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris either buried or with no surface expression.	-	190	0
70517	Magnetic	627131	6197018	A2	-	-	-	83	Identified in the MAG dataset as a medium, sharp asymmetric dipole with peak and trough on one profile line. No corresponding MBES or SSS contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	191	0
70518	Seabed disturbance	627023	6196474	A2	22.5	21	0.1	-	Identified in the SSS dataset as an indistinct group of dark and bright reflectors, a thin, curvilinear dark reflector with slight shadow is visible with a curvilinear bright reflector making up the outside of the feature and small thin dark reflectors are within. No corresponding MBES or MAG contacts. Interpreted as a possible natural feature or may contain possible non-ferrous debris.	-	191	0
70519	Debris	627321	6195307	A2	9.6	5.7	0.1	-	Identified in the SSS dataset as a linear dark reflector with a short shadow, that is situated in a depression. The object is right angled and anomalous to the surrounding featureless seabed. No corresponding MBES or MAG contacts. Interpreted as a possible item of non-ferrous debris.	-	192	69.844828
70520	Magnetic	627800	6194176	A2	-	-	-	8	Identified in the MAG dataset as a small, broad asymmetric dipole with peak and trough on one profile line. No corresponding MBES or SSS contacts. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris either buried or with little surface expression.	-	194	0

ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	External references	Nearest KP	Distance to MIC (m)
70521	Magnetic	628194	6192836	A2	-	-	-	105	Identified in the MAG dataset as a large positive monopole with peak and trough on one profile line. No corresponding MBES or SSS contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	195	57.986424
70522	Magnetic	628750	6192237	A2	-	-	-	37	Identified in the MAG dataset as a small asymmetric dipole with peak and trough on one profile line. No corresponding MBES or SSS contacts. Interpreted as a possible item of ferrous debris that is either buried or has no surface expression.	-	196	0
70523	Magnetic	628892	6191831	A2	-	-	-	82	Identified in the MAG dataset as a medium, sharp asymmetric dipole with peak and trough on one profile line. No corresponding MBES or SSS contacts. Interpreted as a possible item of ferrous debris that is either buried or has no surface expression.	-	196	0
70524	Magnetic	630333	6186930	A2	-	-	-	11	Identified in the MAG dataset as a small, broad positive monopole with peak and trough on one profile line. No corresponding MBES or SSS contacts. Interpreted as a possible item of ferrous debris that is either buried or has no surface expression.	-	201	0
70525	Magnetic	631090	6185427	A2	-	-	-	61	Identified in the MAG dataset as a medium asymmetric dipole with peak and trough on one profile line. May relate to anomaly 70526 situated 80 m south west. No corresponding MBES or SSS contacts. Interpreted as a possible item of ferrous debris that is either buried or has no surface expression.	-	203	0
70526	Magnetic	631026	6185376	A2	-	-	-	20	Identified in the MAG dataset as a small negative monopole with peak and trough on one profile line. May relate to anomaly 70525 situated 80 m north east. No corresponding MBES or SSS contacts. Interpreted as a possible item of ferrous debris that is either buried or has no surface expression.	-	203	0
70527	Dark reflector	631258	6185019	A2	9.9	0.4	0.1	-	Identified in the SSS dataset as a long, curvilinear dark reflector with a short, intermittent shadow. Possibly related to similar feature 70528 situated 12 m south east. No corresponding MBES or MAG contacts. Interpreted as a possible natural feature or possible debris.	-	203	0
70528	Dark reflector	631274	6185011	A2	7.4	0.4	0.1	-	Identified in the SSS dataset as a long, slightly indistinct, intermittent, curvilinear dark reflector with a short shadow. Possibly related to similar feature 70528 situated 12 m north west. No corresponding MBES contact. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	-	203	0
70529	Seabed disturbance	631926	6182447	A2	11.4	3.5	0.4	-	Identified in the SSS dataset as an area of disturbed seabed comprising indistinct elongate dark reflectors with a bright, clear shadow. The feature is anomalous for the surrounding featureless seabed. No corresponding MBES contact. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or area of possible debris.	-	206	0
70530	Magnetic	632119	6181795	A2	-	-	-	26	Identified in the MAG dataset as a small negative monopole with peak and trough on one profile line. No corresponding MBES or SSS contacts. Interpreted as a possible item of ferrous debris that is either buried or has no surface expression.	-	207	0
70531	Magnetic	632946	6180303	A2	-	-	-	19	Identified in the MAG dataset as a small negative monopole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	208	0
70532	Magnetic	633184	6179030	A2	-	-	-	44	Identified in the MAG dataset as a small asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	210	0
70533	Magnetic	633285	6178906	A2	-	-	-	14	Identified in the MAG dataset as a small, broad symmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	210	0
70534	Magnetic	633301	6178863	A2	-	-	-	13	Identified in the MAG dataset as a small, broad asymmetric dipole with peak and trough on one profile line. No corresponding MBES or SSS contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	210	0
70535	Dark reflector	633563	6178770	A2	4.7	2	0.8	-	Identified in the SSS dataset as a irregular dark reflector with a short, rounded shadow. Approximately 20 m from 70536 and may be related. Also identified in the MBES dataset as an elongate sub-angular prismatic mound, somewhat distinct from surrounding seabed. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	-	210	0
70536	Debris	633572	6178746	A2	3.6	1.7	1.9	9	Identified in the SSS dataset as a distinct, rounded dark reflector with a slightly irregular shadow and significant height. Approximately 20 m from dark reflector 70535 and may be related. Possibly associated with a small, broad asymmetric dipole with peak and trough on one profile line, indicating there may be some ferrous material present. Interpreted as a possible item of ferrous debris.	-	210	0
70537	Magnetic	633639	6178303	A2	-	-	-	59	Identified in the MAG dataset as a medium, sharp asymmetric dipole with peak and trough on one profile line. No corresponding MBES or SSS contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	210	0

ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	External references	Nearest KP	Distance to MIC (m)
70538	Magnetic	633655	6178259	A2	-	-	-	10	Identified in the MAG dataset as a small, broad asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Retained as a precaution due to proximity to 70537. May represent a natural feature or may represent possible ferrous debris either buried or with little surface expression.	-	211	0
70539	Magnetic	633784	6177876	A2	-	-	-	30	Identified in the MAG dataset as a small asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	211	0
70540	Mound	633984	6177368	A2	9.8	1.7	0.1	-	Identified in the MBES dataset as an elongate subangular mound, somewhat distinct from surrounding seabed. No corresponding SSS contact. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Retained as a precaution. Interpreted as a possible natural feature or possible debris.	-	211	0
70541	Magnetic	634104	6176564	A2	-	-	-	14	Identified in the MAG dataset as a small asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	212	0
70542	Debris	634296	6176452	A2	4.2	1.2	1.3	15	Identified in the SSS dataset as a distinct sub-angular dark reflector with a large, tapered shadow and significant height. The feature has some surrounding sediment disturbance. Visible as an uneven area of seabed in the MBES dataset. Associated with a small asymmetric dipole with peak and trough on one profile line, indicating some ferrous material is present. Interpreted as possible ferrous debris.	-	212	0
70543	Magnetic	634592	6175603	A2	-	-	-	56	Identified in the MAG dataset as a medium asymmetric dipole with peak and trough on one profile line. No corresponding MBES or SSS contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	213	0
70544	Dark reflector	634945	6175107	A2	2.9	2.6	0.9	-	Identified in the SSS dataset as a distinct, isolated square dark reflector with a short, tapered shadow. Also visible in the MBES dataset as a depression measuring 7.8 x 5.2 m with possible objects in its base, but this is unclear. No corresponding MAG contact. Interpreted as a possible natural feature or possible non-ferrous debris.	-	214	0
70545	Magnetic	634564	6175062	A2	-	-	-	48	Identified in the MAG dataset as a small, sharp asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	214	0
70546	Magnetic	634750	6175078	A2	-	-	-	26	Identified in the MAG dataset as a small asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts, though there is a mound in the vicinity of this position that may or may not be related. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris either buried or with little surface expression.	-	214	0
70547	Magnetic	635683	6172869	A2	-	-	-	7	Identified in the MAG dataset as a small, broad asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris either buried or with little surface expression.	-	216	0
70548	Mound	636549	6170659	A2	4.2	2.1	0.4	-	Identified in the MBES dataset as an irregularly shaped mound with uneven sides and a jagged peak. The eastern side of the feature appears more distinct and steeper and there is some encircling scour extending for 3.4 m and is 0.2 m deep. No corresponding SSS or MAG contacts. Retained as a precaution due to its anomalous form. Interpreted as a possible natural feature or may be possible non-ferrous debris.	-	219	0
70549	Magnetic	636723	6169592	A2	-	-	-	32	Identified in the MAG dataset as a small asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	220	0
70550	Dark reflector	637438	6168961	A2	5.1	1.4	1	-	Identified in the SSS dataset as a rounded dark reflector with a bright, tapered shadow and significant height, the feature has some surrounding disturbed seabed. Visible as an uneven area of seabed in the MBES dataset. No corresponding MAG contact. Interpreted as a possible natural feature or may be possible non-ferrous debris.	-	221	0
70551	Seabed disturbance	637609	6168297	A2	29.1	13.8	1.6	-	Identified in the SSS dataset as a cluster of distinct, rounded dark reflectors with bright, tapered shadows. The feature is situated within depressions and disturbed seabed. Also identified in the MBES dataset as a small rounded mound with evenly sloping sides and a pointed top situated within scour that extends for 1.6 m. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or may be possible debris.	-	221	0

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70552	Seabed disturbance	637689	6167652	A2	21.7	7.9	0.6	-	Identified in the SSS dataset as two indistinct dark reflectors with bright, straight shadows, one object measures 1.3 x 1.3 x 0.6 m and the other measures 2.3 x 1.1 x 0.3. These are situated within an area of disturbed seabed and are anomalous for the area. Also identified in the MBES dataset as an area of irregular seabed with two slight depressions, with a mound at the northern end, and a slightly raised mound between the two depressions. The largest depression measures 6.3 x 7.9 x -0.3 m and each has an uneven base which could indicate anomalies with little expression. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or may be possible debris.	-	222	0
70553	Magnetic	637563	6167638	A2	-	-	-	11	Identified in the MAG dataset as a small, broad asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	222	0
70554	Magnetic	637639	6167474	A2	-	-	-	9	Identified in the MAG dataset as a small, broad asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	222	0
70555	Magnetic	637697	6167342	A2	-	-	-	9	Identified in the MAG dataset as a small negative monopole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	222	0
70556	Magnetic	638094	6167235	A2	-	-	-	14	Identified in the MAG dataset as a small asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	222	0
70557	Magnetic	638177	6166363	A2	-	-	-	9	Identified in the MAG dataset as a small negative monopole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	223	0
70558	Mound	638711	6165275	A2	2.4	1.6	0.2	-	Identified in the MBES dataset as a distinct but small elongate mound with some slight surrounding scour. No corresponding SSS contact. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Retained as a precaution. Interpreted as a possible natural feature or may be possible debris.	-	224	0
70559	Dark reflector	638825	6164488	A2	2.4	2	0.6	-	Identified in the SSS dataset as a relatively isolated, slightly elongate dark reflector with a bright shadow. Also identified in the MBES dataset as a slightly elongate irregular mound with evenly sloping sides and a jagged peak. There is some encircling scour extending for 3.6 m and 0.2 m deep. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Retained as a precaution. Interpreted as a possible natural feature or may be possible debris.	-	225	0
70560	Magnetic	639298	6163575	A2	-	-	-	11	Identified in the MAG dataset as a small, broad asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris either buried or with little surface expression.	-	226	0
70561	Magnetic	639609	6163100	A2	-	-	-	15	Identified in the MAG dataset as a small asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	227	0
70562	Magnetic	639763	6162750	A2	-	-	-	5	Identified in the MAG dataset as a small, broad asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris either buried or with little surface expression.	-	227	0
70563	Magnetic	639935	6162246	A2	-	-	-	11	Identified in the MAG dataset as a small, broad asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris either buried or with little surface expression.	-	228	0
70564	Magnetic	639775	6162037	A2	-	-	-	9	Identified in the MAG dataset as a small negative monopole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	228	0
70565	Magnetic	640209	6161782	A2	-	-	-	21	Identified in the MAG dataset as a small asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	228	0
70566	Mound	640244	6160831	A2	3.6	2	0.2	-	Identified in the MBES dataset as an irregular mound with a more prominent western edge, that has unevenly sloping sides and a rounded peak. Scour is visible extending along the western edge of the feature for 1.5 m. No corresponding SSS contact. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or may be possible debris.	-	229	0
70567	Magnetic	641007	6159028	A2	-	-	-	9	Identified in the MAG dataset as a small, broad asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	231	0

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70568	Magnetic	641839	6158262	A2	-	-	-	9	Identified in the MAG dataset as a small, broad asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	232	0
70569	Magnetic	641695	6157868	A2	-	-	-	83	Identified in the MAG dataset as a complex medium symmetric dipole with two peaks and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	232	12.248477
70570	Rope/chain	646039	6152045	A2	170.6	1	0.3	-	Identified in the SSS dataset as a long narrow curvilinear dark reflector with a variable shadow along its length. The feature is distinct from the surrounding seabed and orientated north west to south east. This location was not directly covered by the MBES or MAG datasets, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as possible long length of rope or chain.	-	240	42.90401
70571	Seabed disturbance	647281	6149946	A2	27	11.1	0.1	-	Identified in the SSS dataset as four narrow curvilinear dark reflectors with short shadows, distinct from surrounding seabed, two of the features appear attached to one another other in a 'Y' shape. No corresponding MBES or MAG contacts. Interpreted as a possible natural feature or may be possible non-ferrous debris.	-	242	0
70572	Dark reflector	649090	6146651	A2	4.4	0.5	0.2	-	Identified in the SSS dataset as an elongate sub-rounded dark reflector with shadow, somewhat distinct from the surrounding seabed, dimensions likely inaccurate due to data distortion. No corresponding MBES contacts. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Retained as a precaution. Interpreted as a possible natural feature or may be possible debris.	-	246	0
70573	Mound	650598	6144167	A2	7	6.2	0.2	-	Identified in the MBES dataset as an indistinct elongate mound that has evenly sloping sides and a rounded peak. There is some scour extending to the north west for 3.7 m. Appears unusual in the wider clear seabed. No corresponding SSS contacts. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or may be possible debris.	-	249	0
70574	Mound	651149	6143012	A2	2.6	2.6	0.6	-	Identified in the MBES dataset as a distinct rounded mound with evenly sloping sides and a pointed peak. There is some encircling scour extending for 9.2 m predominantly to the north west and the feature is isolated in the surrounding clear seabed. No corresponding SSS contacts. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or may be possible debris.	-	250	0
70575	Magnetic	651774	6142568	A2	-	-	-	20	Identified in the MAG dataset as a small negative monopole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or has no surface expression.	-	251	0
70576	Magnetic	653542	6139944	A2	-	-	-	16	Identified in the MAG dataset as a small asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or has no surface expression.	-	254	0
70577	Dark reflector	654824	6138273	A2	0.7	0.5	0.8	-	Identified in the SSS dataset as a small elongate dark reflector with long narrow shadow. Distinct from surrounding seabed. No corresponding MBES contacts. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or may be possible debris.	-	256	114.492258
70578	Dark reflector	654759	6138153	A2	3.3	0.9	0.1	-	Identified in the SSS dataset as an elongate sub-rounded dark reflector with tapered shadow within scour, distinct from surrounding seabed, dimensions maybe inaccurate due to data distortion. No corresponding MBES or MAG contacts. Interpreted as a possible natural feature or may be possible non-ferrous debris.	-	256	29.295553
70579	Dark reflector	654785	6138080	A2	3.2	1.9	0.8	-	Identified in the SSS dataset as a small irregular faint dark reflector with angular shadow, somewhat distinct from surrounding seabed. Visible as an angular mound in the MBES dataset. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or may be possible debris.	-	256	43.41308
70580	Dark reflector	654583	6137892	A2	4.1	0.8	0.4	-	Identified in the SSS dataset as a sub-rounded dark reflector with broad shadow, somewhat distinct from surrounding seabed. No corresponding MBES contacts. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or may be possible debris.	-	256	0
70581	Dark reflector	654512	6137732	A2	3.5	1.4	0.6	-	Identified in the SSS dataset as an elongate dark reflector with broad shadow and situated within scour measuring 5.3 m x 2.1 m, distinct from the surrounding seabed. Also identified in the MBES dataset as a sub-rounded mound with evenly sloping sides and a pointed top. There is a slight ridge to the south west, possibly indicating a more complex feature. No corresponding MAG contact. Interpreted as a possible natural feature or may be possible non-ferrous debris.	-	256	0
70582	Magnetic	654276	6137890	A2	-	-	-	5	Identified in the MAG dataset as a small, broad asymmetric dipole with peak and trough on one profile line. No corresponding MBES or SSS contacts, though this is situated within an area of sand waves. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris either buried or with little surface expression.	-	256	0

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70583	Magnetic	654303	6137866	A2	-	-	-	5	Identified in the MAG dataset as a small, broad positive monopole with peak and trough on one profile line. No corresponding MBES or SSS contacts, though this is situated within an area of sand waves. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris either buried or with little surface expression.	-	256	0
70584	Magnetic	654416	6136989	A2	-	-	-	9	Identified in the MAG dataset as a small, broad asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	257	0
70585	Magnetic	654652	6136677	A2	-	-	-	5	Identified in the MAG dataset as a small, broad asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	257	0
70586	Magnetic	654667	6136584	A2	-	-	-	8	Identified in the MAG dataset as a small, broad positive monopole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	258	0
70587	Magnetic	654996	6135939	A2	-	-	-	10	Identified in the MAG dataset as a small, broad asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	258	0
70588	Rope/chain	654626	6135527	A2	237.7	0.6	0.1	-	Identified in the SSS dataset as a distinct curvilinear dark reflector with a shadow along most of its length. The feature is orientated NNE to SSW on the seabed and may be related to debris field 70590 situated at its south west end. The feature is partially covered by the MBES dataset and where it is no corresponding MBES contact is visible. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible length of rope or chain.	-	259	17.680753
70589	Magnetic	654682	6135546	A2	-	-	-	6	Identified in the MAG dataset as a small, broad symmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	259	0
70590	Debris field	654615	6135401	A2	10.5	8.4	0.3	-	Identified in the SSS dataset as a group of indistinct dark reflectors comprising one sub-rounded dark reflector measuring 1.6 x 1.2 x 0.3 m and curvilinear dark reflectors with slight shadows. Situated at the SSW end of possible rope or chain 70588 and may be related. This location is not covered by the MBES or MAG datasets, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible debris field.	-	259	48.485827
70591	Magnetic	655076	6135439	A2	-	-	-	9	Identified in the MAG dataset as a small, broad asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	259	0
70592	Magnetic	654759	6135380	A2	-	-	-	9	Identified in the MAG dataset as a small negative monopole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	259	0
70593	Magnetic	655097	6135313	A2	-	-	-	6	Identified in the MAG dataset as a small, broad asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	259	0
70594	Magnetic	654783	6135222	A2	-	-	-	7	Identified in the MAG dataset as a small negative monopole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	259	0
70595	Debris	655277	6135066	A2	11	0.8	0.2	-	Identified in the SSS dataset as an indistinct linear dark reflector with a bright uneven shadow, possibly suggesting uneven height. The object bends to a right angle at its north eastern extremity and may be broken up. This location was not directly covered by the MBES or MAG datasets, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible item of debris.	-	259	52.143755
70596	Magnetic	655249	6134313	A2	-	-	-	22	Identified in the MAG dataset as a small asymmetric dipole with peak and trough on two profile lines. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	260	0
70597	Magnetic	654921	6134020	A2	-	-	-	16	Identified in the MAG dataset as a small symmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	260	0
70598	Magnetic	655444	6133650	A2	-	-	-	10	Identified in the MAG dataset as a small, broad asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	261	0
70599	Magnetic	655174	6133418	A2	-	-	-	5	Identified in the MAG dataset as a small negative monopole with peak and trough on one profile line. No corresponding MBES or SSS contacts. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris either buried or with little surface expression.	-	261	0

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70600	Magnetic	655085	6133367	A2	-	-	-	30	Identified in the MAG dataset as a small asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	261	0
70601	Debris field	655437	6131186	A2	34.8	5.6	0.1	16	Identified in the SSS dataset as an area of disturbed seabed comprising multiple linear and curvilinear dark reflectors with slight shadows. Associated with a small, broad asymmetric dipole with peak and trough on one profile line, indicating some ferrous material is present. No corresponding MBES contact. Interpreted as a ferrous debris field.	-	263	0
70602	Magnetic	655376	6131187	A2	-	-	-	30	Identified in the MAG dataset as a small asymmetric dipole with peak and trough on one profile line. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	263	0
70603	Magnetic	655752	6130573	A2	-	-	-	5	Identified in the MAG dataset as a small, broad asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	264	0
70604	Magnetic	655710	6130422	A2	-	-	-	16	Identified in the MAG dataset as a small, broad symmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	264	0
70605	Magnetic	655593	6130224	A2	-	-	-	20	Identified in the MAG dataset as a small asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	264	0
70606	Rope/chain	655546	6129790	A2	66.3	0.4	0.1	-	Identified in the SSS dataset as a distinct curvilinear linear dark reflector with a slight shadow across its extent. The feature appears coiled on the seabed. No corresponding MBES contact. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible length of rope or chain.	-	264	17.352047
70607	Magnetic	655876	6129438	A2	-	-	-	23	Identified in the MAG dataset as a small asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	265	0
70608	Debris field	655644	6129076	A2	37.9	20.6	0.1	-	Identified in the SSS dataset as a group of indistinct linear and curvilinear dark reflectors with shadows coiled on the seabed. The feature extends beyond the data range and so the dimensions should be considered a minimum. This location was not directly covered by the MBES or MAG datasets, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible debris field, and may be fishing gear however, this cannot be confirmed without visual inspection.	-	265	33.602015
70609	Rope/chain	656265	6128789	A2	88.9	0.5	0.1	-	Identified in the SSS dataset as an indistinct curvilinear dark reflector with a slight shadow. This location was only partially covered by the MBES dataset and not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible length of rope or chain.	-	265	34.142043
70610	Magnetic	655932	6128626	A2	-	-	-	9	Identified in the MAG dataset as a small, broad asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	266	0
70611	Magnetic	656224	6128207	A2	-	-	-	8	Identified in the MAG dataset as a small, broad asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	266	0
70612	Magnetic	656157	6128047	A2	-	-	-	27	Identified in the MAG dataset as a small symmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	266	0
70613	Rope/chain	656407	6127591	A2	123.9	0.5	0.1	-	Identified in the SSS dataset as a distinct long, thin and curvilinear dark reflector with a slight shadow in places. No corresponding MBES contact. This location was only partially covered by the MAG dataset so it cannot be ascertained whether ferrous material is present at this location. Interpreted as a possible length of rope or chain.	-	267	0
70614	Magnetic	656360	6125967	A2	-	-	-	25	Identified in the MAG dataset as a small negative monopole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	268	0
70615	Magnetic	656460	6124354	A2	-	-	-	11	Identified in the MAG dataset as a small, broad asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	270	0
70616	Magnetic	656678	6124466	A2	-	-	-	43	Identified in the MAG dataset as a small, sharp asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	270	0
70617	Magnetic	656628	6124510	A2	-	-	-	6	Identified in the MAG dataset as a small, broad asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	270	0

ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	External references	Nearest KP	Distance to MIC (m)
70618	Magnetic	656504	6124138	A2	-	-	-	7	Identified in the MAG dataset as a small, broad asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	270	0
70619	Magnetic	656833	6123792	A2	-	-	-	22	Identified in the MAG dataset as a small symmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	270	0
70620	Magnetic	656618	6123790	A2	-	-	-	12	Identified in the MAG dataset as a small positive monopole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	270	0
70621	Magnetic	656735	6123688	A2	-	-	-	24	Identified in the MAG dataset as a small asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris either buried or with no surface expression.	-	271	0
70622	Magnetic	656734	6123665	A2	-	-	-	11	Identified in the MAG dataset as a small, broad asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Retained as a precaution. May relate to Mag anomaly 70621 situated 22 m north. May represent a natural feature or may represent possible ferrous debris either buried or with no surface expression.	-	271	0
70623	Magnetic	656821	6123571	A2	-	-	-	6	Identified in the MAG dataset as a small, broad symmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Retained as a precaution, one of a cluster of MAG anomalies in this area. May represent a natural feature or may represent possible ferrous debris either buried or with no surface expression.	-	271	0
70624	Magnetic	656819	6123542	A2	-	-	-	8	Identified in the MAG dataset as a small, broad symmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Retained as a precaution, one of a cluster of MAG anomalies in this area. May represent a natural feature or may represent possible ferrous debris either buried or with no surface expression.	-	271	0
70625	Magnetic	656816	6123495	A2	-	-	-	7	Identified in the MAG dataset as a small, broad asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Retained as a precaution, one of a cluster of MAG anomalies in this area. May represent a natural feature or may represent possible ferrous debris either buried or with no surface expression.	-	271	0
70626	Magnetic	656818	6123527	A2	-	-	-	36	Identified in the MAG dataset as a small asymmetric dipole with peak and trough on one profile line, one of a cluster of MAG anomalies in this area that may be related. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	271	0
70627	Magnetic	656797	6123149	A2	-	-	-	29	Identified in the MAG dataset as a small asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	271	0
70628	Magnetic	656481	6122206	A2	-	-	-	30	Identified in the MAG dataset as a small positive monopole with peak and trough on one profile line. Possibly related to MAG anomaly 70629 situated 64 m south east. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	272	0
70629	Magnetic	656521	6122157	A2	-	-	-	32	Identified in the MAG dataset as a small asymmetric dipole with peak and trough on one profile line. Possibly related to MAG anomaly 70628 situated 64 m north west. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	272	0
70630	Magnetic	656471	6120171	A2	-	-	-	9	Identified in the MAG dataset as a small, broad asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	274	0
70631	Debris field	656590	6120096	A2	27.5	16.9	2.9	-	Identified in the SSS dataset as a group of distinct dark reflectors with shadows, comprising multiple sub-angular, linear and curvilinear objects. The largest object is very angular, measures 3.3 x 2.9 x 2.9 m and has significant height. Also identified in the MBES dataset as two distinct mounds with a series of smaller, less distinct mounds and slightly irregular seabed surrounding these. The two mounds are on a north to south alignment, the northern mound measures 4.6 x 3.8 x 2.4 m and has irregular sides with a flat peak, the southern mound measures 4.0 x 3.4 x 1.0 m. The is some scour visible to the east and north extending 5.4 m and is 0.1 m deep. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a debris field.	-	274	0
70632	Magnetic	656528	6120014	A2	-	-	-	31	Identified in the MAG dataset as a small asymmetric dipole with peak and trough on one profile line, possibly a complex cluster of anomalies. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	274	0
70633	Magnetic	656074	6114562	A2	-	-	-	36	Identified in the MAG dataset as a small, sharp symmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	280	0

ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	External references	Nearest KP	Distance to MIC (m)
70634	Dark reflector	656286	6113907	A2	3.2	2.4	1	-	Identified in the SSS dataset as a very distinct, slightly angular dark reflector with a bright shadow and significant height. The feature is isolated in an area of mobile sediments. Also identified in the MBES dataset as a sub-rounded mound with evenly sloping sides and a rounded peak. It is located in encircling scour that extends for 8.1 and is 0.3 m deep. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	-	280	0
70635	Rope/chain	656149	6113543	A2	107.5	0.4	0.1	-	Identified in the SSS dataset as an indistinct curvilinear dark reflector with a variable shadow across its length. May be indistinctly visible in the MBES dataset as slight depressions on the seabed. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible length of rope or chain.	-	281	0
70636	Magnetic	655862	6113029	A2	-	-	-	9	Identified in the MAG dataset as a small, broad asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	281	0
70637	Mound	656002	6111895	A2	4.4	3.9	0.7	-	Identified in the MBES dataset as a sub-rounded mound with evenly sloping sides and a pointed peak. The feature has encircling scour extending for 7.1 m and 0.1 m deep and appears slightly anomalous for the area. No corresponding SSS contacts. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Retained as a precaution. Interpreted as a possible natural feature or possible debris.	-	282	0
70638	Dark reflector	656249	6111010	A2	5	1.5	1.1	-	Identified in the SSS dataset as a distinct large sub-angular dark reflector with a large shadow and significant height. This location was not directly covered by the MBES or MAG datasets, so it is not possible to ascertain whether ferrous material is present at this location. Retained as a precaution due to size. Interpreted as a possible natural feature or possible debris.	-	283	71.848391
70639	Magnetic	655910	6110499	A2	-	-	-	10	Identified in the MAG dataset as a small, broad asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	284	0
70640	Magnetic	656069	6110291	A2	-	-	-	7	Identified in the MAG dataset as a small, broad asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris either buried or with no surface expression.	-	284	0
70641	Seabed disturbance	656918	6108459	A2	4.1	3.3	0.1	-	Identified in the SSS dataset as an indistinct, small area of disturbed seabed comprising irregular dark reflectors with slight shadows situated within mobile sediments. This location was not directly covered by the MBES or MAG datasets, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	-	287	39.87362
70642	Dark reflector	657228	6107947	A2	2.7	2.2	1.1	-	Identified in the SSS dataset as a distinct sub-rounded dark reflector with a large bright shadow and significant height. The feature has some possible scour to the north east. Visible in the MBES dataset as a slight mound within a large depression. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	-	287	0
70643	Seabed disturbance	657178	6107634	A2	23.6	10	0	-	Fairly distinct seabed disturbance comprising an irregular elongate area of different reflectivity from the surrounding seabed. This location was not directly covered by the MBES dataset or the MAG dataset so it is not possible to ascertain whether ferrous material is present in this area. Interpreted as a possible natural feature or possible debris.	-	287	52.232527
70644	Dark reflector	658026	6105804	A2	4.5	0.8	0.4	-	Identified in the SSS dataset as a distinct elongate dark reflector. One of two in a very small area. Observed in the MBES dataset as an indistinct area of irregular seabed. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present in this area. Interpreted as a possible natural feature or possible debris.	-	290	0
70645	Dark reflector	658053	6105416	A2	7.3	0.4	0	-	Identified in the SSS dataset as a distinct elongate or linear dark reflector with no discernible shadow. This location was not directly covered by the MBES dataset or the MAG dataset, so it is not possible to ascertain whether ferrous material is present in this area. Interpreted as a possible natural feature or possible debris.	-	290	56.820039
70646	Magnetic	658560	6105332	A2	-	-	-	18	Identified in the MAG dataset as a small, broad positive monopole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris either buried or with no surface expression.	-	290	0
70647	Mound	658484	6104352	A2	5.6	2.2	0.6	-	Identified in the MBES dataset as a sub-rounded mound with unevenly sloping sides and a dual pointed top, possibly indicating two adjacent features. It is on the edge of the dataset and so somewhat obscured. There is some scour to the east and west visible extending for 2.2 m. No corresponding SSS contact. Interpreted as a possible natural feature or possible debris.	-	291	48.561284
70648	Dark reflector	659196	6103069	A2	4.4	2.3	0.5	-	Identified in the SSS dataset as a distinct sub-rounded dark reflector with a bright and asymmetric shadow. Visible in the MBES dataset as an indistinct rounded mound. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present in this area. Interpreted as a possible natural feature or possible debris.	-	292	0

ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	External references	Nearest KP	Distance to MIC (m)
70649	Mound	660410	6100897	A2	3.6	1.8	0.5	-	Identified in the MBES dataset as an elongate mound with evenly sloping sides and a pointed top. There is encircling scour extending primarily to the south west to 2.2 m. No corresponding SSS or MAG contacts. Interpreted as a possible natural feature or possible non-ferrous debris.	-	295	0
70650	Magnetic	660362	6100605	A2	-	-	-	18	Identified in the MAG dataset as a small asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris either buried or with no surface expression.	-	295	0
70651	Magnetic	660974	6099494	A2	-	-	-	168	Identified in the MAG dataset as a large, sharp asymmetric dipole with peak and trough on one profile line. Complex and very broad but is visible on adjacent lines. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris either buried or with no surface expression.	-	297	0
70652	Mound	661288	6099447	A2	4.6	2.9	0.4	-	Identified in the MBES dataset as an elongate mound with evenly sloping sides and an uneven top. There is some encircling scour in a wider uneven depression, it extends for 2.5 m and is 0.1 m deep. No corresponding SSS contact. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present in this area. Possibly related to 70653, 30 m to the west. Interpreted as a possible natural feature or possible debris.	-	297	242.346079
70653	Seabed disturbance	661252	6099448	A2	8.2	4.9	0.2	-	Identified in the MBES dataset as an area of irregular mounds, with the largest mound to the south and measuring 3.0 x 2.2 x 0.2 m. It appears in an area of wider depression and so scour is not completely clear, the area is uneven and undulates. No corresponding SSS or MAG contacts. Possibly related to 70652, 30 m to the east. Interpreted as a possible natural feature or possible non-ferrous debris.	-	297	215.936055
70654	Mound	661260	6099149	A2	3.8	2.2	0.6	-	Identified in the MBES dataset as an elongate mound with some slight scour extending for 2.4 m. In an area of undulating seabed. No corresponding SSS contact. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present in this area. Interpreted as a possible natural feature or possible debris.	-	297	24.738493
70655	Magnetic	661237	6099129	A2	-	-	-	78	Identified in the MAG dataset as a medium, sharp asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Possibly related to 70654 located 30 m to the north east, however this is not possible to ascertain without further investigation. Interpreted as possible ferrous debris either buried or with no surface expression.	-	297	0
70656	Debris	661949	6098246	A2	3	1.6	1.5	-	Identified in the SSS dataset as a distinct large sub-angular dark reflector with a bright shadow. Observed in the MBES dataset as a rounded mound with scour extending for 5.3 m and 0.1 m deep. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present in this area. Interpreted as possible debris.	-	298	0
70657	Mound	661951	6097587	A2	2.8	2.8	0.6	-	Identified in the MBES dataset as a distinct rounded mound with evenly sloping sides and a rounded top. There is some encircling scour extending for a maximum of 6.2 m. Visible in the SSS dataset as an indistinct bright reflector. No corresponding MAG anomaly. Interpreted as a possible natural feature or possible non-ferrous debris.	-	299	0
70658	Magnetic	662040	6097605	A2	-	-	-	18	Identified in the MAG dataset as a small asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris either buried or with no surface expression.	-	299	0
70659	Rope/chain	662693	6097397	A2	99.2	0.8	0.1	-	Identified in the SSS dataset as a long and distinct curvilinear dark reflector with a slight shadow. Observed in the MBES dataset as an indistinct linear mound on a north to south alignment. This feature was only partially covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present in this area. Interpreted as possible length of rope or chain.	-	299	0
70660	Magnetic	663135	6096951	A2	-	-	-	11	Identified in the MAG dataset as a small, broad symmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris either buried or with no surface expression.	-	300	0
70661	Dark reflector	663140	6096787	A2	6.4	0.9	1.2	-	Identified in the SSS dataset as a large elongate dark reflector with a dull shadow. Visible in the MBES dataset as an area of uneven seabed. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present in this area. Interpreted as a possible natural feature or possible debris.	-	300	0
70662	Mound	662937	6096531	A2	3.9	2.8	0.5	-	Identified in the MBES dataset as a sub-rounded mound with unevenly sloping sides and a pointed top. A smaller, secondary mound is located to the immediate south west and may be related. It measures 2.9 x 1.8 x 0.2 m. There is some encircling scour extending for a maximum of 4.6 m and primarily north west to south east aligned. Visible in the SSS as an indistinct dark reflector. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present in this area. Interpreted as a possible natural feature or possible debris.	-	300	0
70663	Debris	663260	6096012	A2	13	0.5	0.1	-	Identified in the SSS dataset as a distinct linear dark reflector with a slight shadow. The feature appears disjointed and may be broken up or partially buried by sands. This location was not directly covered by the MBES dataset or the MAG dataset, so it is not possible to ascertain whether ferrous material is present in this area. Interpreted as possible debris.	-	301	41.220177

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70664	Magnetic	663807	6096182	A2	-	-	-	28	Identified in the MAG dataset as a small asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris either buried or with no surface expression.	-	301	0
70665	Seabed disturbance	664008	6096239	A2	9.1	7	-	-	Identified in the MBES dataset as an area of disturbed seabed comprising a sub-rounded depression with uneven sides and an irregular base. There appears to be some small mounds around the north western side that are indistinct and may indicate debris. No corresponding SSS contact. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present in this area. Interpreted as a possible natural feature or possible debris.	-	301	170.716023
70666	Magnetic	664100	6095597	A2	-	-	-	30	Identified in the MAG dataset as a small asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris either buried or with no surface expression.	-	302	0
70667	Rope/chain	664473	6094683	A2	8.6	0.4	0.1	-	Identified in the SSS dataset as a distinct linear dark reflector with a bright shadow. No corresponding MBES contact. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present in this area. Interpreted as a possible short length of rope or chain.	-	302	6.130638
70668	Magnetic	664980	6094150	A2	-	-	-	8	Identified in the MAG dataset as a small, broad asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris either buried or with no surface expression.	-	303	0
70669	Magnetic	667464	6091900	A2	-	-	-	7	Identified in the MAG dataset as a small, broad symmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris either buried or with no surface expression.	-	307	0
70670	Magnetic	667029	6091796	A2	-	-	-	10	Identified in the MAG dataset as a small, broad positive monopole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris either buried or with no surface expression.	-	306	0
70671	Mound	667327	6091468	A2	3.7	2.1	0.3	-	Identified in the MBES dataset as a sub-rounded mound with some slight scour extending for 1.4 m. Visible in the SSS dataset as a very indistinct dark reflector. No corresponding MAG anomaly. Interpreted as possible non-ferrous debris or a natural feature.	-	307	0
70672	Debris field	668789	6090144	A1	16.4	9.4	0.5	5080	Identified in the SSS dataset as a distinct group of objects comprising several elongate and irregular dark reflectors. Observed in the MBES dataset as an area of multiple irregularly shaped mounds within an area of scour. There is one distinct central mound that appears in two segments; the south western segment measures 5.3 x 3.1 x 1.6 m and the north eastern measures 7.1 x 2.7 x 1.1 m, and both are on an overlapping approximate north to south alignment. There are further irregular sections at the base of this central mound indicating the potential for multiple items of debris. To the south and east of this mound there are at least four further smaller irregular mounds and an area of irregular seabed indicating further, possibly partially buried, debris: this is located within an area of scour which extended for 8.1 m. There is a second area of scour to the west extending for 14.1 m. Associated with a very large, sharp symmetric dipole with peak and trough on one profile line in the MAG dataset, indicating ferrous material is present. Interpreted as a ferrous debris field.	-	309	0
70673	Debris field	668843	6090099	A2	6.4	2.6	1.7	-	Identified in the SSS dataset as a discrete area of elongate and sub-rounded dark reflectors with varying shadow lengths. Visible in the MBES dataset as an area of irregular seabed. No corresponding MAG anomaly. Interpreted as a possible debris field.	-	309	0
70674	Magnetic	669199	6090038	A2	-	-	-	13	Identified in the MAG dataset as a small asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris either buried or with no surface expression.	-	309	0
70675	Recorded Wreck	669510	6089942	A3	-	-	-	-	The position of a recorded wreck (UKHO 6382) an unknown wreck recorded as lying in two sections. It was last surveyed in 1988, with the two sections reported as being 10 m apart in a general depth of 67 m, the reported geophysical dimensions were 45 x 12 x 7.9 m. This position is not directly covered by the geophysical datasets, it has been retained in this gazetteer as a precaution as the location of a potential archaeological site. A 100 m AEZ would be recommended which encroaches on the study area and therefore this is has been retained as a precaution.	UKHO 6382, WA 2005	309	152.548913
70676	Dark reflector	669369	6089760	A2	2.9	1.1	0.4	-	Identified in the SSS dataset as a distinct elongate dark reflector with a bright shadow. No corresponding MBES contact. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present in this area. Interpreted as a possible natural feature or possible debris.	-	309	0
70677	Seabed disturbance	670434	6088720	A2	47.9	7.5	0.6	-	Identified in the SSS dataset as a distinct irregular area of seabed disturbance comprising possible multiple linear and irregular dark reflectors with associated shadows. This location was not directly covered by the MBES dataset or the MAG dataset, so it is not possible to ascertain whether ferrous material is present in this area. Interpreted as a possible natural feature or possibly partially buried debris.	-	311	41.00039

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70678	Dark reflector	670398	6088692	A2	2.8	1.1	0.4	-	Identified in the SSS dataset as a distinct elongate dark reflector with a bright shadow. Visible in the MBES dataset as an indistinct sub-rounded area of uneven seabed. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present in this area. Interpreted as a possible natural feature or possible debris.	-	311	0
70679	Magnetic	670505	6088636	A2	-	-	-	28	Identified in the MAG dataset as a small negative monopole with peak and trough on one profile line. No corresponding SSS contact. This location was not covered by the MBES dataset. Interpreted as possible ferrous debris either buried or with no surface expression.	-	311	38.957973
70680	Magnetic	670476	6088584	A2	-	-	-	18	Identified in the MAG dataset as a small asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris either buried or with no surface expression.	-	311	0
70681	Magnetic	670059	6088346	A2	-	-	-	11	Identified in the MAG dataset as a small, broad asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris either buried or with no surface expression.	-	311	0
70682	Magnetic	670455	6088278	A2	-	-	-	22	Identified in the MAG dataset as a small asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris either buried or with no surface expression.	-	311	0
70683	Mound	670308	6088205	A2	3.9	2.3	0.8	-	Identified in the MBES dataset as a sub-rounded mound with no distinct scour. Visible in the SSS dataset as a very indistinct dark reflector. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present in this area. Interpreted as a possible natural feature or possible debris.	-	311	0
70684	Magnetic	670784	6088068	A2	-	-	-	10	Identified in the MAG dataset as a small, broad positive monopole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris either buried or with no surface expression.	-	312	0
70685	Mound	671450	6087012	A2	4.1	2.9	0.8	-	Identified in the MBES dataset as a sub-rounded mound with some scour extending for 5.0 m and 0.3 m deep. Visible in the SSS dataset as an indistinct dark reflector. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present in this area. Interpreted as a possible natural feature or possible debris.	-	313	0
70686	Dark reflector	671893	6086666	A2	5.2	0.4	0.4	-	Identified in the SSS dataset as a distinct elongate and sub-angular dark reflector with a dull shadow, possibly subject to some data distortion. This location was not directly covered by the MBES dataset or the MAG dataset, so it is not possible to ascertain whether ferrous material is present in this area. Interpreted as a possible natural feature or possible debris.	-	313	54.194181
70687	Mound	671758	6086058	A2	1.8	1.6	0.8	-	Identified in the MBES dataset as a small, rounded mound. This appears to be on a slight natural ridge and no clear scour is visible. No corresponding SSS or MAG contacts. Interpreted as a possible natural feature or possible non-ferrous debris.	-	314	0
70688	Magnetic	672410	6085062	A2	-	-	-	16	Identified in the MAG dataset as a small, broad positive monopole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris either buried or with no surface expression.	-	315	0
70689	Magnetic	673224	6084256	A2	-	-	-	16	Identified in the MAG dataset as a small negative monopole with peak and trough over two profile lines. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris either buried or with no surface expression.	-	316	0
70690	Magnetic	673198	6083998	A2	-	-	-	20	Identified in the MAG dataset as a small, broad asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris either buried or with no surface expression.	-	316	0
70691	Dark reflector	673465	6083429	A2	4.2	0.9	0.9	-	Identified in the SSS dataset as a distinct dark reflector with a large bright shadow and some sediment build up. Observed in the MBES dataset as an irregularly shaped mound with a slightly larger section on the south west side. There is some encircling scour extending for 4.9 m and the feature is located close to a bedrock outcrop. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present in this area. Interpreted as a possible natural feature or possible debris.	-	317	0
70692	Seabed disturbance	673722	6082854	A2	17.1	4.1	0.4	-	Identified in the SSS dataset as an irregular area of seabed disturbance comprising a long, low mound with smaller sub-rounded dark reflectors. This location was not directly covered by the MBES dataset or the MAG dataset, so it is not possible to ascertain whether ferrous material is present in this area. Interpreted as a possible natural feature or possible debris.	-	318	36.783666
70693	Magnetic	674350	6082573	A2	-	-	-	18	Identified in the MAG dataset as a small asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris either buried or with no surface expression.	-	318	0

ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	External references	Nearest KP	Distance to MIC (m)
70694	Seabed disturbance	674893	6081165	A2	13.2	6.3	0.1	-	Identified in the MBES dataset as an area of irregular seabed. It appears on an approximate north west to south east alignment and is not very distinct. There are no clearly distinguishable individual mounds, but the area does appear unusual in the surrounding clear seabed. Visible in the SSS dataset as an indistinct area of irregular seabed. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present in this area. Interpreted as a possible natural feature or possible partially buried debris.	-	320	0
70695	Seabed disturbance	675275	6080400	A2	10.5	5.8	0	-	Identified in the SSS dataset as a distinct area of seabed disturbance with no measurable height. Visible in the MBES dataset as an indistinct area of irregular seabed. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present in this area. Interpreted as a possible natural feature or possible debris.	-	320	104.65149
70696	Magnetic	676395	6079402	A2	-	-	-	29	Identified in the MAG dataset as a small asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris either buried or with no surface expression.	-	322	0
70697	Magnetic	676544	6079168	A2	-	-	-	54	Identified in the MAG dataset as a medium asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris either buried or with no surface expression.	-	322	0
70698	Magnetic	677654	6077470	A2	-	-	-	30	Identified in the MAG dataset as a small asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris either buried or with no surface expression.	-	324	0
70699	Magnetic	677541	6077361	A2	-	-	-	97	Identified in the MAG dataset as a medium, sharp asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris either buried or with no surface expression.	-	324	0
70700	Magnetic	677847	6077314	A2	-	-	-	73	Identified in the MAG dataset as a medium, sharp asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris either buried or with no surface expression.	-	324	0
70701	Magnetic	677960	6077144	A2	-	-	-	24	Identified in the MAG dataset as a small asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris either buried or with no surface expression.	-	325	0
70702	Magnetic	678180	6076943	A2	-	-	-	40	Identified in the MAG dataset as a small asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris either buried or with no surface expression.	-	325	0
70703	Debris field	678711	6076258	A2	11.2	10	0	-	Identified in the SSS dataset as a distinct area comprising multiple linear dark reflectors without discernible heights. Possibly ropes or chains. No corresponding MBES contact. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present in this area. Interpreted as a possible debris field.	-	326	0
70704	Magnetic	679015	6075157	A2	-	-	-	11	Identified in the MAG dataset as a small, broad symmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris either buried or with no surface expression.	-	327	0
70705	Debris	680560	6073514	A2	2.5	1.5	0.5	17	Identified in the SSS dataset as an indistinct sub-rounded dark reflector with a dull shadow. Observed in the MBES dataset as a sub-rounded mound with encircling scour extending for 5.7 m primarily to the north west. Appears distinct in an area of relatively clear seabed. Visible in the MAG dataset as a small asymmetric dipole with peak and trough on one profile line. Interpreted as possible ferrous debris.	-	329	0
70706	Debris field	680233	6073327	A2	24.9	12.8	0.2	363	Identified in the SSS dataset as a distinct seabed disturbance comprising two discrete areas of disturbance with indistinct individual dark reflectors within. Observed in the MBES dataset as an area of uneven seabed which translates to two uneven slightly rounded mounds. This appears on an east to west alignment and the western area appears more mounded and larger, whilst the eastern is more irregular. Visible in the MAG dataset as a large, sharp asymmetric dipole with peak and trough on one profile line. Interpreted as a ferrous debris field.	-	329	0
70707	Magnetic	680198	6073214	A2	-	-	-	40	Identified in the MAG dataset as a small asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris either buried or with no surface expression.	-	329	0
70708	Magnetic	680327	6073181	A2	-	-	-	16	Identified in the MAG dataset as a small symmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris either buried or with no surface expression.	-	329	0
70709	Dark reflector	680683	6072935	A2	7.7	5.1	0.2	-	Identified in the SSS dataset as two distinct small dark reflectors with bright shadows. Observed in the MBES dataset as an elongate mound with evenly sloping sides and a pointed top, with a secondary smaller mound to the north west and measuring 1.3 x 0.7 x 0.1 m. A relatively deep area of possible scour or depression to the south east extending for 6.3 m deep and 0.3 m deep. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present in this area. Interpreted as a possible natural feature or possible debris.	-	330	0

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70710	Magnetic	680032	6073386	A2	-	-	-	13	Identified in the MAG dataset as a small, broad asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris either buried or with no surface expression.	-	329	33.77498
70711	Magnetic	680016	6073030	A2	-	-	-	120	Identified in the MAG dataset as a large, sharp asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris either buried or with no surface expression.	-	329	244.723257
70712	Magnetic	681437	6072493	A2	-	-	-	15	Identified in the MAG dataset as a small, broad asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris either buried or with no surface expression.	-	331	0
70713	Seabed disturbance	681365	6072203	A2	29.5	9.4	0.2	-	Identified in the SSS dataset as a long narrow slightly curvilinear dark reflector with variable shadow, with several sub-rounded dark reflectors in the vicinity. Visible in the MBES as an area of uneven seabed. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present in this area. Interpreted as a possible natural feature or possible debris.	-	331	0
70714	Magnetic	682610	6071197	A2	-	-	-	17	Identified in the MAG dataset as a small asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris either buried or with no surface expression.	-	332	0
70715	Mound	683074	6070589	A2	2.2	2.2	0.5	-	Identified in the MBES dataset as a sub-rounded mound with evenly sloping sides and a rounded top. It is located in encircling scour extending for 3.4 m and 0.2 m. No corresponding SSS or MAG contacts. Interpreted as a possible natural feature or possible debris.	-	333	0
70716	Magnetic	683483	6070396	A2	-	-	-	19	Identified in the MAG dataset as a small asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris either buried or with no surface expression.	-	333	0
70717	Magnetic	684175	6069587	A2	-	-	-	14	Identified in the MAG dataset as a small, broad symmetric dipole with peak and trough on one profile line. There is a small, rounded mound with some encircling scour visible in the MBES dataset located 10 m to the west which may be related, however it is unclear from this dataset. No corresponding SSS dataset. Interpreted as possible ferrous debris, possibly related to a nearby mound, or otherwise either buried or with no surface expression.	-	335	0
70718	Magnetic	685509	6068371	A2	-	-	-	15	Identified in the MAG dataset as a small symmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris either buried or with no surface expression.	-	336	0
70719	Dark reflector	686533	6067576	A2	3.5	0.7	1.2	-	Identified in the SSS dataset as an elongate sub-rounded dark reflector with long tapered shadow. Observed in the MBES dataset as a sub-angular mound with evenly sloping sides and a pointed top. This is located in a wide area of scour fanning to the north west and the south east and extending for 11.9 m and with a depth of 0.1 m. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present in this area. Interpreted as a possible natural feature or possible debris.	-	338	0
70720	Dark reflector	686645	6067494	A2	2.4	0.3	1	-	Identified in the SSS dataset as a sub-rounded dark reflector with long tapered shadow. Visible in the MBES dataset as a small mound located in encircling scour. No corresponding MAG anomaly. Possible non-ferrous debris or a natural feature.	-	338	0
70721	Mound	686761	6066884	A2	5.4	3	1.1	-	Identified in the MBES dataset as a distinct elongate mound with evenly sloped steep sides and a rounded, level top. Some scour extending for 2.8 m and 0.1 m deep. Visible in the SSS as a dark reflector with a bright shadow. No corresponding MAG anomaly. Possible non-ferrous debris or a natural feature.	-	338	0
70722	Magnetic	686641	6066682	A2	-	-	-	66	Identified in the MAG dataset as a medium negative monopole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris either buried or with no surface expression.	-	339	0
70723	Mound	686460	6066138	A2	3.7	2.6	0.5	-	Identified in the MBES dataset as an elongate mound with unevenly sloping sides and a pointed peak. There is some encircling scour extending for 3.3 m and 0.2 m deep. Visible in the SSS as an indistinct dark reflector with some shadow. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present in this area. Interpreted as a possible natural feature or possible debris.	-	339	0
70724	Magnetic	686827	6065568	A2	-	-	-	12	Identified in the MAG dataset as a small, broad asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris either buried or with no surface expression.	-	340	0
70725	Magnetic	686968	6065251	A2	-	-	-	36	Identified in the MAG dataset as a small symmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris either buried or with no surface expression.	-	340	0

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70726	Magnetic	687364	6064970	A2	-	-	-	10	Identified in the MAG dataset as a small, broad asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris either buried or with no surface expression.	-	341	0
70727	Magnetic	687712	6064962	A2	-	-	-	27	Identified in the MAG dataset as a small asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris either buried or with no surface expression.	-	341	0
70728	Debris	687400	6064726	A2	3.6	2.8	0.8	11	Identified in the MBES dataset as a rounded mound with evenly sloping sides and a rounded top. There is some scour extending primarily to the north west for 9.6 m. Observed in the MAG dataset as a small, broad asymmetric dipole with peak and trough over two profile lines. No corresponding SSS contact. Interpreted as possible ferrous debris.	-	341	0
70729	Magnetic	688230	6064379	A2	-	-	-	13	Identified in the MAG dataset as a small, broad positive monopole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris either buried or with no surface expression.	-	342	0
70730	Magnetic	688547	6064001	A2	-	-	-	33	Identified in the MAG dataset as a small symmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris either buried or with no surface expression.	-	342	0
70731	Dark reflector	688569	6063954	A2	3.6	0.9	0.6	-	Identified in the SSS dataset as an indistinct sub-rounded elongate dark reflector with broad tapered shadow. Observed in the MBES dataset as a distinct sub-rounded mound with evenly sloping sides and a rounded top. There is some encircling scour extending for 6.7 m and 0.6 m deep. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present in this area. Interpreted as a possible natural feature or possible debris.	-	342	0
70732	Magnetic	688578	6063885	A2	-	-	-	6	Identified in the MAG dataset as a small, broad symmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris either buried or with no surface expression.	-	342	0
70733	Mound	688839	6063682	A2	19.8	6.7	0.6	-	Identified in the MBES dataset as a mound in a distinctive arc shape, with a more gentle sloping side to the outer edge, and a more sheer face to the internal edge. The top is irregular, and there are some smaller mounds in the vicinity around that could be related. This is located next to a large bedrock outcrop and could also be natural, but it looks slightly anomalous. It is visible in the SSS dataset as an indistinct area of irregular seabed. No corresponding MAG anomaly. Retained as a precaution. May represent a natural feature or may represent possible non-ferrous debris.	-	342	0
70734	Magnetic	689838	6063438	A2	-	-	-	36	Identified in the MAG dataset as a small asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris either buried or with no surface expression.	-	343	0
70735	Dark reflector	689683	6063135	A2	3.5	1.7	0.7	-	Identified in the SSS dataset as a sub-rounded dark reflector with long broad shadow, distinct from surrounding seabed. Observed in the MBES dataset as an oval mound with evenly sloping sides and a level top. There is some encircling scour extending primarily to the north west and south east for 12.7 m. Appears a very regular shape in an area of irregular seabed and boulders. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location Interpreted as a possible natural feature or possible debris.	-	343	0
70736	Debris	689945	6063315	A2	2.3	0.3	1.7	-	Identified in the SSS dataset as an elongate sub-angular dark reflector with long tapered shadow. Visible in the MBES dataset as a rounded mound with some shallow scour extending for 19.7 m and 0.1 m deep. Located in an area with some boulders, however this appears distinct. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as debris.	-	344	0
70737	Mound	690014	6062913	A2	2.8	2.4	1	-	Identified in the MBES dataset as a sub-rounded mound with evenly sloping sides and a pointed top. There is some encircling scour extending for 1.6 m and 0.1 m deep. No corresponding SSS contact. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present in this area. Interpreted as a possible natural feature or possible debris.	-	344	0
70738	Magnetic	691009	6062699	A2	-	-	-	9	Identified in the MAG dataset as a small asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris either buried or with no surface expression.	-	345	0
70739	Magnetic	691871	6062312	A2	-	-	-	9	Identified in the MAG dataset as a small, broad asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts, though this is located in an area with outcropping geology. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris with little surface expression.	-	346	0
70740	Magnetic	693143	6061481	A2	-	-	-	17	Identified in the MAG dataset as a small positive monopole with peak and trough on one profile line. No corresponding SSS or MBES contacts, though this is located in an area with outcropping geology. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris with little surface expression.	-	347	0

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70741	Magnetic	693206	6061317	A2	-	-	-	12	Identified in the MAG dataset as a small, broad positive monopole with peak and trough on one profile line. No corresponding SSS or MBES contacts, though this is located in an area with outcropping geology. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris with little surface expression.	-	347	0
70742	Magnetic	693412	6061020	A2	-	-	-	14	Identified in the MAG dataset as a small, broad asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris either buried or with no surface expression.	-	348	0
70743	Magnetic	693899	6061018	A2	-	-	-	57	Identified in the MAG dataset as a medium, sharp positive monopole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris either buried or with no surface expression.	-	348	0
70744	Mound	694242	6060865	A2	8.3	2.9	0.4	-	Identified in the MBES dataset as an elongate mound with no clear scour and on an approximate north east to south west alignment. Located in an area of uneven seabed and anomalous for area. No corresponding SSS contact. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	-	349	0
70745	Magnetic	694359	6060817	A2	-	-	-	12	Identified in the MAG dataset as a small negative monopole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris either buried or with no surface expression.	-	349	0
70746	Dark reflector	696041	6059826	A2	2.5	0.7	0.4	-	Identified in the SSS dataset as a sub-angular elongate dark reflector with broad rounded shadow, distinct from surrounding seabed. Visible in the MBES dataset as an indistinct mound with some slight scour. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present in this area. Interpreted as a possible natural feature or possible debris.	-	351	0
70747	Dark reflector	698122	6058191	A2	1.2	0.6	0.7	-	Identified in the SSS dataset as a small sub-angular dark reflector with broad sub-angular shadow. There is some data distortion visible which may affect the accuracy of the anomaly measurements. Partially covered by the MBES dataset and visible as an irregular area of seabed consisting of a partial mound within a depression, likely scour. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present in this area. Interpreted as a possible natural feature or possible debris.	-	353	26.943004
70748	Magnetic	698552	6058442	A2	-	-	-	11	Identified in the MAG dataset as a small, broad asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts, though this is located in an area with outcropping geology. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris with little surface expression.	-	353	0
70749	Dark reflector	699397	6057623	A2	1.8	0.4	1.1	-	Identified in the SSS dataset as a small elongate sub-rounded dark reflector with long broad shadow. Visible in the MBES dataset as an angular mound with encircling scour extending primarily to the north west and south east for 7.2 m. No corresponding MAG anomaly. Interpreted as a possible natural feature or possible non-ferrous debris.	-	355	0
70750	Seabed disturbance	699607	6057975	A2	12.6	7.8	0.4	-	Identified in the MBES dataset as an elongate area of irregular seabed only partially covered by the data and so the dimensions should be considered a minimum. This consists of a series of sharply pointed mounds that do not appear easily distinguishable from one another. There is no clear scour. It is visible in the SSS dataset as an area of indistinct irregular seabed. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present in this area. Interpreted as a possible natural feature or possible debris.	-	355	23.067781
70751	Magnetic	699545	6057702	A2	-	-	-	12	Identified in the MAG dataset as a small, broad asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris either buried or with no surface expression.	-	355	0
70752	Magnetic	700585	6057657	A2	-	-	-	23	Identified in the MAG dataset as a small, broad asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts, though this is located in an area with outcropping geology. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris with little surface expression.	-	355	289.008502
70753	Magnetic	700169	6057457	A2	-	-	-	37	Identified in the MAG dataset as a small asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris either buried or with no surface expression.	-	355	0
70754	Magnetic	700337	6057342	A2	-	-	-	48	Identified in the MAG dataset as a small negative monopole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris either buried or with no surface expression.	-	355	0
70755	Magnetic	700024	6057314	A2	-	-	-	100	Identified in the MAG dataset as a large, sharp asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris either buried or with no surface expression.	-	355	0

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70756	Dark reflector	700878	6056982	A2	1.3	1.1	0.6	-	Identified in the SSS dataset as a small sub-rounded faint dark reflector with long tapered shadow, somewhat distinct from surrounding seabed. This location was not directly covered by the MBES or MAG datasets, so it is not possible to ascertain whether ferrous material is present in this area. Retained as a precaution. Interpreted as a possible natural feature or possible debris.	-	356	486.189434
70757	Dark reflector	699981	6056921	A2	2.4	0.4	0.3	-	Identified in the SSS dataset as an elongate sub-angular dark reflector with broad tapered shadow. Visible in the MBES dataset as an indistinct rounded mound with some encircling scour. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present in this area. Interpreted as a possible natural feature or possible debris.	-	356	0
70758	Magnetic	699964	6056074	A2	-	-	-	9	Identified in the MAG dataset as a small, broad asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris either buried or with no surface expression.	-	357	0
70759	Magnetic	699980	6055673	A2	-	-	-	14	Identified in the MAG dataset as a small, broad asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris either buried or with no surface expression.	-	357	72.531241
70760	Magnetic	700322	6056221	A2	-	-	-	20	Identified in the MAG dataset as a small asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	357	0
70761	Dark reflector	700900	6055036	A2	2.4	0.9	0.5	-	Identified in the SSS dataset as an angular dark reflector with broad tapered shadow, the feature is situated within scour measuring 0.8 m x 0.6 m. Visible in the MBES dataset as a small angular mound within a depression on a relatively featureless seabed. Situated directly next to similar dark reflector 70762 and may be associated. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	-	358	0
70762	Dark reflector	700902	6055033	A2	2.4	1	0.5	-	Identified in the SSS dataset as an angular dark reflector with broad tapered shadow, the feature is situated within scour measuring 2.7 m x 1.0 m. Visible in the MBES dataset as a small angular mound within a depression on a relatively featureless seabed. Situated directly next to similar dark reflector 70761 and may be associated. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	-	358	0
70763	Magnetic	701810	6053642	A2	-	-	-	16	Identified in the MAG dataset as a small, broad negative monopole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris either buried or with no surface expression.	-	360	0
70764	Magnetic	702524	6051731	A2	-	-	-	29	Identified in the MAG dataset as a small asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	362	0
70765	Debris	702844	6051724	A2	3.2	2.8	0.3	24	Identified in the SSS dataset as a sub-rounded dark reflector with irregular shadow, distinct from a featureless seabed. Also identified in the MBES dataset as a sub-rounded mound with unevenly sloping sides and a rounded peak. The feature is situated in an area of depression, with some possible sediment accumulation to the south east. Associated with a small asymmetric dipole with peak and trough on one profile line, indicating some ferrous material is present. Interpreted as possible ferrous debris	-	362	0
70766	Magnetic	703012	6051775	A2	-	-	-	15	Identified in the MAG dataset as a small symmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	362	0
70767	Dark reflector	703040	6051469	A2	2.4	0.9	0.2	-	Identified in the SSS dataset as an irregular angular dark reflector with broad irregular shadow, the feature is situated within scour measuring 5.8 m x 1.8 m on a relatively featureless seabed. Visible as angular objects in a depression in the MBES dataset. Possibly related to 70768 situated 13 m south east. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	-	362	0
70768	Dark reflector	703058	6051456	A2	1.6	0.3	0.3	-	Identified in the SSS dataset as a small, straight dark reflector with broad shadow, situated within scour measuring 2.8 m x 1.6 m. Also identified in the MBES dataset as an elongate mound with steeply sloping sides and a pointed peak within a depression, there is some possible sediment accumulation to the south east edge of the depression. Possibly related to 70767 situated 13 m north west. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	-	362	0
70769	Magnetic	703344	6050183	A2	-	-	-	22	Identified in the MAG dataset as a small asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	363	0

ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	External references	Nearest KP	Distance to MIC (m)
70770	Magnetic	703613	6050044	A2	-	-	-	14	Identified in the MAG dataset as a small symmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	364	21.147886
70771	Magnetic	703160	6049581	A2	-	-	-	9	Identified in the MAG dataset as a small, broad asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	364	0
70772	Magnetic	703489	6049487	A2	-	-	-	99	Identified in the MAG dataset as a medium, sharp asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	364	0
70773	Magnetic	703437	6049273	A2	-	-	-	11	Identified in the MAG dataset as a small, broad asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	364	0
70774	Magnetic	703510	6049215	A2	-	-	-	40	Identified in the MAG dataset as a small asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	364	0
70775	Magnetic	703259	6049171	A2	-	-	-	15	Identified in the MAG dataset as a small asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts, however this is situated within sand waves. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris either buried or with no surface expression.	-	364	0
70776	Magnetic	703263	6049132	A2	-	-	-	9	Identified in the MAG dataset as a small, broad asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts, however this is situated within sand waves. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris either buried or with no surface expression.	-	364	0
70777	Magnetic	703258	6049037	A2	-	-	-	12	Identified in the MAG dataset as a small, broad asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts, however this is situated within sand waves. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris either buried or with no surface expression.	-	365	0
70778	Magnetic	703231	6048942	A2	-	-	-	17	Identified in the MAG dataset as a small, broad asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	365	0
70779	Magnetic	703498	6048821	A2	-	-	-	28	Identified in the MAG dataset as a small asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	365	0
70780	Magnetic	703564	6048678	A2	-	-	-	9	Identified in the MAG dataset as a small, broad asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	365	0
70781	Dark reflector	703727	6048155	A2	2.9	0.9	0.7	-	Identified in the SSS dataset as a distinct, slightly elongate dark reflector with a bright tapered shadow. The feature is isolated in an area of mobile sediments. No corresponding MBES contact. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Retained as a precaution. Interpreted as a possible natural feature or possible debris.	-	365	0
70782	Magnetic	703562	6047992	A2	-	-	-	11	Identified in the MAG dataset as a small, broad asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts however a mound is visible in the MBES data that may or may not be related. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris either buried or with no surface expression.	-	366	0
70783	Dark reflector	703535	6047492	A2	1.7	1.3	1	-	Identified in the SSS dataset as a distinct, slightly angular dark reflector with a long-tapered shadow and significant height. Visible In the MBES data as a slightly elongate mound with a pointed peak situated in an area of mobile sediment. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	-	366	0
70784	Magnetic	703635	6046074	A2	-	-	-	28	Identified in the MAG dataset as a small, broad symmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts, however this is situated within sand waves. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris either buried or with no surface expression.	-	368	0
70785	Magnetic	703527	6045965	A2	-	-	-	68	Identified in the MAG dataset as a medium, sharp symmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	368	0

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70786	Magnetic	703548	6045753	A2	-	-	-	11	Identified in the MAG dataset as a small asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts, however this is situated within sand waves. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris either buried or with no surface expression.	-	368	0
70787	Magnetic	703845	6045203	A2	-	-	-	13	Identified in the MAG dataset as a small, broad asymmetric dipole with peak and trough on two profile lines. No corresponding SSS or MBES contacts. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris that is either buried or with no surface expression.	-	368	0
70788	Magnetic	703771	6044057	A2	-	-	-	29	Identified in the SSS dataset as a small asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	370	0
70789	Magnetic	704125	6043225	A2	-	-	-	22	Identified in the MAG dataset as a small asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	370	0
70790	Dark reflector	703894	6042948	A2	2.5	1	1.1	-	Identified in the SSS dataset as a distinct dark reflector with a large bright shadow and significant height, object has scouring to the east and west and situated within mobile sediments. No corresponding MBES or MAG contacts. Interpreted as a possible natural feature or possible non-ferrous debris.	-	371	0
70791	Magnetic	704155	6042922	A2	-	-	-	45	Identified in the MAG dataset as a small, sharp asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	371	0
70792	Magnetic	704378	6042579	A2	-	-	-	18	Identified in the MAG dataset as a small asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	371	35.090841
70793	Magnetic	704163	6042020	A2	-	-	-	8	Identified in the MAG dataset as a small, broad asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	372	0
70794	Seabed disturbance	703999	6041489	A2	11.8	6.6	0.5		Identified in the SSS dataset as a group of small, angular, dark reflectors with shadows that are situated in a slight depression, with the largest feature measuring 2.0 x 1.5 m. Also identified in the MBES dataset as two distinct mounds and two distinct depressions situated within a rounded scour on the edge of a sand wave. The northern mound is sub-angular, with evenly sloping sides and a double pointed peak and measures 3.5 x 2.1 x 0.3 m. The second is located to the south west and is a sub-rounded mound with evenly sloping sides and a pointed peak, measuring 2.2 x 1.8 x 0.3 m. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	-	372	0
70795	Magnetic	704042	6041405	A2	-	-	-	16	Identified in the MAG dataset as a small, broad symmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	372	0
70796	Magnetic	704163	6041002	A2	-	-	-	44	Identified in the MAG dataset as a small negative monopole with peak and trough over two profile lines. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	373	0
70797	Dark reflector	704373	6040078	A2	1.6	0.3	0.1	-	Identified in the SSS dataset as a small but distinct elongate dark reflector with a slight shadow and some surrounding scour situated within large sand waves. No corresponding MBES or MAG anomaly. Interpreted as a possible natural feature or possible non-ferrous debris.	-	374	0
70798	Magnetic	704487	6039601	A2	-	-	-	9	Identified in the MAG dataset as a small asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	374	0
70799	Magnetic	704705	6038264	A2	-	-	-	8	Identified in the MAG dataset as a small, broad asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts, however this is situated within an area of sand waves. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris either buried or with no surface expression.	-	375	0
70800	Magnetic	704454	6037987	A2	-	-	-	11	Identified in the MAG dataset as a small, broad symmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	376	0
70801	Magnetic	704734	6037664	A2	-	-	-	11	Identified in the MAG dataset as a small, broad asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts, however this is situated within an area of sand waves. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris either buried or with no surface expression.	-	376	0

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70802	Debris field	704916	6037093	A2	66.1	3.5	0.9		Identified in the SSS dataset as a long and thick linear dark reflector that is wider at its northern end, with a slight shadow. The feature has an object with shadow attached at its centre measuring 2.0 x 1.0 m and a possible object at its northern end. Also identified in the MBES dataset as a distinct, sub-rounded mound with evenly sloping sides and a jagged peak. There is distinct encircling scour that extends for 5.4 m around the feature, and it is situated in an area with large sand waves. No corresponding MAG contact, however, the feature was to fully covered by the MAG dataset so it is not possible to ascertain whether ferrous material is present along its full length. Interpreted as a debris field.	-	377	21.263402
70803	Dark reflector	704643	6037080	A2	2.9	2.1	0.2	-	Identified in the SSS dataset as an indistinct, oval shaped dark reflector with a bright uneven shadow situated within mobile sand waves. Visible in the MBES dataset as an oval mound lying perpendicular to the sand waves. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	-	377	0
70804	Magnetic	704482	6036511	A2	-	-	-	306	Identified in the MAG dataset as a large, sharp asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	377	0
70805	Magnetic	704526	6036449	A2	-	-	-	17	Identified in the MAG dataset as a small asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	377	0
70806	Magnetic	704549	6035815	A2	-	-	-	10	Identified in the MAG dataset as a small asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	378	0
70807	Magnetic	704682	6035729	A2	-	-	-	9	Identified in the MAG dataset as a small, broad asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	378	0
70808	Dark reflector	704903	6035650	A2	1.8	0.9	1.2	-	Identified in the SSS dataset as a distinct angular dark reflector with a long shadow and significant height. The feature has some scouring to the north west and south west 15 m either side and is situated in a depression within mobile sediments. Also identified in the MBES dataset as a rounded mound with steeply sloping sides and a pointed peak. No corresponding MAG contact. Interpreted as a possible natural feature or possible non-ferrous debris.	-	378	0
70809	Magnetic	704998	6035428	A2	-	-	-	15	Identified in the MAG dataset as a small, broad positive monopole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	378	0
70810	Magnetic	704862	6035086	A2	-	-	-	29	Identified in the MAG dataset as a small asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	379	0
70811	Dark reflector	704620	6034886	A2	2	0.4	0.5	-	Identified in the SSS dataset as a slightly elongate dark reflector with a very bright shadow. The feature is situated within large mobile sediments. No corresponding MBES contact. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	-	379	0
70812	Magnetic	704682	6034183	A2	-	-	-	81	Identified in the MAG dataset as a medium symmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	379	2.840151
70813	Dark reflector	705075	6034142	A2	2.8	0.6	0.5	-	Identified in the SSS dataset as a distinct, slightly elongate dark reflector with a bright uneven shadow. Also identified in the MBES dataset as an irregularly shaped low-lying mound with some distinct scour to the north and south, extending for a maximum of 8 m and located in an area of sand waves. No corresponding Mag contact. Interpreted as a possible natural feature or possible non-ferrous debris.	-	380	0
70814	Seabed disturbance	704969	6032517	A2	11.4	7.4	0.3	-	Identified in the SSS dataset as an oval area of disturbed seabed comprising indistinct dark reflectors, with some bright reflectors or shadows also visible. Also identified in the MBES dataset as an elongate mound that is wider at either end. The feature is orientated east to west and has some scour extending to the south for 5 m. It is situated within an area of mobile sediments. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	-	381	0
70815	Dark reflector	705044	6032256	A2	2.1	0.1	1	-	Identified in the SSS dataset as a distinct slightly elongate dark reflector with a bright rounded shadow and significant height. The feature has scouring to the north west and south east. Also visible in the MBES dataset as an angular mound within mobile sediments. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	-	381	0

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70816	Magnetic	705209	6031806	A2	-	-	-	28	Identified in the MAG dataset as a small asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	382	0
70817	Magnetic	705151	6031483	A2	-	-	-	13	Identified in the MAG dataset as a small, asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts, however this is situated within an area of sand waves. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris either buried or with no surface expression.	-	382	0
70818	Dark reflector	705895	6030483	A2	2.4	1.5	1.3		Identified in the SSS dataset as a distinct dark reflector with a large bright shadow and significant height, the feature is situated within scour. Also identified in the MBES dataset as a rounded mound with evenly sloping sides and an uneven peak. The feature has some encircling scour extending for 5.0 m and appears distinct in an area of large mobile sediments. The feature is situated directly north west of dark reflector 70819 and may be related. No corresponding MAG contact. Interpreted as a possible natural feature or possible non-ferrous debris.	-	383	0
70819	Dark reflector	705903	6030475	A2	5.1	0.2	0.1		Identified in the SSS dataset as a short thin and slightly curvilinear dark reflector with a slight shadow. The feature is situated directly south east of dark reflector 70818 and may be related. No corresponding MBES or MAG contacts. Interpreted as a possible natural feature or possible non-ferrous debris.	-	383	0
70820	Magnetic	705917	6030450	A2	-	-	-	58	Identified in the MAG dataset as a medium asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	383	0
70821	Dark reflector	705926	6030229	A2	1.9	1.5	1.2		Identified in the SSS dataset as a distinct, slightly angular dark reflector with a large, tapered shadow and significant height. The feature is situated within a distinct depression and mobile sediments with some scouring to the ESE and WNW. Visible in the MBES dataset as an irregular, angular slight mound, that may be broken up or multiple objects. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	-	384	0
70822	Mound	706410	6030032	A2	8.5	6	0.2	-	Identified in the MBES dataset as an elongate mound with gently sloping sides and a rounded peak. The feature is lying perpendicular to the large mobile sediments. No corresponding SSS contact. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	-	384	0
70823	Magnetic	706089	6029919	A2	-	-	-	22	Identified in the MAG dataset as a small asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	384	0
70824	Mound	707067	6029015	A2	5.8	3.8	0.4	-	Identified in the MBES dataset as an oval mound with evenly sloping sides and a pointed top. The feature is located in an area of sand ripples and the seabed appears disturbed with the sand ripples irregular. No corresponding SSS or MAG contacts. Retained as a precaution. Interpreted as a possible natural feature or possible non-ferrous debris.	-	385	0
70825	Dark reflector	706772	6026667	A2	1.7	1.3	0.3	-	Identified in the SSS dataset as an elongate, slightly angular dark reflector with a bright, tapered shadow. Visible in the MBES dataset as an angular mound situated between large sand waves. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	-	388	22.548739
70826	Rope/chain	707003	6026659	A2	86.9	0.6	0.1	326	Identified in the SSS dataset as a long, thin and slightly intermittent linear dark reflector with a slight shadow. The feature is situated in mobile sediments and may be partially buried or broken up along its length. No corresponding MBES contact. Associated with a large, sharp asymmetric dipole with peak and trough on one profile line where it crosses a Mag line, indicating some ferrous material is present at this location at least. Interpreted as a possible length of rope or chain with some ferrous content.	-	388	0
70827	Dark reflector	706932	6026650	A2	8.4	3	0.8	-	Identified in the SSS dataset as a distinct, irregularly shaped dark reflector with a bright tapered shadow. The feature is slightly anomalous to the surrounding seabed and situated in large, mobile sand waves. Also identified in the MBES dataset as an elongate, angular mound with an irregular peak, the southern end of the feature appears partially covered by sediment. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	-	388	0
70828	Dark reflector	707244	6026458	A2	1.7	0.5	1	-	Identified in the SSS dataset as a distinct angular dark reflector with a long bright shadow and significant height. Visible in the MBES dataset as a rounded mound isolated on an uneven area of seabed. Retained as a precaution. No corresponding MAG contact. Interpreted as a possible natural feature or possible non-ferrous debris.	-	388	0
70829	Dark reflector	706861	6026326	A2	1.8	1.2	1.1	-	Identified in the SSS dataset as a distinct, rounded dark reflector which casts a bright tapering shadow. Visible as a mound in the MBES dataset. No corresponding MAG contact. Interpreted as a possible natural feature or possible non-ferrous debris.	-	388	0

ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	External references	Nearest KP	Distance to MIC (m)
70830	Dark reflector	706977	6026317	A2	2.5	0.8	0.5		Identified in the SSS dataset as an elongate dark reflector with a bright, slanted shadow. Visible in the MBES dataset as a mound within large sand waves. No corresponding MAG contact. Interpreted as a possible natural feature or possible non-ferrous debris.	-	388	0
70831	Dark reflector	706635	6026005	A2	1.6	1.4	1.1	-	Identified in the SSS dataset as a distinct oval dark reflector with a long bright shadow and significant height. This location was not directly covered by the MBES or MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Retained as a precaution. Interpreted as a possible natural feature or possible debris.	-	388	56.770202
70832	Dark reflector	706840	6025906	A2	3.8	2.7	1.9	-	Identified in the SSS dataset as a distinct angular dark reflector with a long tapering shadow and significant height. Also identified in the MBES dataset as a slightly angular mound with evenly sloping sides and a pointed peak. The feature is anomalous to the surrounding seabed. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	-	388	0
70833	Seabed disturbance	706622	6025429	A2	13.3	7	0.8	-	Identified in the SSS dataset as an indistinct area of disturbed seabed comprising indistinct elongate dark reflectors with bright, irregular shadows and possible bright reflectors. Also visible in the MBES dataset as two distinct mounds, one is elongate with evenly sloping sides and a rounded top measuring 8.4 x 5.2 x 0.3 m and the other to the south is visible as an elongate with evenly sloping sides and a pointed top, measuring 4.3 x 2.8 x 0.5 m. The features have some slight encircling scour extending for a maximum of 3.3 m and are very anomalous in a featureless area of seabed. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	-	389	0
70834	Magnetic	707011	6025264	A2	-	-	-	18	Identified in the MAG dataset as a small asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris either buried or with little surface expression.	-	389	0
70835	Dark reflector	706611	6024452	A2	2.3	0.8	1.1	-	Identified in the SSS dataset as a slightly elongate dark reflector which casts a bright shadow that tapers to a slightly blunt end shape. Also visible in the MBES dataset as a slightly angular mound within a slightly uneven area seabed. No corresponding MAG contact. Retained as a precaution. Interpreted as a possible natural feature or possible non-ferrous debris.	-	390	0
70836	Dark reflector	706421	6024115	A2	1.4	0.3	0.6	-	Identified in the SSS dataset as a slightly elongate dark reflector which casts a bright shadow with straight sides and a slanted end shape. Visible in the MBES dataset as a slightly elongate mound in a slight depression, isolated on the seabed. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	-	390	0
70837	Dark reflector	706454	6023886	A2	3.2	2.2	0.7	-	Identified in the SSS dataset as a distinct, slightly elongate dark reflector which casts a bright tapering shadow. Also identified in the MBES dataset as an oval mound with evenly sloping sides and a flat peak. The feature has some slight encircling scour extending for 2.7 m and appears distinct in an area of relative clear seabed. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	-	390	0
70838	Magnetic	706055	6022798	A2	-	-	-	7	Identified in the MAG dataset as a small, broad symmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts, however this is situated within an area of outcropping geology. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris with no surface expression.	-	392	0
70839	Dark reflector	706317	6022743	A2	6.8	1.1	3.7	-	Identified in the SSS dataset as an elongate, triangular dark reflector which casts a narrow and long shadow, with significant height. Appears anomalous to the surrounding seabed which contains frequent natural features. No corresponding MBES contact. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Retained as a precaution. Interpreted as a possible natural feature or possible debris and may be modern, however this cannot be confirmed without visual inspection.	-	392	0
70840	Magnetic	706230	6022514	A2	-	-	-	21	Identified in the MAG dataset as a small asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	392	0
70841	Mound	705552	6019799	A2	2.5	1.7	0.4	-	Identified in the MBES dataset as a rounded mound with a pointed peak and evenly sloping sides with an indistinct possible elongate object attached to the southern end. The feature has some scour extending primarily to the south east for 3.8 m. No corresponding SSS contact. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	-	395	0
70842	Magnetic	705514	6019480	A2	-	-	-	5	Identified in the MAG dataset as a small, broad asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	395	0

ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	External references	Nearest KP	Distance to MIC (m)
70843	Dark reflector	705836	6019170	A2	2.7	1.4	0.2	-	Identified in the SSS dataset as an indistinct dark reflector that is elongate and slightly curved with a bright shadow. The feature is situated on an uneven area of seabed and is faintly visible in the MBES dataset as a slight mound. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	-	395	0
70844	Dark reflector	705645	6018868	A2	3	2	1.1	-	Identified in the SSS dataset as a distinct dark reflector with a large bright shadow and significant height. Also identified in the MBES dataset as a sub-angular mound with evenly sloped sides and a pointed peak. The feature has some scour extending predominantly to the north west for 7.1 m. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	-	396	0

Appendix G England (up to 12 NM): Seabed features of archaeological potential

ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	External references	Nearest KP	Distance to MIC (m)
70845	Magnetic trend	705159	6017708	A2	220	-	-	11	Identified in the MAG dataset as a linear series of three MAG anomalies, extending over 200 m and aligned generally east to west. The MAG responses range between 8 nT and 11 nT. No corresponding SSS or MBES contacts. Retained as a precaution. May represent a natural linear trend or may represent possible ferrous debris.	-	397	0
70846	Mound	705226	6017652	A2	3.3	2.4	0.9	-	Identified in the MBES dataset as a distinct slightly angular mound with steeply sloping sides. No associated SSS or MAG contact. Interpreted as a possible natural feature or possible non-ferrous debris.	-	397	0
70847	Dark reflector	705142	6017188	A2	2.5	1.8	1.7	-	Identified in the SSS dataset as a tall, subangular dark reflector which casts a straight sided shadow with a slanted end shape. Also identified in the MBES dataset as a distinct, rounded mound with an angular peak and steeply sloping sides. No associated MAG contact. Interpreted as a possible item of non-ferrous debris or a natural feature.	-	397	0
70848	Dark reflector	704950	6016898	A2	1.8	1.7	0.7	-	Identified in the SSS dataset as a slightly elongate dark reflector which casts a bright tapering shadow. No associated MBES contact. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	-	398	0
70849	Dark reflector	705314	6016835	A2	3	2.2	0.8	-	Identified in the SSS dataset as a subangular dark reflector with a bright and broad, tapering shadow and some slight scour. Identified in the MBES dataset as a large, distinct rounded mound. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	-	398	0
70850	Debris	704790	6016358	A2	7	4.3	0.4	12	Identified in the MBES dataset as an elongate mound with an uneven top. Associated with a small, broad asymmetric dipole with peak and trough on one profile line. No associated SSS contact. Interpreted as possible ferrous debris.	-	398	0
70851	Dark reflector	705207	6016213	A2	1.4	0.4	1.1	-	Identified in the SSS dataset as an angular dark reflector with a straight sided shadow with a slightly forked end shape. Visible in the MBES data as a small mound. No associated MAG contact. Interpreted as a possible natural feature or possible non-ferrous debris.	-	398	0
70852	Dark reflector	704768	6015988	A2	2.8	2.2	0.6	-	Identified in the SSS dataset as a large rounded dark reflector which casts an asymmetrically tapered shadow. Visible in the MBES data as a small mound. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	-	399	0
70853	Mound	704750	6014489	A2	3.6	2.5	0.4	-	Identified in the MBES dataset as a distinct, large flat-topped mound situated on a featureless area of seabed. No associated SSS or MAG contact. Interpreted as a possible item of non-ferrous debris or a natural feature.	-	400	0
70854	Dark reflector	704382	6014182	A2	1.4	0.5	1	-	Identified in the SSS dataset as a small rounded dark reflector with a very long shadow and significant height. The feature has some associated scouring. Visible in the MBES data as an elongate mound. No associated MAG contact. Interpreted as a possible item of non-ferrous debris or a natural feature.	-	400	0
70855	Dark reflector	704263	6014068	A2	2.2	1.5	1	-	Identified in the SSS dataset as an angular dark reflector with a long tapering shadow. This location was not directly covered by the MBES dataset; nor was it covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible item of debris or a natural feature.	-	400	44.917375
70856	Mound	704639	6014055	A2	3.5	1.9	0.4	-	Identified in the MBES dataset as a distinct subrounded to elongate mound. No associated SSS contact. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	-	400	0
70857	Dark reflector	704574	6014023	A2	3.7	1.3	1.5	-	Identified in the SSS dataset as a subangular dark reflector which casts a long-tapered shadow. Also identified in the MBES dataset as a distinct, subrounded mound. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible item of debris or a natural feature.	-	400	0
70858	Dark reflector	704751	6013956	A2	1.4	0.6	0.8	-	Identified in the SSS dataset as an angular dark reflector which casts a bright shadow. Visible in the MBES data as a small mound. No associated MAG contact. Interpreted as a possible item of non-ferrous debris or a natural feature.	-	401	0
70859	Dark reflector	704242	6013904	A2	2.2	1.7	0.3	-	Identified in the SSS dataset as an elongate and slightly angular dark reflector which casts a bright, irregular shadow and some associated scour. Visible in the MBES data as a small mound in a depression. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible item of debris or a natural feature.	-	401	33.390542

ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	External references	Nearest KP	Distance to MIC (m)
70860	Mound	704730	6013886	A2	4.1	2.8	0.4	-	Identified in the MBES dataset as a large, rounded mound. No associated SSS contact. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	-	401	0
70861	Seabed disturbance	704414	6013731	A2	5.2	4.2	0.5	-	Identified in the SSS dataset as an area of disturbed seabed comprising a large, but indistinct subangular dark reflector with a tapering shadow. Also identified in the MBES dataset as a distinct, rounded mound with gently sloping sides and an uneven peak. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	-	401	0
70862	Dark reflector	704270	6013554	A2	1.1	0.8	1	-	Identified in the SSS dataset as a small, angular dark reflector which casts a long, narrow shadow. No associated MBES contact. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	-	401	0
70863	Dark reflector	704530	6013461	A2	2.5	0.7	0.8	-	Identified in the SSS dataset as an indistinct dark reflector which appears elongate and casts a slanted shadow. Also identified in the MBES dataset as an irregular mound. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	-	401	0
70864	Dark reflector	704121	6013150	A2	1.9	1	0.5	-	Identified in the SSS dataset as a narrow curved dark reflector which casts a fairly bright shadow. Visible in the MBES data as a small mound. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	-	401	4.372897
70865	Mound	704260	6012302	A2	2.8	1.8	0.3	-	Identified in the MBES dataset as a distinct, subrounded mound. No associated SSS contact. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible item of debris or a natural feature.	-	402	0
70866	Debris	703977	6011888	A2	2.2	1.6	0.4	9	Identified in the SSS dataset as an elongate dark reflector which casts a bright tapered shadow. Also identified in the MBES dataset as a slightly irregular angular mound situated in a very slight depression, measuring 9.7 x 8.4 x -0.1 m. Associated with a small, broad asymmetric dipole with peak and trough on one profile line. Interpreted as a possible item of ferrous debris.	-	403	0
70867	Dark reflector	704058	6011550	A2	3.4	2.3	0.4	-	Identified in the SSS dataset as a sub-angular dark reflector which casts a bright tapering shadow. Also identified in the MBES dataset as a large, rounded mound. No associated MAG contact. Interpreted as a possible natural feature or possible non-ferrous debris.	-	403	0
70868	Debris	704017	6011288	A2	4.9	2.5	0.6	-	Identified in the SSS dataset as a distinct, elongate dark reflector with a bright uneven shadow, possibly suggesting uneven height or multiple objects. The feature has some associated scouring. Also identified in the MBES dataset as an irregular, subrounded mound. No associated MAG contact. Interpreted as a possible item of non-ferrous debris or a natural feature.	-	403	0
70869	Dark reflector	704138	6010882	A2	1.9	0.1	0.1	-	Identified in the SSS dataset as a narrow, elongate dark reflector which casts a small bright shadow. Visible in the MBES data as a small mound. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	-	404	0
70870	Dark reflector	703991	6010143	A2	1.8	1.7	1.2	-	Identified in the SSS dataset as a distinct, angular dark reflector which casts a tapering shadow. Also identified in the MBES dataset as a tall mound. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	-	404	0
70871	Debris	703463	6009243	A2	8.5	0.3	0.1	-	Identified in the SSS dataset as a distinct linear dark reflector which casts a short shadow. No associated MBES or MAG contacts. Interpreted as a possible item of non-ferrous linear debris.	-	405	0
70872	Dark reflector	703429	6009214	A2	2.3	0.6	0.6	-	Identified in the SSS dataset as an angular dark reflector which casts a bright, straight sided shadow, with some associated slight scouring. Visible in the MBES data as a small mound. No associated MAG contact. Interpreted as a possible natural feature or possible non-ferrous debris.	-	405	0
70873	Dark reflector	703483	6008597	A2	2	1.5	0.8	-	Identified in the SSS dataset as an indistinct, elongate dark reflector with a bright and irregular shadow. No associated MBES or MAG contacts. Interpreted as a possible item of non-ferrous debris or a natural feature.	-	406	0
70874	Magnetic	703622	6008090	A2	-	-	-	17	Identified in the MAG dataset as a small, symmetric dipole with peak and trough on one profile line. No associated SSS or MBES contact. Interpreted as possible ferrous debris either buried or with no surface expression.	-	406	0
70875	Magnetic	703185	6007129	A2	-	-	-	7	Identified in the MAG dataset as a small, broad asymmetric dipole with peak and trough on one profile line. No associated SSS or MBES contact. Interpreted as a possible natural feature or possible ferrous debris.	-	408	0

ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	External references	Nearest KP	Distance to MIC (m)
70876	Dark reflector	703057	6006700	A2	2.3	1.1	0.3	-	Identified in the SSS dataset as a slightly indistinct, elongate dark reflector which casts a bright and irregular shadow. Visible in the MBES data as a small mound in a depression. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible item of debris or a natural feature.	-	408	0
70877	Dark reflector	703192	6006521	A2	2.2	1.8	1	-	Identified in the SSS dataset as a subangular dark reflector which casts a long tapering shadow. Also identified in the MBES dataset as a subrounded mound, possibly located in a wide depression or scour. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible item of debris or a natural feature.	-	408	0
70878	Dark reflector	703042	6006255	A2	2.1	0.9	1.1	-	Identified in the SSS dataset as a distinct, rectangular shaped dark reflector which casts a very long, bright shadow. The feature has some scour associated, orientated WNW-ESE. Visible in the MBES data as a small mound present in a depression. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible item of debris or a natural feature.	-	408	0
70879	Dark reflector	702800	6006182	A2	3.1	1.7	0.5	-	Identified in the SSS dataset as a distinct dark reflector which casts a bright shadow with straight sides. The feature is situated within a slight depression, possibly with some sediment accumulation. Also identified in the MBES dataset as a rounded mound. No associated MAG contact. Interpreted as a possible item of non-ferrous debris or a natural feature.	-	409	0
70880	Bright reflector	702673	6005858	A2	3.4	0.6	-	-	Identified in the SSS dataset as an elongate bright reflector. No associated MBES contact. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	-	409	0
70881	Dark reflector	702852	6005632	A2	2	1.4	0.9	-	Identified in the SSS dataset as a distinct, slightly angular dark reflector, with a bright shadow. Also identified in the MBES dataset as a distinct rounded mound, possibly set within a shallow depression. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	-	409	0
70882	Debris	702974	6005350	A2	5	0.9	0.5	-	Identified in the SSS dataset as an elongate dark reflector with a bright asymmetrical shadow. Visible in the MBES data as a small linear mound, distinct from the surrounding, likely natural features. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible item of debris.	-	409	0
70883	Dark reflector	702847	6005249	A2	1.6	1.1	1.1	-	Identified in the SSS dataset as a distinct, angular dark reflector with a long and irregularly tapering shadow. Also identified in the MBES dataset as a subrounded mound, present in an area of seabed with natural ridges. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	-	409	0
70884	Mound	703028	6005215	A2	2.3	2	1	-	Identified in the MBES dataset as a distinct, subrounded mound, with an uneven peak. No associated SSS contact. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	-	409	0
70885	Dark reflector	702932	6005191	A2	3.4	0.4	0.1	-	Identified in the SSS dataset as an elongate dark reflector with a bright, rounded shadow, the feature is situated on an uneven area of seabed. No corresponding MBES contact. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	-	409	0
70886	Dark reflector	702621	6004965	A2	2.9	1.9	0.6	-	Identified in the SSS dataset as a distinct dark reflector with a bright, long shadow. The feature is situated within an area of trawling scars and may be broken up or partially buried by sands. Visible as an angular mound in the MBES dataset. No corresponding MAG contact. Interpreted as a possible natural feature or possible non-ferrous debris.	-	410	0
70887	Dark reflector	702646	6004851	A2	6.8	1.1	0.1	-	Identified in the SSS dataset as a long, thin and slightly curvilinear dark reflector with a slight shadow, situated in an area of seabed with frequent trawling scars. No corresponding MBES contact. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	-	410	0
70888	Dark reflector	702628	6004683	A2	1.1	0.7	0.3	-	Identified in the SSS dataset as a small, subrounded dark reflector with broad angular shadow. The feature is isolated and distinct from an otherwise featureless seabed. No corresponding MBES or MAG contacts. Interpreted as a possible natural feature or possible non-ferrous debris.	-	410	0
70889	Magnetic	702662	6004511	A2	-	-	-	13	Identified in the MAG dataset as a small symmetric dipole with peak and trough on one profile line. No associated SSS or MBES contact. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris either buried or with no surface expression.	-	410	0

ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	External references	Nearest KP	Distance to MIC (m)
70890	Debris	702860	6004469	A2	6.3	0.6	0.1	-	Identified in the SSS dataset as a distinct, elongate dark reflector with a bright shadow. The feature is situated within an area of sand mega ripples. No corresponding MBES contact. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as possible linear debris.	-	410	25.234198
70891	Mound	702013	6003765	A2	2	1.9	0.1	-	Identified in the MBES dataset as a small and angular mound within a depression measuring 6.9 x 6.1 x -0.1 m. The feature is quite indistinct but anomalous for the area and is situated on a possible seabed scar orientated north west to south east on the seabed. No corresponding SSS or MAG contacts. Interpreted as a possible natural feature or possible debris.	-	411	0
70892	Magnetic	702005	6003724	A2	-	-	-	52	Identified in the MAG dataset as a medium, asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	411	0
70893	Dark reflector	702129	6003695	A2	1.4	1	0.8	-	Identified in the SSS dataset as a small, rounded dark reflector with a broad, straight-sided shadow. The feature is distinct and has scouring to the north east to south west. Also identified in the MBES dataset as a small and angular mound within a depression measuring 14.8 x 10.1 - 0.2 m. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	-	411	0
70894	Magnetic	702157	6003675	A2	-	-		20	Identified in the MAG dataset as a small, broad asymmetric dipole with peak and trough over two profile lines. No corresponding SSS or MBES contacts. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris either buried or with no surface expression.	-	411	0
70895	Debris	701850	6003486	A2	14.3	0.4	0.1	-	Identified in the SSS dataset as a distinct, narrow and slightly curvilinear dark reflector with a bright shadow. The feature is situated within an area of sand mega ripples. No corresponding MBES contact. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as possible curvilinear debris.	-	411	0
70896	Magnetic	702138	6003290	A2	-	-	-	14	Identified in the MAG dataset as a small, asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	411	0
70897	Dark reflector	701921	6003269	A2	2.6	0.3	0.1		Identified in the SSS dataset as an indistinct, elongate dark reflector with a very bright shadow. The feature is situated on an area of sand mega ripples. No corresponding MBES contact. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	-	412	0
70898	Magnetic	701655	6003033	A2	-	-	-	88	Identified in the MAG dataset as a medium, asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	412	0
70899	Dark reflector	701825	6002784	A2	3.8	2.6	0.9	-	Identified in the SSS dataset as an indistinct, slightly angular dark reflector with a large bright shadow. The feature is slightly anomalous to the surrounding seabed. Visible in the MBES dataset as a tall mound within a depression. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	-	412	0
70900	Dark reflector	701959	6002711	A2	7.2	0.7	0.1	-	Identified in the SSS dataset as an indistinct, thin and slightly curved dark reflector with a bright, short shadow. The feature is situated in an area of sand mega ripples. No corresponding MBES contact. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	-	412	0
70901	Magnetic	701309	6002204	A2	-	-	-	22	Identified in the MAG dataset as a small, broad positive monopole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	413	0
70902	Magnetic	701619	6001970	A2	-	-	-	13	Identified in the MAG dataset as a small, broad asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	413	22.389305
70903	Dark reflector	700659	6001063	A2	1.3	0.5	0.7	-	Identified in the SSS dataset as a small, rounded dark reflector with broad tapered shadow. The feature is distinct and isolated on an area of seabed with sand mega ripples. Visible as a small mound in the MBES dataset. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	-	414	0
70904	Magnetic	701072	6001053	A2	-	-	-	37	Identified in the MAG dataset as a small, asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	414	0

ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	External references	Nearest KP	Distance to MIC (m)
70905	Magnetic	701005	6000971	A2	-	-	-	38	Identified in the MAG dataset as a small, asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	414	0
70906	Seabed disturbance	700755	6000600	A2	18.1	9.6	0.6	-	Identified in the SSS dataset as an area of disturbed seabed comprising two angular dark reflectors with long shadows situated within an area of sand mega ripples. The features measure approximately 1.9 x 0.6 x 0.5 and 1.7 x 1.4 x 0.6 m individually. Also identified in the MBES dataset as an area of disturbed seabed comprising three small mounds within a depression, the feature is relatively isolated on an uneven area of seabed. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. May represent a natural feature or possible debris.	-	415	0
70907	Debris field	700713	6000429	A2	15.6	11.2	0.1	-	Identified in the SSS dataset as a group of straight, curvilinear and slightly angular dark reflectors with shadows, the largest object measures 4.6 x 0.4 m. The feature is situated within sand mega ripples and the full extent of the feature may be buried. Visible as an uneven area of seabed in the MBES dataset. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible debris field.	-	415	0
70908	Magnetic	700718	6000326	A2	-	-	-	34	Identified in the MAG dataset as a small, positive monopole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris either buried or with no surface expression.	-	415	0
70909	Magnetic	700325	6000291	A2	-	-	-	6	Identified in the MAG dataset as a small, broad asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris either buried or with no surface expression.	-	415	0
70910	Magnetic	700315	6000271	A2	-	-	-	41	Identified in the MAG dataset as a small, symmetric dipole with peak and trough on two profile lines. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	415	0
70911	Dark reflector	700279	6000268	A2	2.2	1.4	0.8	-	Identified in the SSS dataset as an indistinct dark reflector, slightly irregularly shaped with a bright, uneven shadow, possibly suggesting uneven height. The feature is situated within sand mega ripples and may be partially buried. The feature has some associated scouring orientated south south west. Visible as an angular mound in the MBES dataset. No corresponding MAG contact. Interpreted as a possible natural feature or possible non-ferrous debris.	-	415	0
70912	Magnetic	700260	6000249	A2	-	-	-	34	Identified in the MAG dataset as a small, negative monopole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	415	0
70913	Rope/chain	700601	6000073	A2	109.7	0.9	0.1	-	Identified in the SSS dataset as a long, thin and distinct linear dark reflector with a bright, short shadow in places. The feature is orientated approximately north to south on an uneven area of seabed, some extents of the feature are less distinct than others. No corresponding MBES or MAG contacts. Interpreted as a possible length of rope or chain.	-	415	0
70914	Debris field	700369	5999946	A2	39.6	8.7	0.4	-	Identified in the SSS dataset as a group of indistinct dark reflectors with shadows and bright reflectors that measure up to 1.9 x 0.3 m individually. The objects appear to be connected by a thin, curvilinear dark reflector that may be a rope or chain, orientated approximately north to south on the seabed. No corresponding MBES or MAG contacts, although the full extent of the feature is not covered by the MAG data. Possibly associated with debris field 70916, situated 18 m south. Interpreted as a debris field and may be fishing gear, however, this cannot be confirmed without visual inspection.	-	415	0
70915	Magnetic	700490	5999925	A2	-	-	-	24	Identified in the MAG dataset as a small, asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	415	0
70916	Debris field	700373	5999891	A2	22.3	0.6	0	-	Identified in the SSS dataset as a thin, curvilinear bright reflector with an indistinct dark reflector attached at one end. The feature is orientated approximately north to south on an uneven area of seabed. No corresponding MBES contact. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Possibly associated with debris field 70914, situated 18 m north. Interpreted as a debris field and may be fishing gear, however, this cannot be confirmed without visual inspection.	-	415	0
70917	Magnetic	700121	5998972	A2	-	-	-	28	Identified in the MAG dataset as a small, broad asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris either buried or with no surface expression.	-	416	10.734705
70918	Rope/chain	699424	5998713	A2	26.3	0.8	0.1	-	Identified in the SSS dataset as a long, thin and curvilinear dark reflector with a slight shadow across its extent. The feature is situated within an area of mega ripples and is indistinct in places, possibly suggesting partial burial. No corresponding MBES contact. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible length of rope or chain.	-	417	0

ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	External references	Nearest KP	Distance to MIC (m)
70919	Seabed disturbance	699562	5998647	A2	5.7	3.5	0.1	-	Identified in the SSS dataset as a seabed disturbance comprising a small group of dark reflectors with bright shadows. The features are indistinct and situated within an area of sand mega ripples, as such the full extent of the feature may be partially buried. In the MBES dataset, an uneven area of seabed, with low-lying mounds is visible. No corresponding MAG contacts. Interpreted as a possible natural feature or possible non-ferrous debris.	-	417	0
70920	Magnetic	699349	5998488	A2	-	-	-	8	Identified in the MAG dataset as a small, broad symmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	417	0
70921	Magnetic	699493	5998431	A2	-	-	-	56	Identified in the MAG dataset as a medium, negative monopole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	417	0
70922	Debris field	699229	5998337	A2	68.5	5.6	0.8	-	Identified in the SSS dataset as a large spread of angular dark reflectors with shadows, situated on an area of seabed with frequent sand waves. A distinct, thin and curvilinear dark reflector is visible connecting the objects. Also identified in the MBES dataset as an irregularly shaped depression with some indistinct mounds within its centre. The largest mound measures 3.3 x 2.3 x 0.2 m. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a debris field and may be fishing gear, however, this cannot be confirmed without visual inspection.	-	417	6.730475
70923	Debris field	699201	5997807	A2	160.5	0.4	0.1	-	Identified in the SSS dataset as a long, thin and curvilinear dark reflector with shadow, with regularly spaced small rounded dark reflectors attached measuring approximately 1.0 x 0.5 x 0.2 m. Possibly associated with debris field 70925. No corresponding MBES or MAG contacts. Interpreted as a debris field and may be fishing gear, however, this cannot be confirmed without visual inspection.	-	418	0
70924	Magnetic	698964	5997783	A2	-	-	-	11	Identified in the MAG dataset as a small, broad positive monopole with peak and trough on one profile line. No corresponding SSS or MBES contacts, although this may be related to one end of debris field (70925), situated 23 m west and debris field (70923), situated 36 m east. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	418	0
70925	Debris field	698837	5997773	A2	174.6	0.6	0.4	-	Identified in the SSS dataset as a long, thin and curvilinear dark reflector with shadow across its extent, with regularly spaced small, rounded dark reflectors attached. No corresponding MBES or MAG contacts. Possibly associated with debris field 70923. Interpreted as a debris field and may be fishing gear however, this cannot be confirmed without visual inspection.	-	418	0
70926	Debris	699031	5997728	A2	7.2	0.3	0.1	-	Identified in the SSS dataset as a thin, elongate dark reflector with a slight shadow. The feature is orientated approximately NNE to SSW and distinct to the surrounding sand mega ripples. No corresponding MBES contact. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as possible debris.	-	418	0
70927	Magnetic	699058	5997654	A2	-	-	-	18	Identified in the MAG dataset as a small, asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	418	0
70928	Debris	699209	5997528	A2	14.6	0.7	0.1	-	Identified in the SSS dataset as an elongate, thin and slightly curvilinear dark reflector with a bright shadow, situated within an area of sand mega ripples. No corresponding MBES contact. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as curvilinear debris.	-	418	0
70929	Dark reflector	698366	5997473	A2	1.8	0.8	0.4	-	Identified in the SSS dataset as a small, slightly angular dark reflector with irregular tapered shadow, possibly suggesting uneven height. The feature is situated in an area of sand mega ripples. Visible as a small mound in the MBES dataset. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	-	419	0
70930	Magnetic	698393	5997465	A2	-	-	-	26	Identified in the MAG dataset as a small, symmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	419	0

ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	External references	Nearest KP	Distance to MIC (m)
70931	Wreck	699178	5997464	A1	10.5	7.1	0.7	-	Identified in the SSS dataset as an oval area of disturbed seabed comprising bright and small dark reflectors, with some areas of measurable height. The feature is situated in an area of sand mega ripples and appears anomalous to the surrounding seabed. Also identified in the MBES dataset as a large and distinct mound, the feature has gently sloping sides and an uneven peak. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Associated with the location of an unknown, recorded wreck (UKHO 85842), first identified in 2016 with geophysical dimensions of 10 x 7.7 x 1.0 m and no associated magnetic anomaly, the wreck was described as being mostly buried and orientated 030/210° on the seabed. There are no recognisable wreck characteristics visible in the geophysical survey data, and the lower height measurement may indicate the wreck may have since become partially buried. Interpreted as a partially buried wreck.	UKHO 85842, WA 2012	418	0
70932	Magnetic	698420	5997293	A2	-	-	-	17	Identified in the MAG dataset as a small, asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	419	0
70933	Debris field	698208	5997150	A2	270	0.9	0.5	25	Identified in the SSS dataset as an alignment of very similar, small dark reflectors with shadows, orientated east to west on the seabed, approximately 270 m long. There are approximately nine anomalies that measure up to 1.9 m, these may be connected by a linear feature, but this is unclear in the data. No corresponding MBES contact. Associated with two small MAG anomalies visible on the MAG dataset, indicating some ferrous material is present, however the entire feature is not covered by the MAG data and therefore we cannot confirm that it is ferrous across the entire length. Interpreted as a partially ferrous debris field and may be fishing gear, however, this cannot be confirmed without visual inspection.	-	419	0
70934	Magnetic	698452	5997145	A2	-	-	-	21	Identified in the MAG dataset as a small positive monopole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	419	0
70935	Rope/chain	697524	5997005	A2	24.3	0.5	0.1	-	Identified in the SSS dataset as a long, thin and curvilinear dark reflector with a bright shadow, the feature is indistinct in places. The feature is situated within slight mega ripples and may be partially buried. No corresponding MBES or MAG contacts. Interpreted as a possible length of rope or chain.	-	420	0
70936	Magnetic	698072	5996925	A2	-	-	-	24	Identified in the MAG dataset as a small, symmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	419	0
70937	Magnetic	697110	5996887	A2	-	-	-	22	Identified in the MAG dataset as a small negative monopole with peak and trough on one profile line. No corresponding SSS contact. This location was not covered by the MBES dataset. Interpreted as possible ferrous debris that is either buried or with no surface expression	-	420	38.559414
70938	Dark reflector	697790	5996857	A2	5.6	0.7	0.2	-	Identified in the SSS dataset as a thin, slightly elongate dark reflector with a bright shadow, situated within sand mega ripples. No corresponding MBES contact. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	-	419	0
70939	Dark Reflector	696983	5996756	A2	3.5	1.6	0.9	-	Identified in the SSS dataset as a distinct, angular dark reflector with a large bright shadow and significant height. Also identified in the MBES dataset as an elongate mound with steeply sloping sides situated in a slight depression. The feature is anomalous to the surrounding featureless seabed. No corresponding MAG contact. Interpreted as a possible natural feature or possible non-ferrous debris.	-	420	0
70940	Magnetic	697023	5996740	A2	-	-	-	26	Identified in the MAG dataset as a small negative monopole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	420	0
70941	Dark reflector	697079	5996684	A2	1.9	1	0.4	-	Identified in the SSS dataset as a small, indistinct and slightly irregularly shaped dark reflector with a bright, uneven shadow, possibly suggesting uneven height. No corresponding MBES contact. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	-	420	0
70942	Rope/chain	697897	5996680	A2	26.6	1	0.2	-	Identified in the SSS dataset as a long, thin and slightly curvilinear dark reflector with a short shadow. The feature has a small, slightly angular dark reflector with a short bright shadow attached to its northern end, measuring 1.8 x 0.7 x 0.2 m. No corresponding MBES or MAG contacts. Interpreted as a possible length of non-ferrous rope or chain.	-	419	21.869321
70943	Dark reflector	696590	5996479	A2	1.3	0.5	0.3	-	Identified in the SSS dataset as a small, slightly elongate dark reflector, situated within a wider boulder field. Visible as a small mound within a depression in the MBES dataset. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	-	421	0

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70944	Magnetic	697554	5996479	A2	-	-	-	38	Identified in the MAG dataset as a small, asymmetric dipole with peak and trough on one profile line. No corresponding SSS contact. This location was not directly covered by the MBES dataset. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	420	32.837453
70945	Magnetic	696908	5996440	A2	-	-	-	42	Identified in the MAG dataset as a small, asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	420	0
70946	Debris	697066	5996372	A2	9.3	1.2	0.5	216	Identified in the SSS dataset as a long, thin and distinct dark reflector with a bright shadow. The feature is orientated approximately east to west on an uneven area of seabed. Identified in the MBES dataset as an elongate mound within an area of irregular seabed comprising depressions and mounds. Associated with a large asymmetric dipole with peak and trough over two profile lines visible on the MAG dataset, indicating some ferrous material is present. Interpreted as ferrous linear debris.	-	420	0
70947	Dark reflector	696192	5996370	A2	2.1	1.7	0.7	-	Identified in the SSS dataset as a distinct subangular dark reflector with a bright, uneven shadow, possibly suggesting varying height. Visible as a distinct, angular mound in the MBES dataset. No corresponding MAG contact. Interpreted as a possible natural feature or possible non-ferrous debris.	-	421	8.805602
70948	Magnetic	697256	5996347	A2	-	-	-	19	Identified in the MAG dataset as a small, broad asymmetric dipole with peak and trough over two profile lines. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	420	5.006173
70949	Magnetic	697097	5996279	A2	-	-	-	62	Identified in the MAG dataset as a medium, sharp asymmetric dipole with peak and trough over two profile lines. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	420	0
70950	Magnetic	696037	5996241	A2	-	-	-	42	Identified in the MAG dataset as a small negative monopole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	421	0
70951	Dark reflector	696160	5996218	A2	1.7	0.9	0.6	-	Identified in the SSS dataset as a distinct oval shaped dark reflector with a tapered, long shadow. The feature is situated within a depression and wider boulder field. Visible as a mound in the MBES dataset. No corresponding MAG contact. Interpreted as a possible natural feature or possible non-ferrous debris.	-	421	0
70952	Magnetic	695585	5996201	A2	-	-	-	39	Identified in the MAG dataset as a small, sharp asymmetric dipole with peak and trough on two profile lines. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	422	0
70953	Magnetic	696723	5996169	A2	-	-	-	499	Identified in the MAG dataset as a large, sharp asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	421	0
70954	Dark reflector	696328	5996134	A2	1.2	0.8	0.6	-	Identified in the SSS dataset as a small, angular dark reflector with a bright, pointed shadow. The feature has some scour to the south east measuring 4.2 m and is situated on an uneven area of seabed. The feature is visible in the MBES dataset as an oval mound within a depression. No corresponding MAG contact. Interpreted as a possible natural feature or possible non-ferrous debris.	-	421	0
70955	Magnetic	696468	5996104	A2	-	-	-	59	Identified in the MAG dataset as a medium, sharp asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts, however a mound is visible in the MBES dataset in the vicinity and may be associated. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris that is either buried or with little surface expression.	-	421	0
70956	Magnetic	695910	5996037	A2	-	-	-	32	Identified in the MAG dataset as a small asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts, however this is situated on an area of seabed with outcropping geology. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris.	-	421	0
70957	Dark reflector	695209	5995968	A2	0.7	0.6	0.5	-	Identified in the SSS dataset as a small but distinct, angular dark reflector with a bright, irregular shadow, possibly suggesting uneven height. Visible as a mound in the MBES dataset. No corresponding MAG contact. Interpreted as a possible natural feature or possible non-ferrous debris.	-	422	0
70958	Mound	696143	5995961	A2	1.9	1.8	0.6	-	Identified in the MBES dataset as a slightly square shaped mound with steeply sloping sides and a rounded peak. No corresponding SSS or MAG contacts. Interpreted as a possible natural feature or possible non-ferrous debris.	-	421	0
70959	Magnetic	696220	5995953	A2	-	-	-	68	Identified in the MAG dataset as a medium, sharp positive monopole with peak and trough on one profile line. No corresponding SSS or MBES contacts, however it is situated within an area of sand waves. Interpreted as possible ferrous debris that is either buried or with little surface expression.	-	421	0
70960	Magnetic	695958	5995920	A2	-	-	-	37	Identified in the MAG dataset as a small negative monopole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	421	0

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70961	Magnetic	694338	5995903	A2	-	-	-	162	Identified in the MAG dataset as a large, sharp asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	423	4.209036
70962	Dark reflector	694894	5995889	A2	2.7	1.2	1.3	-	Identified in the SSS dataset as a very distinct oval shaped dark reflector with a bright, large shadow and significant height. The feature is situated on a boulder rich area of seabed but is significantly larger than the surrounding features. Also identified in the MBES dataset as a distinct and slightly angular, oval mound situated in a slight depression, close to an area of sand waves. No corresponding MAG contact. Interpreted as a possible natural feature or possible non-ferrous debris.	-	423	0
70963	Dark reflector	694557	5995884	A2	2.2	0.9	0.9	-	Identified in the SSS dataset as a distinct subrounded dark reflector with a bright shadow. Visible in the MBES dataset as an angular mound within a depression. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	-	423	0
70964	Magnetic	694302	5995867	A2	-	-	-	49	Identified in the MAG dataset as a small asymmetric dipole with peak and trough over two profile lines. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	423	0
70965	Dark reflector	694913	5995840	A2	3	2	1.3	-	Identified in the SSS dataset as a very distinct, oval shaped dark reflector with a bright, large shadow and significant height. Also identified in the MBES dataset as a distinct and slightly angular, oval mound in a slight depression and close to some slight sand waves. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	-	423	0
70966	Magnetic	694838	5995795	A2	-	-	-	353	Identified in the MAG dataset as a large, sharp asymmetric dipole with peak and trough over two profile lines. No corresponding SSS or MBES contacts, however this is situated on an area of seabed with outcropping geology, but unlikely to be natural due to amplitude. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	423	0
70967	Magnetic	694970	5995778	A2	-	-	-	273	Identified in the MAG dataset as a large, sharp asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts, however this is situated on an area of seabed with outcropping geology, but likely unrelated. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	422	0
70968	Magnetic	695012	5995763	A2	-	-	-	40	Identified in the MAG dataset as a small positive monopole with peak and trough on one profile line. No corresponding SSS or MBES contacts, however this is situated on an area of seabed with outcropping geology. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris.	-	422	0
70969	Magnetic	694949	5995742	A2	-	-	-	88	Identified in the MAG dataset as a medium, sharp positive monopole with peak and trough on one profile line. No corresponding SSS or MBES contacts, however this is situated on an area of seabed with outcropping geology. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris.	-	423	0
70970	Recorded Wreck	695256	5995704	A3	-	-	-	-	The position of an unknown, recorded wreck (UKHO 6161), described as a steam ship that was first reported in 1980. In 2002 the UKHO record states that the wreck was known locally as 'Winch', dived over 10 years ago, the bell was recovered with no name, with elements of the wreck identifiable, situated in sand. The wreck was not located in MBES data in a 2016 geophysical survey and the record was amended to Dead. This location was covered by the 2021 SSS, MBES and MAG datasets and no remains were identified, however this area of seabed has frequent mounds visible in the MBES dataset, interpreted as natural features. It has been retained in this gazetteer as a precaution as the location of a potential archaeological site, and, as such, a 100 m AEZ is recommended	UKHO 6161, NRHE 908404, WA 2017	422	0
70971	Dark reflector	694401	5995643	A2	1.7	0.7	0.9	-	Identified in the SSS dataset as a distinct dark reflector with a bright, long shadow and significant height. The feature is situated on an uneven area of seabed and visible as a mound in the MBES dataset. No corresponding MAG contact. Interpreted as a possible natural feature or possible non-ferrous debris.	-	423	0
70972	Dark reflector	693326	5995587	A2	3.1	1.7	0.6	-	Identified in the SSS dataset as a distinct, elongate dark reflector with a large bright shadow, situated within a wider boulder field. Visible in the MBES dataset as an elongate mound. No corresponding MAG contact. Interpreted as a possible natural feature or possible non-ferrous debris.	-	424	0
70973	Dark reflector	694261	5995563	A2	2.5	0.5	0.9	-	Identified in the SSS dataset as a distinct, straight dark reflector with a very bright, large shadow and significant height. Visible as a mound in a slight depression in the MBES dataset. No corresponding MAG contact. Interpreted as a possible natural feature or possible non-ferrous debris.	-	423	0
70974	Magnetic	693740	5995526	A2	-	-	-	54	Identified in the MAG dataset as a medium, sharp asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts, however this is situated on an area of seabed with frequent boulders. Interpreted as possible ferrous debris that is either buried or with little surface expression.	-	424	0

ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	External references	Nearest KP	Distance to MIC (m)
70975	Magnetic	692943	5995515	A2	-	-	-	97	Identified in the MAG dataset as a medium, sharp positive monopole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	425	0
70976	Dark reflector	694277	5995480	A2	2.4	0.6	1.3	-	Identified in the SSS dataset as a distinct, angular dark reflector with a very large, broad shadow and significant height. Also identified in the MBES dataset as a distinct, rounded mound with slightly irregular sides. The feature is situated in a depression measuring 8.0 x 7.8 x -0.2 m and within a wider boulder field. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	-	423	0
70977	Dark reflector	694419	5995475	A2	2.9	1.9	1.1	-	Identified in the SSS dataset as a distinct, angular dark reflector with a very large, broad shadow and significant height. The feature is situated within a wider boulder field but appears anomalous. Also identified in the MBES dataset as a very distinct, rounded mound with slightly irregular sides. The feature is situated in a depression measuring 10.6 x 8.2 x -0.2 m and possibly has an indistinct linear mound attached to its south west end extending for 3.0 m. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	-	423	0
70978	Dark reflector	693741	5995456	A2	1.4	0.9	0.5	-	Identified in the SSS dataset as a distinct, rectangular shaped dark reflector with a large rounded shadow. Visible as a mound in the MBES dataset. No corresponding MAG contact. Interpreted as a possible natural feature or possible non-ferrous debris.	-	424	0
70979	Magnetic	693562	5995431	A2	-	-	-	26	Identified in the MAG dataset as a small, sharp symmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts, however a mound is visible in the MBES dataset in the vicinity and may be associated. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris either buried or with no surface expression.	-	424	0
70980	Dark reflector	692358	5995417	A2	2.1	0.3	0.8		Identified in the SSS dataset as a fairly distinct, elongate dark reflector with a bright shadow. Also identified in the MBES dataset as a distinct mound, taller at its southern end, with one gentle sloping edge and one steep. The feature has a slightly uneven peak and is situated in a depression measuring 5.9 x 3.8 x -0.1 m. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	-	425	11.659564
70981	Dark reflector	693412	5995393	A2	1.9	1.2	1.3	-	Identified in the SSS dataset as a distinct dark reflector with a very large, long and tapered shadow with significant height off the seabed. The feature is visible as a mound in the MBES dataset. No corresponding MAG contact. Interpreted as a possible natural feature or possible non-ferrous debris.	-	424	0
70982	Dark reflector	692422	5995387	A2	2.3	0.5	0.6		Identified in the SSS dataset as a distinct, angular and possibly broken up dark reflector with a bright shadow. Also identified in the MBES dataset as a rounded, low-lying mound with an uneven peak and gently sloping sides. No corresponding MAG contact. Interpreted as a possible natural feature or possible non-ferrous debris.	-	425	0
70983	Magnetic	693678	5995367	A2	-	-	-	51	Identified in the MAG dataset as a medium negative monopole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	424	0
70984	Dark reflector	693662	5995262	A2	3.1	1.7	0.7	-	Identified in the SSS dataset as a distinct dark reflector with a bright shadow. The feature is situated within a wider boulder field, however, is larger and appears anomalous. Also identified in the MBES dataset as a distinct oval mound with slightly angular sides and a rounded top, with some sediment build up at its base. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location, however a broad MAG anomaly on the closest line 17 m south west interpreted as geological, may be a halo of something not directly covered by the dataset. Interpreted as a possible natural feature or possible debris.	-	424	0
70985	Mound	691400	5995114	A2	2	2	0.8	-	Identified in the MBES dataset as a distinct rounded mound with steeply sloping sides, situated in a wider boulder field but appears anomalous due to its size. No corresponding SSS contact. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	-	426	73.482076
70986	Magnetic	693126	5995070	A2	-	-	-	15	Identified in the MAG dataset as a small asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	424	10.831955
70987	Magnetic	692910	5995061	A2	-	-	-	21	Identified in the MAG dataset as a small symmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	425	0

ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	External references	Nearest KP	Distance to MIC (m)
70988	Dark reflector	692184	5995060	A2	6.9	0.9	0.1	-	Identified in the SSS dataset as a short, linear dark reflector with a dull shadow, situated on a boulder rich area of seabed. The feature is possibly associated with nearby anomaly 70989. No corresponding MBES or MAG contacts. Interpreted as a possible natural feature or possible non-ferrous debris.	-	425	0
70989	Dark reflector	692188	5995058	A2	4.6	0.5	0.1	-	Identified in the SSS dataset as a distinct, slightly elongate dark reflector with an uneven shadow. The feature is possibly associated with nearby anomaly 70988 and is situated within a wider boulder field. No corresponding MBES or MAG contacts. Interpreted as a possible natural feature or possible non-ferrous debris.	-	425	0
70990	Mound	692925	5995044	A2	2.3	1.4	0.4	-	Identified in the MBES dataset as an elongate mound with an uneven, possibly double peaked top with steeply sloping sides. The feature is situated in a depression measuring 6.6 x 4.7 x -0.1 m. No corresponding SSS or MAG contacts. Interpreted as a possible natural feature or possible non-ferrous debris.	-	425	0
70991	Magnetic	691497	5994972	A2	-	-	-	52	Identified in the MAG dataset as a medium, sharp positive monopole with peak and trough on one profile line. No corresponding SSS or MBES contacts, however a mound is visible in the MBES dataset in the vicinity and may be associated. Retained as a precaution. May represent a natural linear trend or may represent possible ferrous debris.	-	426	0
70992	Magnetic	692120	5994970	A2	-	-	-	45	Identified in the MAG dataset as a small positive monopole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	425	0
70993	Magnetic	691462	5994938	A2	-	-	-	51	Identified in the MAG dataset as a medium, sharp asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Retained as a precaution. May represent a natural linear trend or may represent possible ferrous debris.	-	426	0
70994	Magnetic	691201	5994903	A2	-	-	-	65	Identified in the MAG dataset as a medium, sharp positive monopole with peak and trough on one profile line. No corresponding SSS or MBES contacts, however a mound is visible in the MBES dataset in the vicinity and may be associated. Interpreted as possible ferrous debris that is either buried or with little surface expression.	-	426	0
70995	Magnetic	691986	5994896	A2	-	-	-	37	Identified in the MAG dataset as a small asymmetric dipole with peak and trough over two profile lines. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	426	0
70996	Magnetic	692109	5994894	A2	-	-	-	10	Identified in the MAG dataset as a small asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	425	0
70997	Magnetic	691469	5994875	A2	-	-	-	34	Identified in the MAG dataset as a small positive monopole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Retained as a precaution. May represent a natural linear trend or may represent possible ferrous debris.	-	426	0
70998	Magnetic	691909	5994852	A2	-	-	-	52	Identified in the MAG dataset as a medium, sharp positive monopole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	426	0
70999	Debris	692064	5994850	A2	2.7	0.5	0.1	147	Identified in the SSS dataset as a straight, elongate dark reflector with a slightly uneven shadow across its extent. The feature is situated within a wider boulder field. No corresponding MBES contact. Associated with a large, sharp asymmetric dipole with peak and trough on one profile line visible on the MAG dataset, indicating some ferrous material is present. Interpreted as possible ferrous debris.	-	426	0
71000	Dark reflector	691427	5994834	A2	1	0.2	0.9	-	Identified in the SSS dataset as a distinct, short and straight dark reflector with a long rectangular shadow and significant height, the feature is situated within a wider boulder field. Visible in the MBES dataset as a round mound. No corresponding MAG contact. Interpreted as a possible natural feature or possible non-ferrous debris.	-	426	0
71001	Magnetic	691551	5994832	A2	-	-	-	36	Identified in the MAG dataset as a small, sharp asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Possibly associated with Mag anomaly 71003. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	426	0
71002	Dark reflector	691378	5994831	A2	1.9	0.7	0.5	-	Identified in the SSS dataset as an indistinct, slightly elongate dark reflector with a bright shadow. Also identified in the MBES dataset as a rectangular mound with steeply sloping sides and an uneven top, situated in an area of frequent boulders. No corresponding MAG contact. Interpreted as a possible natural feature or possible non-ferrous debris.	-	426	0
71003	Magnetic	691514	5994815	A2	-	-	-	74	Identified in the MAG dataset as a medium, sharp positive monopole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Possibly associated with Mag anomaly 71001. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	426	0

ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	External references	Nearest KP	Distance to MIC (m)
71004	Magnetic	691576	5994792	A2	-	-	-	38	Identified in the MAG dataset as a small negative monopole with peak and trough on one profile line. No corresponding SSS or MBES contacts, however a mound is visible in the SSS dataset in the vicinity and may be associated. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris either buried or with little surface expression.	-	426	0
71005	Mound	691694	5994777	A2	2	1.8	0.6	-	Identified in the MBES dataset as a distinct mound with steeply sloping sides. The feature is very distinct within a wider boulder field. No corresponding SSS or MAG contacts. Interpreted as a possible natural feature or possible non-ferrous debris.	-	426	0
71006	Magnetic	691703	5994751	A2	-	-	-	54	Identified in the MAG dataset as a medium, sharp asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	426	0
71007	Dark reflector	691871	5994745	A2	2.1	1.3	0.6	-	Identified in the SSS dataset as a distinct sub-rounded dark reflector with a bright, symmetrical shadow. The feature is situated within an area of sand waves and within a wider boulder field. Identified in the MBES dataset as a slightly angular mound. No corresponding MAG contact. Interpreted as a possible natural feature or possible non-ferrous debris.	-	426	0
71008	Magnetic	691613	5994716	A2	-	-	-	29	Identified in the MAG dataset as a small asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Retained as a precaution. May represent a natural linear trend or may represent possible ferrous debris.	-	426	0
71009	Magnetic	690825	5994658	A2	-	-	-	111	Identified in the MAG dataset as a large, sharp asymmetric dipole with peak and trough over two profile lines. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	427	0
71010	Magnetic	691689	5994619	A2	-	-	-	98	Identified in the MAG dataset as a medium, sharp asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts, however a mound is visible in the MBES dataset in the vicinity and may be associated. Retained as a precaution. May represent a natural linear trend or may represent possible ferrous debris that is buried or without surface expression.	-	426	0
71011	Debris	691479	5994576	A2	2.3	1.6	1.1	426	Identified in the SSS dataset as a distinct dark reflector with a large, bright shadow and significant height. The feature is situated within a wider boulder field but appears anomalous. Also identified in the MBES dataset as a very distinct, tall and almost square shaped mound situated on an uneven area of seabed. Associated with a large, sharp asymmetric dipole with peak and trough on two profile lines, indicating some ferrous material is present. Interpreted as possible ferrous debris.	-	426	0
71012	Dark reflector	690982	5994562	A2	2.5	2	0.2	-	Identified in the SSS dataset as a distinct, slightly right-angled dark reflector with a bright tapered shadow. The feature is situated within an area of sand waves and appears slightly anomalous. No corresponding MBES contact. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	-	427	0
71013	Dark reflector	691013	5994537	A2	3.2	1.1	0.4	-	Identified in the SSS dataset as an elongate dark reflector with a long, bright uneven shadow, possibly indicating uneven height. The feature is situated in a slight depression on a sand wave rich area of seabed. Visible as an angular mound in the MBES dataset. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	-	427	0
71014	Magnetic	690558	5994498	A2	-	-	-	9	Identified in the MAG dataset as a small, sharp symmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	427	0
71015	Dark reflector	690984	5994479	A2	2.6	2.1	0.7	-	Identified in the SSS dataset as a distinct, square shaped dark reflector with a bright shadow, situated on an area of seabed with frequent sand waves. The feature is situated within an area of slight seabed disturbance. Also identified in the MBES dataset as a distinct rectangular mound with a flat top situated within scour measuring 5.7 x 2.8 - 0.4 m and orientated to the south west, the mound has steeply sloping sides. The feature has no corresponding MAG contact, however it is situated within an area of high magnetic responses that may be associated. Interpreted as a possible natural feature or possible debris.	-	427	0
71016	Magnetic	690682	5994413	A2	-	-	-	18	Identified in the MAG dataset as a small asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	427	0
71017	Magnetic	690578	5994374	A2	-	-	-	19	Identified in the MAG dataset as a small asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	427	0
71018	Magnetic	689959	5994230	A2	-	-	-	31	Identified in the MAG dataset as a small positive monopole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	428	0

ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	External references	Nearest KP	Distance to MIC (m)
71019	Magnetic	690945	5994043	A2	-	-	-	59	Identified in the MAG dataset as a medium negative monopole with peak and trough on one profile line. No corresponding SSS contact and this location was not directly covered by the MBES dataset. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	427	234.790038
71020	Magnetic	689617	5993993	A2	-	-	-	126	Identified in the MAG dataset as a large, sharp asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	428	0
71021	Wreck	690003	5993981	A1	14.4	9.5	0.8	33	Identified in the SSS dataset as an indistinct, dark reflector with a dull shadow situated on a featureless area of seabed. The feature is situated in a depression and orientated approximately north east to south west on the seabed. There are some possible linear, or slatted objects visible within the feature, however it is situated at the edge of the data range so this is unclear, and the dimensions should be considered a minimum. This location was not directly covered by the MBES or MAG datasets, however a broad negative monopole, that may be a halo response, is visible on the closest line, 44 m north west, may be associated. This position is associated with a UKHO record for the Brabant, a 1492 tonne steam ship sunk in 1917. The wreck originally measured 73.5 x 10.7 x 6.1 m and carried a cargo of wood. The wreck was last surveyed in 2011, with only the stern section and two boilers visible, and geophysical dimensions of 58.0 x 19.0 x 5.0 m, suggesting the wreck extends considerably beyond the data extents. Interpreted as a wreck that is situated outside of the Study Area, however it has been retained in this gazetteer due to its AEZ.	UKHO 5807, NRHE 907941, WA 2019	428	0
71022	Magnetic	688893	5993757	A2	-	-	-	8	Identified in the MAG dataset as a small negative monopole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	429	0
71023	Magnetic	688637	5993728	A2	-	-	-	248	Identified in the MAG dataset as a large, sharp positive monopole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	429	0
71024	Magnetic	688845	5993702	A2	-	-	-	40	Identified in the MAG dataset as a small positive monopole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	429	0
71025	Magnetic trend	688558	5993668	A2	100	-	-	23	Identified in the MAG dataset as a series of two MAG anomalies, extending over approximately 100 m, aligned generally NNW to SSE. The MAG responses range between 15 nT and 23 nT. No corresponding SSS or MBES contacts. Retained as a precaution. May represent a natural linear trend or may represent possible ferrous debris.	-	429	0
71026	Magnetic trend	688311	5993347	A2	60	-	-	26	Identified in the MAG dataset as a series of two MAG anomalies, extending over approximately 60 m, aligned generally north to south. The MAG responses range between 24 nT and 26 nT. No corresponding SSS or MBES contacts. Retained as a precaution. May represent a natural linear trend or may represent possible ferrous debris.	-	430	0
71027	Magnetic	688140	5993303	A2	-	-	-	13	Identified in the MAG dataset as a small, broad asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	430	0
71028	Magnetic	688182	5993283	A2	-	-	-	23	Identified in the MAG dataset as a small asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	430	0
71029	Magnetic	687722	5993164	A2	-	-	-	23	Identified in the MAG dataset as a small, broad asymmetric dipole with peak and trough over two profile lines. No corresponding SSS or MBES contacts. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris either buried or with no surface expression.	-	430	0
71030	Magnetic	687876	5993158	A2	-	-	-	69	Identified in the MAG dataset as a medium, sharp asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	430	0
71031	Magnetic	687192	5993022	A2	-	-	-	10	Identified in the MAG dataset as a small, broad symmetric dipole with peak and trough over two profile lines. No corresponding SSS or MBES contacts. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris either buried or with no surface expression.	-	431	0
71032	Magnetic	687212	5992937	A2	-	-	-	24	Identified in the MAG dataset as a small asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	431	0
71033	Magnetic	687015	5992871	A2	-	-	-	16	Identified in the MAG dataset as a small positive monopole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	431	0
71034	Magnetic	686861	5992862	A2	-	-	-	101	Identified in the MAG dataset as a large positive monopole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	431	0

ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	External references	Nearest KP	Distance to MIC (m)
71035	Magnetic trend	686795	5992841	A2	300	-	-	41	Identified in the MAG dataset as a curvilinear series of six MAG anomalies, extending over 300 m, aligned generally north east to south west. The MAG responses range between 7 nT and 41 nT. No corresponding SSS or MBES contacts. Retained as a precaution. May represent a natural linear trend or may represent possible ferrous debris.	-	431	0
71036	Magnetic	686767	5992933	A2	-	-	-	30	Identified in the MAG dataset as a small asymmetric dipole with peak and trough over two profile lines. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	431	0
71037	Magnetic	686687	5992809	A2	-	-	-	13	Identified in the MAG dataset as a small asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	431	0
71038	Debris field	685959	5992965	A2	212.9	0.4	0.4	8	Identified in the SSS dataset as a very long, thin and curvilinear dark reflector with a shadow in parts, that is spread over a wide area of seabed (approximately 275 x 133 m), the feature is coiled in places. The feature has numerous, angular dark reflectors with shadows attached across its extent, these measure approximately 1.2 x 0.8 m individually. Also identified in the MBES dataset as a long, thin and slightly curvilinear mound on a relatively flat and even area of seabed, orientated north east to south west, some of the associated objects are visible in the MBES dataset. The feature is associated with a number of small MAG anomalies where the MAG lines cross the feature, indicating some ferrous material is present. Interpreted as a partially ferrous debris field, and may be fishing gear, however, this cannot be confirmed without visual inspection.	-	432	0
71039	Seabed disturbance	685925	5993023	A2	10.3	0.7	0.1	-	Identified in the SSS dataset as an area of disturbed seabed comprising three small, angular dark reflectors with shadows aligned on the seabed. Individually, these features measure approximately 0.9 x 0.6 m. This location was not directly covered by the MBES or MAG datasets. Interpreted as a possible natural feature or possible debris.	-	432	0
71040	Magnetic	685303	5992796	A2	-	-	-	20	Identified in the MAG dataset as a small asymmetric dipole with peak and trough over two profile lines. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	433	0
71041	Debris	685420	5992882	A2	2	0.2	0.1	-	Identified in the SSS dataset as a short curvilinear dark reflector with a slight dull shadow. The feature is isolated and distinct on a featureless area of seabed. No corresponding MBES or MAG contacts. Interpreted as possible non-ferrous debris.	-	433	0
71042	Debris field	685164	5992974	A2	71	0.8	0.2	-	Identified in the SSS dataset as a long, thin and curvilinear dark reflector with an intermittent shadow. At the south western edge of the feature there is one dark reflector measuring 3.4 x 0.7 x 0.1 m associated. Also identified in the MBES dataset as a seabed disturbance comprising two depressions measuring approximately 7.8 x 4.5 m, connected by linear mounds. No corresponding MAG contact. Interpreted as a debris field, and may be fishing gear, however this cannot be confirmed without further investigation.	-	433	0
71043	Magnetic	684889	5993012	A2	-	-	-	42	Identified in the MAG dataset as a small asymmetric dipole with peak and trough on one profile line. No corresponding SSS contact. Visible as a slight depression in the MBES dataset. Interpreted as possible ferrous debris that is either buried or with little surface expression.	-	433	0
71044	Magnetic	684966	5992795	A2	-	-	-	18	Identified in the MAG dataset as a small, broad asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	433	0
71045	Debris	684113	5993070	A2	2.6	1.1	0.4	-	Identified in the SSS dataset as a distinct, elongate dark reflector with a bright pointed shadow. Also identified in the MBES dataset as a distinct, rectangular shaped mound with straight sides and a slightly uneven peak. No corresponding MAG contact. Interpreted as possible non-ferrous debris.	-	434	0
71046	Dark reflector	683921	5993010	A2	1.2	0.8	0.3	-	Identified in the SSS dataset as a small, elongate dark reflector with a bright, tapered shadow. The feature is isolated on a featureless area of seabed, with some slight scour visible. Visible in the MBES dataset as a small angular mound within a depression. Interpreted as a possible natural feature or possible debris.	-	434	0
71047	Rope/chain	683785	5992875	A2	23.7	0.1	0.1	6	Identified in the SSS dataset as a long, thin and slightly curvilinear dark reflector with a slight shadow. The anomaly is situated on a featureless area of seabed. No corresponding MBES contact. The feature is covered by the MAG dataset at its southern end and is associated with a small MAG anomaly with peak and trough on one profile line, indicating some ferrous material may be present. Interpreted as a possible length of partially ferrous rope or chain.	-	434	0
71048	Dark reflector	683797	5993001	A2	2.1	0.7	0.3	-	Identified in the SSS dataset as an indistinct dark reflector, with a bright, slightly uneven shadow, possibly suggesting uneven height. Visible in the MBES dataset as an angular mound within a depression. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	-	434	0

ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	External references	Nearest KP	Distance to MIC (m)
71049	Magnetic	683948	5992998	A2	-	-	-	56	Identified in the MAG dataset as a medium, sharp asymmetric dipole with peak and trough on multiple profile lines. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	434	0
71050	Mound	683384	5993026	A2	1.6	1.2	0.1	-	Identified in the MBES dataset as a small but distinct, irregularly shaped mound with an uneven peak. The feature appears anomalous to the surrounding seabed. No corresponding SSS contact. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	-	435	0
71051	Magnetic	682795	5993216	A2	-	-	-	364	Identified in the MAG dataset as a large, sharp asymmetric dipole with peak and trough on one profile line. No corresponding SSS or MBES contacts. Interpreted as possible ferrous debris that is either buried or with no surface expression.	-	435	0
71052	Dark reflector	682811	5992900	A2	1.7	0.3	0	-	Identified in the SSS dataset as a distinct, short, straight dark reflector with no shadow, the feature is isolated on a featureless area of seabed. No corresponding MBES contact. This location was not directly covered by the MAG dataset, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	-	435	0

Appendix H Maritime Recorded Losses

NRHE/Canmore ID	HER ID	Name	Type	Date of Loss	Description
Canmore 292316	Aberdeenshire NK14SW0141	Union	Schooner	1871	A wooden schooner with a cargo of coal that was run ashore leaky, and wrecked at Sandford Bay, one mile south of Peterhead
Canmore 206349	Aberdeenshire NK14SW0100	Courier	Smack	1839	A smack, with general cargo, that was wrecked at Sandford Bay, near Peterhead.
Canmore 115520	-	Endeavour	Steam drifter	1929	A steam drifter that was lost in fog outside Boddam harbour, about 700 yards from Buchan Ness Lighthouse.
Canmore 265727	Aberdeenshire NK14SW0125	Julie Caso	Unknown	1875	A piece of wreckage marked 'Julie Caso' was picked up near Peterhead. Presumed to be a schooner which foundered off Salthouse head.
Canmore 207134	Aberdeenshire NK14SE0008	Children's Friend	Lugger	1897	A wooden fishing lugger that foundered outside Peterhead harbour after being driven from anchor.
-	Aberdeenshire NK14SE0004	Unknown	Sloop	1865	A sloop was seen in distress off Buchan Ness. Not known if vessel was lost.
Canmore 329214	Aberdeenshire NK14SE0005	Unknown	Brigantine	1731	A brigantine that foundered off Buchan Ness.
Canmore 207224	Aberdeenshire NK24SW0006	Happy Ena	Lugger	1900	A wooden lugger that was driven from moorings and is supposed to have foundered near Boddam.
Canmore 292403	Aberdeenshire NK24SW0003	Nanny	Sloop	1844	A sloop that foundered off Buchan Ness.
Canmore 292405	Aberdeenshire NK24SW0004	Newark	Unknown	1800	A vessel sunk by privateer off Buchan Ness.
Canmore 206467	Aberdeenshire NK24SW0002	Brothers	Smack	1869	A wooden smack that was in a collision and sank off Buchan Ness.

NRHE/Canmore ID	HER ID	Name	Type	Date of Loss	Description
Canmore 292406	Aberdeenshire NK24SW0005	Edward	Brig	1791	A brig with a cargo of iron ore that foundered off Buchan Ness.
Canmore 260808	Aberdeenshire NK23SE0002	Equity	Schooner	1882	A wooden schooner with a cargo of coal that foundered eight miles south east of Buchan Ness.
-	Angus NP54NW0001	HMS Blackmorevale	Minesweeper	1918	The minesweeper HMS *Blackmorevale* was mined off Montrose. It was a minesweeper of the Early Hunt class, built in 1917.
Canmore 327151	-	Anna Charlotte	Unknown	1861	A vessel abandoned 40 miles east of Bell Rock
Canmore 325391	-	Magdeline Caroline	Unknown	1870	A vessel carrying coal abandoned 50 miles off May Island.
Canmore 329461	-	Ann	Sloop	1846	A sloop seen in an abandoned and sinking condition at 56N 01W.

Appendix I Intertidal Heritage Assets

WA ID	NRHE / Canmore ID	HER ID	Type	Date	Description
1001	Canmore 305324	Aberdeenshire NK14SW0048	Village, Harbor	Post Medieval/19th Century	Site of the village of Burnhaven, depicted on the OS 1st and 2nd edition maps. Both shows parallel rows of buildings either side of the main street, the southern row extending further east, and with additional buildings to the west. South of the main street is a meeting house. To the south west is the harbour and jetty, The small harbour made use of where the mouth of the burn originally flowed into the sea, and was demarked by the stone jetty, which had a T-shaped stone mooring on the harbour decking of paved stones. None of the buildings appear to remain, with much of the former village site now occupied by a sewage works. The harbour is no longer shown after the 2nd edition map, with the little remains of the harbour quay only visible at lower tides. Polygon from HER extends into intertidal zone.
1002	-	Aberdeenshire NK14SW0228	Standing Structure	Post Medieval/19th Century	Remains of structures on the beach at Sandford Bay, most likely related to the former village of Burnhaven and its harbour (NK14SW0048) to the northeast. The wall lines were reported to the Archaeology Service by a member of the public in November 2019. No structures are shown at this location on the OS historic maps.
1003	-	Humber MHU21018	Beach Scaffolding	Second World War	Aerial Photographs show Second World War beach defences.
1004	NRHE 1516561	-	Road	Post Medieval / 19th Century / Modern	Site of Auburn to Bridlington Road. Originally the main Bridlington Road from the south, later replaced by the northern section of what is now the A165. Most of the road had been destroyed by erosion.