



The Great Grid Upgrade

Sea Link

Preliminary Environmental Information Report

Volume: 2

Part 4 Offshore Scheme

Appendix 4.7.A, Marine Archaeological Technical
Report

Version A

October 2023

nationalgrid

Page intentionally blank

Contents

4.7.A Marine Archaeological Technical Report	1
4.7.A.1 Introduction	1
4.7.A.2 Legislation, Guidance and Policy	2
4.7.A.3 Methodology	11
4.7.A.4 Marine Archaeological Assessment: Palaeogeography	28
4.7.A.5 Marine Archaeological Assessment: Maritime, Aviation Sites and Geophysical Anomalies of Archaeological Potential	41
4.7.A.6 Marine Archaeological Assessment: Intertidal Heritage Assets	63
4.7.A.7 Assessment of Historic Seascape Character	66
4.7.A.8 Summary of Results and Overall Sensitivity	67
4.7.A.9 References	69
Annex 4.7.A.1: Terminology	77
Annex 4.7.A.2: Legislation, Policy and Guidance	80
Annex 4.7.A.3: Palaeogeographic Features of Archaeological Potential	85
Annex 4.7.A.4: Vibrocore locations	96
Annex 4.7.A.5: Stage 1 Geotechnical Review	99
Annex 4.7.A.6: Seabed Features of Archaeological Potential	115
Annex 4.7.A.7: Additional Seabed Features Not Identified in Marine Geophysical Survey Data	382
Annex 4.7.A.8: Maritime Recorded Losses	385
Annex 4.7.A.9: Aviation Recorded Losses	399
Annex 4.7.A.10: Intertidal Sites and Findspots	400

Table of Tables

Table 4.7.A.1: Summary of relevant NPS documents	3
Table 4.7.A.2: East Suffolk Council's Suffolk Coastal Local Plan policies	7
Table 4.7.A.3: Thanet District Local Plan policies	9
Table 4.7.A.4: Summary of survey equipment	15
Table 4.7.A.5: Software used for geophysical assessment	16
Table 4.7.A.6: Criteria for assigning data quality rating	18
Table 4.7.A.7: Criteria discriminating relevance of identified features	19
Table 4.7.A.8: Staged approach to geoarchaeological investigations	20
Table 4.7.A.9: Criteria to assess the archaeological value of marine heritage assets	25
Table 4.7.A.10: Shallow stratigraphy within the study area	32
Table 4.7.A.11: Anomalies of archaeological potential within the study area	42
Table 4.7.A.12: Types of anomalies identified	43
Table 4.7.A.13: Summary of Recorded Losses by date and county	58

Sea Link

Document control

Document Properties

Organisation	Wessex Archaeology
Author	AECOM
Approved by	AECOM
Title	Preliminary Environmental Information Report Part 4, Appendix 4.7.A, Marine Archaeological Technical Report
Data Classification	Internal

Version History

Document	Version	Status	Description / Changes
24/10/2023	A	FINAL	First issue

4.7.A Marine Archaeological Technical Report

4.7.A.1 Introduction

Project Background

- 4.7.A.1.1 Wessex Archaeology was commissioned by National Grid Electricity Transmission plc, hereafter referred to as National Grid, to undertake the marine archaeological assessments required to support the Planning Inspectorate application for the offshore element of the proposed Sea Link Project, hereafter referred to as the Proposed Project.
- 4.7.A.1.2 In March 2022, following consultation with the relevant Local Planning Authorities in Suffolk and Kent, the Proposed Project was to be considered a Nationally Significant Infrastructure Project (NSIP) defined under Part 3 of the Planning Act 2008 (Ref 7.1).
- 4.7.A.1.3 This document is appended to **Volume 1, Part 4, Chapter 7, Marine Archaeology** of the Preliminary Environmental Information Report (PEIR).

Development Proposal

- 4.7.A.1.1 The Project aims to reinforce the transmission network in the southeast of England and East Anglia with a High Voltage Direct Current (HVDC) Link between a landfall located between Aldeburgh and Thorpeness in Suffolk and Pegwell bay in Kent. A full description of the Proposed Project is presented in a separate chapter: **Volume 1, Part 1, Chapter 4, Description of the Proposed Project**.
- 4.7.A.1.4 This heritage assessment will detail the known and potential marine archaeology within the Offshore Scheme.

Previous Impact

- 4.7.A.1.5 There are already a considerable number of existing marine developments located in proximity to the Offshore Scheme, including Thanet, London Array, and Greater Gabbard offshore wind farms. The Proposed Project will also intersect or run close to export cable routes and/or agreement areas for East Anglia One, East Anglia One North, East Anglia Two, East Anglia Three, North Falls and Five Estuaries offshore wind farms. There are also several marine aggregate licence areas located adjacent to the Offshore Scheme, including 528/2, 510/1-2 and 507/1 (**Volume 1, Part 4, Chapter 10, Other Sea Users**).

Scope of Document

- 4.7.A.1.6 The purpose of this assessment is to determine, as far as is possible from existing information and survey data, the nature, extent and significance of the known and potential marine archaeological resource within the marine archaeological study area, hereafter referred to as the study area, comprising the extent of the Offshore Scheme

and its environs, and to assess the potential impacts to this resource as a result of activities associated with the Proposed Project.

4.7.A.1.7 Further definitions of terminology and chronology can be found in Annex 4.7.A.1.

Aims

4.7.A.1.8 The overall aim of this assessment is to inform **Volume 1, Part 4, Chapter 7, Marine Archaeology**, the marine archaeological chapter of the PEIR for the Proposed Project.

4.7.A.1.9 The specific aims are to:

- outline the known and potential marine heritage assets within the study area based on a review of existing information, including geophysical and geotechnical survey data, within and beyond the area, forming the baseline;
- provide a summary of the value and sensitivity of known and potential marine heritage assets; and
- inform the production of a PEIR.

Copyright

4.7.A.1.10 This report may contain material that is non-Wessex Archaeology copyright (e.g. Ordnance Survey, British Geological Survey (BGS), Crown Copyright), or the intellectual property of third parties, which Wessex Archaeology are able to provide for limited reproduction under the terms of our own copyright licences, but for which copyright itself is non-transferable by Wessex Archaeology. Users remain bound by the conditions of the Copyright, Designs and Patents Act 1988 (Ref 7.2) with regard to multiple copying and electronic dissemination of the report.

4.7.A.1.11 This product has been derived in part from material obtained from the UK Hydrographic Office (UKHO) with the permission of the UKHO and His Majesty's Stationery Office (© Crown Copyright 2022. Wessex Archaeology ref. HA294/007/316-01). The UKHO has not verified the information within this product and does not accept liability for the accuracy of reproduction or any modifications made thereafter.

4.7.A.2 Legislation, Guidance and Policy

Introduction

4.7.A.2.1 The study area is located inside England's Territorial Waters, which extend to 12 nautical miles (nm) from the coast (**Figure 4.7.A.1**).

4.7.A.2.2 This section provides a summary of the national, regional and local planning and legislative framework that governs how the marine historic environment is dealt with in regard to the planning process. More comprehensive details are provided in Annex 4.7.A.2 of this document.

Marine Legislation

4.7.A.2.3 The following legislation applies to marine heritage within the study area:

- Marine and Coastal Access Act 2009 (Ref 7.3);

- Protection of Wrecks Act 1973: Section One and Two (Ref 7.4);
- Ancient Monuments and Archaeological Areas Act 1979 (as amended) (Ref 7.5);
- Protection of Military Remains Act 1986 (Ref 7.6); and
- Merchant Shipping Act 1995 (Ref 7.7).

4.7.A.2.4 The above legislation provides a context for focussing approaches and consultation requirements. These legal frameworks provide protection for marine historic assets of high historical, archaeological or artistic value, as well as allowing military wrecks and aircraft remains to be protected. Ownership of any wreck remains is determined in accordance with the Merchant Shipping Act 1995 (Ref 7.7) as administered by the Receiver of Wreck.

International Conventions

4.7.A.2.5 The UNESCO Convention was concluded in 2001 and is a comprehensive attempt to codify the law internationally with regards to underwater archaeological heritage. The UK (including the Bailiwick of Guernsey) abstained in the vote on the final draft of the Convention, however, it 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. To date, the Convention has been ratified by 71 countries (Ref 7.8).

4.7.A.2.6 The Annex of the convention suggests preservation *in situ* as best archaeological practise.

Planning Policy

National Policy Statements

4.7.A.2.7 The UK Government produces National Policy Statements (NPS) which set out the UK Government's objectives for the development of NSIPs. Those NPS potentially relevant to marine archaeology are shown in Table 4.7.A.1.

Table 4.7.A.1: Summary of relevant NPS documents

Policy	Summary
Overarching National Policy Statement for Energy (EN-1; Ref 7.9)	This NPS sets out national policy for energy infrastructure and the importance of archaeological assessment in the development process.
National Policy Statement for Electricity Networks Infrastructure (EN-5; Ref 7.10)	This NPS, taken together with the overarching NPS (EN-1), provides for decision making on above ground electricity lines of 132kV and over and other electricity networks associated with a Nationally Significant Infrastructure Project e.g. substations and converter stations.

National Planning Policy Framework

4.7.A.2.8 The National Planning Policy Framework (NPPF) was first published by the Department for Communities and Local Government in March 2012, replacing Planning Policy Statement 5. The most recent iteration of the NPPF, published by the Ministry of Housing, Communities and Local Government, was released in July 2021 (Ref 7.11).

4.7.A.2.9 Section 16 of the NPPF (Ref 7.11), Conserving and enhancing the historic environment, sets out the principal national guidance on the importance, management and safeguarding of heritage assets within the planning process. The aim of this section is to ensure that Regional Planning Bodies and Local Planning Authorities, developers and owners of heritage assets adopt a consistent and holistic approach to their conservation and to reduce complexity in planning policy relating to proposals that affect them.

4.7.A.2.10 The government guidance provides a framework that:

- recognises that heritage assets are an irreplaceable resource;
- requires applicants to provide proportionate information on the significance of heritage assets affected by the proposals and an impact assessment of the proposals on that significance;
- takes into account the desirability of sustaining and enhancing the significance of heritage assets and their setting;
- places weight on the conservation of designated heritage assets;
- requires developers to record and advance understanding of the significance of any heritage assets to be lost (wholly or in part) in a manner proportionate to their importance and impact, and to make this evidence (and any archive generated) publicly accessible; and
- promotes the conservation of 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.

Marine policy

4.7.A.2.11 The Marine and Coastal Access Act 2009 (Ref 7.3) is the primary legislation relevant to marine development plans. Under this legislation, marine plans must be consistent with the UK Marine Policy Statement (MPS; Ref 7.12) and fully reflect the requirements of the MPS at a local level. Marine plans must also be in accordance with other UK national policy, including the NPPF (Ref 7.11).

4.7.A.2.12 The MPS (Ref 7.12) was prepared and adopted by HM Government and the devolved administrations of Scotland, Wales and Northern Ireland for the purposes of Section 44 of the Marine and Coastal Access Act 2009 (Ref 7.3). Under the Act, the UK was divided into marine planning regions, with an associated planning authority responsible for preparing a marine plan for that area.

4.7.A.2.13 The MPS (Ref 7.12) sets out the framework for preparing Marine Plans (see below) and taking decisions affecting the marine environment and was jointly adopted by the Secretary of State, Scottish Ministers, Welsh Ministers and the Department of the Environment in Northern Ireland in 2011.

4.7.A.2.14 The UK MPS notes that “*marine activities have the potential to result in adverse effects on the historic environment both directly and indirectly, including damage to or destruction of heritage assets*” (Ref 7.12, 22).

4.7.A.2.15 It sets out for consideration that:

- some heritage assets have a level of interest that justifies statutory designation, the purpose of which is to ensure that they are protected and conserved for the benefit of this and future generations;
- many heritage assets with archaeological interest in these areas are not currently designated as scheduled monuments or protected wreck sites but are demonstrably of equivalent significance. The absence of designation for such assets does not necessarily indicate lower significance and the marine plan authority should consider them subject to the same policy principles as designated heritage assets;
- in considering the significance of heritage assets and their setting, the marine plan authority should take into account the particular nature of the interest in the assets and the value they hold for this and future generations;
- where the loss of the whole or a material part of a heritage asset’s significance is justified, the marine plan authority should identify and require suitable mitigating actions to record and advance understanding of the significance of the heritage asset before it is lost. Requirements should be based on advice from the relevant regulator and advisors; and
- in England, marine licensing and marine planning was made the responsibility of the Marine Management Organisation (MMO).

Local planning policy

Marine plans

4.7.A.2.16 The study area is located within the East Inshore and East Offshore Marine Plan (Ref 7.13) and the South East Inshore Marine Plan (Ref 7.13).

East Inshore Marine Plan Area

4.7.A.2.17 Both the East Inshore and East Offshore Marine Plans were published in one document in April 2014 (Ref 7.13). Within this document, the East Inshore Marine Plan area covers the marine area within the 12 nm from the Mean High Water Spring (MHWS) mark between Flamborough Head, Yorkshire to Felixstowe, Suffolk covering an area of approximately 6000 square kilometres.

4.7.A.2.18 With regards to heritage assets and seascape, objective 5 of the plan is “*to conserve heritage assets, nationally protected landscapes and ensure that decisions consider the seascape of the local area*” (Ref 7.13, 50). Furthermore, policy SOC2 of the Marine Plan details the requirements that should be demonstrated for proposals that may affect heritage assets, as follows:

- that they will not compromise or harm elements which contribute to the significance of the heritage asset.
- how, if there is compromise or harm to a heritage asset, this will be minimised.

- how, where compromise or harm to a heritage asset cannot be minimised it will be mitigated against.
- the public benefits for proceeding with the proposal if it is not possible to minimise or mitigate compromise or harm to the heritage asset.

4.7.A.2.19 Additionally, Policy SOC3 details the requirements that should be demonstrated for proposals that may affect terrestrial and marine character of an area:

- that they will not adversely impact the terrestrial and marine character of an area.
- how, if there are adverse impacts on the terrestrial and marine character of an area, they will minimise them.
- how, where these adverse impacts on the terrestrial and marine character of an area cannot be minimised they will be mitigated against.
- the case for proceeding with the proposal if it is not possible to minimise or mitigate the adverse impacts.

South East Inshore Marine Plan Area

4.7.A.2.20 The South East Inshore Marine Plan was published in June 2021 (Ref 7.14) and stretches from Felixstowe, Suffolk to west of Dover, Kent covering approximately 1400km of coastline and extends seaward to the limit of the UK territorial waters (12nm).

4.7.A.2.21 Objective 5 of the plan states that *“people appreciate the diversity of the marine environment, its seascapes, its natural and cultural heritage and its resources and can act responsibly”* (Ref 7.14, 18).

4.7.A.2.22 With regards to heritage assets, policy SE-HER-1 aims to conserve and enhance marine and coastal heritage assets (both designated and non-designated) by considering the potential for harm to their significance. The policy states that:

- proposals that demonstrate they will conserve and enhance the significance of heritage assets will be supported.
- where proposals may cause harm to the significance of heritage assets, proponents must demonstrate that they will, in order of preference, avoid, minimise, and mitigate any harm 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.

4.7.A.2.23 Additionally, seascapes and landscapes are detailed in policy SE-SCP-1, which aims to manage significant adverse impacts on the seascape and landscape of the area and will ensure that the area’s value, quality and its capacity to accommodate change is considered and that the scale and design of a proposal is compatible with its surroundings. The policy’s primary aim is to make provisions for those areas of seascape without statutory designation. The policy states that:

- proposals should ensure they are compatible with their surroundings and should not have a significant adverse impact on the character and visual resource of the seascape and landscape of the area.
- the location, scale and design of proposals should take account of the character, quality and distinctiveness of the seascape and landscape.

- proposals that may have a significant adverse impact on the seascape and landscape of the area should demonstrate that they will, in order of preference, avoid, minimise, and mitigate adverse impacts so they are no longer significant.
- if it is not possible to mitigate, the public benefits for proceeding with the proposal must outweigh significant adverse impacts to the seascape and landscape of the area.
- proposals within or relatively close to nationally designated areas should have regard to the specific statutory purposes of the designated area. Great weight should be given to conserving and enhancing landscape and scenic beauty in National Parks and Areas of Outstanding Natural Beauty.

County Council plans

East Suffolk

4.7.A.2.24 East Suffolk Council's Suffolk Coastal Local Plan Adopted 2020 (Ref 7.15), sets out the strategic and non-strategic planning policies which the Council will use to determine planning applications across Suffolk Coastal area. The Council will be a statutory consultee in processes relating to all proposed NSIPs.

4.7.A.2.25 Table 4.7.A.2 summarises the relevant policies from the plan.

Table 4.7.A.2: East Suffolk Council's Suffolk Coastal Local Plan policies

Policy ref.	Title	Summary
SCLP11.3	Historic Environment	<p>The Council will work with partners, developers and the community to conserve and enhance the historic environment and to ensure that where possible development makes a positive contribution to the historic environment.</p> <p>The policies of the National Planning Policy Framework will be applied in respect of designated and non-designated heritage assets.</p> <p>All development proposals which have the potential to impact on heritage assets or their settings should be supported by a Heritage Impact Assessment and/or an Archaeological Assessment prepared by an individual with relevant expertise. Pre-application consultation with the Council is encouraged to ensure the scope and detail of a Heritage Impact Assessment or Archaeological Assessment is sufficient. The level of detail of a Heritage Impact Assessment should be proportionate to the scheme proposed and the number and significance of heritage assets affected.</p>
SCLP11.6	Non-Designated Heritage Assets	<p>Proposals for the re-use of Non-Designated Heritage Assets which are buildings or structures will be supported if compatible with the elements of the fabric and setting of the building or structure which contribute to its significance. Applications,</p>

Policy ref.	Title	Summary
SCLP11.7	Archaeology	<p>including those for a change of use, which result in harm to the significance of a Non-Designated Heritage Asset will be judged based on the balance of the scale of any harm or loss, and the significance of the heritage asset. In considering proposals which involve the loss of a non-designated heritage asset, consideration will be given to:</p> <p>a) Whether the asset is structurally unsound and beyond technically feasible and economically viable repair (for reasons other than deliberate damage or neglect); or</p> <p>b) Which measures to sustain the existing use, or find an alternative use/user, have been fully investigated.</p> <p>Neighbourhood Plans can identify Non-Designated Heritage Assets. However, the protection afforded to these should be no more than that provided to Non-Designated Heritage Assets protected by this policy. Buildings or structures identified as Non-Designated Heritage Assets should at least meet the Council’s criteria for identifying Non-Designated Heritage Assets.</p> <p>An archaeological assessment proportionate to the potential and significance of remains must be included with any planning application affecting areas of known or suspected archaeological importance to ensure that provision is made for the preservation of important archaeological remains. Where proposals affect archaeological sites, preference will be given to preservation <i>in situ</i> unless it can be shown that recording of remains, assessment, analysis report and/or deposition of the archive is more appropriate.</p> <p>Archaeological conditions or planning obligations will be imposed on consents as appropriate. Measures to disseminate and promote information about archaeological assets to the public will be supported.</p>

Kent

4.7.A.2.26 Thanet District Council’s Local Plan Adopted July 2020 (Ref 7.16) guides and delivers the Council’s plans and aspirations for growth, as desired by the Council and community, and for the delivery of development projects and infrastructure.

4.7.A.2.27 Table 4.7.A.3 summarises the relevant policies from the plan.

Table 4.7.A.3: Thanet District Local Plan policies

Policy ref.	Title	Summary
SP36	Conservation and Enhancement of Thanet's Historic Environment	<p>The Council will support, value and have regard to the historic or archaeological significance of heritage assets by:</p> <ol style="list-style-type: none"> 1) Protecting the historic environment from inappropriate development. 3) Requiring the provision of information describing the significance of any heritage asset affected and the impact of the proposed development on this significance. 6) Offering help, advice and information about the historic environment by providing guidance to stakeholders, producing new guidance leaflets, reviewing existing guidance leaflets and promoting events which make the historic environment accessible to all. 8) Supporting development that is of high quality design and supports sustainable development.
HE01	Archaeology	<p>Developers should submit information with the planning application that allows an assessment of the impact of the proposal on the significance of the heritage asset.</p> <p>Where appropriate the Council may require the developer to provide additional information in the form of a desk-based or field assessment. Development proposals adversely affecting the integrity or setting of scheduled monuments or other heritage assets of comparable significance will normally be refused.</p> <p>Where the case for development which would affect an archaeological site is accepted by the Council, preservation <i>in situ</i> of archaeological remains will normally be sought.</p> <p>Where this is not possible or not justified, appropriate provision for investigation and recording will be required. The fieldwork should define:</p> <ol style="list-style-type: none"> 1) The character, significance, extent and condition of any archaeological deposits or structures within the application site. 2) The likely impact of the proposed development on these features. 3) The means of mitigating the effect of the proposed development. <p>Recording should be carried out by an appropriately qualified archaeologist or archaeological contractor and may take place in advance of and during development. No work shall take place until a specification for the archaeological work has been submitted and</p>

Policy ref.	Title	Summary
HE03	Heritage Assets	<p>approved by the Council. Arrangements must also be in place for any necessary post-excavation assessment, analysis and publication of the results, and deposition of the archive in a suitable, accessible repository.</p> <p>The Council supports the retention of local heritage assets, including buildings, structures, features and gardens of local interest. Local heritage assets will be identified in a local list as part of the Heritage Strategy.</p> <p>Proposals that affect both designated and non-designated heritage assets, will be assessed by reference to the scale of harm, both direct and indirect, or loss to, the significance of the heritage asset in accordance with the criteria in the National Planning Policy Framework.</p>

Marine Guidance

4.7.A.2.28 This assessment was carried out in a manner consistent with available guidance as described in chronological order of issue:

- Identifying and Protecting Palaeolithic Remains: Archaeological Guidance for Planning Authorities and Developers (Ref 7.17);
- Managing Lithic Scatters: Archaeological Guidance for Planning Authorities and Developers (Ref 7.18);
- Military Aircraft Crash Sites: Archaeological guidance on their significance and future management (Ref 7.19);
- The Code of Practice for Seabed Developers (Ref 7.20);
- Conservation Principles, Policies and Guidance for the sustainable management of the historic environment (Ref 7.21);
- Our Seas – A shared resource: High level marine objectives (Ref 7.22);
- Environmental Archaeology: A Guide to the Theory and Practice of Methods, from Sampling and Recovery to Post-excavation (second edition) (Ref 7.23);
- Offshore Geotechnical Investigations and Historic Environment Analysis: Guidance for the Renewable Energy Sector (Ref 7.24);
- Ships and Boats: Prehistory to Present - Designation Selection Guide (Ref 7.25);
- Marine Geophysics Data Acquisition, Processing and Interpretation Guidance Notes (Ref 7.26);
- People and the Sea: A Maritime Archaeological Research Agenda for England (Ref 7.27);
- Geoarchaeology: Using Earth Sciences to Understand the Archaeological Record (Ref 7.28);
- Managing Significance in Decision-Taking in the Historic Environment Historic Environment Good Practice Advice in Planning: 2 (Ref 7.29);

- Preserving Archaeological Remains: Decision-taking for Sites under Development (Ref 7.30);
- The Setting of Heritage Assets – Historic Environment Good Practice Advice in Planning: 3 (Second Edition) (Ref 7.31);
- Conservation Principles for the Sustainable Management of the Historic Environment (Ref 7.32);
- Statements of Heritage Significance: Analysing Significance in Heritage Assets: Historic England Advice Note 12 (7.33);
- Deposit Modelling and Archaeology Guidance for Mapping Buried Deposits (Ref 7.34);
- Standard and Guidance for Archaeological Advice by Historic Environment Services (Ref 7.35);
- Standard and guidance for historic environment desk-based assessment (Ref 7.36);
- Archaeological Written Schemes of Investigation for Offshore Wind Farm Projects (Ref 7.37);
- Code of Conduct: Professional Ethics in Archaeology (Ref 7.38); and
- Curating the Palaeolithic (Ref 7.39).

4.7.A.3 Methodology

Study Area

- 4.7.A.3.1 The boundary of the study area defines the area where any potential impact on marine archaeology receptors may occur. The study area comprises a 100m buffer around the extent of the Offshore Scheme as defined by the draft Order Limits (supplied 28 February 2023) and the extent of the marine geophysical survey area¹, whichever is largest (**Figure 4.7.A.1**). At each of the proposed landfalls, the study area includes a 100m buffer beyond the MHWS mark.
- 4.7.A.3.2 The marine study area overlaps with the terrestrial historic environment and cultural heritage study area between the MHWS and MLWS marks.

Search area

- 4.7.A.3.3 A search area comprising a 2km buffer of the extent of the Offshore Scheme (supplied 08 March 2022) was used for obtaining records from relevant archive databases. The wider search area 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 heritage assets identified to be represented in a broader archaeological context.
- 4.7.A.3.4 All data for heritage assets located within this search area are stored on the Wessex Archaeology archive network and can be made available on request.

¹ The geophysical survey area is defined as the extents of the SSS dataset, within the wider Offshore Scheme Scoping boundary.

Walkover Survey Methodology

4.7.A.3.5 A walkover survey is planned to be undertaken during the Spring/Summer of 2023 and the methodology and results will be included in the Environmental Statement (ES).

Archaeological Desk-Based Assessment

Key themes

4.7.A.3.6 The methodology follows the best practice professional guidance outlined by the Chartered Institute for Archaeologists' (CIfA) Standard and Guidance for Historic Environment Desk-Based Assessment (Ref 7.36).

4.7.A.3.7 The marine themes relevant to the marine archaeological baseline assessed in this report are:

- Palaeogeography (for example, palaeochannels and other features that contain prehistoric sediment, and derived Palaeolithic artefacts such as handaxes) including their setting and value.
- Seabed features including:
 - maritime sites (such as shipwrecks and associated material including cargo, obstructions and fishermen's fasteners) including their setting and value; and
 - aviation sites (aircraft crash sites and associated debris) including their setting and value.
- Intertidal features relating to marine activity, for example fish traps, piers, sea defences located within the intertidal zone between MHWS and MLWS marks.
- The historic seascape character in and around the study area.

4.7.A.3.8 The types of archaeology listed above relate to the known marine resource and also the currently unknown resource. There is potential for the presence of palaeogeographic material dating from the Palaeolithic onwards. There is also 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 the UKHO and others, and thus recorded in the archaeological record. However, there is still potential for the 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.

4.7.A.3.9 There is also potential for 20th century aircraft, particularly in relation to the Second World War (Ref 7.40) Aircraft crash sites are also difficult to identify through archaeological assessments of geophysical survey, although experience indicates material from the site, such as engines or other material may be recorded as small obstructions or anomalies.

Data sources

4.7.A.3.10 The following data sources were consulted to compile the desk-based element of the assessment:

- geophysical survey datasets acquired by MMT comprising sub-bottom profiler (SBP), sidescan sonar (SSS), magnetometer (Mag.) and Multibeam Echo Sounder (MBES);
- geotechnical data including 69 provisional vibrocore logs provided by MMT;
- the UKHO data for charted wrecks and obstructions (received 4 April 2022);
- the National Marine Heritage Record (NMHR) maintained by Historic England, comprising data for terrestrial and marine archaeological sites, findspots and archaeological events (received 23 March 2022);
- Historic Environment Records results for Suffolk (provided by AECOM's Historic Environment and Cultural Heritage team), Essex (received 17 March 2022) and Kent (received 23 March 2022) comprising databases of their recorded archaeological sites, findspots, and archaeological events;
- the National Heritage List for England maintained by Historic England, comprising data of designated heritage assets including sites protected under the Protection of Military Remains Act 1986 (Ref 7.6) and the Protection of Wrecks Act 1973 (Ref 7.4);
- coastal archaeological findspots and sites from CITiZAN's coastal map (Ref 7.41);
- datasets comprising the Historic Seascape Characterisation (HSC): Consolidating the National HSC Database (Ref 7.42).
- relevant background mapping from the area including BGS, Admiralty Charts from the UKHO, historic maps and Ordnance Survey;
- client supplied survey report (Ref 7.43); and
- relevant documentary sources and grey literature held by Wessex Archaeology and those available through the Archaeological Data Service and other websites.

Data structure

4.7.A.3.11 This report is supported by a Geographic Information System (GIS) using ArcGIS 10.8.1, 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 known archaeological features located within the study area.

4.7.A.3.12 The datasets used in this assessment have been presented in Universal Transverse Mercator (UTM) Zone 31 North projected from a European Terrestrial Reference System 1989 (ETRS89) datum.

Chronology

4.7.A.3.13 Archaeological material is generally studied within a framework of 'periods' or 'ages' that reflect the activities and cultural changes taking place over time. Where age estimates are available for deposits these are expressed in millions of years (Ma), thousands of years (Ka) and within the Holocene epoch as either years Before Present (BP), Before Christ (BC) and Anno Domini (AD). These dates are supplemented where relevant with the comparable Marine Isotope Stage (MIS) where odd numbers indicate an interglacial period and even numbers a glacial period.

4.7.A.3.14 A list of the main archaeological periods in Britain referred to in the text, along with their broadly defined dates, are presented in Annex 4.7.A.1.

Palaeogeography

4.7.A.3.15 The baseline summary for seabed prehistory was based on a review of geological mapping of superficial sediments and solid geology from published BGS sources, as well as previous assessments undertaken in the region containing the study area. This has been enhanced by the geoarchaeological review of geotechnical data undertaken for 69 provisional vibrocores obtained in 2022 and used to produce a stratigraphic framework for understanding the archaeological potential of the Quaternary geology within the area investigated.

4.7.A.3.16 A geoarchaeological baseline for the study area is presented later in this appendix along with the results of the geoarchaeological review of the geotechnical data.

Seabed features: maritime and aviation sites

4.7.A.3.17 The baseline summary for maritime and aviation archaeology was assessed by means of accessing any records of sites, findspots, wrecks, casualties and other seabed features obtained from the UKHO, NMHR and local HERs located within the study area. Results from the geophysical survey data have also been incorporated to complement this data forming several discrete gazetteers.

4.7.A.3.18 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 study area.

4.7.A.3.19 Data relating to Recorded Losses were also extracted from the NMHR 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 NMHR. For example, a Recorded Loss within this dataset may be based on the loss of a vessel off the coast at 'Sizewell, Suffolk' or associated with a known navigational hazard such as a sand bank or rocks (which may give rise to a falsely precise geographic coordinate for the record). 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.

4.7.A.3.20 Details regarding Recorded Losses, whose Named Locations happen to intersect with the study area, are presented in a gazetteer format (Annex 4.7.A.8 and 4.7.A.9). These records have retained their original identification assigned by the NMHR for ease of cross-referencing. The gazetteer does not include positional data due to the inaccuracies therein and, as they signify the potential maritime and aviation resource, they are not presented on a figure.

Intertidal heritage assets

4.7.A.3.21 The baseline summary of intertidal heritage assets located within the extent of the Offshore Scheme, up to the MHWS, was assessed from NMHR, Suffolk HER, Kent

HER and CITiZAN datasets and compiled into a gazetteer. This gazetteer will be supplemented by the results of an intertidal walkover survey, planned for later in 2023.

4.7.A.3.22 A full assessment of terrestrial historic environment and cultural heritage will be presented in the corresponding documents: **Volume 1, Part 2, Chapter 4 Cultural Heritage**, for Suffolk; and **Part 3, Chapter 4 Cultural Heritage**, Kent. The marine study area overlaps with the terrestrial historic environment and cultural heritage study area between the MHWS and MLWS marks.

Historic seascape characterisation

4.7.A.3.23 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*” (Ref 7.44). 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*” (Ref 7.44).

4.7.A.3.24 Seascape assessment reflects the holistic approach to landscape of the European Landscape Convention, extending it to the sea. Seascape Character Areas include coastal land, intertidal and marine environments and cover the offshore environment to the territorial limit (12nm). HSC assessment is the identification and interpretation of the historic dimension of the present day coastal and marine environment (Ref 7.42).

4.7.A.3.25 The baseline summary for character of the historic seascape within the study area was assessed using the compiled results of LUC’s Historic Seascape Characterisation: Consolidating the National HSC Database (Ref 7.45).

Geophysical Survey Methodology

Technical specifications

4.7.A.3.26 The geophysical data were acquired between 18 August 2021 and 6 September 2021 by MMT. The nearshore geophysical data were acquired onboard the *Mersey Discovery* and the offshore geophysical data were acquired onboard MV *Northern Franklin*. Further details on the equipment used is presented in Table 4.7.A.4.

Table 4.7.A.4: Summary of survey equipment

Survey company	Survey vessel	Data type	Equipment	Data format
MMT	<i>Mersey Discovery</i> (Nearshore)	SBP	Innomar SES-2000 compact parametric sonar	.sgy
			Boomer	.sgy
		MBES	Kongsberg EM2040D	.xyz
		SSS	Edgetech, 35m range, 400-900 kHz	.jsf
		Mag.	Geometrics G-882	.xls
		Positioning	Applanix PosMV 320	N/A

Survey company	Survey vessel	Data type	Equipment	Data format
		SBP	Innomar SES-2000 parametric sonar	.sgy
			Chirp	.sgy
	MV Northern Franklin (Offshore)	MBES	Kongsberg EM2040D	.xyz
		SSS	Edgetech, 65–75m range, 300-600 kHz	.jsf
		Mag.	Geometrics G-882	.xls
		Positioning	Applanix PosMV 320	N/A

Processing

4.7.A.3.27 A number of datasets were assessed over the study area, each dataset was processed separately using the following software (Table 4.7.A.5).

Table 4.7.A.5: 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	
SSS	CodaOctopus Survey Engine v5.11	
Mag.	Geometrics MagPick v3.25 and proprietary software	

4.7.A.3.28 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.

4.7.A.3.29 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.

4.7.A.3.30 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 1,600ms⁻¹. This is a standard estimate for shallow, unconsolidated sediments.

4.7.A.3.31 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.

- 4.7.A.3.32 For the SBP assessment, 25% of the lines were initially assessed. Where features of interest were identified, additional lines were then interpreted to more accurately map the extents of these features.
- 4.7.A.3.33 The MBES data were analysed to identify any unusual seabed structures that could be shipwrecks or other anthropogenic debris. The data were gridded at 0.2m 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.
- 4.7.A.3.34 The high frequency *.jsf* 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 Coda by tagging individual features of possible archaeological potential, recording their positions and dimensions, and acquiring an image of each anomaly for future reference.
- 4.7.A.3.35 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.
- 4.7.A.3.36 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.
- 4.7.A.3.37 The Mag. data were processed using a combination of Geometrics MagPick and proprietary software in order to identify any discrete magnetic contacts which could represent buried metallic debris or structures such as wrecks.
- 4.7.A.3.38 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.
- 4.7.A.3.39 For the purposes of this assessment, any identified magnetic anomalies have been classified depending on their amplitude as small (5nT (Nanotesla) to 49nT), medium (50nT to 99nT), large (>100nT) and very large (>500nT).

Data quality

- 4.7.A.3.40 Once processed, the geophysical data sets were individually assessed for quality and their suitability for archaeological purposes, and rated using the following criteria (Table 4.7.A.6).

Table 4.7.A.6: 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 study area.

4.7.A.3.41 The parametric sonar data were the primary SBP dataset used for the palaeolandscape assessment due to their resolution. The quality of the parametric sonar 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 clearly visible.

4.7.A.3.42 The MBES data were rated as ‘Good’ using the above criteria. The data quality and resolution of 0.2m was found to be of a good standard and suitable for archaeological assessment of objects and debris over 0.2m in size.

4.7.A.3.43 The SSS data have been rated as ‘Average’ using the above criteria table. Some data files displayed weather noise and cable snatching due to sea state and/or weather conditions, particularly in the nearshore areas, but overall, the data were not affected to a significant degree and therefore are considered suitable for archaeological interpretation.

4.7.A.3.44 The Mag. data have been rated as ‘Average’ using the above criterial table. There was some influence from background geology which may have masked some smaller features, and some impacts from weather conditions visible. The line spacing of 50m in the offshore survey area means that smaller ferrous features which aren’t 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.

Anomaly grouping and discrimination

4.7.A.3.45 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 exploration area.

4.7.A.3.46 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.

4.7.A.3.47 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 as follows (Table 4.7.A.7).

Table 4.7.A.7: Criteria discriminating relevance of identified features

Overview	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_h	Anomaly of likely anthropogenic origin but of unknown date; may be of archaeological interest or a modern feature	MBES, SSS, Mag.
Archaeological	A2_l	Anomaly of possible anthropogenic origin but interpretation is uncertain; may be anthropogenic or a natural feature	MBES, SSS, Mag.
Archaeological	A3	Historic record of possible archaeological interest with no corresponding geophysical anomaly	MBES, SSS, Mag.

4.7.A.3.48 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.

4.7.A.3.49 Any anomalies located outside of the defined study areas, 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 report.

Geotechnical Survey Methodology

Introduction

4.7.A.3.50 To frame geoarchaeological investigations of this nature, Wessex Archaeology has developed a five-stage approach, encompassing different levels of investigation appropriate to the results obtained, accompanied by formal reporting of the results. The stages are summarised below (Table 4.7.A.8).

4.7.A.3.51 This assessment presents the results of a Stage 1 review of geotechnical logs, with recommendations made for any further geoarchaeological works (i.e. Stage 2 geoarchaeological recording) if deemed necessary.

Table 4.7.A.8: Staged approach to geoarchaeological investigations

Stage	Description
Stage 1: Geoarchaeological review	Desk-based review of geotechnical and geological data. Establish likely presence/absence/distribution of archaeologically relevant deposits. Identify deposits or samples for Stage 2 works.
Stage 2: Geoarchaeological recording/monitoring	Target deposits or samples identified in Stage 1. Describe the sequences recovered and undertake deposit modelling (if suitable). Interpret depositional environment (if possible). Identify if suitable deposits are present for Stage 3 works.
Stage 3: Palaeoenvironmental assessment	Sub-sample deposits of archaeological interest for palaeoenvironmental assessment (e.g. pollen, plant macrofossils, foraminifera, ostracod and diatoms) and associated scientific dating. Provide an outline interpretation of the archaeological and palaeoenvironmental context. Any recommendations for Stage 4 works will depend on the potential for further analysis and the project research objectives.
Stage 4: Palaeoenvironmental analysis	Full analysis of samples and additional scientific dating as specified in Stage 3, together with a detailed synthesis of the results, in their local, regional or wider archaeological and palaeoenvironmental context. Publication would usually follow from a Stage 4 report.

Stage	Description
Stage 5: Publication	<p>Publication of the results of Stage 1-4 works for submission in a peer reviewed journal, book or monograph, depending on the archaeological significance of the work.</p> <p>The scope and location of the final publication will be agreed in consultation with the client and regulatory bodies where appropriate.</p>

4.7.A.3.52 A total of 69 vibrocore logs were acquired during geotechnical surveying undertaken in September 2021. Geotechnical logs were provided by MMT and reviewed as part of the geoarchaeological assessment in order to identify deposits of potential archaeological interest. Interpretations were made regarding both likely depositional environment and formation processes of the recovered sediment.

4.7.A.3.53 The vibrocores were drilled across the study area to a maximum depth of 6.5 metres below sea floor (mbsf) using a high-performance corer. Vibrocores were acquired in clear liners, split into 1m sections offshore and transported to the laboratory of MMT, where they were split lengthways, photographed, and described in detail. Geotechnical logs and core photographs were provided to Wessex Archaeology for review and geoarchaeological assessment. The location of vibrocores recovered from the study area are presented in Annex 4.7.A.4.

4.7.A.3.54 Vibrocores were assigned either a high, medium or low status based on their perceived archaeological potential.

Deposit modelling

4.7.A.3.55 Following the Stage 1 review, geotechnical vibrocores assigned medium and high archaeological potential were recommended for Stage 2 recording. However, the vibrocores of interest were mistakenly destroyed in extensive laboratory testing before a Stage 2 geoarchaeological assessment could be undertaken. Additional geoarchaeological mitigation works were therefore proposed, with the aim of using a targeted approach to inform both the program of combined geotechnical and geophysical works planned to be undertaken during the 2023 survey campaign and ES. Additional geoarchaeological surveys are planned for Summer 2023 and eight duplicate vibrocores (located within the Offshore Scheme Boundary) will be obtained to allow the Stage 2 assessment to be undertaken. Furthermore, the 69 vibrocores from the MMT survey were located within the wider Offshore Scoping Boundary and therefore do not cover the entire extent of the Offshore Scheme Boundary. Further marine geotechnical surveys are planned for Summer 2023 to cover these specific areas. The results of further geotechnical surveys will be included in the ES.

4.7.A.3.56 To ensure the delivery of archaeological objectives of the original MMT survey, a series of geoarchaeological deposit models were constructed for the study area. A total of six two-dimensional stratigraphic profiles ('transects') were produced (**Figures 4.7.A.8 – 4.7.A.13**). The deposit modelling was undertaken following the guidelines in Historic England (Ref 7.34).

4.7.A.3.57 All available data points were entered into industry standard geological utilities software (Rockworks™ 17). Each stratigraphic unit was given a colour and pattern allowing cross correlation and grouping of the different sedimentary units. The

grouping of these deposits is based on lithological descriptions, which define distinct depositional environments referred to as 'lithostratigraphic units'.

4.7.A.3.58 Interpreted stratigraphic units were input into a database within the Rockworks™ 17 program. Transects of the selected vibrocores, showing the main stratigraphic units and their lateral and vertical variability across the study area, were generated using Rockworks™ 17 (**Figures 4.7.A.8 – 4.7.A.13**). The locations of the transects are shown on each transect figure.

Assessment of Setting

4.7.A.3.59 The NPPF (Ref 7.11, 71) defines setting as “*the surroundings in which a heritage asset is experienced. Its extent is not fixed and may change as the asset and its surroundings evolve. Elements of a setting may make a positive or negative contribution to the significance of an asset, may affect the ability to appreciate that significance, or may be neutral.*”

4.7.A.3.60 Currently, there is no specific guidance regarding the assessment of setting for offshore archaeological and cultural heritage assets. However, Historic England's The Setting of Heritage Assets – Historic Environment Good Practice Advice in Planning 3 (Ref 7.31) provides general guidance, largely applicable to terrestrial sites, and notes that the importance of setting “*lies in what it contributes to the significance of the heritage asset*” (Ref 7.31, 4). With regards to significance for heritage policy, NPPF notes that the interest of a heritage asset “*may be archaeological, architectural, artistic or historic*” (Ref 7.11, 72).

4.7.A.3.61 Historic England states that setting depends on a “*wide range of physical elements within, as well as perceptual and associational attributes pertaining to, the heritage asset's surroundings*” (Ref 7.31, 4). One aspect that contributes to the setting of a heritage asset is referred to as 'views', which includes not only views that can contribute to its significance, but also intended views between heritage assets, and planned views. In addition, the guidance suggests that the appreciation of the setting of a site does not depend on the ability to access it (Ref 7.31). Reference in the guidance is also made to the setting associated with buried heritage assets which may not be readily appreciated by a casual observer, but retains a presence in the landscape such as, for example, wreck sites that are periodically, partly or wholly submerged. In addition, the location and setting of historic battles, with otherwise no visible traces, may include important strategic views, routes by which opposing forces approached each other and a topography that played a part in the outcome (Ref 7.31, 4-5).

4.7.A.3.62 In order to assess whether, how and to what degree setting makes a contribution to the significance of heritage assets, the following must be considered: the physical surroundings of the asset including its relationship with other heritage assets; the way the asset is appreciated, and the asset's associations and patterns of use.

4.7.A.3.63 The assessment of setting in this document follows the guidance discussed in the paragraphs above, is based on the baseline assessment of the palaeogeography, maritime and aviation assets, and is described using the following two factors:

- physical surroundings and views – which includes the physical presence of the asset on the seabed, its surroundings, and relationship with other assets and navigational hazards in the immediate area. Views to and from the asset, and how the asset is experienced in its immediate physical surroundings are also considered; and

- non-visual factors – including the way the asset is appreciated in a broader historical, artistic and intellectual capacity, and the asset’s associations.

4.7.A.3.64 It should be noted that for heritage assets offshore, sites are generally only experienced by divers, remotely operated vehicle (ROV) or by geophysical survey, and the views to the asset are often very limited due to reduced visibility in the water column. In addition, unlike many terrestrial sites, the position of the asset on the seabed has not been deliberately chosen, and although some sites may have reached their position through military action (e.g. hitting a mine within a known minefield or in a battle) or have been lost due to a particular navigational hazard (e.g. being stranded on a particular sandbank), many positions are entirely arbitrary, and even with military sinking events, an attack on the surface could lead to a wreck being deposited on the seabed miles from where the event took place. Non-visual factors may include associations with particular battles, wars, minefields and other historic events, as well as how the wreck can be appreciated in its wider context, for example through well-known trade routes, collisions or local industry. Association between the asset and the local social history is another important aspect of an asset’s non-visual importance, including rescue attempts or losses occurring within modern memory.

4.7.A.3.65 It is not possible to ascertain the setting of currently unidentified marine heritage assets, where limited information is known, for example wrecks that have not been identified or characterised to determine their period of build, use or loss. Similarly, setting cannot be assessed for geophysical anomalies of archaeological potential or potential sites that have not yet been discovered.

Determining Importance (or Value) and Sensitivity

4.7.A.3.66 This report will adopt the conceptual approach known as the ‘source-pathway-receptor’ model. 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). In order for the significance of any given impact to be fully understood, the sensitivity of any receptors that may be impacted need to be considered. This section outlines the means by which the sensitivity of marine heritage assets is ascertained.

4.7.A.3.67 The perceived importance of each marine archaeological asset is generally assessed and assigned on a site-by-site basis, depending on the criteria listed in Table 4.7.A.9. The UK MPS (Ref 7.12, 90) 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.

4.7.A.3.68 The sensitivity of an asset is a function of its capacity to accommodate change and reflects its ability to recover if it is affected. The sensitivity of the asset will be assessed with regard to the following factors:

- adaptability or vulnerability- 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.

4.7.A.3.69 Archaeological and cultural heritage assets cannot typically adapt, tolerate or recover from physical impacts resulting in material damage or loss caused by development. Consequently, the sensitivity of each asset is predominantly quantified only by their value. For the purposes of this assessment, value and importance are treated as equivalent terms.

4.7.A.3.70 Based on Historic England's Conservation Principles, Policies and Guidance for the Sustainable Management of the Historic Environment (Ref 7.32, 4), the significance of a historic asset "*embraces all the diverse cultural and natural heritage values or interests that people associate with it*".

4.7.A.3.71 Within this document, 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.

4.7.A.3.72 With regards to assessing the importance of shipwrecks, the following criteria listed in English Heritage's Ships and Boats: Prehistory to Present - Designation Selection Guide (Ref 7.25) can be used to assess an asset in terms of its value:

- period;
- rarity;
- documentation;
- group value;
- survival/condition; and
- potential.

4.7.A.3.73 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 public engagement to be assessed.

4.7.A.3.74 The value of known archaeological and cultural heritage assets were assessed on a five-point scale using professional judgement informed by criteria provided in Table 4.7.A.9 below. This table derives from the Aggregate Levy Sustainability Fund funded Marine Class Description and principles of selection for aggregate producing areas project (ALSF 5383), undertaken by Wessex Archaeology (Ref 7.48).

Table 4.7.A.9: Criteria to assess the archaeological value of marine heritage assets

Value	Definition
Very high	<ul style="list-style-type: none"> • Best known or only example and/or significant potential to contribute to knowledge and understanding and/or public engagement. Assets with a demonstrable international dimension to their importance are likely to fall within this category. • Receptors with a demonstrable international dimension to their importance are likely to fall within this category. • Wrecked ships and aircraft that are protected under the Protection of Wrecks Act 1973 (Ref 7.4), Ancient Monuments and Archaeological Areas Act 1979 (Ref 7.5) or Protection of Military Remains Act 1986 (Ref 7.6) with an international dimension to their importance, plus as-yet undesignated sites that are demonstrably of equivalent archaeological value. • Known submerged prehistoric sites and landscapes with the confirmed presence of largely in situ artefactual material.
High	<ul style="list-style-type: none"> • Above average and/or high potential to contribute to knowledge and understanding and/or public engagement. • Receptors with a demonstrable national level dimension to their importance are likely to fall within this category. • All other wrecked ships and aircraft with statutory protection under the Protection of Wrecks Act 1973 (Ref 7.4), Ancient Monuments and Archaeological Areas Act 1979 (Ref 7.5) or Protection of Military Remains Act 1986 (Ref 7.6), plus as-yet undesignated sites that are demonstrably of equivalent archaeological value. • Palaeogeographic features with demonstrable potential to include artefactual and/or palaeoenvironmental material, possibly as part of a prehistoric site or landscape.
Medium	<ul style="list-style-type: none"> • Average example and/or moderate potential to contribute to knowledge and understanding and/or public engagement. • Receptors with a demonstrable district level dimension to their importance are likely to fall within this category. • 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. • Prehistoric deposits with moderate potential to contribute to an understanding of the palaeoenvironment.
Low	<ul style="list-style-type: none"> • Below average example and/or low potential to contribute to knowledge and understanding and/or public engagement. • Receptors with a demonstrable local dimension to their importance are likely to fall within this category. • 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.

Value	Definition
	<ul style="list-style-type: none"> • Prehistoric deposits with low potential to contribute to an understanding of the palaeoenvironment.
Negligible	<ul style="list-style-type: none"> • Poor example and/or little or no potential to contribute to knowledge and understanding and/or public engagement. Assets with little or no surviving archaeological interest.
Unknown	<ul style="list-style-type: none"> • There is not presently enough information available about the site to assess its importance.

4.7.A.3.75 Furthermore, On the Importance of Shipwrecks (Ref 7.47) suggests importance can be assessed through the following criteria: build, use, loss, survival and investigation.

4.7.A.3.76 In general, the Selection Guide on Boats and Ships in Archaeological Contexts (Ref 7.48) drew some generalisations about value based on the age of the wreck:

- Pre-1500 AD: this covers the period from the earliest Prehistoric evidence for human maritime activity to the end of the medieval period, circa 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.
- 1501-1815: this encompasses the Tudor and Stuart periods, the English Civil War, the Anglo-Dutch Wars and later the American Independence and French Revolutionary Wars. Wrecks and vessel remains from this date are also quite rare, and can be expected to be of special value.
- 1816-1913: 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.
- 1914-1945: 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.
- 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.

4.7.A.3.77 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.

Assumptions and Limitations

Archaeological data

4.7.A.3.78 Data used to compile this report consists of secondary information derived from a variety of sources, only some of which have been directly examined for the purposes

of this study. The assumption is made that the data, as well as that derived from other secondary sources, are accurate.

- 4.7.A.3.79 The records held by the UKHO, NMHR, HERs and the other sources used in this assessment 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 datasets 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.
- 4.7.A.3.80 The data supplied by the UKHO, NMHR and HERs were obtained between March and April 2022 and will not be refreshed for the duration of the Project. As a result, any new records that are entered into these archives may not be included within this, or future, deliverables.
- 4.7.A.3.81 Data supplied by the UKHO, NMHR and HERs have been converted from the coordinate system they were supplied to the Project coordinate system, ETRS89 UTM31N. However, some records within the NMHR shapefiles (provided in WGS84) were not placing in the correct location on the Wessex Archaeology project GIS according to the BNG positions in the accompanying records. As a result, this dataset had to be recreated using the BNG positions and subsequently converted to ETRS89 UTM31N.

Geoarchaeological data

- 4.7.A.3.82 Cores were collected by MMT in September 2021, however, all cores recommended for the next stage of geoarchaeological recording were targeted and used for engineering lab testing prior to their geoarchaeological analysis. Although parts of these cores still exist, Wessex Archaeology's geoarchaeologists believed there was little potential for the next stage of recording of these samples as it is assumed that they will have since been at least partly destroyed, disturbed or bagged, losing any stratigraphic context or dating opportunity. Therefore, the vibrocores were not usable for the Stage 2 assessment.
- 4.7.A.3.83 Additional geoarchaeological surveys are planned for Summer 2023 and eight duplicate vibrocores (located within the Offshore Scheme Boundary) targeting the medium and high archaeological potential areas will be obtained to allow the Stage 2 assessment to be undertaken.
- 4.7.A.3.84 Furthermore, the 69 vibrocores from the MMT survey were located within the wider Offshore Scoping Boundary and therefore do not cover the entire extent of the Offshore Scheme Boundary. Further marine geotechnical surveys are planned for Summer 2023 to cover these specific areas.
- 4.7.A.3.85 The results of further geotechnical survey work will be included in the ES.

Geophysical data

- 4.7.A.3.86 The geophysical survey is defined as the extents of the SSS dataset, within the wider Offshore Scheme Scoping boundary. Therefore, the datasets do not cover the entire extent of the Offshore Scheme. Further marine geophysical surveys are planned for Summer 2023 to cover these specific areas.

4.7.A.3.87 In terms of the geophysical data collected and assessed in this appendix, the individual data sets were assessed and rated for quality (good, average, below average and variable), and the quality assessment is as follows:

- SBP data – good. Data were mostly clear and largely unaffected by sea state or weather conditions.
- MBES – good. Data were suitable for archaeological assessment of features over 0.2m in size.
- SSS data – average. Some data files displayed weather noise and cable snatching due to sea state and/or weather conditions.
- Mag. data – average. Some influence from background geology which may have masked some smaller features and some impacts from weather conditions are visible. The 50m line spacing offshore meant that smaller ferrous features were not picked up in the data.

4.7.A.4 Marine Archaeological Assessment: Palaeogeography

Geological Baseline and Palaeogeographic Potential

- 4.7.A.4.1 The study area stretches from its northern extent on the east Norfolk coast through the Outer Thames Estuary and into Pegwall Bay, east Kent (**Figure 4.7.A.1**). The Outer Thames Estuary lies within the Cenozoic London Basin which, although traditionally regarded as a distinct sedimentary basin, is likely a southern extension of the North Sea Basin (Ref 7.49). Stiff sandy silty clay of the London Clay Formation (Eocene; c. 56-49 Mya) is present across much of the study area, with chalk bedrock mapped to the south and extending from the east Kent coastline. Bedrock geology across the study area is unconformably overlain by both Pleistocene and Holocene sediments (Ref 7.50) predominantly comprising clays, silts, sands and gravels with occasional organic-rich deposits (peats), overlain by recent unconsolidated marine shelly sands.
- 4.7.A.4.2 The study area covers a significant expanse of the Outer Thames Estuary, an area associated with the Thames-Medway river system. Major drainage reorganisation during the Anglian glacial period (MIS 12) had a significant impact on the evolution of the Thames-Medway river systems and palaeogeography of the Outer Thames Estuary (Ref 7.51). Prior to the Anglian period, the Thames Medway rivers occupied a more northerly course entering the southern North Sea via the present northern coast of Norfolk (Ref 7.52) and the pre-Anglian stratigraphy of the Outer Thames Estuary is represented by Red Crag which are Plio-Pleistocene marine deposits (Ref 7.53) that pre-date earliest known occupation of Britain.
- 4.7.A.4.3 The Pleistocene geological history of the North Sea basin is dominated by repeated glacial/interglacial cycles, resulting in rising and falling sea levels and deposition of terrestrial, marine and glacially derived sediments (**Figure 4.7.A.2**). The only evidence of ice contact in the study area is associated with the Anglian glaciation (478–424ka BP or MIS 12). The southern extent of the Anglian glaciation is highly debated, however based on bathymetric data Dix and Sturt (Ref 7.54) argue for an Anglian glacial origin for over-steepened valleys (tunnel valleys) identified within the Outer Thames Estuary.
- 4.7.A.4.4 The Quaternary stratigraphy in the Outer Thames Estuary is recorded by the BGS as undifferentiated (Ref 7.53). However, following the results of the Outer Thames Estuary Regional Environmental Characterisation report, it was suggested that fluvial deposits associated with the submerged Thames-Medway river system were likely to

dominate the Pleistocene and early Holocene sequence (Ref 7.49). Marine and estuarine deposits dating to the Pleistocene have been recovered at Gunfleet Sands Offshore Wind Farm (Ref 7.55), located west of the Proposed Project and approximately 6.8km south of Clacton-on-Sea, however, no palaeoenvironmental assessments have been undertaken on such deposits.

- 4.7.A.4.5 Two distinct channel systems were identified from marine aggregate licence area 528: a northern and southern channel complex separated by high elevated bedrock (Ref 7.56). The channel complex is suggested to form part of the submerged Thames-Medway system postdating the Anglian (MIS 12). Given that the study area runs through Area 528, an equivalent complex stratigraphy is likely preserved across the Project.
- 4.7.A.4.6 In contrast, Holocene aged alluvium and peats recovered from the London Array OWF and Nemo Link areas, which transect the Project, were assessed with the earliest sequence dating to 8240-7840 cal. BC (Ref 7.57; Ref 7.58). The pollen assemblage from this earliest sequence mainly comprised boreal woodland taxa and ostracods reflecting a freshwater environment. A rise in sea level was recorded in later sequences between 6600-5970 cal. BP and 5890-5390 cal. BP with the development of a saltmarsh environment. The peats are of high geoarchaeological potential, preserving a range of palaeoenvironmental remains and material suitable for radiocarbon dating.
- 4.7.A.4.7 Across the Outer Thames Estuary and wider southern North Sea, Pleistocene and early Holocene sediments are capped by post-transgression marine sands. The progressive inundation of the North Sea occurred over an extended time scale, with particularly rapid sea-level rise during the early Holocene (11.5-7ka), and with fully marine conditions occurring by around 6ka (Ref 7.59).

Archaeological Record and Palaeogeographic Potential

- 4.7.A.4.8 The southern North Sea off the east coast of East Anglia is known to contain relatively well preserved palaeolandscape features such as fluvial channels that formed during periods of lower sea level when the southern North Sea was free of ice. The remains of these terrestrial landscapes are frequently recovered by dredging and fishing activities in numerous areas around the southern North Sea generally in the form of the remains of extinct megafauna (e.g. woolly mammoths, woolly rhinoceros, bison, horse, lion and hyena).
- 4.7.A.4.9 The discovery of actual human artefacts, such as stone tools and worked bone, and even remains is a rarer occurrence, but artefacts have been recovered (e.g. Ref 7.60). Reported finds from offshore activity has, to date, produced a range of early prehistoric lithic artefacts indicating early prehistoric activity in submerged palaeolandscapes from Lower, Middle, and Upper Palaeolithic periods (Ref 7.61) with notable collections of more recent Mesolithic artefacts from submerged palaeolandscape contexts (Ref 7.62; Ref 7.63).
- 4.7.A.4.10 The earliest records of Lower Palaeolithic archaeology from northern Europe are associated with terrestrial deposits on margins of the North Sea basin in East Anglia, most notably from Pakefield (Ref 7.64) and Happisburgh Site 3 (Ref 7.65). Whilst the archaeology at Pakefield was created during a fully interglacial, more Mediterranean climate, at around MIS 17, the remains at Happisburgh Site 3 are older (MIS 21 or MIS 25) and the environmental evidence is indicative of cool conditions at the edge the boreal zone (Ref 7.66) which implies that these early hominins were capable of surviving in northern Europe in periods not associated with fully interglacial

environments (Ref 7.65). The importance of these sites is international, as they are currently unique at this latitude for this early date (Ref 7.63).

- 4.7.A.4.11 Cohen *et al.* (Ref 7.67) 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 southeast of England, are important regions for later Middle Pleistocene, Lower Palaeolithic archaeology (MIS 13-MIS 9). During this timeframe British archaeology reflects repeated episodes of hominin occupation during temperate interglacial and cool conditions, separated by phases of hominin absence during fully glacial periods.
- 4.7.A.4.12 Archaeological evidence is particularly abundant during MIS 13 and MIS 11 (Ref 7.68; Ref 7.69) when warmer climate conditions meant Britain was again available to be recolonised by hominin communities, after a period of absence during the preceding Anglian glaciation (MIS 12). Lower Palaeolithic archaeological assemblages of this date tend to be characterised by handaxes, although during the earlier part of MIS 11, collections lacking handaxes (termed Clactonian) have been recognised. The foreshore, cliffs and hinterland at Clacton-on Sea (Essex) comprise an important Lower Palaeolithic site which 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. This archaeology dates from the Hoxnian interglacial period (MIS 11, c.23–380ka) (Ref 7.70; Ref 7.71), and the type site for the Hoxnian (the Hoxne Brick Pit) is located a relatively short distance inland outside of Diss, Suffolk (Ref 7.72)
- 4.7.A.4.13 During the MIS 10 glaciation there appears to have been a hiatus in hominin activity in Britain (Ref 7.69). The post MIS 10 occupation Britain is associated with the emergence of the Neanderthals and their associated archaeology and patterns of behaviour. From the later part of MIS 9 the archaeological record attests to the development of Levallois core working strategies. This is also seen to mark the end of the Lower Palaeolithic and the beginning of the Middle Palaeolithic. The Levallois technique comes to dominate the British archaeological record during the early Middle Palaeolithic (late MIS 8 and MIS 7), with handaxe production occurring infrequently (Ref 7.73).
- 4.7.A.4.14 The international importance of early Middle Palaeolithic archaeology in the southern North Sea is highlighted by the numerous sites preserved within the Thames river terraces (Ref 7.74; Ref 7.73 and, in particular, by the submerged prehistoric Levallois lithic assemblage from marine aggregate licence Area 240 in the palaeo-Yare catchment. Over 120 artefacts have now been recovered from this locale, some of which are identifiable as Levallois, with many recovered from *in situ* or minimally disturbed contexts (Ref 7.75; Ref 7.61).
- 4.7.A.4.15 The substantial, mixed assemblage of handaxes also recovered from Area 240 may be of older Lower Palaeolithic origin (e.g. >MIS 9), or may date to the Later Middle Palaeolithic when handaxes re-emerge as one of the key components of the archaeological record (late MIS 4-MIS 3) (Ref 7.76). However, based on palaeoenvironmental and sedimentological evidence an early Middle Palaeolithic date is most likely (Ref 7.61).
- 4.7.A.4.16 Palaeogeographically, Area 240 is one of the most northerly Neanderthal sites in northwest Europe and of primary archaeological importance for defining Middle Palaeolithic potential and the contemporary palaeogeography across the southern North Sea basin (Ref 7.75). The site highlights the archaeological potential of preserved Pleistocene fluvial deposits within the southern North Sea.

- 4.7.A.4.17 Within the Outer Thames Estuary, a large Palaeolithic assemblage including over 200 Levallois flakes was recovered from aggregate deposits forming the Clacton to Holland-on-Sea beach replenishing scheme (Ref 7.77). These deposits were originally sourced from marine aggregate License Area 447, located in an area where the confluent post-Anglian (<MIS 12) Rivers Thames, Medway and Blackwater would have been located (Ref 7.71, Ref 7.49, Ref 7.78Ref 7.54). It is therefore likely that this Middle Palaeolithic assemblage originates from submerged Pleistocene deposits relating to this channel complex.
- 4.7.A.4.18 Currently there is no definitive evidence of a hominin presence in Britain during the Ipswichian (MIS 5e) or the early Devensian (MIS 5d-a; Ref 7.79). 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 5d to 5a) and archaeological sites of this age are relatively abundant in northern France (Ref 7.79; Ref 7.69). Therefore, the potential exists for human activity to have occurred sporadically both within Britain and in any sub-aerially exposed parts of the southern North Sea basin, during the early Devensian.
- 4.7.A.4.19 From late MIS 4 to MIS 3 there is evidence in Britain for Neanderthal recolonization. This late Middle Palaeolithic archaeological record is associated with morphologically and technologically distinctive handaxes (Ref 7.80). A key site belonging to this period is Lynford Quarry, Norfolk where a palaeochannel containing mammoth remains and associated late Middle Palaeolithic stone tools and debitage have been recovered (Ref 7.76).
- 4.7.A.4.20 In the early Upper Palaeolithic, at the end of the Late Pleistocene, Neanderthals were replaced in northern Europe by modern humans who, occupying and moving through what is now the southern North Sea, were present in in Britain from around 34ka (Ref 7.81; Ref 7.82). Archaeological evidence for this period consists of blade point/leaf point assemblages, thought to be associated with the final Neanderthal occupation of Britain, and small number of findspots associated with Evolved Aurignacian and Gravettian lithic artefacts which were produced by modern humans (Ref 7.81).
- 4.7.A.4.21 During the last glacial period, the study area will have been beyond, yet close to the maximum Devensian ice margin. At the maximum of the last glacial period, the environment within the southern North Sea was relatively poor for human colonisation, with humans absent from Britain during these peak cold conditions. However, there was increasing human exploitation after ~15ka. 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 (Ref 7.82).
- 4.7.A.4.22 The onshore archaeological record of later Upper Palaeolithic activity is marked by Creswellian/Final Magdalenian stone tool assemblages associated with the later Upper Palaeolithic recolonization of Britain (Ref 7.83), and offshore locations may provide unique and important context for coastal and lowland human activity during this period.
- 4.7.A.4.23 The Mesolithic period began in the early Holocene and at around 10ka, sea levels were approximately 35m below current levels (Ref 7.84) sub-aerially exposing large parts of the southern North Sea and English Channel making them suitable for human occupation. Archaeological and palaeoenvironmental material from this period has been reported from North Sea contexts for over a century (Ref 7.84; Ref 7.86 For example, a Maglemosian harpoon artefact was trawled in the early 20th century and was later radiocarbon dated to around 12,000 years ago (Ref 7.87).

- 4.7.A.4.24 Between 8 and 5ka, much of the landscape was inundated by eustatically driven sea-level change, and by 6ka sea level was only approximately 7m below the present level (Ref 7.84). Around this time, Britain became an island again (Ref 7.88, 67) and rising sea levels forced communities further inland. As temperate climates returned, the open plains were gradually replaced by forested areas and the large herds of reindeer, buffalo and horse hunted during the Palaeolithic were replaced by forest dwelling animals such as red deer, roe deer and wild cattle. Mesolithic hunters and gatherers also began to rely on the gathering of shellfish and vegetable foods. 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.
- 4.7.A.4.25 It is clear from numerous research and development-led investigations that postglacial marine transgression has not destroyed Pleistocene and Holocene palaeogeography by default (Ref 7.63). 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 (Ref 7.89; Ref 7.90; Ref 7.54).
- 4.7.A.4.26 Considerable attention has been paid to Mesolithic landscapes of the southern North Sea (Ref 7.91 Ref 7.89 as the now-submerged palaeolandscapes provide key contextual evidence for recovered artefacts and a background landscape within which to place these human communities. Increasingly, a maritime perspective has developed for understanding the early prehistoric archaeological record, where coasts, estuaries and wetlands are key landscape elements (Ref 7.27).

Palaeogeographic Assessment Results

- 4.7.A.4.27 The identified geology within the study area has been correlated with the geoarchaeological assessment results and divided into the Units described below in Table 4.7.A.10. The results of this assessment are collated in gazetteer format detailed in Annex 4.7.A.3 and illustrated in **Figures 4.7.A.3A-G**.

Table 4.7.A.10: Shallow stratigraphy within the study area

WA Unit	Lithofacies	Sediment Description	Geophysical Characteristics	Formation	Epoch
Unit 4	Seabed sediment	Silty gravelly sand with shell fragments	Observed as a thin veneer to large sand waves and sand banks across the study area. Boundary between surficial sediments and underlying units not always discernible	Seabed sediment	Modern/Late Holocene
Unit 3d	Alluvium and Peat	Soft dark brown organic silt and clay with organic material and occasional shell fragments (fine-grained organic)	Pleistocene and Holocene sediments. Distinct channel and cut and fill features, with fills characterised by parallel internal reflectors, sometimes acoustically	n/a	Early Holocene/ Pleistocene

WA Unit	Lithofacies	Sediment Description	Geophysical Characteristics	Formation	Epoch
		Soft brown silt and clay with thin beds or laminae of silty sand (fine-grained minerogenic)	unstructured and chaotic.		
		Dark brown peat with fibrous material			
Unit 3c	Shallow marine to coastal	Silty sand with beds and/or thick laminae of occasionally organic silty clay/silty sand with shell fragments		n/a	
Unit 3b	Non-marine sand	Silty sand with no shell and occasional pockets and laminae of sand and clay		n/a	
Unit 3a	Fluvial gravel	Silty sandy gravel with shell fragments		n/a	
Unit 2	Oxidised shallow marine sand	Orange silty sand with many shell fragments	Acoustically unstructured and sometimes stratified	Red Crag Formation	Plio-Pleistocene
Unit 1b	Pre-Quaternary Bedrock	Firm to stiff gravelly sandy silty clay with shell	Sub-parallel internal reflectors	London Clay Formation	Eocene
Unit 1a	Pre-Quaternary Bedrock	Intact structureless chalk or reworked silt and sand with chalk gravel and shell fragments	Acoustically unstructured and sometimes stratified close to the surface	Chalk	Upper Cretaceous

4.7.A.4.28 The oldest interpreted unit within the study area is Units 1a and 1b, which comprises the solid, pre-Quaternary bedrock for the region, Campanian Chalk and London Clay. This is seen in some areas to outcrop close to and at the seabed. As formations of

Upper Cretaceous to Eocene age, Units 1a and 1b are 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.

- 4.7.A.4.29 In the northern extent of the study area Unit 2, Red Crag Formation, has been occasionally identified in the SBP data, as an acoustically unstructured, occasionally chaotic unit, it is sometimes overlying Unit 1a. As a Plio-Pleistocene marine deposit that pre-dates the earliest known occupation of Britain (Ref 7.53), this unit is not considered to be of archaeological potential.
- 4.7.A.4.30 Unit 3 has been identified in multiple features across the study area and comprises Pleistocene and early Holocene sediments. Where features correlate with a vibrocore location, it has been sub-divided into Units 3a – 3d, some of which are interpreted to relate to the previous offshore course of the Thames-Medway river system. In the SBP data Unit 3 is visible as both buried and underfilled palaeochannels and cut and fill features containing deposits of sands, gravels, silts, clays and peats. As potential terrestrial fluvial features, these deposits have the potential to contain both *in situ* and derived archaeological material, alongside preserved organic remains of potential importance to palaeoenvironmental studies. A number of these palaeogeographic features have been identified and individually mapped, all of which contain sediments interpreted to be from Unit 3.
- 4.7.A.4.31 A total of 12 channels have been identified within the study area (see Annex 4.7.A.3). Channel **75006** is located in the northern extent of the study area and orientated east to west. The channel has a single fill that is characterised by strong parallel reflectors, although it is sometimes acoustically chaotic or unstructured. The feature contains areas of acoustic blanking (**75007**) that may indicate the microbial breakdown of organic matter. A vibrocore taken from the fill of this feature (VC-S6005) has identified the presence of alluvium and peat (Unit 3d), interpreted to be of high palaeoenvironmental potential. This channel is likely to be the same feature as **75005**, in the east nearshore option of the study area. Channel **75005** has a similar fill to channel **75006**, with areas of acoustic blanking (**75004**) (**Figure 4.7.A.4**). A vibrocore taken from the fill of this feature (VC-008A) has identified the presence of alluvium (Unit 3d). These features may represent buried palaeochannels, and the infill deposits have the potential to contain material of palaeoenvironmental interest and/or both *in situ* and derived artefacts of archaeological interest.
- 4.7.A.4.32 Channel **75015** is located offshore of Harwich and orientated east to west across the study area. The channel has an undulating basal reflector and two fills; the lower fill of the feature is acoustically unstructured and the upper fill contains parallel internal reflectors. The feature is situated below modern seabed sediments (Unit 4) and cuts into interpreted London Clay (Unit 1b). A vibrocore (VC-021) taken from the fill at the northern edge of the feature has identified Units 3c and 3d, including organic matter, interpreted to be of medium palaeoenvironmental potential. This feature may represent a buried palaeochannel, and the infill deposits may contain material of palaeoenvironmental interest and/or both *in situ* and derived artefacts of archaeological interest. Based on regional bathymetry data, this appears to be the offshore extension of the River Stour, which has been identified within numerous offshore development areas within the region.
- 4.7.A.4.33 Channel **75018** is located offshore and south of Harwich, it is orientated approximately north-east to south-west. The channel has a distinct, undulating basal reflector and two fills visible on some lines of data. The lower fill is chaotic and the upper fill is

characterised by parallel internal reflectors. The feature is situated below a thin veneer of modern seabed sediments (Unit 4) and cuts into interpreted London Clay (Unit 1b). A laterally restricted high amplitude reflector (**75017**) has been identified within the feature, suggesting possible organic material is present. The feature has the potential to represent a buried palaeochannel, and the infill deposits may contain material of palaeoenvironmental interest and/or both *in-situ* and derived artefacts of archaeological interest and is considered of high archaeological potential.

- 4.7.A.4.34 Three channel complexes have been identified in the southern extent of the study area (**75029**, **75030** and **75031**). All of these features are located within the Outer Thames estuary and are potentially part of the offshore route of the Thames/Medway river system. Feature **75030** has a distinct, undulating basal reflector and multiple phases of fill. The lower fill is characterised by distinct parallel internal reflectors, and the upper fill is generally more chaotic (although in some parts the fills are acoustically unstructured) (**Figure 4.7.A.5**). The feature is situated below modern seabed sediments (Unit 4) and cuts into an acoustically unstructured unit (Unit 1a). Two vibrocores taken within the fill of this channel contain shallow marine to coastal deposits of medium palaeoenvironmental potential (VC-057 and VC-058), interpreted to be Unit 3c. The feature has the potential to represent a possible fluvial braid plain feature of archaeological potential, and the infill deposits may contain material of palaeoenvironmental interest, it is located within the Outer Thames estuary and potentially part of the offshore route of the Thames/Medway river system.
- 4.7.A.4.35 Twelve simple cut and fills have been identified within the study area (see Annex 4.7.A.3), one of which has been discriminated as P1 archaeological potential (**75024**). Simple cut and fill feature **75024** has a chaotic fill with an indistinct basal reflector and is seen cutting into interpreted London Clay (Unit 1b). A vibrocore taken from the fill of this feature (VC-046) has been interpreted to contain alluvium (Unit 3d) and is considered to be of medium palaeoenvironmental potential. This feature has the potential to represent a remnant fluvial feature infilled with deposits of palaeoenvironmental potential.
- 4.7.A.4.36 One complex cut and fill has been identified within the study area (**75023**) cutting into the underlying London Clay (Unit 1b). This feature contains two fills, both of which are acoustically unstructured and sometimes chaotic. A vibrocore (VC-043) taken from the fill of this feature identified oxidised shallow marine sands (Unit 3c), situated below modern seabed sediments (Unit 4). This feature may represent remnant fluvial features infilled with Unit 3c, 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 and is considered to be of medium archaeological potential.
- 4.7.A.4.37 Seven areas of acoustic blanking have been identified throughout the study area (**75000**, **75001**, **75002**, **75004**, **75007**, **75009** and **75016**). Acoustic blanking (**75004**) has been identified in the fill of channel **75005** (**Figure 4.7.A.4**); it is visible as a very slightly chaotic reflector that blanks the channel fill and is situated below modern seabed sediments (Unit 4). Areas of acoustic blanking have 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.
- 4.7.A.4.38 Unit 4 has been identified widely across the study area in both the SBP and the geotechnical logs. It has been interpreted to be modern seabed sediments and generally comprises shelly gravelly sands and sandy gravels. It is visible as varying thicknesses along the study area, ranging from a thin veneer to sand waves and sand

banks a few metres in height. These sediments are considered to be of low potential, but have the potential to contain re-worked artefacts and can cover wreck sites and other cultural heritage in areas with sufficient thickness.

Geoarchaeological Assessment

Introduction

4.7.A.4.39 Geoarchaeological assessments are typically undertaken with reference to geological periods (e.g. Quaternary), epochs (e.g. Pleistocene) and sub-epochs (e.g. Devensian) that reflect major climate sea-level and/or environmental changes. Here we adopt standard British nomenclature correlated to the Marine Isotope Stage (MIS) record to distinguish between different climatic periods, with dates given in ka (thousands of years before present). Marine Isotope Stages are deduced from marine palaeoclimatic records and reflect alternating warm (interglacial and interstadial) and cold (glacial and stadial) periods throughout the Quaternary.

Geoarchaeological assessment results

4.7.A.4.40 A total of 69 vibrocore logs were reviewed as part of the Stage 1 works (**Figure 4.7.A.6**), with the aim of identifying deposits of potential geoarchaeological interest with recommendations for further geoarchaeological work, if necessary. Outline descriptions based on geotechnical logs are presented in Annex 4.7.A.5, accompanied by an initial interpretation of the deposits. A summary of the deposits encountered is provided in Table 4.7.A.10 and the geoarchaeological priority is shown in **Figure 4.7.A.7**.

Bedrock and reworked bedrock

4.7.A.4.41 Structureless chalk and stiff sandy silty clay with siltstone and mudstone were recovered from the study area and interpreted as Chalk and London Clay Formation bedrock, respectively. Chalk bedrock was recovered in eight vibrocores and represents a continuation of equivalent onshore deposits mapped on the Isle of Thanet in east Kent.

4.7.A.4.42 In 13 vibrocores, stiff gravelly sandy silty clay with shell fragments interpreted as reworked London Clay bedrock and silt and sand with chalk gravel and shell fragments were recovered. The archaeological potential of these reworked deposits is low as they formed prior to human occupation of Britain.

Fluvial gravel

4.7.A.4.43 Silty sandy gravel with shell fragments was recorded in a single vibrocore (VC-040), between seabed and 3.82mbsf. The coarse nature of this deposit including subangular clasts may suggest deposition in a high-energy fluvial environment. Despite this, the recovery of shell is unique and is typically indicative of marine processes. Based on SBP data VC040 is located within a mapped palaeochannel and as such, is tentatively interpreted as representing a fluvial channel which has been reworked by succeeding marine processes, as evidenced by the recovery of broken shell.

4.7.A.4.44 Given this deposit was recovered in a single vibrocore, it is possible that the sands and gravels represent a relict, isolated channel system. Although the age of this deposit is unknown, due to post-depositional reworking by increasing marine conditions, it is considered to have low geoarchaeological and archaeological potential.

Non-marine sand

- 4.7.A.4.45 Silty sand with occasional pockets and laminae of sand and clay was recorded in two vibrocores at depths between seabed (VC062A) and 4.27mbsf (VC061). A diagnostic characteristic of this unit is the absence of fragments and whole shells, which combined with the non-calcareous nature of these sediments, suggests deposition within a sub-aerially exposed landscape. The depositional history of this deposit is difficult to determine from geotechnical logs alone. Nonetheless, it is possible that formation occurred within a periglacial environment by aeolian or fluvial processes and as such has been interpreted as non-marine sand.
- 4.7.A.4.46 An extensive channel network has been identified in the study area through the interpretation of SBP data and identification of buried palaeolandscapes features. Given VC061 lies within a palaeochannel, it is likely the non-marine sands preserved reflect deposition in a fluvial setting.
- 4.7.A.4.47 VC062 is also mapped within a palaeochannel, however the non-marine sands preserved are unique as they are oxidized which may suggest previous subaerial exposure with deposition predating the early Holocene. Non-marine sand is assigned medium geoarchaeological potential as deposition most likely occurred in a sub-aerially exposed landscape suitable for hominin occupation.

Oxidised shallow marine sand

- 4.7.A.4.48 Light to dark orange occasionally gravelly, silty sand with frequent shell fragments was recovered in three vibrocores (VC009, VC0021 and VC043) at depths between 0.98mbsf and 4.71mbsf. In all instances, this deposit directly overlies London Clay bedrock. The presence of shell fragments suggests deposition in a marine environment, however oxidation was identified following a review of core photographs. Oxidation is typically associated with stratigraphically older deposits and is shown to occur during periods of landscape exposure. Given this deposit overlies bedrock, is oxidised and contains abundant shell, it is correlated to the Red Crag Formation.
- 4.7.A.4.49 The Red Crag Formation is a formation of marine shelly sands and gravels which unconformably overlies London Clay bedrock (Ref 7.50). Although the exact age of formation is debatable, deposits are Plio-Pleistocene in age and therefore pre-date the earliest known occupation of Britain and are considered low archaeological and geoarchaeological potential.

Shallow marine to coastal

- 4.7.A.4.50 In 20 vibrocores, lithologically variable deposits comprising gravelly sand and silty sand with beds and laminae of occasional organic clay, silt and sand with shell fragments were recovered at depths between seabed and 5.55mbsf.
- 4.7.A.4.51 Fragments of shell within this deposit suggest deposition in a marine setting, however a bedded structure is frequently observed and is indicative of low-energy periodic deposition. Comparatively coarser deposits of gravelly sands are also recorded and are indicative of higher energy conditions, and combined with the presence of shell, likely represents deposition within a coastal plain, or possibly littoral, environment. Given the changes in energy resulting in more laminated and comparatively coarser sand units, it is difficult to determine the depositional environment. However, based on the presence of shell, indicative of marine conditions and organic horizons which indicate a more marginal environment that would allow vegetation to establish, these

deposits are interpreted as representing deposition in a shallow marine to coastal setting.

4.7.A.4.52 These deposits are typically overlain by fine-grained minerogenic, and organic alluvium, and were likely deposited in the early Holocene when the southern North Sea was subaerially exposed. Given the presence of organic material, these sand dominated deposits have been assigned medium priority status as while there is potential to preserve palaeoenvironmental material, the organic layers are thin and the sandy nature may have a negative impact on preservation and concentration.

Alluvium and peat

4.7.A.4.53 In nine vibrocores (VC-S6005, VC007, VC08A, VC009, VC022, VC038, VC050, VC051 and VC061) soft brown silt and clay with thin beds or laminae of silty sand was recovered. The fine-grained and laminated nature of this deposit suggests deposition in a low-energy setting, and given the absence of organic material, is interpreted as fine-grained minerogenic alluvium.

4.7.A.4.54 Soft dark brown organic silt and clay with occasional organics and shell fragments was recorded in seven vibrocores (VC-S6005, VC005, VC021, VC046A, VC050, VC055A, VC061). Laminations were occasionally observed on review of core photographs and may suggest periodic increase of tidal processes. Based on the abundance of organics, this deposit is interpreted as organic alluvium.

4.7.A.4.55 Collectively, given the fine-grained, laminated nature of sediments and presence of shell fragments, these minerogenic and organic alluvial deposits are both interpreted as representing deposition in a tidally influenced environment. These fine-grained deposits are likely of Holocene age, dating to a time when the southern North Sea was sub-aerially exposed prior to sea-level transgression.

4.7.A.4.56 Although several vibrocores recovered from the study area contain both minerogenic and organic alluvium (VC-S6005, VC050 and VC061) no stratigraphic order is observed, with organic alluvium occurring above and below minerogenic deposits. This demonstrates a more localized response of palaeolandscape development in the early Holocene, with organic sediments forming in response to more stable and drier conditions. However, in some instances (e.g. in VC007) organics are absent with thick (<4.5m) minerogenic sequences recorded. This may suggest a greater influence of tidal or more coastal conditions and again highlights these local changes in palaeogeography, amplified in the study area by a large number of palaeochannels dissecting the landscape.

4.7.A.4.57 Fibrous material is frequently recorded in these organic alluvial deposits and display evidence of stabilisation of the land surface and progressive development of a terrestrial landscape.

4.7.A.4.58 Organic alluvium is assigned medium priority status given its potential to preserve geoarchaeological material suitable for palaeoenvironmental assessment. Minerogenic alluvium is also considered to have medium priority status given the potential to preserve inorganic microfossils.

4.7.A.4.59 Peat described as firm and dark brown was recorded in a single vibrocore (VC-S6005) between 1.74mbsf and 2.16mbsf. The high organic content of this deposit suggests formation within a semi-terrestrial wetland environment and considering its relationship with the underlying shallow marine to coastal deposits and overlying tidally

influenced alluvium, this is likely a coastal wetland fringing an estuarine, lagoonal or embayment coast.

4.7.A.4.60 Peat deposits have the highest potential for preserving material for radiocarbon dating, along with a range of palaeoenvironmental remains (e.g. pollen and plant macrofossils) suitable for reconstructing past landscapes and environmental change, and investigating evidence for human activity during the Upper Palaeolithic and Early Mesolithic.

Seabed sediments

4.7.A.4.61 In 43 vibrocores, brown silty gravelly sand and sandy gravel with whole shell and shell fragments were recovered. This deposit where present is always recorded at seabed and due to the high gravel and shell content, is interpreted to represent modern seabed sediments.

4.7.A.4.62 As sea levels stabilised during the Mid-Holocene, marine processes began to rework the uppermost deposits in places, forming gravelly sands with frequent shell and shell fragments. Seabed sediments typically form a veneer over fine-grained laminated sequences, generally where mapped palaeochannels occur, or over outcropping chalk bedrock. However, in places deposits are occasionally thick (e.g. 2.94m in VC050) and may reflect the formation of sand waves or ripple or dune features on the seabed. Although there is potential for these deposits to contain reworked archaeology or bury palaeolandscape features, their archaeological potential is considered low.

Deposit modelling

4.7.A.4.63 Following the Stage 1 review of a total of 69 vibrocores from the study area, a series of geoarchaeological deposit models were constructed to target medium to high priority deposits. The models included six transects from north to south across the extents of the Proposed Project (**Figures 4.7.A.8 – 4.7.A.13**). The locations of the transects are shown on each transect figure.

4.7.A.4.64 The cross-sections are composed of two-dimensional stratigraphic profiles (transects) that provide vertical visualisations of the stratigraphic records, along lines drawn through selected vibrocores across the licence areas. These transects model the possible make-up of the deposits between these individual deposit records.

Transect 1 (Figure 4.7.A.8)

4.7.A.4.65 To the north of the ECC, varying thicknesses of shallow marine sands are overlain by minerogenic and organic alluvium (VC-005, VC-008A and VC-S6-005). The profile exhibits one exception in VC-007, which records an isolated deposit of minerogenic alluvium approximately 2.0m in thickness. A thin veneer of organic alluvium is recorded in two vibrocores (VC-005 and VC-S6-005); the latter overlies a thin (0.42m) deposit of peat. In VC-009, oxidised shallow marine sand is overlain by minerogenic alluvium, and may represent a remnant deposit of the Red Crag Formation which typically outcrops in the nearshore area. The profile illustrates deposits infilling features or a channel incised into underlying bedrock, with seabed sediments appearing more frequently to the south (VC-014).

Transect 2 and 3 (Figure 4.7.A.9 and 4.7.A.10)

4.7.A.4.66 This trend of bedrock overlain by seabed sediments continues further south and is illustrated in Transect 2. A thick sequence of superficial deposits is, however, recorded

in VC-021 and VC-022; oxidised shallow marine sands overlain by a thin unit of organic alluvium and seabed sediments in the former and shallow marine to coastal deposits overlain by minerogenic alluvium in the latter. This may reflect the infilling of an isolated feature or channel, with alluvial deposits in VC-021 possibly truncated by seabed sediments. Bedrock capped by seabed sediments continue to the south as illustrated in Transect 3. The single outlier in this profile is VC-038, which records a thin deposit of shallow marine to coastal sands and minerogenic alluvium.

Transect 4 (Figure 4.7.A.11)

4.7.A.4.67 Cross section 4 comprises eight vibrocores and similar to Transect 3, predominantly consists of bedrock overlain by thin veneers of either seabed sediments or reworked bedrock. A unique deposit interpreted as fluvial gravel is recorded in VC-040 overlying bedrock at a comparatively lower elevation (c. -38.0m LAT). Although the age of this deposit is unknown, the lower elevation may suggest downcutting, with this deposit reflecting a younger, isolated channel system which possibly formed during the Late Pleistocene to Holocene. The southern end of Transect 4 is predominantly comprised of bedrock overlain by seabed sediments. However, in VC-046A infill consisting of organic alluvium is recorded incising into bedrock, reflecting the development of a channel or isolated feature.

Transect 5 and 6 (Figure 4.7.A.12 and Figure 4.7.A.13)

4.7.A.4.68 To the south lies Transect 5, which covers the most extensive area (c. 25km) and comprises 15 vibrocores. The profile traverses an extensive channel system identified through sub-bottom profiler data, which is clearly documented through the lateral and vertical extent of superficial deposits in Transect 5. The deposits interpreted as shallow marine to coastal are dominant in the profile and are present in all but three vibrocores; both VC-049 and VC-064 are mapped beyond the limits of this channel system.

4.7.A.4.69 Two deposits of non-marine sands are illustrated at the southern extent of the transect (VC-061 and VC-62A) and may reflect either lower energy fluvial or alternatively older aeolian deposition. A thick (<3.0m) deposit of seabed sediments is recorded in VC-050, likely representing a sand bank. At the southern extent of the study area, Transect 6 shows bedrock overlain by reworked bedrock and seabed sediments.

Setting

4.7.A.4.70 The setting of seabed prehistory features is integral to their value and importance. Although there are no views to the features nor ways they can be experienced on the seabed, their position is critical to how palaeolandscapes were experienced by past peoples, and their non-visual setting includes international research into the Palaeolithic and Mesolithic periods across Europe. If further relevant information regarding these features becomes available in the future then an assessment of their setting may be undertaken.

Value

4.7.A.4.71 There are no designated or known seabed prehistory sites within the study area. However, the results of the palaeogeographic assessment together with the archaeologically assessed cores taken for the Proposed Project have demonstrated the potential for the discovery of material relating to seabed prehistory.

4.7.A.4.72 On the basis of age and the rarity of Palaeolithic and Mesolithic finds in marine contexts, if any sites or material was discovered, they would likely be of high, probably national, archaeological importance. A guidance note published by English Heritage (now Historic England) Identifying and Protecting Palaeolithic Remains: archaeological guidance for planning authorities and developers (Ref 7.92) 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. This was reiterated in Historic England's 2023 guidance, Curating the Palaeolithic (Ref 7.39).

4.7.A.5 Marine Archaeological Assessment: Maritime, Aviation Sites and Geophysical Anomalies of Archaeological Potential

Introduction

- 4.7.A.5.1 The following assessment for the maritime and aviation marine archaeological baseline resource is predominantly based on the assessment of geophysical data to identify features of archaeological potential relating to maritime and aviation activity. This information was supplemented with records of known shipwrecks, aircraft crash sites and obstructions to provide an overall baseline of the study area. The distribution of the known heritage receptors is illustrated in **Figures 4.7.A.14A-U**.
- 4.7.A.5.2 As well as summarising the known archaeological resource, the baseline assessment underlines the potential for encountering shipwreck and aircraft crash sites within the study area. Relevant primary and secondary source material has also been utilised to understand the nature of maritime and aviation activity of the region.
- 4.7.A.5.3 The overall aim is to establish the known and potential marine archaeological resource that could be affected by the Proposed Project within the Offshore Scheme.
- 4.7.A.5.4 Further geophysical and geotechnical surveys are planned for Summer 2023 and the archaeological assessment of these data will be incorporated into the ES. It is recommended that any future geophysical or geotechnical data that is undertaken within the study area should also be subject to archaeological review in order to establish a more accurate and up to date ground truthing of the study area.
- 4.7.A.5.5 The baseline information presented here has been gathered following the best practice professional guidance outlined by the ClfA's Standard and Guidance for Historic Environment Desk-Based Assessment (Ref 7.36).

Protected Sites

- 4.7.A.5.6 Wrecks protected under the Protection of Wrecks Act 1973 (Ref 7.4), the Protection of Military Remains Act 1986 (Ref 7.6) or the Ancient Monuments and Archaeological Areas Act 1978 (Ref 7.5) are marked on appropriate UKHO Admiralty Charts. Interference or damage to these wrecks is considered a criminal offence.
- 4.7.A.5.7 There are currently no maritime or aviation sites within the study area that are subject to statutory protection from these acts that can be used to protect marine archaeological sites.
- 4.7.A.5.8 There are no recorded known aircraft crash sites located within the study area, however, it is possible that the anomalies given the archaeological discrimination A2

described in the geophysical seabed features assessment results below could relate to such sites. All aircraft that crashed while in military service are automatically protected under the Protection of Military Remains Act 1986 (Ref 7.6). If present within the study area, such sites would represent statutory constraints upon the proposed development. This legislation means any activities impacting upon the aircraft remains must cease pending assessment by the Ministry of Defence.

4.7.A.5.9 An NMHR Recorded Loss for an aircraft crash site records the location of a B-17 Flying Fortress within the study area. The record (NMHR_1602379) is located within a circular named location polygon with a 1km diameter. Material associated with this aircraft were discovered in the 1990s and were recovered and accessioned with the British Breznett Aeronautical Museum. A walkover survey was undertaken in 2017 to inform the Thanet Extension Offshore Wind Farm and, following discussions with Elliot Smock who was involved with the recovery of the material in the 1990s, the remaining material associated with the aircraft were located on Sandwich Flats to the south of Pegwell Bay (Ref 7.93). The NMHR record for this site has not since been updated and therefore the named location position for the aircraft is incorrect and does not impact the Proposed Project.

Geophysical Seabed Features Assessment Results

4.7.A.5.10 The results of this assessment are collated in gazetteer format detailed in Annex 4.7.A.6 and illustrated in **Figures 4.7.A.14A-U** with wreck sheets presented on Figures 4.7.A.15 – 4.7.A.29 and data examples presented on **Figure 4.7.A.30**.

4.7.A.5.11 A total of 837 features have been identified as being of possible archaeological potential within the study area and are discriminated as shown in Table 4.7.A.11.

4.7.A.5.12 It should be noted that two recorded wrecks within the study area have been interpreted to be modern and therefore not of archaeological potential. These wrecks have not been included in the seabed features assessment results relating to the geophysical survey, however, their positions are recorded here for reference (406038mE, 5784901mN (UKHO_10324) and 399653mE, 5700985mN (2012/UKHO_92106). UKHO_10324 is located within the geophysical study area, however, it is not within the boundary of the Offshore Scheme. UKHO_92106 is mentioned in the additional seabed features section as **2012**.

Table 4.7.A.11: Anomalies of archaeological potential within the study area

Archaeological discrimination	Quantity	Interpretation
A1	29	Anthropogenic origin of archaeological interest
A2_h	340	Anomaly of likely anthropogenic origin but of unknown date; may be of archaeological interest or a modern feature
A2_l	458	Anomaly of possible anthropogenic origin but interpretation is uncertain; may be anthropogenic or a natural feature
A3	10	Historic record of possible archaeological interest with no corresponding geophysical anomaly
Total	837	

4.7.A.5.13 Furthermore, these anomalies can be classified by probable type, which can further aid in assigning archaeological potential and importance (Table 4.7.A.12).

Table 4.7.A.12: Types of anomalies identified

Anomaly classification	Definition	Number of anomalies
Wreck	Areas of coherent structure including wrecks of ships, submarines and some aircraft (where coherent structure survives)	15
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	35
Debris	Distinct objects on the seabed, generally exhibiting height or with evidence of structure, that are potentially anthropogenic in origin	74
Seabed disturbance	An area of disturbance without individual, distinct objects. Potentially indicates wreck debris or other anthropogenic features buried just below the seabed.	21
Rope/chain	Curvilinear dark reflectors, often with a small amount of height, indicating rope or chain (if ferrous)	37
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	98
Mound	A mounded feature with height not considered to be natural. Mounds may form over wreck sites or other debris.	47
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.	3
Magnetic	No associated seabed surface expression, and have the potential to represent possible buried ferrous debris or buried wreck sites	496
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.	10
Total		837

- 4.7.A.5.14 A total of 29 anomalies have been discriminated as A1 during this assessment.
- 4.7.A.5.15 Wreck **7002** is an unknown and unrecorded wreck visible in the SSS data as a distinct and compact group of elongate, rounded and angular dark reflectors with bright shadows, measuring 10.8 x 8.4 x 0.4m. The wreck appears very broken up and degraded with no distinguishable features, however, appears highly anthropogenic. This position 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. The wreck is situated 20m south-east of a recorded wreck in the UKHO records, *Ocean Pride*, a modern fishing vessel not included in this gazetteer and not covered by any of the 2021 geophysical datasets. Given the condition of the wreck it is unlikely to be modern and so has been discriminated as A1 (**Figure 4.7.A.15**: Wreck Sheet 1). This wreck is not located within the Offshore Scheme Boundary will not be impacted by the Proposed Project.
- 4.7.A.5.16 Wreck **7116** is an unknown, recorded wreck that corresponds with UKHO record 87090. The wreck is visible in the SSS data as an indistinct spread of dark reflectors with slight shadows, including multiple small angular objects within an area of disturbed seabed. The wreck measures 15.5 x 8.4 x 0.7m and its full extent may be buried. In the MBES data the wreck is visible as a large oval mound with an uneven peak, with distinct scouring to the south measuring 25m long and approximately 0.5m deep. No anomalous features were identified in the Mag. data at this location. In the UKHO, **7116** is recorded as a dangerous wreck first identified in 2017 and reported as measuring 10.2 x 5.0 x 1.0m, however, there is no other information available. The larger geophysical dimensions in the most recent survey may suggest the wreck has become more exposed since 2017 (**Figure 4.7.A.16**: Wreck Sheet 2).
- 4.7.A.5.17 Wreck **7120** is an unknown and unrecorded wreck, identified in the SSS data as large oval shaped thin curvilinear dark reflector interpreted to be the hull, with bright irregular shadows across its length, indicating uneven height. Internally, indistinct angular and short and straight dark reflectors with shadows are visible that may be surviving deck structure. The wreck is situated in an area of mobile sediments and measures 22.2 x 9.9 x 0.4m. In the MBES data one end of the wreck is visible as a distinct curvilinear mound that appears to be mostly intact hull structure. Internally indistinct linear mounds are visible that suggest the wreck is upright, and there are some small angular mounds directly next to the hull that may be collapsed structure. The wreck is orientated east to west on the seabed, with the east end potentially buried by sediments and/or highly degraded. The wreck has scouring to the south for approximately 25.0m (approximately 0.7m deep). The wreck has a large Mag. anomaly associated with it, measuring 111 nT indicating some ferrous material is present (**Figure 4.7.A.17**: Wreck Sheet 3).
- 4.7.A.5.18 Wreck **7173** is a recorded wreck that corresponds with UKHO (10249) and NMHR (912686) records for HMS *Tervani*; a trawler built in 1914, with build dimensions of 48.8 x 7.9 x 4.3m. The vessel had one boiler and a triple expansion engine and was mined in 1916. The wreck was last surveyed in 2017 and reported as being intact and partially buried, with MBES dimensions of 48.1 x 8.1 x 2.4m.
- 4.7.A.5.19 In the 2021 data set, wreck **7173** is partially covered by the SSS data and is visible a series of distinct but dispersed dark reflectors with bright shadows. Short linear and angular objects are visible, as well as slatted features that may be surviving deck structure. The wreck is orientated approximately north to south and extends beyond the SSS data range; the measured dimensions of 36.8 x 15.2 x 0.6m are significantly shorter than those in the UKHO record, suggesting the wreck extends considerably

beyond the 2021 data extents. The wreck has significant scour associated that extends beyond the data range to the south-east. The wreck was not directly covered by the MBES or Mag. datasets; however, a small Mag. anomaly was identified on the closest Mag. line, 46.0m east, measuring 34nT, indicating some ferrous material is present (**Figure 4.7.A.18**: Wreck Sheet 4). Debris field **7174** has been identified 4.0m to the north of wreck **7173** and is considered to be an associated debris field; as such it has also been discriminated as A1. Other objects identified in the vicinity of the wreck are interpreted as associated debris.

- 4.7.A.5.20 Wreck **7176** is a recorded, unknown wreck that corresponds with UKHO record 86578. The wreck is partially covered by the SSS data and is visible as a large spread of linear, curvilinear, elongate, and angular dark reflectors with bright shadows. The wreck measures 41.4 x 10.2 x 0.4m, however it extends beyond the SSS data range and so the dimensions should be considered a minimum. At the north-east end of the wreck a distinctive curvilinear dark reflector measuring 23.7 x 1.3m is visible that is interpreted to be part of the hull. No superstructure or deck structure is visible, and associated debris has been identified in the vicinity (**Figure 4.7.A.19**: Wreck Sheet 5). The wreck was not directly covered by the MBES or Mag. datasets, so it is not possible to ascertain whether ferrous material is present. Associated with a UKHO record for an unknown wreck, last surveyed in 2017, it is reported as a being largely intact and partially buried, with dimensions of 41.7 x 6.5 x 2.9m. Debris **7177** and debris field **7178** are considered to be associated wreck debris and have been discriminated as A1.
- 4.7.A.5.21 Wreck **7232** is a recorded wreck that corresponds with a UKHO (14743) and NMHR (879873) record for an unknown wreck. In the SSS data the wreck is visible as a distinct oval shaped thick curvilinear dark reflector, interpreted to represent the hull. Internally there are indistinct linear and angular dark reflectors with shadows that are likely surviving deck structure. The wreck is orientated approximately north-east to south-west on the seabed and measures 44.5 x 14.5 x 3.4m. In the MBES data the wreck appears upright and mostly intact, internally some upstanding deck structure is visible in the form of square and rounded mounds. At the south-west end of the deck two tall mounds are visible which may be boilers. The south-west end of the wreck ends abruptly, suggesting the vessel may be broken in two, is partially buried or very degraded. The wreck has substantial sediment accumulation on its south-western end and deep scouring, particularly to the SSW extending for approximately 90m and up to 4.0m deep. The wreck has a very large Mag. anomaly associated with it, measuring 3,415nT, indicating substantial ferrous material is present (**Figure 4.7.A.20**: Wreck Sheet 6).
- 4.7.A.5.22 In the UKHO record wreck **7232** was first located in 1973 and last surveyed in 2019, the wreck was reported as being generally intact and partially buried with the aft broken off or degraded. The wreck has reported dimensions of 31.6 x 7.2 x 4.4m and is orientated 69° on the seabed. The larger geophysical dimensions in the most recent survey may indicate the wreck has collapsed, degraded further, or become more exposed since 2019. The wreck is situated in an area of mobile sediments and it may periodically be buried. There is associated debris identified in the vicinity of the wreck (**7233** – **7236**), and the substantial sediment accumulation on its southern side may be burying further objects.
- 4.7.A.5.23 Wreck **7269** is a recorded wreck that corresponds with a UKHO (14599) and NMHR (908160) record for UC11 (Possibly); a German minelaying submarine that sunk after running into one of its own mines in 1918, it had as built dimensions of 34.1 x 3.0m. The wreck is visible in the SSS data as a thick, elongate and slightly intermittent dark

reflector with bright shadows, interpreted to be the hull. Within this, multiple linear, curvilinear and angular objects are visible. The wreck measures 43.5 x 20.7 x 3.2m and is visible in the MBES data as a spread of angular, linear and curvilinear mounds. The largest mound is rectangular, with steep sides and a flat thin peak measuring 13.6 x 4.3 x 3.0m and may be the conning tower or a rudder. Some objects are very distinct, and others may be partially buried. The feature has scouring associated orientated to the north and south for a maximum of 28.0m and is 0.5m deep. The wreck has a very large magnetic anomaly associated with it, measuring 5,114nT, indicating substantial ferrous material is present (**Figure 4.7.A.21**: Wreck Sheet 7).

- 4.7.A.5.24 In the UKHO record UC11 (Possibly), is reported as being upturned, with a strong magnetic anomaly associated. The wreck was last surveyed in 2016 and described as being broken up with dimensions of 27.0 x 11.0 x 4.3m. The UKHO record suggests that the wreck may have been salvaged in the past. In the 2021 geophysical data the wreck appears to be highly degraded and broken up, with one piece of superstructure visible. The wreck is situated within an area of mobile sediments, and it may periodically be buried. Debris field **7270** is situated on the northern side of the wreck is considered to be associated wreck debris and has been discriminated as A1.
- 4.7.A.5.25 Wreck **7346** is a recorded wreck that corresponds with a UKHO (14419) and NMHR (802191) record for *Salerno* (Possibly); a steam ship built in 1912 with two boilers, a triple expansion engine and build dimensions of 99.1 x 13.5 x 6.0m. The vessel struck a mine laid by UC3 in 1915. In the SSS data one edge of the hull is visible as a distinct long and thick dark reflector with a very large, bright and uneven shadow, indicating uneven height. Within the hull there are multiple indistinct elongate and linear dark reflectors, indicating the wreck is upright and has some surviving deck structure. The wreck measures 97.0 x 25.2 x 11.1m and is orientated north-east to south-west on the seabed within an area of mobile sediments. In the MBES data the wreck is upright but leaning over to one side, and the northern side of the wreck is not visible. The hull appears to be mostly intact, with collapsed structure on its south-west end with the northern edge of the wreck buried by sediments. In the centre of the deck a large square mound is visible measuring 8.7 x 4.2 x 4.0m. There are multiple linear and angular mounds across the deck and a large mound is present at the north-eastern end of the vessel indicating surviving superstructure and possibly a boiler. The wreck has significant scour to the south for over 200.0m and up to 6.0m deep and is surrounded by sediment accumulation, which may be concealing the full extents of the wreck and possibly associated debris. The wreck has a very large Mag. anomaly associated with it, measuring 1,659nT, indicating substantial ferrous material is present (**Figure 4.7.A.22**: Wreck Sheet 8).
- 4.7.A.5.26 In the UKHO record wreck **7346** was last surveyed in 2016 and described as being broken up with a strong Mag. anomaly associated and dimensions of 95.0 x 22.0 x 11.7m. In the 2021 geophysical data the wreck appears to be predominantly intact, although the south-west end has evidence of deterioration. It is situated within an area of large sand waves which may be concealing associated debris and may periodically bury the full extent of the wreck.
- 4.7.A.5.27 Wreck **7348** is a recorded wreck that corresponds with a UKHO (14418) record for an unknown wreck and may be associated with a NMHR record (802188) situated 30m north-west, for the possible wreck of the *Volscian* (although the NMHR record references UKHO 14418). The wreck is visible in the SSS data as a distinct curvilinear dark reflector with a bright uneven shadow, orientated NNW to SSE on the seabed. This is interpreted to represent the hull and appears to be intact. Within the hull, multiple distinct linear dark reflectors are visible; these slatted features potentially

indicate surviving deck structure and that the wreck is upright on the seabed. The wreck measures 27.6 x 10.7 x 3.6m and is surrounded by scour and sediment accumulation (**Wreck Sheet 9**). The wreck was not directly covered by the MBES or Mag. datasets; however, a large Mag. anomaly (**7347**) identified on the closest Mag. line 100m east may be associated. Wreck **7348** is not located within the Offshore Scheme Boundary and will not be impacted by the Proposed Project.

- 4.7.A.5.28 In the UKHO record the wreck is reported as being upright and in good condition with recorded dimensions of 35.0 x 9.0 x 5.2m. The wreck was last surveyed in 2016 and reported as lying on a gently undulating seabed with a strong Mag. anomaly associated and scour of 100.0m length and up to 2.0m deep. In the 2021 data the wreck appears to be intact and upright with some surviving deck structure visible. The wreck is situated within an area of mobile sediments that may periodically bury the wreck and any associated debris.
- 4.7.A.5.29 Wreck **7414** is a recorded wreck that corresponds with a UKHO (13968) and NMHR (904723) record for *Saidieh*, a 3303 gross ton steam ship built in 1878, the vessel was sunk in 1915 by UB6, a German submarine. In the SSS data the wreck is visible as a large spread of distinct linear and curvilinear dark reflectors with bright shadows. The wreck is upright and measures 116.6 x 36.6 x 6.8m, there are slatted features visible internally, however no superstructure is identifiable. The wreck has a rope or chain that is either attached or snagged on the south-eastern edge (**7415**). The hull of the wreck is not well defined, suggesting it is broken up. In the MBES data the wreck is orientated approximately east-northeast to west-southwest on a relatively featureless area of seabed. The wreck appears upright but is highly degraded with a collapsed hull. Within the hull possible surviving deck structure is visible, comprising three distinct square shaped mounds in its centre with thin, linear mounds and smaller rounded and angular mounds visible across the deck. The wreck has significant sediment accumulation and scour to the north and south, with significant scour to the south measuring 140 x 54.0 x -5.2m, which may be burying collapsed structure and associated debris. The wreck has a very large Mag. anomaly associated with it, measuring 27,020nT, indicating substantial ferrous material is present (**Figure 4.7.A.24**: Wreck Sheet 10).
- 4.7.A.5.30 In the UKHO record wreck **7414** was last surveyed in 2017 and described as being partially broken up and buried with dimensions of 112.5 x 21.1 x 5.8m. The larger geophysical dimensions in the most recent survey may indicate the wreck has collapsed, degraded further, or become more exposed since 2017. The wreck is situated on a relatively featureless area of seabed but has substantial sediment accumulation around it and it may periodically be buried. Associated debris (**7416**) has been identified in the vicinity of the wreck and further debris may be buried.
- 4.7.A.5.31 Wreck **7426** is a recorded, unknown wreck that corresponds with a UKHO (13958) and NMHR record (831796). The wreck is visible in the SSS data as a large, elongate and distinct curvilinear dark reflector with a bright uneven shadow, measuring 51.6 x 11.9 x 3.4m. This is interpreted to represent the hull, which appears to be intact. Within the hull, linear and curvilinear dark reflectors and some slatted features are visible that possibly represent surviving deck structure. One end of the vessel is heavily degraded and may be buried. In the MBES data the stern of the wreck appears to be to the WNW and the bow to the east-southeast. The hull is mostly intact, however there is a dip visible in the centre of the wreck which may suggest it is broken in two. It appears slightly bowed and has large amounts of sediment accumulation at either side of the hull up to 5m high that may be burying its full extent. The wreck is upright with two triangular mounds visible in its centre that may be boilers. Some possible surviving deck structure is visible as linear mounds at the stern and small uneven angular

mounds at the bow end of the vessel. The wreck is surrounded by scouring up to 2.0m deep (**Figure 4.7.A.25**: Wreck Sheet 11). The wreck has a very large Mag. anomaly associated with it, measuring 10,094nT, indicating substantial ferrous material is present. The wreck has a number of possible associated items of debris and debris fields identified in the vicinity (**7427 - 7436**), three of which (**7430, 7433 and 7434**) have been discriminated as A1 due to their highly anthropogenic characteristics.

- 4.7.A.5.32 In the UKHO record wreck **7426** was last surveyed in 2017 and reported as being upright and intact with dimensions of 50.8 x 9.0 x 3.7m and with 25.0m of scour up to 2.7m deep. The wreck appears to be mostly intact however evidence of collapse and burial is visible in the 2021 geophysical data. Several items of debris are visible surrounding the wreck suggesting it is degraded and a large mound identified at the stern suggests a large piece of the vessel may have broken off. The wreck is situated in an area of mobile sediments, and it may periodically be buried.
- 4.7.A.5.33 Wreck **7472** is a recorded wreck that corresponds with a UKHO (14944) and NMHR (904908) record for *Selma* (Possibly), a 1654 gross ton steam ship with build dimensions of 82.3 x 11.9 x 5.5m that was sunk by a mine in 1915. In the SSS data the wreck is visible as a large spread of elongate, angular and curvilinear dark reflectors with bright shadows. The hull is not distinct and there are no discernible internal features visible, suggesting the wreck is very broken up. The wreck measures 52.5 x 38.7 x 1.6m and is situated in an area of mobile sediments, indicating the full extent of the wreck may be buried. In the MBES data the wreck is visible as a group of elongate, angular and rounded objects situated within depressions. The largest linear object measures 7.7 x 2.8 x 0.6m and a large angular mound at the western end of the wreck measures 4.1 x 2.8m; this has a very flat peak and steep edges, and some data points are missing which may suggest its peak is overhanging the edge of the main structure. Large scouring is visible to the south of the wreck measuring 24m long and 0.6m deep. The wreck is surrounded by sand waves and there is some outcropping geology to the north. The wreck has a very large Mag. anomaly associated with it, measuring 5,443nT, indicating substantial ferrous material is present (**Figure 4.7.A.26**: Wreck Sheet 12).
- 4.7.A.5.34 In the UKHO record wreck **7472** was last surveyed in 2018 and reported as consisting of broken and dispersed debris in scour with dimensions of 30.0 x 23.3 x 0.8m. The larger geophysical dimensions in the most recent survey may indicate the wreck has collapsed, degraded further, or become more exposed since 2018. The wreck is very broken up and degraded and is situated in an area of mobile sediments, suggesting it may periodically be buried. An associated debris field **7471**, has been identified to the north-west of the wreck and more debris may be buried in the vicinity.
- 4.7.A.5.35 Wreck **7494** is a recorded wreck that corresponds with a UKHO record (15175) for *Klar*, a 518 gross ton steam ship with build dimensions of 45.7 x 7.6 x 5.2m. It struck a mine and sank on passage from Tyne to Rouen in 1915. In the SSS data the wreck is visible as a large spread of highly anomalous rounded, curved, linear and angular dark reflectors with shadows of varying heights. The wreck measures 51.3 x 42.2 x 1m and is situated within an area of sand waves, suggesting the potential for further debris to be buried in the vicinity. In the MBES data the wreck is visible as an area of disturbed seabed comprising three compact groups of distinct mounds within mobile sediments. An elongate object is visible measuring 2.2 x 1.2m and the largest mound measures 2.8 x 1.8m. Smaller rounded and angular mounds are also visible and the feature has scouring to the south for 13.0m and up to 0.4m deep. The wreck has a very large Mag. anomaly associated with it, measuring 8,421nT, indicating substantial ferrous material is present (**Figure 4.7.A.27**: Wreck Sheet 13).

- 4.7.A.5.36 In the UKHO record wreck **7494** was last identified in 1997 with recorded dimensions of 50.0 x 45.0 x 1.0m and scour extending for 65.0m. The wreck was not identified in a MBES survey in 2018 and the record was amended to 'dead'. In the 2021 geophysical data the wreck appears very broken up and degraded with no identifiable structure visible. The wreck is situated within sand waves and may be periodically buried, which may explain why it was not identified in 2018.
- 4.7.A.5.37 Wreck **7558** is a recorded wreck that corresponds with a UKHO (13837) and NMHR (904884) record for *Bravore*, a 1458 gross ton steam ship with two boilers and a triple expansion engine and build dimensions of 71.6 x 11.6 x 4.9m. The vessel sank in 1940 after striking a mine laid by a German submarine. The wreck is visible in the SSS data as a large cluster of densely packed angular, irregular and linear dark reflectors with bright shadows. The hull is not discernible and there is no identifiable superstructure. The wreck measures 106.1 x 49.5 x 3.1m and associated debris has been identified in the vicinity (**7559** and **7560**). In the MBES dataset the wreck is visible as a large area of disturbed seabed situated in a large depression or scour measuring up to 2.0m deep and comprising numerous angular and rounded mounds and smaller depressions (**Figure 4.7.A.28**: Wreck Sheet 14). The wreck has a very large Mag. anomaly associated with it, measuring 3,614nT, indicating substantial ferrous material is present.
- 4.7.A.5.38 In the UKHO record wreck **7558** was last surveyed in 2016 and reported as being a circular area with debris within. The wreck had a strong Mag. anomaly associated with it and dimensions of 80.5 x 44.9 x 3.6m with large scour measuring 121.0m and 1.5m deep. In the 2021 data the wreck is highly broken up and dispersed with no identifiable structure or hull visible. The wreck has associated sediment accumulation visible that may be burying further debris.
- 4.7.A.5.39 Wreck **7721** is an unknown recorded wreck that corresponds with UKHO record 85569. In the SSS data the wreck is visible as an area of disturbed seabed with three distinct dark reflectors within; a thin right-angled object measuring 5.0 x 0.6m is visible, plus two smaller angular objects with slight shadows. The wreck measures 8.5 x 4.7 x 0.4m and is situated within an area of mobile sediments so the full extent is likely buried. In the MBES data the wreck is visible as a group of angular objects in the base of a large depression or seabed disturbance; the largest object measures 2.1 x 1.2 x 0.2m. The wreck has a very large Mag. anomaly associated with it, measuring 9,085nT, indicating substantial ferrous material is present (**Figure 4.7.A.29**: Wreck Sheet 15).
- 4.7.A.5.40 In the UKHO record wreck **7721** was first identified in 2016 and reported as being the possible remains of a barge. The wreck was last surveyed in 2019 with MBES dimensions of 37.4 x 3.9 x 0.9m. The wreck is highly broken up with no hull or structure discernible in the 2021 geophysical data. The previously reported dimensions and appearance suggest that this wreck has become almost completely buried in mobile sediments since 2019 and little can be said about its present condition.
- 4.7.A.5.41 Seven magnetic anomalies have been assigned an A1 archaeological discrimination. Magnetic anomaly **7065** was seen to have a magnetic amplitude of 3,113nT and is associated with a UKHO (10317) and NMHR (912877) record for the HMS *Dane*, a steel trawler built in 1913 and mined in 1915. The wreck was last surveyed in 2016 and no remains were identified in MBES data, and the record was amended to 'dead'; however, a small wreck was identified in 1984. No anomalous features were identified in the 2021 SSS or MBES data, suggesting substantial ferrous material may be buried at this position. Although no wreck material was identified on the seabed, this anomaly

has been classified as A1 due to the potential for the buried remains of the HMS *Dane* at this location.

- 4.7.A.5.42 Magnetic anomaly **7608** was seen to have a magnetic amplitude 1,452nT and is associated with a UKHO record (91237) for an obstruction first identified in 2019. The obstruction is described as a large rectangular object in a pile with additional small square objects measuring 12.1 x 8.9 x 0.5m. As the feature is situated outside of the SSS and MBES data extents and its origin can't be confirmed without further investigation, an exclusion zone would be recommended.
- 4.7.A.5.43 Magnetic anomaly **7647** was seen to have a magnetic amplitude of 91nT and corresponds with a recorded obstruction in the UKHO records. The obstruction was identified in a 2019 MBES survey with dimensions of 8.0 x 5.7 x 0.6m and described as possibly being a degraded or broken apart wreck or other (debris). This position was not directly covered by the 2021 SSS or MBES datasets and so it is not possible to comment on its condition. The position is situated outside of the study area; however as possible wreck material this record is recommended as having a precautionary exclusion zone.
- 4.7.A.5.44 An additional four magnetic anomalies **7487**, **7612**, **7613** and **7631** have been discriminated as A1 based on their amplitudes. There is nothing anomalous visible on the SSS or MBES data at these positions and they have been interpreted as substantial ferrous debris which is either buried or has no surface expression. As the amplitudes are over 1,000nT, they are considered of higher archaeological potential as they suggest the presence of a more significant amount of ferrous material. Magnetic anomaly **7487** is situated 60m NNE of a recorded wreck **7500**, and may be associated, however it has been retained as substantial ferrous debris.
- 4.7.A.5.45 Ten recorded wrecks have been discriminated as A3, seven of which are situated outside of the study area and are not covered by the 2021 geophysical datasets; however, recommended exclusion zones around their positions may encroach upon the study area and so they have been included in the gazetteer (**7060**, **7073**, **7217**, **7231**, **7259**, **7284** and **7490**). However, the following wrecks are not located within the Offshore Scheme Boundary and will not be impacted by the Proposed Project: **7060**, **7073**, **7217**, **7259** and **7490**. Three recorded wreck positions (**7241**, **7495** and **7500**) were covered by the 2021 geophysical datasets and no anomalous features were identified in the data. However, as remains have been identified at these positions previously, they have been retained as a precaution in case any remains are buried at these locations.
- 4.7.A.5.46 The remaining 837 features within the study area have all been discriminated as A2 during this assessment.
- 4.7.A.5.47 Of these A2 anomalies, 30 have been classified as debris fields (for the full list, please see Annex 4.7.A.6). Debris field **7486** measures 45.0 x 4.1 x 0.4m and was identified in the SSS data as a group of elongate linear and curvilinear dark reflectors with bright uneven shadows, possibly suggesting uneven height. The linear features may be short lengths of rope or chain or debris (**Figure 4.7.A.30**). The feature was visible in the MBES data as an elongate linear mound which is angled at its centre with several indistinct objects attached along its length. The debris field is situated 35m south-west of a recorded wreck (**7500**) and may or may not be associated.
- 4.7.A.5.48 Two debris fields are associated with UKHO records for recently identified obstructions. Debris field **7617** was identified in the SSS data as a large spread of

distinct dark reflectors with bright shadows measuring 27.3 x 7.5 x 0.9m. The feature comprises elongate, curvilinear and angular objects; the largest object measures 4.5 x 0.5m. The feature was visible in the MBES data as an uneven area of seabed. This position was not directly covered by the Mag. data so it is not possible to ascertain whether ferrous material is present at this location. Associated with a UKHO (91236) record for an obstruction found by MBES survey in 2019 measuring 14.7 x 3.5m. As it is not possible to confirm if this feature is modern without further investigation, it has been retained in this report.

- 4.7.A.5.49 Debris field **7641** measures 10.6 x 5.5 x 0.9m and was identified in the SSS data as an area of disturbed seabed comprising indistinct dark reflectors with shadows and some possible bright reflectors and depressions. The feature was visible in the MBES data as an indistinct mound, with some slight peaks and angular edges visible with some possible surrounding sediment accumulation. Associated with a UKHO record (91238) for an obstruction first identified in 2019, with MBES dimensions of 5.9 x 5.7 x 0.8m and described as an object with some structure that might indicate it is man-made. As the origin of this feature can't be confirmed it has been retained in this report.
- 4.7.A.5.50 Seventy-two anomalies have been classified as debris (for the full list, please see Annex 4.7.A.6). Debris **7286** is highly anomalous and was visible in the SSS data as a distinct elongate dark reflector with a bright, irregular shadow, possibly suggesting uneven height. The feature is isolated on the seabed with dimensions of 5.1 x 4.1 x 1.4m. The feature was visible in the MBES data as a distinct 'T' shaped mound with a bulbous northern end and linear piece to the south. The object is tallest at its north end and has some sediment accumulation surrounding it. The feature has a small Mag. anomaly associated with it, measuring 20nT, indicating some ferrous material is present and has been interpreted as ferrous debris (**Figure 4.7.A.30**).
- 4.7.A.5.51 Debris **7566** was identified in the SSS data as a distinct and highly angular dark reflector with some linear dark reflectors internally and measurements of 8.0 x 2.1 x 0.5m. The feature has a large irregular shadow, possibly suggesting uneven height with some scour and sediment disturbance surrounding it. In the MBES data the feature was visible as a distinct linear mound with steeply sloping sides and a slightly uneven peak and is situated in a depression measuring 16.4 x 12.7 x -0.5m. The feature has a large Mag. anomaly associated with it, measuring 127nT, indicating some ferrous material is present. The feature is associated with a UKHO (75358) record for a linear contact, with scour to the north-east and south-west and MBES dimensions of 6.9 x 1.7 x 0.1m. As the origin of this feature can't be confirmed without further investigation it has been retained in this report.
- 4.7.A.5.52 A total of 21 anomalies have been classified as seabed disturbances (for the full list, please see Annex 4.7.A.6). The largest of these was **7374**, which was identified in the SSS data as an area of disturbed seabed comprising indistinct linear dark reflectors in an approximate oval shape on the seabed. Up to five indistinct features, some with short, narrow shadows are visible within this wider area. The longest feature is approximately 10.0m long and the whole feature measures 20.2 x 15.6 x 0.1m (**Figure 4.7.A.30**). The feature was visible in the MBES data as an indistinct area of mounds, comprising thin linear and rounded objects all of which are low-lying and distinct to the relatively featureless seabed. This position was not directly covered by the Mag. data so it is not possible to ascertain whether ferrous material is present. This feature has the potential of representing debris items but may be a natural feature.

- 4.7.A.5.53 A total of 37 A2 anomalies have been classified as lengths of rope or chain (for the full list, please see Annex 4.7.A.6). The longest of these was **7459**, which was identified in the SSS data as a very long, thin and slightly curvilinear dark reflector with a short even shadow along its length, measuring approximately 400.0 x 0.9 x 0.4m. The feature is orientated north to south on the seabed and may be associated with or snagged on ferrous debris (**7458**). In the MBES data the feature was visible as a thin, low-lying linear mound. No anomalous features were identified in the Mag. data at this location, however the Mag. anomaly associated with debris (**7458**) may also be associated with the northern end of this feature. 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.
- 4.7.A.5.54 One bright reflector (**7783**) has been discriminated as A2. This was identified in the SSS data as a very small but distinct, hollow bright reflector, measuring 0.7 x 0.6m (**Figure 4.7.A.30**). No anomalous features were identified in the MBES data and this position was not directly covered by the Mag. data so it is not possible to ascertain whether ferrous material is present. This has the potential of representing an item of debris, but may be a natural feature.
- 4.7.A.5.55 A total of 98 anomalies have been classified as dark reflectors (for the full list, please see Annex 4.7.A.6). The smallest of these was **7115**, this was identified in the SSS data as a distinct, slightly elongate dark reflector with an asymmetric thin bright shadow, measuring 0.6 x 0.3 x 0.2m (**Figure 4.7.A.30**). The feature may be associated with an item of ferrous debris (**7114**) situated 2m to the north-west. No anomalous features were identified in the MBES or Mag. data at this location, however the Mag. anomaly associated with **7114** may also be associated with **7115**. This anomaly has been interpreted to be a possible natural feature or may be possible debris.
- 4.7.A.5.56 A total of 47 anomalies have been classified as mounds (for the full list, please see Annex 4.7.A.6). The largest of these is feature **7153** which was identified in the MBES data as a long and thin curvilinear mound, measuring 20.9 x 2.8 x 0.2m. The feature was orientated north-west to south-east and lying perpendicular to the surrounding natural features on this area of seabed. No anomalous features were identified in the SSS or Mag. data at this location and it has been interpreted to be a possible natural feature or may be possible non-ferrous debris.
- 4.7.A.5.57 Three magnetic trends have been identified within the study area (**7040**, **7493** and **7524**). Magnetic trend **7493** was identified in the Mag. data as a linear series of four Mag. anomalies ranging from 12nT to 33nT, orientated approximately east to west and situated approximately 100m west of wreck **7494**. 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.
- 4.7.A.5.58 The remaining 489 anomalies have been classified as magnetic anomalies (for full list, please see Annex 4.7.A.6). 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 5nT (**7056**, **7596**, **7685** and **7697**) to 846nT (**7802**), and are considered to be possible ferrous items of debris which are either buried or have no surface expression.

Additional Seabed Features

- 4.7.A.5.59 The following section includes 21 additional seabed features recorded in the UKHO and NMHR datasets that are either located beyond the boundary of the marine geophysical study area or were not included in the geophysical survey assessment due to the detail in the UKHO record indicating that the site had not been identified for some time or that the site relates to a modern site.
- 4.7.A.5.60 These additional sites (**2001 – 2021**), running north to south along the study area) are described below in chronological order and presented in Annex 4.7.A.7 and on **Figures 4.7.A.14A-U**. Where sites located inside the study area are recorded in both the UKHO and NMHR datasets, the positional information from the UKHO was used since this directly relates to survey data.
- 4.7.A.5.61 Record **2001** relates to the possible remains of a British cargo vessel, *F Stobart*, that struck a mine laid by submarine UC1 in August 1916 and sank off the coast at Aldeburgh. This record has been taken from the NMHR dataset and is located within the study area; however, a UKHO (10309) record also exists for this named ship which is located outside the study area and contains detailed information on the wreck site. Therefore, the location included in this assessment as a precaution and may not relate to a wreck on the seabed. Equally, this record is not located within the Offshore Scheme and therefore is unlikely to be impacted by the Proposed Project.
- 4.7.A.5.62 Record **2007** relates to the dangerous wreck of *Thyra*, a British steamship that was lost in December 1916 after striking a mine. The ship was taken in tow but subsequently sank. Built in 1925, this vessel was lost whilst travelling from Hartlepool for London carrying a cargo of timber. Substantial remains exist on the seabed and would pose a significant hazard.
- 4.7.A.5.63 Record **2008** relates to the possible remains of a dangerous wreck, *Zoroaster*. This steamship foundered in December 2016 after detonating a German mine. Built in 1900, this cargo ship was lost whilst travelling from the Tyne with a cargo of coal.
- 4.7.A.5.64 Record **2010** describes the possible site of a dangerous wreck of the German submarine, UC21, one of the most lethal mine-laying submarines during the First World War, that was responsible for the sinking of 98 ships (Ref 7.94). Built in 1915, the submarine was last heard of after leaving Zeebrugge on 13 September 1917 for a mine-laying operation off the French coast and the UKHO record suggests it sank in mine nets. Since 1970, the UKHO describes this record as 'dead' as the wreck has not been identified in surveys, however buried remains may still exist in the area. The site is located outside the extent of the Offshore Scheme and is unlikely to be impacted by the Proposed Project.
- 4.7.A.5.65 Record **2015** refers to the possible site of a dangerous wreck, *Merel*, lost in December 1939 after striking a mine. The British merchant steamship was lost whilst enroute from Le Havre to London carrying a general cargo. The remains on the seabed are described as being in two sections with the northern section buried.
- 4.7.A.5.66 Record **2018** relates to the dangerous wreck of a collier steamship, *Rydal Force*, which was lost in April 1940 having struck an aerial-deployed mine. Built in Dundee in 1924, the ship was enroute from Sunderland to Cowes carrying a cargo of coal. The wreck is described as being only just above the general seabed and would pose a significant seabed hazard.
- 4.7.A.5.67 Two records relating to HMS *Arctic Trapper* exist within the UKHO (**2016**) and NMHR (**2017**) datasets at different locations 0.6km apart. This vessel was a British armed

patrol trawler that sank in October 1941 following an attack by a German aircraft. The wreck is described as being well broken up on the seabed and only partially visible, and therefore associated debris may be buried. Due to the nature of the UKHO surveys, the UKHO record is more likely to be the accurate location for this vessel, although the NMHR record is still included for reference.

- 4.7.A.5.68 Record **2006** relates to the dangerous wreck of a fishing vessel, *Patrick Michael*, that sank in 1975 during passage from Ipswich to Dundee after striking an underwater object. Since 1995 the UKHO record has been amended to dead as it has not been identified on surveys since that time. It is still possible that buried remains of this vessel still exist at this location.
- 4.7.A.5.69 Record **2020** describes the remains of a fishing vessel, *Pisces*, that was lost just outside Pegwell Bay in December 1995. The record has been amended to dead as the wreck was not located during the latest survey in 2019. Buried material associated with the wreck could still pose a seabed hazard.
- 4.7.A.5.70 Record **2011** refers to the dangerous wreck of *Lauri Coin*, a sailing vessel that sank in 2019 following a fire onboard with the safe recovery of all the crew. The wreck is described as sitting upright and is approximately 11m in length. The site would be considered a significant seabed hazard, however it is located outside the extent of the Offshore Scheme and is unlikely to be impacted by the Proposed Project.
- 4.7.A.5.71 Two records relate to unidentified dangerous wreck sites. Record **2004** relates to an amorphous rounded shape possibly concealing debris or a wreck below located beyond the extent of the Offshore Scheme and record **2005** is described as a partially buried and broken apart wreck.
- 4.7.A.5.72 Six records relate to 'live' seabed obstructions, that refer to an anchor and chain (**2002**), the remains of a former beacon tower (**2021**) and several unidentified features (**2003**, **2013**, **2014** and **2019**). Record **2021** is located beyond the extent of the Offshore Scheme.

Setting and Value of Seabed Features

- 4.7.A.5.73 This section will assess the setting and value of the known and identified seabed features of a maritime nature since there are no recorded aircraft crash sites identified within the study area. The value of the potential discovery of further maritime sites and aircraft crash sites will also be included.
- 4.7.A.5.74 The perceived setting and value assigned to an individual site is, to a large degree, site specific. A vessel or aircraft may be considered of special interest on the basis of any number of interrelating integral and relative factors, as discussed in the methodology section of this document.
- 4.7.A.5.75 The setting and value of the known, named wrecks can be taken into consideration. All of the sites have limited views due to being underwater, although some have been explored by divers. Some of the wrecks are potentially buried or are considered 'dead' by the UKHO (**2006**, **2012** and **2020**) and therefore their underwater setting is further limited. Since these three wrecks are modern, they are not considered to have associated archaeological value.
- 4.7.A.5.76 Nineteen of the named vessels were lost during the First or Second World Wars, and therefore their non-visual setting is within the wider First World War and Second World War military landscape of the study area and beyond. The project, East Coast War Channels in the First and Second World War (Ref 7.95), researched the spatial extent

of navigation channels and minefields between the Thames and the Scottish border during both wars, and evaluated the heritage assets that are associated with these channels. All these wreck sites are considered to have high archaeological value due to the importance of their military involvement during the wars. The East Coast War Channels could be considered heritage assets with value in their own right, as they can be spatially represented. The significance of the value of their setting, specifically within the area of study area, may also become apparent through the assessment of the collective military landscape and seascape, encompassing recorded onshore defence infrastructure and known losses or documented losses of maritime vessels or aircraft during the First and Second World Wars.

- 4.7.A.5.77 The specific loss events of these 19 vessels also provide information to how their position setting can be understood: 16 vessels sank having struck a mine (**2001, 2007, 2008, 2015, 2018, 7065, 7073, 7173, 7259, 7269, 7346, 7472, 7490, 7494, 7495, 7558**), one vessel was torpedoed (**7414**), one vessel was lost following an attack by a German aircraft (**2016** and **2017**), and one submarine is recorded as sinking in mine nets (**2010**). While it is possible that the vessels could have drifted before sinking, it is also possible that the position on the seabed is in close proximity to the wrecking event. Each of these losses is very much a product of its location at the time of loss. For example, those 16 vessels that sank following striking a mine, were lost due to their unfortunate position within a mine field, and therefore reflects not only the circumstances of the war, but also the specific methods being used to target ships, and, depending on whether the ship drifted following the event, its position on the seabed could even still be in relatively close proximity to the mine or mine field. The submarine UC11 (**7269**) sank as result of striking one of its own mines, which also demonstrates the hazardous nature of laying mines.
- 4.7.A.5.78 It is not possible to assess the setting of the 16 un-named wrecks, eight obstructions and 837 A2 geophysical anomalies, however, should further information come to light regarding their character, their associated setting and value should be reviewed. It is possible that these are associated with First World War or Second World War military maritime or aviation activity, and therefore become part of the broader military landscape that exists in the region, however without further information to identify these wrecks it is impossible to confirm at this time. At present, the setting associated with these assets cannot be experienced from land or within a wider marine landscape, and due to the generally limited visibility within UK waters, the experience of setting at their locations is likely to be limited to the immediate vicinity.
- 4.7.A.5.79 Furthermore, all wreck sites must be considered to have archaeological value, to a greater or lesser degree and, in accordance with the precautionary approach, the un-named wrecks are therefore considered as high value assets. Similarly, 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.
- 4.7.A.5.80 As there is insufficient information to assess the value of each individual unidentified anomaly identified in the geophysical assessment (A2), all these additional anomalies (totalling 837) must be considered to have high archaeological value until more information becomes available. It is possible that any of the A2 geophysical anomalies located within the study area could relate to maritime sites or aircraft crash sites and therefore, there is the potential for wreck or wreck debris to exist on the seafloor of the study area.
- 4.7.A.5.81 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 its use and loss (Ref 7.19, 2). On this basis, all potential aircraft sites are considered to be of high value.

4.7.A.5.82 Additionally, the value and setting of any currently unrecorded wrecks (maritime or aviation) discovered during pre-construction or construction activities for the Proposed Project would also be unknown and would need to be evaluated on a case-by-case basis.

4.7.A.5.83 Derived artefacts are likely to be of limited archaeological value as individual discoveries. However, the occurrence of a number of seemingly isolated objects within a particular area has the potential to indicate shipping routes or maritime battlegrounds, or possibly even indicate the presence of a hitherto unknown wreck site. Isolated maritime finds are, therefore, regarded as being of medium archaeological value. Isolated aircraft finds are considered as being of medium archaeological value as they may provide insight into patterns of historical aviation across the study area or indicate the presence of uncharted aircraft crash sites.

Maritime and Aviation Archaeological Potential

Introduction

4.7.A.5.84 The assessment of potential for the discovery of shipwreck, shipwreck-derived, aircraft and aircraft-derived material within the study area draws on the results of the desk-based research combined with further research of the wider area.

4.7.A.5.85 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 the UKHO and others, and thus recorded in the archaeological record. However, there is still potential for the 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.

4.7.A.5.86 There is also potential for 20th century aircraft, particularly in relation to the Second World War. Aircraft crash sites are also difficult to identify through archaeological assessments of geophysical survey, although experience indicates material from the site, such as engines or other material may be recorded as small obstructions or anomalies.

Navigational hazards, seabed morphology and potential for preservation

4.7.A.5.87 A project entitled Enhancing our Understanding: Mapping Navigational Hazards as Areas of Maritime Archaeological Potential, undertaken by Bournemouth University (Ref 7.96) assessed historical records of navigational hazards to interpret and characterise the marine historic environment. Areas assessed to be hazardous were considered alongside a model of the preservation potential of marine sediments with the purpose of identifying areas where there was not only a high potential for ship losses, but where there was also a high potential for the preservation of archaeological remains. These areas were coined as Areas of Maritime Archaeological Potential (AMAPs).

4.7.A.5.88 The project records several navigational hazards within, and in proximity to, the study area, as follows:

- Sizewell Bank, Suffolk – bank hazard

- Aldeburgh Napes, Suffolk – bank hazard
- Shipwash, Suffolk – bank hazard
- Brake, Kent – mobile sandbank hazard
- Sandwich Bay – anchorage hazard

4.7.A.5.89 The study area traverses several coastal and offshore AMAPs (generally associated with the navigational hazards above) that are all defined as having fine-grained sediments and therefore a high potential of preservation. The remaining study area covered by the project assessment comprises a mixture of the high potential fine-grained sediments and also further offshore, more coarse-grained sediments that have a lower potential of preservation.

4.7.A.5.90 The study area is generally considered to be an exposed coastal area with offshore banks that, at the Kent landfall, may provide shelter. The northern element of the study area is characterised as being particularly exposed to north-easterly and easterly winds with shallow muddy foreshore and banks inshore. The study area also traverses through an offshore area that is considered to be exposed to all wind directions, which is proven by the substantial number of Recorded Losses for vessels that foundered as a result of poor weather conditions.

4.7.A.5.91 In addition to those hazards described above, the mudflats of Pegwell Bay and Sizewell Bank also present a considerable navigational hazard at both landfalls. Furthermore, based on two of the Recorded Losses discussed in the Recorded Losses section below, Ramsgate pier was a considerable navigational hazard with ships colliding with the structure and being lost.

4.7.A.5.92 Due to this region being a heavily used shipping route around the UK, into London and also internationally, another hazard to maritime vessels would be collision. This is recorded on several records associated with Recorded Losses across the study area.

Recorded losses

4.7.A.5.93 As discussed in the methodology section, Recorded Losses refer to ships and aircraft that are recorded as having been lost, but for which the exact locations are not known and no material has been encountered on the seabed within the Named Location. The records for these losses provide additional documentary evidence for the potential discovery of sites and material relating to maritime and aviation activity within the study area.

4.7.A.5.94 A list of all maritime and aircraft Recorded Losses in the vicinity of the study area are summarised in Annex 4.7.A.8, 4.7.A.9 and Table 4.7.A.13. The NMHR, SHER and KHER datasets have 159 records of Recorded Losses located within seven Named location polygons that intersect with the boundary of the study area. This total comprises 151 ships and eight aircraft. Suffolk and Essex data has been merged together as the marine boundary between the two counties is unclear and often NMHR records within the same Named Location are given a different county.

Table 4.7.A.13: Summary of Recorded Losses by date and county

Date	Number of records of ship losses		Number of records of aircraft losses	
	Suffolk and Essex waters	Kent waters	Suffolk and Essex waters	Kent waters
Pre-1500	-	5	-	-
1501-1815	10	24	-	-
1816-1913	64	25	-	-
1914-1945	23	-	-	8
Post-1945	-	-	-	-
Total	97	54	0	8

4.7.A.5.95 The Recorded Losses are categorised based on the date ranges used in the Selection Guide Boats and Ships in Archaeological Contexts (Ref 7.48). Few ship losses are recorded prior to the beginning of the post-medieval period (c.1500), reflecting not only a significant increase in shipping from the post-medieval period onwards but also a general improvement in record keeping. Although the number of early Recorded Losses are low, their presence suggests the potential for the discovery of material relating to those early periods.

Maritime recorded losses

4.7.A.5.96 The Recorded Losses date from the early 13th century to the modern period, cover a wide range of vessel types and provide information about the causes of loss and reason for travel. The earliest record (NMHR_1572769) relates to an unknown number of French vessels that were sunk by the English during the Battle of Sandwich in 1217, while the most recent comprise a British cargo vessel lost in 1936 (NMHR_1260079) following a collision.

4.7.A.5.97 Of the 151 vessels lost, a total of 126 records refer to named ships, which could allow for further research to be undertaken to perhaps better understand the location of these vessels now.

4.7.A.5.98 Records for 63 ships provide a date of build, a majority of which were built in the 19th century when more accurate records were being maintained and archived. There is still potential for earlier vessels to be discovered in the study area whose loss was simply not recorded.

4.7.A.5.99 Many of the records do not state a reason for the loss, giving only stranded, foundered or wrecked as a cause. The cause of loss can indicate whether there is potential for the remains of vessels to be discovered within the study area, but also provides an indication of how vessels that were not recorded may also have been lost. A majority of the Recorded Losses that do indicate a reason for the loss were caused by poor weather conditions and beaching or grounding. With regards these remaining records, the most common cause of loss was due to poor weather conditions, including gales and snowstorms, clearly showing the hazardous nature of this coastline and the weather conditions endured by maritime travellers.

- 4.7.A.5.100 Other commonly cited reasons for loss include collision, which clearly indicates both the density of maritime traffic present along this coastline and the dangerous nature of maritime travel at this time, and also beaching.
- 4.7.A.5.101 Of the 23 vessels that were lost between 1914 and 1945, 16 were caused by either being mined or torpedoed during the First World War. The remains of such vessels on the seabed could pose a significant hazard.
- 4.7.A.5.102 Trade routes are also provided on many of the records for most of the losses and show that vessels were travelling not only domestically around the coast but were also travelling further afield, for example to Norway, Germany and St Petersburg.

Aircraft recorded losses

- 4.7.A.5.103 The aircraft Recorded Losses are particularly important as any aircraft lost while in military service is automatically protected under the Protection of Military Remains Act 1986 (Ref 7.6), and therefore the discovery of remains from any of these aircraft would be protected.
- 4.7.A.5.104 The eight Recorded Losses predominantly relate to British aircraft lost during the Second World War including three fighters, three bombers and two reconnaissance aircraft. A Recorded Loss records an American B-17G Flying Fortress (NMHR_1602379), however the remains for this aircraft have since been discovered to the south of the study area on Sandwich Flats.

Potential for unrecorded maritime archaeology

- 4.7.A.5.105 A maritime site may comprise an articulated or partially articulated shipwreck and/or associated debris of infrastructure. Debris can comprise a single artefact through to an entire scatter of material that was either accidentally or deliberately lost from a vessel. As an island nation, the UK has a long maritime history and as such there is potential for archaeological evidence of maritime sites since the area started to become inundated during the Mesolithic period through to the present day within the study area.
- 4.7.A.5.106 Many vessels were lost without a record being made and sometimes even records that were created have since been lost (Ref 7.97). Consequently, in addition to the charted seabed features and Recorded Losses discussed above, there is also the considerable potential for the discovery of archaeological material of a maritime nature, currently uncharted, to exist within the marine study area spanning from the Mesolithic period to the present day.
- 4.7.A.5.107 The exploitation of the marine environment could have begun in the Mesolithic (10,000-4000 BC) as the landscape of the study area would have been inundated from a terrestrial surface over multiple transgressions until the final gradual inundation mid-way through the Mesolithic when the study area would have become completely submerged.
- 4.7.A.5.108 The evidence for Mesolithic maritime craft is very sparse with the earliest example in Northern Europe coming in the form of a logboat from Pesse, Netherlands (c. 7920-6740 BC; Ref 7.98, 173). The landscape of the study area would have been subject to a great change during the inundation of the Mesolithic period and undoubtedly would have provided a wetland/seascape suitable for logboats.
- 4.7.A.5.109 By the Neolithic (4000-2400 BC), the coastline and sea level was very similar to that of the present day. Marine traffic passing through the study area would most likely have been related to trade and the movement of people and domesticated animals, using

such craft as logboats and hide boats. The discovery of a dugout boat thought to date to the Late Neolithic, at Westgate-on-Sea, Kent (Ref 7.99, 7) highlights the potential for early maritime activity.

- 4.7.A.5.110 The Bronze Age (2400-700 BC) saw technological advances within Britain and North-west Europe that brought greater human interaction, resulting in the transference of materials, belief, concept, traditions and ideas, either reciprocal or forced (Ref 7.100, 15-20). The maritime industry and boat building technology also advanced significantly during this period. The evidence for continental trade during this period is vast and widespread suggesting that regular organised crossings of the open ocean around Britain occurred during this time. It is possible that the Bronze Age sewn plank boat recovered from Dover, Kent is an example of the type of vessel that could have been involved within this seafaring trade network (Ref 7.101, 210). Equally, the discovery of a small jet plaque object from a multi-period occupation site at South Lowestoft suggests that large scale trade networks already existed with the north of England (Ref 7.102, 52). Pegwell Bay, Kent has been an important landing place for thousands of years, evidenced by the discovery of 363 Bronze Age objects at Langdon Bay, Dover, believed to relate to a shipwreck (Ref 7.103, 26).
- 4.7.A.5.111 There is very little evidence for seafaring within Britain during the Iron Age (700 BC-AD 43), however, the distribution of artefact types and the variety of examples found across North-West Europe suggests a high level of cross-channel trade and it is clear that from at least the Iron Age onwards, seagoing vessels passed through the study area. Thanet, Kent has also been described as a 'Gateway Community' during the Bronze Age and Iron Age (Ref 7.99, 9) as it was a prehistoric centre of social and economic activity.
- 4.7.A.5.112 The Romano-British period (AD 43-410) brought with it considerable changes in many aspects of life within Britain. The evidence of this is widespread and can be seen in the archaeological record by way of the influx of new styles and materials. This is also believed to be the case in terms of maritime technology, which included the development of more substantial wooden vessels (Ref 7.104). The north Kent coastline is where Caesar and Claudius launched the Roman invasion of Britain in the 1st century AD, and following this, London became the political and economic centre of Roman Britain, whereby the Thames became the main access route to the continental empire crossing the study area. The construction of Roman forts at Richborough and Reculver, at either end of the Wantsum Channel, a straight separating the Isle of Thanet from the rest of Kent, and connecting the English Channel and the Thames Estuary, suggests the importance of trade through the Wantsum Channel during the Romano-British period. The potential for Roman (and later) wrecks in the area is highlighted by the presence of a Roman lighthouse at Dover, which suggests that the dangers of the Goodwin Sands and the approaches to Dover were already considered hazardous by this time (Ref 7.97, 15).
- 4.7.A.5.113 With regards the northern element of the study area, the more substantial construction of vessels together with the increase in maritime traffic visiting the developed ports on the Suffolk coasts and rivers, would suggest that there is certainly potential for Romano-British material to be recovered from within the study area.
- 4.7.A.5.114 Along with the scale and variety of maritime activity that was being undertaken within North-West Europe, some of the most important maritime technological advances occurred during the Anglo-Saxon and medieval periods (AD 410–1500). For instance the development of several phases of specialised boat building techniques, each of which came from the influence of foreign technologies and ideas. Vessel types

included logboats for transport along inland waterways, to larger planked boats propelled by oar or sail and used for estuary, coast or cross-channel work (Ref 7.105, 37). Remains of a 7th century dugout have been found at Walthamstow and dated to the 7th century AD (Ref 7.106, 222), and remains of a clinker-built sea-going vessel have been identified at Graveney (Ref 7.107, 89-96), other clinker-built vessels include the boat burials of Sutton Hoo and Snape (Ref 7.108).

- 4.7.A.5.115 During the medieval period, towns and ports along the Suffolk, Essex and Kent coasts continued to be a major focus for maritime trade and shipbuilding throughout the medieval and later periods. The growth of these towns and ports indicates the high level of trade and the influence this had on the wider region. In fact, Norfolk and Suffolk established larger fleets than any other region of England at this time (Ref 7.109, 257) and Sandwich, Kent became an important Cinque Port in the 12th century.
- 4.7.A.5.116 The Battle of Sandwich (1217) between the French and English in a decisive battle of the First Barons' War took place off Pegwell Bay. The French fleet set out from Calais, and consisted of around 80 vessels, including ten fighting ships and various supply and support vessels. The English fleet comprised only 40 vessels, but they managed to gain the advantage. French vessels were captured and boarded, and an unknown number of vessels were lost (NMHR_1572769).
- 4.7.A.5.117 Within a century the advance in shipbuilding technological capabilities and cheap ordnance meant that conflicts at sea became organised, larger in scale and more destructive. For instance, the marine battles of the Anglo-Dutch wars off Suffolk, including the Battle of Lowestoft (1665) and the Battle of Sole Bay (1672).
- 4.7.A.5.118 The post-medieval and modern periods are undoubtedly the most dramatic in terms of development in shipbuilding. It was during this period that metal became prevalent in ship construction, starting as composite vessels where metal replaced some of the wooden parts to vessels built entirely of iron or steel. In parallel to this physical development, was the change from sail to firstly steam power then later diesel engines as new technologies provided the means of propulsion that powered the vessels of the Industrial Revolution. During this time, the Broads of Norfolk and Suffolk transformed into a patchwork of model farms. Local industries of ironworks, lime works (for building and fertilising) and brickworks emerged in order to supply the demand for local developments. Much of this had to be transported by water, until a reliable railway network was developed by the 1860s (Ref 7.110). Additionally, most of the goods being traded around the UK were associated with the industrial output and included bulk cargos of fuel and raw materials. The East coast was especially prevalent within the coal trade as the towns and cities of the North East supplied London with its coal.
- 4.7.A.5.119 The development of the steam ship brought a new type of maritime traffic to ports. Ships were no longer at the mercy of wind and tide, and new industries and leisure activities were developing. By 1831, about 120,000 passengers travelled annually from London to Margate, and seaside towns became day excursion destinations.
- 4.7.A.5.120 The modern period is also characterised by the two World Wars of the 20th century, which saw a sudden rise in military activity for two relatively short periods. As the region encompassing the study area had trade from London passing through it, it attracted intensive enemy action throughout both wars. This took the form of attacks by submarine, aircraft and most commonly mines.
- 4.7.A.5.121 Both conflicts developed separate strategies with which to disrupt shipping, based around the available technologies of the time, with the East Coast witnessing a large proportion of maritime wartime casualties during both conflicts. For instance, great

defensive belts of mines were laid during both World Wars to defend the east coast and coastal shipping and the entrance to the Thames estuary. Additionally, the First World War saw the introduction of coastal convoys, whereby steaming merchant vessels were escorted in groups by warships (Ref 7.111, 17). The first convoys began on the east coast, and their use continued into the Second World War to transform the east coastal trade route into an indestructible highway (Ref 7.111, 17-23). The East Coast War Channels were also created during both the First and Second World War (see Ref 7.95). These were carefully defined routes that were swept clear of mines allowing the movement of civilian shipping and local fishing vessels to move around the country to meet the UK's domestic requirements.

Potential for unrecorded aviation archaeology

- 4.7.A.5.122 Within the study area, there is considerable potential for the presence of aircraft crash sites and associated aviation material and debris dating from the early 20th century until more recent times, with a concentration dating to the World Wars, particularly the Second World War, 1939-45 (Ref 7.40).
- 4.7.A.5.123 Aircraft that crash over the sea tend to break up on impact, spreading wreckage over a wider area. Similarly, where two aircraft collide in mid-air, and both are subsequently lost at sea, the recorded site of the loss can incorporate a larger debris field, stretching hundreds of metres in diameter. However, controlled ditching or sunken aircraft (such as flying boats lost at their moorings) may remain considerably more intact. An aircraft crash site in the marine zone may comprise an articulated or partially articulated aircraft and/or associated debris or infrastructure. Debris can comprise a single artefact through to an entire scatter of material.
- 4.7.A.5.124 Prior to the First World War there was limited commercial civil aviation, however the First World War saw the early development of military aviation and the beginnings of naval aviation. During this period, aircraft were lightweight, and made of wood and other light materials. In the inter-war years, there was increasing cross-channel services to various European and worldwide destinations, and metal largely replaced wood in airframe construction.
- 4.7.A.5.125 By the Second World War, aircraft technology had developed considerably. Luftwaffe attacks on the UK early in the war were the predominant reason for flights over the English Channel. By the middle of the war, this emphasis had changed and the Allies were attacking Continental Europe, principally by bomber fleets based in eastern England and maritime patrols. There was mass production of aircraft, leading to considerable quantities of aircraft, and a significant amount of flying occurred over the sea.
- 4.7.A.5.126 Most aircraft losses at sea are attributed to military aircraft and date from the Second World War, most of which occurred along the south and east coasts of England. The county of Kent and its coast was a major focus of the Battle of Britain and equally Suffolk's airfields were heavily used during the Allied strategic bombing effort of the later stages of the War, initially by the RAF and later the USAF. Furthermore, the proximity of the study area to the approaches to the river Thames, which would have been a natural navigation marker to pilots, suggests that the activity close by and possibly directly over the study area would have been intense.
- 4.7.A.5.127 As the study area is located within a known war time shipping route, from the North of England to London, it is likely that this would have added to the level of aircraft activity in the area. The likely intensity of aviation activity highlights the high potential

for aircraft remains to be recovered from within the study area, which is also highlighted by analyses of UK-wide records (Ref 7.40).

4.7.A.5.128 From the end of the war to the present, civilian air travel has increased. Military aircraft was, until the 1990s, dominated by the Cold War. These aircraft crash events are more likely to have been accurately recorded and positioned, however there is still potential for material.

4.7.A.6 Marine Archaeological Assessment: Intertidal Heritage Assets

Introduction

4.7.A.6.1 The following assessment of the intertidal and terrestrial archaeological baseline resource is based on records of known features in the NMHR, SHER, KHER and CITIZAN databases. A full assessment of terrestrial historic environment and cultural heritage will be presented in the corresponding documents: **Volume 1, Part 2, Chapter 4 Cultural Heritage**, for Suffolk; and **Volume 1, Part 3, Chapter 4 Cultural Heritage**, for Kent. The marine study area overlaps with the terrestrial historic environment and cultural heritage study area between the MHWS and MLWS marks.

4.7.A.6.2 The records located within the study area are presented in Annex 4.7.A.10 and on **Figure 4.7.A.31**. The centrepoinTs of polygons have been used to generate the coordinate location in the gazetteer, which may be located outside the study area, but the extent of the polygons are shown on the figure.

4.7.A.6.3 A walkover survey is planned for the intertidal zone of both landfalls during the Spring/Summer of 2023 and the methodology and results will be included in the ES.

Protected Sites

4.7.A.6.4 There are no designated terrestrial sites within the intertidal zone of the Offshore Scheme.

Known Terrestrial Sites and Findspots

4.7.A.6.5 There are a total of six sites and findspots recorded within the intertidal zone of the Offshore Scheme at each landfall (Annex 4.7.A.10, **Figure 4.7.A.31**).

Suffolk

4.7.A.6.6 There is one terrestrial site located within the intertidal zone of the Offshore Scheme at the Suffolk landfall. This record (**1001**) relates to an extensive length of Second World War beach scaffolding, part of a much longer stretch of anti-invasion defence along the east coast. These sites are no longer visible, however, it is possible that material from these features could remain, buried, although, any material is likely to be fragmentary.

Kent

4.7.A.6.7 There are five terrestrial sites located within the intertidal zone of the Offshore Scheme at the Kent landfall.

- 4.7.A.6.8 There are no records of material from the Palaeolithic to the Romano-British period within the study area, although records within the wider area do relate to these periods. A possible medieval/Post-medieval large fish trap has been recorded in the mud of Pegwell Bay (**1002**) visible on aerial photographs from 1950 and therefore its current condition and extent is unknown, although it is not visible on modern aerial imagery (using Google Earth).
- 4.7.A.6.9 Two records relate to Second World War coastal defence measures, including an alignment of 81 posts located in the intertidal zone preventing airborne and seaborne invasion (**1004**) and also a length of wire obstacles along the coast (**1006**), both of which were recorded from aerial photographs and therefore their current condition and extent are unknown. These sites are no longer visible on modern aerial imagery, however, it is possible that material from these features could remain, buried, although, any material is likely to be fragmentary.
- 4.7.A.6.10 Record **1005** relates to a rifle range that was first visible on 1st Edition Ordnance Survey (OS) mapping from 1877 and was subsequently noted on the Kent HER record that it was no longer in use on the 1908 edition. The site comprised four posts on land and two in the intertidal zone. There may still be material associated with this site including ammunition present in and around its vicinity.
- 4.7.A.6.11 The final record relates to a findspot from the CITiZAN for a circular metal rim that was found protruding from the sand (**1003**). No further details are provided for this item or whether it was left *in situ*.

Setting and value

- 4.7.A.6.12 This section provides a brief assessment based on the criteria set out in the methodology section and on guidance from Historic England (Ref 7.31 and Ref 7.32). The assessment focusses on each individual site, however these sites should not be seen in isolation, but rather within the wider archaeological and cultural heritage landscape.
- 4.7.A.6.13 The earthworks associated with a possible fish trap (**1002**) visible in the exposed mud of Pegwell Bay have setting since its position was deliberately selected as a good location for trapping fish as the tidal waters left the bay and its relationship to another such feature that is located beyond the study area (NMHR_1625661). Extensive views around the bay from this feature would also have been enjoyed. Its non-visual setting includes its use as a method for fishing, making best use of the tidal water of the bay. The setting of such a feature would be integral to its value. If this feature is confirmed as a medieval fish trap of extensive size as identified in aerial photographs from 1950, it would be of high archaeological value.
- 4.7.A.6.14 A majority of the terrestrial sites in the intertidal zone have been removed, including a findspot (**1003**) and three Second World War features (**1001**, **1004** and **1006**), and therefore these features do not have setting as they have been removed from their context. If any Second World War material is discovered during works associated with the Proposed Project, these would have to be assessed within the wider setting of military events and coastal defences. However, the value of such material, if discovered, would be of low archaeological value as it will relate to a modern site which were a common occurrence on most coastlines of south and east Britain during the war. The value of the findspot is not relevant as it has been removed from its location and will not be impacted by the Proposed Project.

4.7.A.6.15 For features where it is unknown whether any material still survives, for instance the targets associated with the rifle range (**1005**), these features would have setting in line with other buried features. The value of the rifle range is low since ranges of this type were common across Britain during the 19th century.

Potential for Heritage Assets within the Intertidal Zone

- 4.7.A.6.16 The presence of known archaeological remains from the intertidal and coastal areas suggests the potential for the discovery of further material that was terrestrial but is now submerged due to sea level rise or erosion and also material relating to human use of the intertidal zone including fish traps and jetties. Any such discoveries would have to be assessed on a case-by-case basis, within the wider landscape framework, but in general, finds from the Neolithic period onwards are likely to provide evidence of the changing coastline over time and of activities in the intertidal zone.
- 4.7.A.6.17 The present sea levels were reached during the medieval period and post-Romano British marine transgression led to the deposition of deep-alluvial layers. As a result, there is potential for now buried material from the Palaeolithic to the Romano-British period. The north Kent and Suffolk coasts have also seen considerable erosion, through high levels of wave action, inclement weather and rising sea levels, and it is possible that terrestrial material could have reached the intertidal zone due to erosion of terrestrial sites. This was recognised in the Suffolk Coastal National Mapping Programme project (Ref 7.112) as exemplified by the medieval town of Dunwich being lost to the sea. Therefore, there is potential for derived evidence from the Palaeolithic to the modern period located within the intertidal zone of the landfalls.
- 4.7.A.6.18 In the landscape around the Suffolk landfall, there is evidence of prehistoric and medieval flint scatters and earthworks comprising round barrows and other types of enclosures and field boundaries, and extensive evidence of industry in the form of post-medieval brickworks, quarries and clay extraction pits. There are also records for early forms of sea defences in the form of a relict sea bank.
- 4.7.A.6.19 At the Kent landfall, the presence of Romano-British pottery discovered from within the study area together with other material dating to between the 17th and 19th centuries recovered from the foreshore of Sandwich Flats (Ref 7.113) suggests that further material dating since the Romano-British period could be uncovered from within the study area. The number of Recorded Losses, the proximity of the Kent landfall to Goodwin Sands, a notorious navigational hazard, along with the Nautical Archaeology Society's records of 14 known wrecks in Sandwich Bay also suggest the potential for maritime remains to be uncovered within the study area. Extensive evidence of keddle net fishing in Sandwich Bay has been recorded by CITIZAN since 2018 (Ref 7.113). Additionally, the intertidal zone at the Kent landfall has the potential to include material relating to settlement and activity of the margins of the Wantsum Channel, and depending on their nature and preservation, could be of high significance and value.
- 4.7.A.6.20 Although the multiple features on the coast and in the intertidal zone relating to the Second World War were removed by the middle of the 20th century at both landfalls, there is still some potential for remnant material from these features, and fragmentary material that was associated with them. Features included searchlight and anti-aircraft batteries, practice trenches, extensive lines of different types of coastal defences and pillboxes.

4.7.A.7 Assessment of Historic Seascape Character

4.7.A.7.1 The assessment of the HSC within the study area was undertaken using the results of LUC's 2107 Historic Seascape Characterisation (HSC): Consolidating the National HSC Database, which consolidated the eight existing HSC implementation projects (undertaken between 2008 and 2015) into a single national database.

4.7.A.7.2 The method assesses and defines areas with HSC types that promote an understanding of historic trends and processes, 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 five tiered levels: the coastal area, the sea surface, the water column, the sea floor and the subsea floor. The characterisation is GIS based, enabling key characteristics to be identified.

4.7.A.7.3 The study area has been characterised as having the following elements:

- reclaimed land (from tidal marsh);
- cultural topography landward (wetland);
- recreation (open ground, wildlife watching);
- reclaimed land (from tidal marsh);
- settlement (urban);
- recreation (parks and gardens; wildlife watching);
- reclaimed land (from tidal marsh);
- fishing (bottom trawling, drift netting, potting);
- maritime safety (buoyage, safety area);
- navigation (wreck hazard, hazardous water, navigation route, shoals and flats, ferry crossing);
- ports and docks (dockyard, harbour);
- recreation (leisure beach, leisure sailing, wildlife watching);
- cultural topography landward (wetland);
- cultural topography marine (palaeochannel);
- energy industry (submarine power cable, renewable energy installation (wind)); and
- telecommunications (submarine telecommunications cable).

4.7.A.7.4 The HSC for the study area already includes submarine power cables and therefore the Proposed Project will not cause additional impact on the HSC of the study area.

Value

4.7.A.7.5 The HSC of the study area is of medium archaeological value, due to the region's important and prolonged maritime history and its continued use today.

4.7.A.7.6 The study area is already characterised by a broad category of industry including renewable energy installations for wind and submarine cables. Therefore, the overall

character of the area will remain predominantly the same while the Proposed Project is in operation.

4.7.A.8 Summary of Results and Overall Sensitivity

Introduction

- 4.7.A.8.1 Based on information available to date and the baseline assessments above, the marine archaeological baseline environment for the study area can be considered to comprise known sites, together with the potential for discovering material relating to palaeogeography, maritime archaeology and aviation archaeology.
- 4.7.A.8.2 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 assets are therefore considered to be of high value.
- 4.7.A.8.3 All archaeological receptors have the potential to be physically damaged, destabilised or destroyed if they are directly or indirectly impacted. Furthermore, all damage to archaeological sites or material is permanent and recovery is limited to stabilisation or reburial to limit further impact. Archaeological receptors have no recoverability if they are affected by a direct or indirect physical impact. As such, all potential receptors should be regarded as having high sensitivity to direct and indirect physical impacts.

Palaeogeography assessment

- 4.7.A.8.4 The assessment of the geophysical data within the study area resulted in a total of 36 features of palaeogeographic interest. These are summarised as follows:
- a total of 11 channels, three channel complexes and one cut and fill were assigned an P1 archaeological rating; and
 - a total of one channel, one complex cut and fill, 11 simple cuts and fills, seven areas of acoustic blanking and one high amplitude reflector were assigned an P2 archaeological rating.
- 4.7.A.8.5 Features given a P1 archaeological rating are considered of high archaeological potential as they comprise terrestrial features interpreted as having been deposited during periods of likely human occupation. Those features with a P2 discrimination are considered of medium archaeological potential, partly due to the uncertainty of features formation and fill. Further geoarchaeological work as described in Section 6.2 below, would aid in refining the interpretation and therefore help determine the archaeological potential of the identified features.

Geoarchaeological assessment

- 4.7.A.8.6 The Stage 1 review of geotechnical data for 69 vibrocores located across the study area resulted in the preparation of six deposit modelling transects and the following results.

Peat

- 4.7.A.8.7 Peat was recovered in a single vibrocore (VC-S6-005) and was assigned high priority status, as it has high potential to preserve suitable palaeoenvironmental and dating material.

Alluvium – organic and minerogenic

- 4.7.A.8.8 Alluvium characterised by minerogenic and organic material have been recovered in vibrocores in the study area. These fine-grained and laminated deposits have been interpreted as being tidally influenced and are likely associated with increasing marine conditions under the influence of early Holocene rising sea level. Both organic and minerogenic deposits are considered to have medium priority status given their potential to preserve organic and inorganic microfossils, respectively.

Shallow marine to coastal

- 4.7.A.8.9 Given coasts, estuaries and wetlands are key landscape elements in the submerged prehistoric record (Ref 7.27) sandy deposits with frequent fine-grained laminations, including laminae of organic material, are assigned medium priority status. These deposits have the potential to contain material suitable for palaeoenvironmental analysis.

Seabed features

- 4.7.A.8.10 With regards seabed features, the study area can be considered to comprise:
- 29 geophysical anomalies of anthropogenic origin of archaeological interest (A1) including 10 recorded wrecks;
 - 798 geophysical anomalies of likely/possible anthropogenic origin (A2);
 - Three historic records of possible archaeological interest with no corresponding geophysical anomaly;
 - 21 additional seabed features including wrecks and obstructions;
 - Potential for the discovery of shipwreck material from the late Mesolithic to the present; and
 - Potential for the discovery of 20th century aircraft material, particularly from the Second World War.

Intertidal heritage assets

- 4.7.A.8.11 There are a total of six records located within the intertidal zone of the study area together with the potential for the discovery of remains dating from the Palaeolithic to the modern periods (especially Second World War related infrastructure).

Historic seascape character

- 4.7.A.8.12 The historic seascape of the study area has a varied character ranging from recreational activities to offshore industry and navigation. Since the area already contains submarine power cables, the impact from the Proposed Project is limited.

4.7.A.9 References

- Ref 7.1 Planning Act (2008). [online]. Available at: <https://www.legislation.gov.uk/ukpga/2008/29/contents> [Accessed February 2023].
- Ref 7.2 Copyright, Designs and Patents Act (1988). [online]. Available at: <https://www.legislation.gov.uk/ukpga/1988/48/contents> [Accessed February 2023].
- Ref 7.3 Marine and Coastal Access Act (2009). [online]. Available at: https://www.legislation.gov.uk/ukpga/2009/23/pdfs/ukpga_20090023_en.pdf [Accessed January 2023].
- Ref 7.4 Protection of Wrecks Act (1973). [online]. Available at: <https://www.legislation.gov.uk/ukpga/1973/33/enacted> [Accessed January 2023].
- Ref 7.5 Ancient Monuments and Archaeological Areas Act (1979 as amended). [online]. Available at: <https://www.legislation.gov.uk/ukpga/1979/46/enacted> [Accessed January 2023].
- Ref 7.6 Protection of Military Remains Act (1986) [online]. Available at: <https://www.legislation.gov.uk/ukpga/1986/35/contents/enacted> [Accessed January 2023].
- Ref 7.7 Merchant Shipping Act (1995). [online]. Available at: <https://www.legislation.gov.uk/ukpga/1995/21/contents/enacted> [Accessed January 2023].
- Ref 7.8 UNESCO (2001). Convention. [online]. Available at: <https://en.unesco.org/underwater-heritage/2001> [Accessed January 2023].
- Ref 7.9 Department of Energy and Climate Change (2011). Overarching National Policy Statement for Energy. (EN-1). [online] Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/47854/1938-overarching-nps-for-energy-en1.pdf [Accessed January 2023].
- Ref 7.10 Department of Energy and Climate Change (2011). National Policy Statement for Electricity Networks Infrastructure. (EN-5). [online] Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/47858/1942-national-policy-statement-electricity-networks.pdf [Accessed January 2023].
- Ref 7.11 Ministry of Housing, Communities and Local Government (2021). National Planning Policy Framework. [online] Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1005759/NPPF_July_2021.pdf [Accessed January 2023].
- Ref 7.12 Department for Environment, Food and Rural Affairs (DEFRA) (2011). UK Marine Policy Statement. [online] Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/69322/pb3654-marine-policy-statement-110316.pdf [Accessed January 2023].
- Ref 7.13 Department for Environment, Food and Rural Affairs (DEFRA) (2014). East Inshore and East Offshore Marine Plans. [online] Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/312496/east-plan.pdf [Accessed January 2023].
- Ref 7.14 Department for Environment, Food, and Rural Affairs (2021). South East Inshore Marine Plan. [online] Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1004493/FINAL_South_East_Marine_Plan_1_.pdf [Accessed January 2023].

- Ref 7.15 East Suffolk Council (2020). Suffolk Coastal Local Plan Adopted 2020. [online] Available at: <https://www.eastsuffolk.gov.uk/assets/Planning/Planning-Policy-and-Local-Plans/Suffolk-Coastal-Local-Plan/Adopted-Suffolk-Coastal-Local-Plan/East-Suffolk-Council-Suffolk-Coastal-Local-Plan.pdf> [Accessed January 2023].
- Ref 7.16 Thanet District Council (2020). Local Plan Adopted July 2020. [online] Available at: <https://www.thanet.gov.uk/wp-content/uploads/2018/03/LP-adjusted.pdf> [Accessed January 2022].
- Ref 7.17 English Heritage (1998). Identifying and Protecting Palaeolithic Remains: Archaeological Guidance for Planning Authorities and Developers.
- Ref 7.18 English Heritage (2000). Managing Lithic Scatters: Archaeological Guidance for planning authorities and developers.
- Ref 7.19 English Heritage (2002). Military Aircraft Crash Sites: Archaeological guidance on their significance and future management.
- Ref 7.20 Joint Nautical Archaeology Policy Committee (2006). Code of Practice for Seabed Developers, Joint Nautical Archaeology Policy Committee. [online] Available at: <http://www.jnapc.org.uk/Code%20of%20Practice%20No.2.pdf> [Accessed January 2023].
- Ref 7.21 English Heritage (2008). Conservation Principles, Policies and Guidance for the sustainable management of the historic environment. [online] Available at: <https://historicengland.org.uk/images-books/publications/conservation-principles-sustainable-management-historic-environment/conservationprinciplespoliciesandguidanceapril08web/> [Accessed March 2023].
- Ref 7.22 Department for Environment, Food and Rural Affairs (DEFRA) (2009). Our Seas – A shared resource: High level marine objectives. [online] Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/182486/ourseas-2009update.pdf [Accessed January 2023].
- Ref 7.23 English Heritage (2011). Environmental Archaeology: A Guide to the Theory and Practice of Methods, from Sampling and Recovery to Post-excavation (second edition).
- Ref 7.24 Gribble, J. and Leather, S. (2011). Offshore Geotechnical Investigations and Historic Environment Analysis: Guidance for the Renewable Energy Sector. Southampton: Emu.
- Ref 7.25 English Heritage (2012). Ships and Boats: Prehistory to Present - Designation Selection Guide. London: Historic England.
- Ref 7.26 Plets, R., Dix, J. and Bates, R. (2013). Marine geophysics data acquisition, processing and interpretation: Guidance notes. London: English Heritage.
- Ref 7.27 Ransley, J., Sturt, F., Dix, J., Adams, J., Blue, L. (2013). People and the Sea: A Maritime Archaeological Research Agenda for England. York, Council for British Archaeology Research Report 171.
- Ref 7.28 English Heritage (2015). Geoarchaeology: Using Earth Sciences to Understand the Archaeological Record.
- Ref 7.29 Historic England (2015). Managing Significance in Decision-Taking in the Historic Environment: Historic Environment Good Practice Advice in Planning 2. Historic England, Swindon.
- Ref 7.30 Historic England (2016). Preserving Archaeological Remains: Decision-taking for Sites under Development. Historic England, Swindon.

- Ref 7.31 Historic England (2017a). The Setting of Heritage Assets – Historic Environment Good Practice Advice in Planning: 3. Historic England, Swindon.
- Ref 7.32 Historic England (2017b). Conservation Principles for the Sustainable Management of the Historic Environment. Consultation Draft 10 November 2017. Historic England, Swindon.
- Ref 7.33 Historic England (2019). Statements of Heritage Significance: Analysing Significance in Heritage Assets: Historic England Advice Note 12. Historic England, Swindon.
- Ref 7.34 Historic England (2020). Deposit Modelling and Archaeology Guidance for Mapping Buried Deposits. Swindon, Historic England.
- Ref 7.35 Chartered Institute for Archaeologists (2020a). Standard and Guidance for Archaeological Advice by Historic Environment Services. Published December 2014, updated October 2020. [online] Available at: https://www.archaeologists.net/sites/default/files/CIfAS%26GArchadvice_4.pdf [Accessed January 2023].
- Ref 7.36 Chartered Institute for Archaeologists (2020b). Standards and guidance for historic environment desk-based assessment. Published December 2014, updated in October 2020. [online] Available at: http://www.archaeologists.net/sites/default/files/CIfAS%26GDBA_3.pdf [Accessed January 2023].
- Ref 7.37 The Crown Estate (2021). Archaeological Written Schemes of Investigation for Offshore Wind Farm Projects. Prepared by Wessex Archaeology. [online] Available at: <https://www.thecrownestate.co.uk/media/3917/guide-to-archaeological-requirements-for-offshore-wind.pdf> [Accessed January 2023].
- Ref 7.38 Chartered Institute for Archaeologists (2022). Code of conduct: professional ethics in archaeology. Published in 2014, updated 2022. [online] Available at: <https://www.archaeologists.net/sites/default/files/Code%20of%20conduct%20revOct2022.pdf> [Accessed January 2023].
- Ref 7.39 Historic England (2023). Curating the Palaeolithic. Historic England, Swindon.
- Ref 7.40 Wessex Archaeology (2008a). Aircraft Crash Sites at Sea: A Scoping Study. Archaeological Desk-based Assessment. Salisbury: unpublished report ref. 666410.02.
- Ref 7.41 CITiZAN (2023). Coastal Map. [online]. Available at: <https://citizan.org.uk/interactive-coastal-map/> [Accessed February 2023].
- Ref 7.42 Historic England (2023). Characterising Historic Seascape. [online]. Available at: <https://historicengland.org.uk/research/methods/characterisation/historic-seascapes/> [Accessed January 2023].
- Ref 7.43 MMT (2021). South East Anglia Link Marine Survey Geophysical Survey. Reading: unpublished report ref. 103748-NAT-MMT-SUR-REP-SURVEYRE.
- Ref 7.44 Council of Europe (2000). European Landscape Convention. [online]. Available at: <https://rm.coe.int/1680080621> [Accessed January 2023].
- Ref 7.45 Land Use Consultants (LUC) (2017). Historic Seascape Characterisation (HSC): Consolidating the National HSC Database.
- Ref 7.46 Wessex Archaeology (2008c). Selection Guide: Boats and Ships in Archaeological Contexts. Aggregate Levy Sustainability Fund, Marine Class Description and principles of selection for aggregate producing areas. York: Archaeology Data Service [distributor]. [online] Available at: <https://doi.org/10.5284/1000046> [Accessed March 2023].

- Ref 7.47 Wessex Archaeology (2006). On the Importance of Shipwrecks. York: Archaeology Data Service [distributor]. [online] Available at: <https://doi.org/10.5284/1000313> [Accessed February 2023].
- Ref 7.48 Wessex Archaeology (2008b). Selection Guide: Boats and Ships in Archaeological Contexts. Salisbury: unpublished report.
- Ref 7.49 Emu Ltd (2009). Outer Thames Estuary Regional Environmental Characterisation. MALSF, Crown Copyright 2009, ISBN 978-00907545-28-9.
- Ref 7.50 Cameron, T. D. J., Crosby, A., Balson, P. S., Jeffery, D. H., Lott, G. K., Bulat, J., and Harrison, D. J (1992). The Geology of the Southern North Sea. British Geological Survey, United Kingdom Offshore Regional Report, London, HMSO.
- Ref 7.51 Bridgland, D.R., (2006). The Middle and Upper Pleistocene sequence in the Lower Thames: a record of Milankovitch climatic fluctuation and early human occupation of southern Britain: Henry Stopes Memorial Lecture 2004. Proceedings of the Geologists' Association, 117(3), pp.281-305.
- Ref 7.52 Bridgland, D. and Gibbard, P., (1997). Quaternary river diversions in the London Basin and the eastern English Channel. *Géographie physique et Quaternaire*, 51(3), pp.337-346.
- Ref 7.53 Stoker, M. S., Balson, P. S., Long, D. and Tappin, D. R. (2011). An overview of the lithostratigraphic framework for the Quaternary deposits of the United Kingdom continental shelf. British geological Survey Research Report, 48.
- Ref 7.54 Dix, J. and Sturt, F. (2011). The Relic Palaeo-landscapes of the Thames Estuary. Southampton, University of Southampton for MALSF.
- Ref 7.55 Heamagi, C. (2017). Gunfleet Sands 3 Demonstration Project Stage 4 Geoarchaeological Analysis Report. Maritime Archaeology Ltd. [online] Available at <https://doi.org/10.5284/1043488> [Accessed February 2023].
- Ref 7.56 Wessex Archaeology (2021). Aggregate Area 528: Palaeolandscape assessment of geophysical and geotechnical data. Salisbury: unpublished report ref: 246490.01.
- Ref 7.57 Wessex Archaeology (2016). Nemo Link Stage 4 Analysis. Salisbury: unpublished report.
- Ref 7.58 Brown, A. and Russell, J. (2019). Mesolithic geoarchaeological investigations in the Outer Thames Estuary. Wessex Archaeology, Salisbury: unpublished report.
- Ref 7.59 Sturt, F., Garrow, D. and Bradley, S. (2013). New models of North West European Holocene palaeogeography and inundation. *Journal of Archaeological Science*, 40, pp.3963-3976.
- Ref 7.60 Hublin, J-J., Weston, D., and Gunz, P. (2009). Out of the North Sea: the Zeeland Ridges Neandertal. *Journal of Human Evolution*, 57, pp.777–785.
- Ref 7.61 Tizzard, L, Bicket, A. R., Benjamin, J., and De Loecker, D. (2015). A Middle Palaeolithic Site in the Southern North Sea: Investigating the Archaeology and Palaeogeography of Area 240. Salisbury, Wessex Archaeology Monograph no 35.
- Ref 7.62 Momber, G., Tomalin, D., Scaife, R., Satchell, J., Gillespie, J. and Heathcote, J. (2011). Mesolithic Occupation at Bouldnor Cliff and the Submerged Prehistoric Landscapes of the Solent. York: Council for British Archaeology. [online] Available at: <https://doi.org/10.5284/1081835> [Accessed February 2023].

- Ref 7.63 Wessex Archaeology (2013). Audit of Current State of Knowledge of Submerged Palaeolandscapes and Sites. Salisbury: Unpublished report ref: 84570.01.
- Ref 7.64 Parfitt, S. A., Barendregt, R. W., Breda, M., Candy, I., Collins, M. J., Coope, G. R., Durbidge, P., Field, M. H., Lee, J. R., Lister, A. M., Mutch, R., Penkman, K. E. H., Preece, R. C., Rose, J., Stringer, C. B., Symmons, R., Whittaker, J. E., Wymer, J., and Stuart, A. J. (2005) The Earliest Record of Human Activity in Northern Europe. *Nature*, 438(7070), pp.1008–12
- Ref 7.65 Parfitt, S. A., Ashton, N. M., Lewis, S. G., Abel, R. L., Coope, G. R., Field, M. H., Gale, R., Hoare, P. G., Larkin, N. R., Lewis, M. D., Karloukovski, V., Maher, B. A., Peglar, S. M., Preece, R. C., Whittaker, J. E., and Stringer, C. B. (2010). Early Pleistocene Human Occupation at the Edge of the Boreal Zone in Northwest Europe. *Nature*, 466(7303), pp.229–33.
- Ref 7.66 Candy, I., Silva, B. and Lee, J. (2011). Climates of the Early Middle Pleistocene in Britain: Environments of the Earliest Humans in Northern Europe. In Ashton N, Lewis, S G, and Stringer, C (eds.) *The Ancient Human Occupation of Britain*. Vol. 14, 11–22, Amsterdam, Netherlands, Elsevier B.V.
- Ref 7.67 Cohen, K. M., MacDonald, K., Joordens, J. C. A., Roebroeks, W. and Gibbard, P. L. (2012). The Earliest Occupation of North-West Europe: a Coastal Perspective. *Quaternary International*, 271, pp.70-83.
- Ref 7.68 Wymer, J. J. (1999). *The Lower Palaeolithic Occupation of Britain. England: Wessex Archaeology and English Heritage.*
- Ref 7.69 Pettitt, P. and White, M. J. (2012). *The British Palaeolithic: Human Societies at the Edge of the Pleistocene World*. Abingdon, Routledge.
- Ref 7.70 Sumbler, M. G. (1996). *British Regional Geology; London and the Thames Valley*. London: HMSO.
- Ref 7.71 Bridgland, D. R. and d'Olier, B. (1995). The Pleistocene evolution of the Thames and Rhine drainage systems in the southern North Sea Basin. *Geological Society, London, Special Publications*, 96(1), pp.27-45.
- Ref 7.72 Ashton, N., Lewis, S. G., Parfitt, S. A., Penkman, K. E. and Coope, G. R. (2008). New evidence for complex climate change in MIS 11 from Hoxne, Suffolk, UK. *Quaternary Science Reviews*, 27(7-8), pp.652-668.
- Ref 7.73 Scott, B. and Ashton, N. (2011). The Early Middle Palaeolithic: The European Context. In Ashton, N, Lewis, S G, and Stringer, C (eds.) *The Ancient Human Occupation of Britain*. Volume 14, 91–112, Amsterdam, Netherlands, Elsevier B.V.
- Ref 7.74 White, M.J., Scott, B. and Ashton, N. (2006). The Early Middle Palaeolithic period in Britain: archaeology, settlement history and human behaviour. *Journal of Quaternary Science*, 21(5), pp.525–42.
- Ref 7.75 Tizzard, L., Bicket, A. R., Benjamin, J., and De Loecker, D. (2014) A Middle Palaeolithic Site in the Southern North Sea: Investigating the Archaeology and Palaeogeography of Area 240. *Journal of Quaternary Science*, 29, pp.698–710.
- Ref 7.76 Boismier, W., Gamble, C., and Coward, F. (2012). *Neanderthals among Mammoths: Excavations at Lynford Quarry, Norfolk, UK*. English Heritage.
- Ref 7.77 Bynoe, R. (2018). The submerged archaeology of the North Sea: Enhancing the Lower Palaeolithic record of northwest Europe. *Quaternary Science Reviews*, 191, pp.1-14.
- Ref 7.78 Sturt, F. and Dix, J.K. (2009). *The Outer Thames Estuary Regional Environmental Characterisation*.

- Ref 7.79 Lewis, S. G., Ashton, N. and Jacobi, R. (2011). Testing Human Presence during the Last Interglacial (MIS 5e): A Review of the British Evidence, In Ashton, N., Lewis, S. G., and Stringer, C. (eds.) *The Ancient Human Occupation of Britain*. Vol.14, 125-247, Amsterdam, Netherlands, Elsevier
- Ref 7.80 White, M.J. and Jacobi, R.M. (2002). Two sides to every story: bout coupé handaxes revisited. *Oxford Journal of Archaeology*, 21(2), pp.109-133.
- Ref 7.81 Jacobi, R. and Higham, T. (2011a). The Later Upper Palaeolithic Recolonisation of Britain: New Results from AMS Radiocarbon Dating. In Ashton N, Lewis, S G, and Stringer, C (eds.) *The Ancient Human Occupation of Britain*. Vol. 14, pp.223–247, Amsterdam, Netherlands, Elsevier B.V.
- Ref 7.82 Bicket, A. and Tizzard, L. (2015). A Review of the Submerged Prehistory and Palaeolandscapes of the British Isles. *Proceedings of the Geologist's Association*, 126, Issue 6, pp.643-663.
- Ref 7.83 Jacobi, R. and Higham, T. (2011). The British earlier Upper Palaeolithic: settlement and chronology. *Developments in Quaternary Sciences*, 14, pp.181-222, Elsevier.
- Ref 7.84 Shennan, I. and Horton, B. (2002). Holocene land- and sea-level changes in Great Britain. *Journal of Quaternary Science*, 17(5-6), pp.511-526.
- Ref 7.85 Reid, C. (1913). *Submerged Forests*. London, Cambridge University Press.
- Ref 7.86 Godwin, H. and Godwin, M. E. (1933). British Maglemose Harpoon Sites. *Antiquity*, 7, pp.36–48.
- Ref 7.87 Housley, R. A. (1991). AMS Dates from the Late Glacial and Early Postglacial in North-West Europe: A Review. In Barton, N, Roberts, A J, and Roe, D A (eds.) *The Late Glacial in North-West Europe: Human Adaptation and Environmental Change at the End of the Pleistocene*. London, Council for British Archaeology, pp.25-36.
- Ref 7.88 Coles, B.J. (1998). Doggerland: a speculative survey. In *Proceedings of the Prehistoric Society*, Vol. 64, pp. 45-81. Cambridge University Press.
- Ref 7.89 Tappin, D. R., Pearce, B., Fitch, S., Dove, D., Gearey, B., Hill, J. M., Chambers, C., Bates, R., Pinnion, J., Diaz Doce, D., Green, M., Gallyot, J., Georgiou, L., Brutto, D., Marzialetti, S., Hopla, E., Ramsay, E., and Fielding, H. (2011). *The Humber Regional Environmental Characterisation*. British Geological Survey Open Report OR/10/54.
- Ref 7.90 Limpenny, S. E., Barrio Froján, C., Cotterill, C., Foster-Smith, R. L., Pearce, B., Tizzard, L., Limpenny, D. L., Long, D., Walmsley, S., Kirby, S., Baker, K., Meadows, W. J., Rees, J., Hill, J., Wilson, C., Leivers, M., Churchley, S., Russell, J., Birchenough, A. C., Green, S. L. and Law, R. J. (2011) *The East Coast Regional Environmental Characterisation*. MEPP.
- Ref 7.91 Gaffney, V., Thomson, K. and Fitch, S. (2007) *Mapping Doggerland: The Mesolithic Landscapes of the Southern North Sea*. Oxford, Archaeopress.
- Ref 7.92 English Heritage (1998). *Identifying and Protecting Palaeolithic Remains: Archaeological Guidance for Planning Authorities and Developers*.
- Ref 7.93 Vattenfall Wind Power Ltd (2018). *Thanet Extension Offshore Wind Farm. Annex 13-1: Marine Archaeological Desk-Based Assessment Technical Report*. Unpublished report ref. 6.4.13.1.
- Ref 7.94 Hartlepool History Then and Now (2023). *Captured and Sunk - the Story*. [online]. Available at: <https://www.hhtandn.org/notes/652/captured-and-sunk-the-story> [Accessed March 2023].

- Ref 7.95 Fjodr (2014). East Coast War Channels in the First and Second World War. [online] Available at: <https://historicengland.org.uk/research/results/reports/103-2014> [Accessed February 2023].
- Ref 7.96 Merritt, O., Parham, D. and McElvogue, D. (2007). Enhancing our Understanding of the Marine Historic Environment. Navigational Hazards Project Final Report for English Heritage. Bournemouth University: Aggregates Levy Sustainability Fund.
- Ref 7.97 Cant, S. (2013). England's Shipwreck Heritage: from logboats to U-boats. English Heritage.
- Ref 7.98 McGrail, S. (2004). Boats of the World: From the Stone Age to medieval Times. Oxford: University Press.
- Ref 7.99 Perkins, D.R.J. (1997). 'An Island Gateway', in Cats, M. & Chamberlain, D., The Maritime Heritage of Thanet. East Kent Maritime Trust, pp.4-16.
- Ref 7.100 Agbe-Davies, A. S. and Bauer, A. A. (2010). Rethinking Trade as a Social Activity: An Introduction. Routledge.
- Ref 7.101 Clark, P. (2004). The Dover Bronze Age Boat. Swindon: English Heritage.
- Ref 7.102 Wessex Archaeology (2010). AODA Marine Aggregate Regional Environmental Assessment. Archaeological Desk-Based Assessment: Final Report. Salisbury: unpublished report ref. 73330.02.
- Ref 7.103 Fenwick V., and Gale, A. (1998). Historic Shipwrecks: Discovered, Protected and Investigated. Tempus Publishing Ltd.
- Ref 7.104 Nayling, N. and McGrail, S. (2004). The Barlands Farm Romano-Celtic Boat. CBA Research Report 138. Council for British Archaeology.
- Ref 7.105 Milne, G. (2003). The Port of Medieval London. Oxbow.
- Ref 7.106 Marsden, P. (1996). Ships of the Port of London, Twelfth to seventeenth centuries AD. English Heritage Archaeological Report 5.
- Ref 7.107 Care-Evans, A. and Fenwick, V.H. (1971). The Graveney Boat. *Antiquity*, 45, pp. 89-96.
- Ref 7.108 Carver, M (1998). Sutton Hoo: Burial Ground of Kings? London, The British Museum Press.
- Ref 7.109 Williams N. J. (1988). Maritime Trade of the East Anglian Ports 1550-1590. Oxford: Oxford University Press.
- Ref 7.110 Gould, S. (1997). The archaeology of industrialisation and manufacture 1750–1960, in Glazebrook, J. ed., *Research and Archaeology: A Framework for the Eastern Counties*, 1. Resource Assessment, 73-79. East Anglian Archaeology, Occasional Paper no. 3. Norwich: Scole Archaeological Committee for East Anglia.
- Ref 7.111 Hewitt, N. (2008). Coastal Convoys 1939-1945: The Indestructible Highway. Norwich: Pen and Sword Maritime.
- Ref 7.112 Hegarty, C. and Newsome, S. (2005). The Archaeology of the Suffolk Coast and Inter-tidal Zone. A report for the National Mapping Programme. Bury St Edmunds/Swindon: Suffolk County Council Archaeological Service/ English Heritage.
- Ref 7.113 CITiZAN (2022). Searching Sandwich Bay. [online]. Available at: <https://citizan.org.uk/blog/2022/Aug/17/searching-sandwich-bay/> [Accessed February 2023].

Ref 7.114 Planning (Listed Buildings and Conservation Areas) Act 1990. [online] Available at: <https://www.legislation.gov.uk/ukpga/1990/9/contents> [Accessed May 2023].

Ref 7.115 National Heritage Act 1983. [online] Available at: <https://www.legislation.gov.uk/ukpga/1983/47/contents> [Accessed May 2023].

Annex 4.7.A.1: Terminology

Glossary

The terminology used in this assessment follows definitions contained within Annex 2 of the UK's National Planning Policy Framework (Ministry of Housing, Communities and Local Government 2021, 64-73).

Term	Definition
Archaeological interest	There will be archaeological interest in a heritage asset if it holds, or potentially may hold, evidence of past human activity worthy of expert investigation at some point. Heritage assets with archaeological interest are the primary source of evidence about the substance and evolution of places, and of the people and cultures that made them.
Conservation (for heritage policy)	The process of maintaining and managing change to a heritage asset in a way that sustains and, where appropriate, enhances its significance.
Designated heritage assets	World Heritage Sites, Scheduled Monuments, Listed Buildings, Protected Wreck Sites, Registered Park and Gardens, Registered Battlefields and Conservation Areas designated under the relevant legislation.
Development Plan	This includes adopted Local Plans, neighbourhood plans and the London Plan, and is defined in section 38 of the Planning and Compulsory Purchase Act 2004.
Environment Impact Assessment	A procedure to be followed for certain types of projects to ensure that decisions are made in full knowledge of any likely significant effects on the environment.
Heritage asset	A building monument, site, place, area or landscape identified as having a degree of significance meriting consideration in planning decisions, because of its heritage interest. Heritage assets include designated heritage assets and assets identified by the local planning authority (including local listing).
Heritage coast	Areas of undeveloped coastline which are managed to conserve their natural beauty and, where appropriate, to improve accessibility for visitors.
Historic environment	All aspects of the environment resulting from the interaction between people and places through time, including all surviving physical remains of past human activity, whether visible, buried or submerged, and landscaped and planted or managed flora.
Historic environment record	Information services that seek to provide access to comprehensive and dynamic resources relating to the historic environment of a defined geographic area for public benefit and use.
Setting of a heritage asset	The surroundings in which a heritage asset is experienced. Its extent is not fixed and may change as the asset and its surroundings evolve. Elements of setting may make a positive or negative contribution to the significance of an asset, may affect the ability to appreciate that significance or may be neutral.

Term	Definition
Significance (for heritage policy)	The value of a heritage asset to this and future generations because of its heritage interest. That interest may be archaeological, architectural, artistic or historic. Significance derives not only from a heritage asset's physical presence, but also from its setting.
Strategic environmental assessment	A procedure (set out in the Environmental Assessment of Plans and Programmes Regulations 2004) which requires the formal environmental assessment of certain plans and programmes which are likely to have significant effects on the environment.
Value	An aspect of worth or importance.

Chronology

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

Prehistoric	
Palaeolithic	970,000 - 9500 BCE
Lower Palaeolithic	970,000 - 300,000 BCE
Middle Palaeolithic	300,000 - 40,000 BCE
Upper Palaeolithic	40,000 - 10,000 BCE
Late Upper Palaeolithic	12,000 - 9500 BCE
Early Post-glacial	9500 - 8500 BCE
Mesolithic	8500 - 4000 BCE
Neolithic	4000 - 2400 BCE
Bronze Age	2400 - 700 BCE
Iron Age	700 BCE - AD 43
Historic	
Romano-British	AD 43 - 410
Saxon	AD 410 - 1066
Medieval	AD 1066 - 1500
Post-medieval	AD 1500 - 1800
19th Century	AD 1800 - 1899
Modern	AD 1900 - present day

The geological and chronostratigraphic periods referred to in the text, including British chronostratigraphy and corresponding Marine Isotope Stages (MIS), are outlined as follows:

Geological period	Chronostratigraphy	Age (ka)	MIS	
Holocene	Holocene interglacial	11.7 – present	1	
Late Pleistocene	Devensian Glaciation	Loch Lomond Stadial	11.7 – 12.9	2 – 5d
		Windermere Interstadial	12.9 – 15	
		Dimlington Stadial	15 – 26	
		Upton Warren Interstadial	40 – 43	
		Early Devensian	60 – 110	
	Ipswichian interglacial	115 – 130	5e	
Middle Pleistocene	Unnamed cold stage	130-374	6	
	Avery interglacial		7	
	Unnamed cold stage		8	
	Purfleet interglacial		9	
	Unnamed cold stage		10	
	Hoxnian interglacial	374 – 424	11	
	Anglian glaciation	424 – 478	12	
	Cromerian Complex	478 – 780	13	

Annex 4.7.A.2: Legislation, Policy and Guidance

Designated Heritage Assets

Designation	Associated legislation	Overview
World Heritage Sites	-	The United Nations Educational, Scientific and Cultural Organisation (UNESCO) World Heritage Committee inscribes World Heritage Sites for their Outstanding Universal Value (OUV) – “ <i>cultural and/or natural significance which is so exceptional as to transcend national boundaries and to be of common importance for present and future generations of all humanity</i> ”. England protects its World Heritage Sites and their settings, including any buffer zones or equivalent, through the statutory designation process and through the planning system. The National Planning Policy Framework sets out detailed policies for the conservation and enhancement of the historic environment, including World Heritage Sites, through both plan-making and decision-taking.
Scheduled Monuments and Areas of Archaeological Importance	Ancient Monuments and Archaeological Areas Act 1979 (Ref 7.5)	Under the Ancient Monuments and Archaeological Areas Act 1979, the Secretary of State (DCMS) can schedule any site which appears to be of national importance because of its historic, architectural, traditional, artistic or archaeological interest. The historic town centres of Canterbury, Chester, Exeter, Hereford and York have been designated as Archaeological Areas of Importance under Part II of the Ancient Monuments and Archaeological Areas Act 1979. Additional controls are placed upon works affecting Scheduled Monuments and Areas of Archaeological Importance under the Act. The consent of the DCMS, as advised by Historic England, is required for certain works affecting Scheduled Monuments.
Protected Wreck Sites	Protection of Wrecks Act 1973 (Ref 7.4)	The Protection of Wrecks Act 1973 allows the Secretary of State to designate a restricted area around a wreck to prevent uncontrolled interference. These statutorily protected areas are likely to contain the remains of a vessel, or its contents, which are of historical, artistic or archaeological importance.
Protected Places and Controlled Sites	Protection of Military Remains Act 1986 (Ref 7.6)	The Protection of Military Remains Act 1986 provides protection for designated military vessels and for all aircraft that crashed while in military service. The Act provides two types of protection: Protected Places (wrecks designated by name

Designation	Associated legislation	Overview
Listed Buildings	Planning (Listed Buildings and Conservation Areas) Act 1990 (Ref 7.114)	and can be designated even if the location of the site is not known) and Controlled Sites (sites designated by location – covers wrecks within the last 200 years). It is illegal to disturb sites or remove anything from sites. Protected Places can be visited by divers, but the rule is look but don't touch. For Controlled Sites it is illegal to conduct any operations (including diving or excavation) within the Controlled Site unless licensed to do so by the Ministry of Defence.
Conservation Areas	Planning (Listed Buildings and Conservation Areas) Act 1990 (Ref 7.114)	In England, under Section 1 of the Planning (Listed Buildings and Conservation Areas) Act 1990, the Secretary of State is required to compile lists of buildings of special architectural or historic interest, on advice from English Heritage/ Historic England. Works affecting Listed Buildings are subject to additional planning controls administered by Local Planning Authorities. Historic England is a statutory consultee in certain works affecting Listed Buildings. Under certain circumstances, Listed Building Consent is required for works affecting Listed Buildings.
Registered Parks and Gardens and Registered Battlefields	National Heritage Act 1983 (Ref 7.115)	A Conservation Area is an area which has been designated because of its special architectural or historic interest, the character or appearance of which it is desirable to preserve or enhance. In most cases, Conservation Areas are designated by Local Planning Authorities. Section 72 (1) of the Planning (Listed Buildings and Conservation Areas) Act 1990 requires authorities to have regard to the fact that there is a Conservation Area when exercising any of their functions under the Planning Acts and to pay special attention to the desirability of preserving or enhancing the character or appearance of Conservation Areas. Although a locally administered designation, Conservation Areas may nevertheless be of national importance and significant developments within a Conservation Area are referred to Historic England.
		The Register of Parks and Gardens was established under the National Heritage Act 1983. The Battlefields Register was established in 1995. Both Registers are administered by Historic England. These designations are non-statutory but are, nevertheless, material considerations in the planning process. Historic England and The Garden's Trust (formerly known as The Garden History Society) are statutory consultees in works affecting Registered Parks and Gardens

Other Relevant Legislation and Policy

Legislation/ Policy	Overview
Merchant Shipping Act 1995 (Ref 7.7)	This Act sets out the procedures for determining the ownership of underwater finds that turn out to be ‘wreck’, defined as any flotsam, jetsam, derelict and lagan found in or on the shores of the sea or any tidal water. It includes ship, aircraft, hovercraft, parts of these, their cargo or equipment. If any such finds are brought ashore, the salvor is required to give notice to the Receiver of Wreck. This Act is administered by the Maritime and Coastguard Agency.
Marine and Coastal Areas Act 2009 (Ref 7.3)	Marine licensing and marine planning made the responsibility of the Marine Management Organisation (MMO). England’s inshore and offshore waters have been divided into 11 plan areas, for which marine plans are being produced by the MMO.
National Policy Statement for Energy (EN-1) (Ref 7.9)	This National Policy Statement (NPS) sets out the national policy for energy infrastructure, and the importance of archaeological assessment in the development process.
National Policy Statement for Energy (EN-5) (Ref 7.10)	This NPS, taken together with the overarching NPS (EN-1; Ref 7.9) provides for decision making on above ground electricity lines of 132kv and over and other electricity networks associated with a Nationally Significant Infrastructure Project e.g. substations and converted stations.
UNESCO Convention on the Protection of the Underwater Cultural Heritage (Ref 7.8)	The UNESCO Convention was concluded in 2001, and is a comprehensive attempt to codify the law internationally, with regards to underwater cultural heritage. The UK (including the Bailiwick of Guernsey) abstained in the vote on the final draft of the Convention, however it 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 2nd January 2009, having been signed or ratified by 20 member states. To date, the Convention has been ratified by 71 countries.

National Planning Policy Framework

NPPF Section 16: Conserving and enhancing the historic environment (Ref 7.11)

Para. 193	Local planning authorities should make information about the historic environment, gathered as part of policy-making or development management, publicly accessible.
-----------	--

NPPF Section 16: Conserving and enhancing the historic environment (Ref 7.11)

Para. 194	In determining applications, local planning authorities should require an applicant to describe the significance of any heritage assets affected, including any contribution made by their setting. The level of detail should be proportionate to the assets' importance and no more than is sufficient to understand the potential impact of the proposal on their significance. As a minimum the relevant historic environment record should have been consulted and the heritage assets assessed using appropriate expertise where necessary. Where a site on which development is proposed includes, or has the potential to include, heritage assets with archaeological interest, local planning authorities should require developers to submit an appropriate desk-based assessment and, where necessary, a field evaluation.
Para.195	Local planning authorities should identify and assess the particular significance of any heritage asset that may be affected by a proposal (including by development affecting the setting of a heritage asset) taking account of the available evidence and any necessary expertise. They should take this into account when considering the impact of a proposal on a heritage asset, to avoid or minimise any conflict between the heritage asset's conservation and any aspect of the proposal.
Para. 199 and 200	<p>When considering the impact of a proposed development on the significance of a designated heritage asset, great weight should be given to the asset's conservation (and the more important the asset, the greater the weight should be). This is irrespective of whether any potential harm amounts to substantial harm, total loss or less than substantial harm to its significance.</p> <p>Any harm to, or loss of, the significance of a designated heritage asset (from its alteration or destruction, or from development within its setting), should require clear and convincing justification. Substantial harm to or loss of:</p> <ul style="list-style-type: none">a) grade II listed buildings, or grade II registered parks or gardens, should be exceptional;b) assets of the highest significance, notably scheduled monuments, protected wreck sites, registered battlefields, grade I and II* listed buildings, grade I and II* registered parks and gardens, and World Heritage Sites, should be wholly exceptional. Non-designated heritage assets of archaeological interest, which are demonstrably of equivalent significance to scheduled monuments, should be considered subject to the policies for designated heritage assets.
Para. 203	The effect of an application on the significance of a non-designated heritage asset should be taken into account in determining the application. In weighing applications that directly or indirectly affect non-designated heritage assets, a balanced judgement will be required having regard to the scale of any harm or loss and the significance of the heritage asset.

NPPF Section 16: Conserving and enhancing the historic environment (Ref 7.11)

Para. 206

Local planning authorities should look for opportunities for new development within Conservation Areas and World Heritage Sites, and within the setting of heritage assets, to enhance or better reveal their significance. Proposals that preserve those elements of the setting that make a positive contribution to the asset (or which better reveal its significance) should be treated favourably.

Annex 4.7.A.3: Palaeogeographic Features of Archaeological Potential

* metres below seafloor

ID	Classification	Archaeological Discrimination	Depth Range (mBSF)*		Description
			From	To	
75000	Acoustic blanking	P2	1.6	2.0	An area of acoustic blanking, the feature is seen to disrupt the surrounding horizons and is situated beneath modern seabed sediments. Potentially indicates the presence of shallow gas which may in turn indicate the presence of organic matter, although it potentially originates from deposits in the Red Crag Formation, which is not considered of archaeological interest. Therefore, the feature is not definitively of palaeoenvironmental or archaeological interest, however it has been retained as a precaution.
75001	Acoustic blanking	P2	1.4	3.7	An area of acoustic blanking, the feature is seen to disrupt the surrounding horizons and is situated beneath modern seabed sediments. Potentially indicates the presence of shallow gas which may in turn indicate the presence of organic matter, although it potentially originates from deposits in the Red Crag Formation, which is not considered of archaeological interest. Therefore, the feature is not definitively of palaeoenvironmental or archaeological interest, however it has been retained as a precaution.
75002	Acoustic blanking	P2	0.5	5.6	An extensive area of acoustic blanking, the feature is seen to disrupt the surrounding horizons and is situated beneath modern seabed sediments. Potentially indicates the presence of shallow gas which may in turn indicate the presence of organic matter, although it potentially originates from deposits in the Red Crag Formation, which is not considered of archaeological interest. Therefore, the feature is not definitively of palaeoenvironmental or archaeological interest, however it has been retained as a precaution.

ID	Classification	Archaeological Discrimination	Depth Range (mBSF)*		Description
			From	To	
75003	Cut and fill	P2	1.7	5.9	A simple cut and fill with a relatively distinct basal reflector and an acoustically unstructured fill. The feature is cutting into an acoustically unstructured unit interpreted to be bedrock and situated below modern seabed sediments. May represent a remnant fluvial feature 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.
75004	Acoustic blanking	P2	1.2	4.7	An area of acoustic blanking, the feature is seen to disrupt the surrounding horizons and is situated beneath modern seabed sediments. Potentially indicates the presence of shallow gas which may in turn indicate the presence of organic matter. The blanking appears to disrupt the fill of channel 75005 , a vibrocore taken from this channel contains a pocket of organic matter (VC-008A) at 1.65 - 2.03m, suggesting the infill deposits may contain material of palaeoenvironmental interest.
75005	Channel	P1	0.3	6.3	A channel that has a fill characterised by strong parallel reflectors, it is sometimes chaotic and acoustically unstructured. The feature has areas of acoustic blanking visible, that may indicate the microbial breakdown of organic matter. A vibrocore taken from the fill of this feature indicates the presence of a pocket of organic matter in VC-008A at 1.65 - 2.03m. Likely related to channel 75006 in the west nearshore option of the cable route. The feature may represent a buried palaeochannel, and the infill deposits may contain material of palaeoenvironmental interest.

ID	Classification	Archaeological Discrimination	Depth Range (mBSF)*		Description
			From	To	
75006	Channel	P1	0.2	8.7	A channel that has a fill characterised by strong parallel reflectors, it is sometimes chaotic and acoustically unstructured. The feature has areas of acoustic blanking visible (75007), that may indicate the microbial breakdown of organic matter. A vibrocore taken from the fill this feature indicates the presence of peat in VC-S6-005 between 1.74-2.16m. Likely related to channel 75005 in the east nearshore option of the study area. The feature may represent a buried palaeochannel, and the infill deposits may contain material of palaeoenvironmental interest.
75007	Acoustic blanking	P2	0.7	3.2	An area of acoustic blanking, the feature is seen to disrupt the surrounding horizons of channel 75006 and is situated beneath modern seabed sediments. The presence of shallow gas may indicate the microbial breakdown of organic matter, it appears that the feature may have originated from deposits in channel 75006 , where peat has been identified in vibrocore VC-S6-005 between 1.74 - 2.16m, suggesting the infill deposits may contain material of palaeoenvironmental interest.
75008	Cut and fill	P2	0.6	3.1	A simple cut and fill with a fill that is acoustically unstructured and similar to the unit it is cutting into, however the basal reflector is visible on multiple lines. The feature is situated below modern seabed sediments and in the nearshore of the route. May be an internal feature 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.
75009	Acoustic blanking	P2	0.5	2.7	An extensive area of acoustic blanking, the feature is seen to disrupt the surrounding horizons and is situated beneath modern seabed sediments. Potentially indicates the presence of shallow gas which may in turn indicate the presence of organic matter, although it potentially originates from deposits in the Red Crag Formation, which is not considered of archaeological interest. Therefore, the feature is not definitively of palaeoenvironmental or archaeological interest, however it has been retained as a precaution.

ID	Classification	Archaeological Discrimination	Depth Range (mBSF)*		Description
			From	To	
75010	Cut and fill	P2	0.4	2.5	A simple cut and fill with a distinct and undulating basal reflector, the fill is acoustically unstructured and similar to the unit it cuts into, possibly London Clay. The feature is situated below a thin veneer of modern seabed sediments. May represent a remnant fluvial feature 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.
75011	Cut and fill	P2	0.3	2.0	A simple cut and fill with steeply sloping sides and a distinct basal reflector, the feature has an acoustically unstructured fill much like the unit it cuts into, possible London Clay. May represent a remnant fluvial feature 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.
75012	Cut and fill	P2	0.3	3.2	A simple cut and fill with a slightly undulating, distinct basal reflector. The feature possibly has two fills the lower fill is chaotic and upper more acoustically unstructured. The feature is situated below a thin veneer of modern seabed sediments and within possible London Clay. May represent a remnant fluvial feature 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.

ID	Classification	Archaeological Discrimination	Depth Range (mBSF)*		Description
			From	To	
75013	Cut and fill	P2	0.6	4.2	A simple cut and fill with an undulating basal reflector, that is distinct on some lines. The fill is acoustically unstructured and similar to the unit it cuts into, possible London Clay. The feature is situated below a thin veneer of modern seabed sediments. May represent a remnant fluvial feature 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.
75014	Channel	P2	0.5	6.1	A channel with a distinct, undulating basal reflector. The fill is characterised by parallel internal reflectors and in some places is acoustically unstructured. The feature is situated below a thin veneer of modern seabed sediments and cuts into London Clay. The feature may represent a buried palaeochannel, and the infill deposits may contain material of palaeoenvironmental interest.
75015	Channel	P1	0.5	7.6	A channel feature with an undulating basal reflector and two fills. The lower fill of the feature is acoustically unstructured, the upper fill of the channel contains parallel internal reflectors and is visible between 1.3 - 3.8m BSB. The feature is situated below modern seabed sediments and cuts into interpreted London Clay. Vibrocore VC-021, taken within the fill of this channel, identified soft slightly sandy silty clay with thin laminations of organic matter at 1.47 - 1.64m. The feature may represent a buried palaeochannel, and the infill deposits may contain material of palaeoenvironmental interest. Based on regional bathymetry data, this appears to be the offshore extension of the River Stour, which has been identified within numerous offshore development areas within the region.

ID	Classification	Archaeological Discrimination	Depth Range (mBSF)*		Description
			From	To	
75016	Acoustic blanking	P2	1	1.6	An area of acoustic blanking, the feature is seen to disrupt the surrounding horizons and is situated beneath modern seabed sediments. Potentially indicates the presence of shallow gas which may in turn indicate the presence of organic matter, although it potentially originates from deposits not considered of archaeological interest. Therefore, the feature is not definitively of palaeoenvironmental or archaeological interest, however it has been retained as a precaution.
75017	High amplitude reflector	P2	0.2	0.4	High amplitude reflector within the upper fill of channel 75018 that may contain sediments containing a high percentage of organic material, or peat. Potentially indicative of a preserved palaeolandsurface of archaeological and/or palaeoenvironmental potential, but only identified on one survey line.
75018	Channel	P1	0.2	5.4	A channel with a distinct, undulating basal reflector. The feature has two fills in places, the lower fill is chaotic and the upper fill has parallel internal reflectors. The upper fill is visible between 0.2 - 1.9m BSB. The feature is situated below a thin veneer of modern seabed sediments and cuts into London Clay. A laterally restricted high amplitude reflector (75017) is visible within the feature, suggesting possible organic material. The feature has the potential to represent a buried palaeochannel, and the infill deposits may contain material of palaeoenvironmental interest.
75019	Cut and fill	P2	0.2	2.1	A simple cut and fill feature with an undulating basal reflector, the fill is acoustically unstructured. The feature is situated below a thin layer of modern seabed sediments and cutting into London Clay. May represent a remnant fluvial feature 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.

ID	Classification	Archaeological Discrimination	Depth Range (mBSF)*		Description
			From	To	
75020	Channel	P1	0.3	3.9	A channel feature with a distinct basal reflector, the fill is characterised by parallel internal reflectors. The feature cuts into London Clay and situated below modern seabed sediments. In the MBES data this feature is visible as a channel orientated north to south. The feature has the potential to represent a buried palaeochannel, and the infill deposits may contain material of palaeoenvironmental interest. Located within a bathymetric low visible within regional bathymetry data, potentially an underfilled channel.
75021	Channel	P1	0.3	6.7	A channel with an undulating, distinct basal reflector and two fills. The lower fill is generally chaotic and the upper fill more acoustically unstructured. The upper fill of the feature is present between 0.4 and 3.2m BSB. The feature is cutting into London Clay and situated below a thin layer of seabed sediments. The feature has the potential to represent a buried palaeochannel, and the infill deposits may contain material of palaeoenvironmental interest. Located within a bathymetric low visible within regional bathymetry data, potentially associated with channel 75020 and part of the same underfilled channel system.
75022	Channel	P1	0.3	6.1	A channel with an indistinct basal reflector, the fill is generally chaotic and the feature has two possible high amplitude reflectors within it, that may contain sediments containing a high percentage of organic material, or peat. The lower reflector is present at 0.6 - 2.0m and the upper reflector is present at 0.4 - 1.2m. The feature is cutting into London Clay and situated below a layer of modern seabed sediments. The feature has the potential to represent a buried palaeochannel, and the infill deposits may contain material of palaeoenvironmental interest. Located close to channel features 75020 and 75021 and may be related.

ID	Classification	Archaeological Discrimination	Depth Range (mBSF)*		Description
			From	To	
75023	Complex cut and fill	P2	0.2	4.6	A complex cut and fill that contains two fills, both fills are acoustically unstructured and sometimes chaotic. The upper fill of the feature is present between 0.3 and 2.2m BSB. The feature is cutting into London Clay. Vibrocore VC-043 taken within the fill of this feature contains oxidised shallow marine sands (1.0 - 4.7m) below seabed sediments. May represent a remnant fluvial feature 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.
75024	Cut and fill	P1	0.3	4.6	A simple cut and fill feature with a chaotic fill and an indistinct basal reflector. The feature is cutting into London Clays. Vibrocore VC-046 taken within the fill of this feature contains alluvium - fine grained organic material between 0.3 - 2.3m and is considered of medium potential. May represent a remnant fluvial feature infilled with deposits of palaeoenvironmental potential
75025	Cut and fill	P2	0.3	2.9	A simple cut and fill feature with a fill characterised by a fill that is chaotic and acoustically unstructured on some lines. The feature has a distinct basal reflector and is cutting into London Clay. May be an internal feature and of no archaeological or palaeoenvironmental interest; however, has the potential of being remnant of a fluvial feature and therefore retained as a precaution.
75026	Cut and fill	P2	0.3	2.0	A simple cut and fill feature with a fill characterised by a chaotic fill and a distinct basal reflector. The feature is cutting into London Clay. May be an internal feature and of no archaeological or palaeoenvironmental interest; however, has the potential of being remnant of a fluvial feature and therefore retained as a precaution.

ID	Classification	Archaeological Discrimination	Depth Range (mBSF)*		Description
			From	To	
75027	Channel	P1	0.3	4.2	A channel feature predominantly characterised by a chaotic fill, but parallel internal reflectors are visible in some places. The feature has a distinct undulating basal reflector cutting into an acoustically unstructured unit and is situated below a thin layer of seabed sediments. Vibrocore VC-050 taken within the fill of this feature contains low strength grey slightly sandy silty clay with thin to thick laminae of black organic silty clay and bivalves between 2.9 - 3.5m and greenish brown silty sand with few shell fragments between 4.0 - 4.4m. Both units are classified as medium palaeoenvironmental potential. The feature has the potential to represent a buried palaeochannel, and the infill deposits may contain material of palaeoenvironmental interest.
75028	Cut and fill	P2	0.2	3.1	A simple cut and fill with an indistinct basal reflector and a chaotic fill. The feature has an undulating basal reflector and is cutting into London Clay. The feature has the potential to represent a buried palaeochannel, and the infill deposits may contain material of palaeoenvironmental interest.
75029	Channel complex	P1	1.3	11.0	A complex channel that has a fill characterised by distinct parallel internal reflectors. The edges of the channel fill in places are more chaotic and some parts of the channel are acoustically unstructured. The feature is situated below modern seabed sediments and cuts into an acoustically unstructured unit. Two vibrocores taken within the fill of this feature contain shallow marine to coastal sediments including very thin beds of soft silty clay and thin laminae of black organic silt and shell fragments (VC-052 and VC-053) classified as medium palaeoenvironmental potential between 0.5 - 5.3m and 0.3 - 5.5m respectively. The feature has the potential to represent a buried palaeochannel, and the infill deposits may contain material of palaeoenvironmental interest. Located within the Outer Thames estuary and potentially part of the offshore route of the Thames/Medway river system.

ID	Classification	Archaeological Discrimination	Depth Range (mBSF)*		Description
			From	To	
75030	Channel complex	P1	1.2	12.3	A complex channel that has multiple fills, some parts of the feature are characterised by distinct and indistinct parallel internal reflectors, other parts are acoustically unstructured. The basal reflector is undulating and in parts distinct. In the basal fill of the feature on the channel edges some possible infilled depressions are visible. The feature is situated below modern seabed sediments and cuts into an acoustically unstructured unit. Two vibrocores taken within the fill of this channel contain shallow marine to coastal deposits of medium palaeoenvironmental potential in VC-057 and VC-058. May represent a possible fluvial braid plain feature of archaeological potential, and the infill deposits may contain material of palaeoenvironmental interest. Located within the Outer Thames estuary and potentially part of the offshore route of the Thames/Medway river system.
75031	Channel complex	P1	0.8	7.9	A complex channel feature with a distinct, undulating basal reflector, the feature has a lower fill that is characterised by distinct parallel internal reflectors, the upper fill is more chaotic and some parts of the fill are acoustically unstructured. The feature is situated below modern seabed sediments and cuts into an acoustically unstructured unit. Vibrocore 060 taken from the fill of this feature contains light brown soft slightly sandy silty clay with organic debris at 4.6 - 5.2m and shallow marine to coastal deposits of medium palaeoenvironmental potential. The feature has the potential to represent a buried palaeochannel, and the infill deposits may contain material of palaeoenvironmental interest. Located within the Outer Thames estuary and potentially part of the offshore route of the Thames/Medway river system.

ID	Classification	Archaeological Discrimination	Depth Range (mBSF)*		Description
			From	To	
75032	Channel	P1	0.3	7.1	A channel feature that has a single fill characterised by distinct parallel internal reflectors, the feature is cutting into bedrock and situated below a layer of seabed sediments. Vibrocore VC-061, taken within the fill of this feature contains alluvium - fine grained organic deposits between 2.7 - 3.6m and is considered to be of medium palaeoenvironmental potential. The feature has the potential to represent a buried palaeochannel, and the infill deposits may contain material of palaeoenvironmental interest. Located within the Outer Thames estuary and potentially part of the offshore route of the Thames/Medway river system.
75033	Cut and fill	P2	0.3	4.5	A simple cut and fill feature with an undulating basal reflector, the fill is characterised by indistinct parallel internal reflectors, the feature is situated below a thin layer of modern seabed sediments and cutting into bedrock. Potentially the remnants of an eroded fluvial system.
75034	Channel	P1	0.4	5.6	A channel feature that has a single fill characterised by distinct parallel internal reflectors, the feature is cutting into chalk and situated below a layer of seabed sediments. The feature is visible in the MBES data as a large depression. The feature has the potential to represent an underfilled palaeochannel, and the infill deposits may contain material of palaeoenvironmental interest
75035	Channel	P1	0.6	5.4	A channel feature that has a single fill characterised by distinct parallel internal reflectors, it is sometimes acoustically unstructured. The feature is cutting into chalk and situated below a layer of seabed sediments. The feature is visible in the MBES data as a large depression. The feature has the potential to represent an underfilled palaeochannel, and the infill deposits may contain material of palaeoenvironmental interest

Annex 4.7.A.4: Vibrocore locations

* metres above ordnance datum

Hole ID	ETRS89 UTM31N		Elevation (m OD)*
	Easting (m)	Northing (m)	
748-NAT-NB-VC-S6-005	408108	5777807	22.0
748-NAT-NB-VC-S6-003	407549	5778802	15.0
748-NAT-NB-VC-005	409379	5783421	18.0
748-NAT-NB-VC-007	410505	5780077	23.0
748-NAT-NB-VC-008A	410238	5778172	27.0
748-NAT-NB-VC-009	409875	5777239	23.0
748-NAT-NB-VC-011	408968	5774386	20.0
748-NAT-NB-VC-012A	408608	5772195	20.0
748-NAT-NB-VC-013A	408437	5770653	20.0
748-NAT-NB-VC-014	408698	5769272	22.0
748-NAT-NB-VC-015	408428	5767534	23.0
748-NAT-NB-VC-016	408196	5765566	26.0
748-NAT-NB-VC-017	407808	5764818	25.0
748-NAT-NB-VC-018	407325	5762723	23.0
748-NAT-NB-VC-019	406842	5760788	22.0
748-NAT-NB-VC-020	406629	5760070	23.0
748-NAT-NB-VC-021	406062	5757786	24.0
748-NAT-NB-VC-022	405615	5755807	24.0
748-NAT-NB-VC-023	405706	5754994	24.0
748-NAT-NB-VC-024a	405988	5752951	23.0
748-NAT-NB-VC-025b	406243	5751056	23.0
748-NAT-NB-VC-026A	406305	5749979	24.0
748-NAT-NB-VC-027A	406808	5748164	25.0
748-NAT-NB-VC-028	408569	5747342	26.0
748-NAT-NB-VC-029	409470	5747210	27.0
748-NAT-NB-VC-030	411553	5746897	27.0
748-NAT-NB-VC-031	413282	5746234	32.0
748-NAT-NB-VC-032	414050	5745097	34.0
748-NAT-NB-VC-033	414789	5743037	40.0
748-NAT-NB-VC-034	415366	5741526	45.0

Hole ID	ETRS89 UTM31N		Elevation (m OD)*
	Easting (m)	Northing (m)	
748-NAT-NB-VC-035	415765	5740468	31.0
748-NAT-NB-VC-036	415859	5738582	28.0
748-NAT-NB-VC-037	415549	5736756	27.0
748-NAT-NB-VC-038	414646	5734870	33.0
748-NAT-NB-VC-039	413320	5733983	32.0
748-NAT-NB-VC-040	411879	5733422	38.0
748-NAT-NB-VC-041	411046	5731990	31.0
748-NAT-NB-VC-042	410084	5730215	26.0
748-NAT-NB-VC-043	409750	5729598	22.0
748-NAT-NB-VC-044	408541	5727666	22.0
748-NAT-NB-VC-045	407486	5726030	23.0
748-NAT-NB-VC-046A	407234	5725168	23.0
748-NAT-NB-VC-047	406777	5723630	25.0
748-NAT-NB-VC-048	405871	5720647	21.0
748-NAT-NB-VC-049	405729	5720256	24.0
748-NAT-NB-VC-050	404873	5718438	23.0
748-NAT-NB-VC-051	404044	5716819	28.0
748-NAT-NB-VC-052	403536	5715780	26.0
748-NAT-NB-VC-053	402683	5714039	30.0
748-NAT-NB-VC-054	401776	5712188	30.0
748-NAT-NB-VC-055A	401331	5711276	28.0
748-NAT-NB-VC-056	400227	5709139	25.0
748-NAT-NB-VC-057	399584	5707828	23.0
748-NAT-NB-VC-058	400097	5706548	22.0
748-NAT-NB-VC-059	399972	5704733	21.0
748-NAT-NB-VC-060	399846	5702932	23.0
748-NAT-NB-VC-061	399727	5701283	22.0
748-NAT-NB-VC-062A	399606	5699519	23.0
748-NAT-NB-VC-063	399727	5697762	20.0
748-NAT-NB-VC-064	399873	5696774	20.0
748-NAT-NB-VC-065	400166	5694791	19.0
748-NAT-NB-VC-066	400142	5692539	16.0
748-NAT-NB-VC-067	399798	5692062	15.0

Hole ID	ETRS89 UTM31N		Elevation (m OD)*
	Easting (m)	Northing (m)	
748-NAT-NB-VC-068	398891	5690693	13.0
748-NAT-NB-VC-069	398052	5689049	11.0
748-NAT-NB-VC-070A	397668	5687467	13.0
748-NAT-NB-VC-071A	397041	5685560	17.0
748-NAT-NB-VC-073	394487	5685006	12.0
748-NAT-NB-VC-075	392365	5684743	14.0

Annex 4.7.A.5: Stage 1 Geotechnical Review

Hole ID	Depth from (m)	Depth to (m)	Description	Interpretation/ Unit	Priority
748-NAT-NB-VC-S6-005	0	0.86	Soft slightly sandy silty clay with thick laminae of sand and thin lamination of fibrous organic material	Alluvium - fine grained organic	Medium
748-NAT-NB-VC-S6-005	0.86	1.52	Silty sand with thick laminae to very thin beds of soft slightly sandy silty clay	Alluvium - fine grained minerogenic	Medium
748-NAT-NB-VC-S6-005	1.52	1.74	Slightly silty sand with thick laminae of silty clayey sand and shell fragments	Alluvium - fine grained minerogenic	Medium
748-NAT-NB-VC-S6-005	1.74	2.16	Firm dark brown peat	Peat	High
748-NAT-NB-VC-S6-005	2.16	3.09	Silty sand with occasional pockets of fibrous organic material	Shallow marine to coastal	Medium
748-NAT-NB-VC-S6-005	3.09	3.24	Soft slightly sandy silty clay with occasional fibrous organic material	Shallow marine to coastal	Medium
748-NAT-NB-VC-S6-005	3.24	3.76	Dense greenish grey silty sand with shell fragments	Shallow marine to coastal	Medium
748-NAT-NB-VC-S6-003	0	1.37	Slightly silty sand with thin to thick laminae of sandy silty clay	Shallow marine to coastal	Medium
748-NAT-NB-VC-S6-003	1.37	2.06	Soft sandy silty clay with thin to thick laminae of silty sand	Shallow marine to coastal	Medium
748-NAT-NB-VC-S6-003	2.06	2.54	Silty sand with thin to thick laminae of sandy silty clay	Shallow marine to coastal	Medium
748-NAT-NB-VC-S6-003	2.54	3.55	Very soft sandy silty clay with thin to thick laminae of silty sand	Shallow marine to coastal	Medium
748-NAT-NB-VC-S6-003	3.55	3.71	Silty sand with shell fragments	Shallow marine to coastal	Medium

Hole ID	Depth from (m)	Depth to (m)	Description	Interpretation/ Unit	Priority
748-NAT-NB-VC-S6-003	3.71	4.1	Green thickly laminated sandy silt	Shallow marine to coastal	Medium
748-NAT-NB-VC-005	0	0.86	Soft sandy silty clay with organic fragments	Alluvium - fine grained organic	Medium
748-NAT-NB-VC-005	0.86	4.49	Slightly silty sand with shell fragments and thin to thick laminae of organic silty clay	Shallow marine to coastal	Medium
748-NAT-NB-VC-005	4.49	4.81	Silty sand with shell fragments	Shallow marine to coastal	Medium
748-NAT-NB-VC-007	0	0.38	Very soft silty clay	Alluvium - fine grained minerogenic	Medium
748-NAT-NB-VC-007	0.38	2.51	Soft slightly sandy silty clay with thin to thick silt laminae	Alluvium - fine grained minerogenic	Medium
748-NAT-NB-VC-007	2.51	2.98	Soft slightly sandy silty clay with thick laminae of sand and shell fragments	Alluvium - fine grained minerogenic	Medium
748-NAT-NB-VC-007	2.98	3.93	Soft slightly sandy silty clay with thin laminae of silty sand	Alluvium - fine grained minerogenic	Medium
748-NAT-NB-VC-007	3.93	4.28	Slightly sandy silt with a very thin bed of silty clay	Alluvium - fine grained minerogenic	Medium
748-NAT-NB-VC-008A	0	0.18	Very soft silty clay	Alluvium - fine grained minerogenic	Medium
748-NAT-NB-VC-008A	0.18	1.65	Very soft slightly sandy silty clay with thick laminae and thin beds of shelly sand	Alluvium - fine grained minerogenic	Medium
748-NAT-NB-VC-008A	1.65	2.03	Firm slightly sandy silty clay with a pocket of organic matter	Alluvium - fine grained minerogenic	Medium
748-NAT-NB-VC-008A	2.03	3.44	Firm slightly sandy silty clay with thin laminae of silty sand	Alluvium - fine grained minerogenic	Medium
748-NAT-NB-VC-008A	3.44	3.92	Silty sand with shell fragments	Shallow marine to coastal	Medium

Hole ID	Depth from (m)	Depth to (m)	Description	Interpretation/ Unit	Priority
748-NAT-NB-VC-008A	3.92	4.13	Slightly silty sand with many shell fragments	Shallow marine to coastal	Medium
748-NAT-NB-VC-009	0	1.08	Soft slightly sandy silty clay with thin laminae of silty sand	Alluvium - fine grained minerogenic	Medium
748-NAT-NB-VC-009	1.08	2.83	Firm slightly sandy silty clay with thick laminae to thin beds of silty sand	Alluvium - fine grained minerogenic	Medium
748-NAT-NB-VC-009	2.83	4.61	Slightly silty sand with many shell fragments	Oxidised shallow marine sand	Low
748-NAT-NB-VC-009	4.61	5.41	Stiff silty clay with gravel size mudstone	Bedrock	Low
748-NAT-NB-VC-011	0	0.89	Silty gravelly sand with shell fragments	Shallow marine to coastal	Medium
748-NAT-NB-VC-011	0.89	3.94	Silty sand with many shell fragments	Shallow marine to coastal	Medium
748-NAT-NB-VC-011	3.94	5.47	Light greenish grey clayey very silty sand with shell fragments	Shallow marine to coastal	Medium
748-NAT-NB-VC-012A	0	0.14	Slightly silty gravelly sand with shell fragments	Shallow marine to coastal	Medium
748-NAT-NB-VC-012A	0.14	3.99	Greenish grey silty sand with shell fragments	Shallow marine to coastal	Medium
748-NAT-NB-VC-012A	3.99	5.04	Very stiff slightly sandy silty clay	Bedrock	Low
748-NAT-NB-VC-013A	0	0.2	Silty very sandy gravel with shell fragments	Seabed sediments	Low
748-NAT-NB-VC-013A	0.2	2.98	Very stiff slightly sandy silty clay with few medium gravel sized siltstone	Bedrock	Low
748-NAT-NB-VC-014	0	2.02	Slightly silty gravelly sand with shell fragments	Seabed sediments	Low

Hole ID	Depth from (m)	Depth to (m)	Description	Interpretation/ Unit	Priority
748-NAT-NB-VC-014	2.02	4.6	Very stiff sandy silty clay with siltstone	Bedrock	Low
748-NAT-NB-VC-015	0	0.28	Slightly silty gravelly sand with shell fragments	Seabed sediments	Low
748-NAT-NB-VC-015	0.28	2.74	Very stiff slightly sandy silty clay with planar fissures	Bedrock	Low
748-NAT-NB-VC-016	0	0.21	Very stiff slightly sandy slightly gravelly silty clay with shell fragments	Reworked/ weathered bedrock	Low
748-NAT-NB-VC-016	0.21	5.02	Very stiff slightly sandy silty clay with planar fissures	Bedrock	Low
748-NAT-NB-VC-017	0	0.12	Orangish brown slightly silty very gravelly sand with shell fragments	Seabed sediments	Low
748-NAT-NB-VC-017	0.12	3.16	Very stiff slightly sandy silty clay	Bedrock	Low
748-NAT-NB-VC-018	0	0.08	Orangish brown silty gravelly sand with shell fragments	Seabed sediments	Low
748-NAT-NB-VC-018	0.08	2.11	Very stiff slightly sandy silty clay with planar fissures	Bedrock	Low
748-NAT-NB-VC-018	2.11	3.6	Very stiff slightly sandy silty clay	Bedrock	Low
748-NAT-NB-VC-019	0	0.07	Firm dark brown slightly sandy and gravelly silty clay with shell fragments	Reworked/ weathered bedrock	Low
748-NAT-NB-VC-019	0.07	5.05	Very stiff slightly sandy silty clay	Bedrock	Low
748-NAT-NB-VC-020	0	0.19	Orangish brown slightly silty and clayey gravelly sand	Seabed sediments	Low
748-NAT-NB-VC-020	0.19	3.36	Very stiff slightly sandy silty clay	Bedrock	Low

Hole ID	Depth from (m)	Depth to (m)	Description	Interpretation/ Unit	Priority
748-NAT-NB-VC-021	0	0.58	Slightly gravelly silty sand with shell fragments	Seabed sediments	Low
748-NAT-NB-VC-021	0.58	1.47	Slightly silty very gravelly sand with shell fragments	Seabed sediments	Low
748-NAT-NB-VC-021	1.47	1.64	Soft slightly sandy silty clay with thin laminations of organic matter	Alluvium - fine grained organic	Medium
748-NAT-NB-VC-021	1.64	1.76	Silty sand with shell fragments	Oxidised shallow marine sand	Low
748-NAT-NB-VC-021	1.76	4.93	Slightly gravelly silty sand with shell fragments	Oxidised shallow marine sand	Low
748-NAT-NB-VC-021	4.93	5.48	Very stiff slightly gravelly sandy silty clay	Bedrock	Low
748-NAT-NB-VC-022	0	0.48	Very soft slightly sandy silty clay	Alluvium - fine grained minerogenic	Medium
748-NAT-NB-VC-022	0.48	1.14	Very clayey sand	Shallow marine to coastal	Medium
748-NAT-NB-VC-022	1.14	1.87	Silty sand with very thin beds of soft organic silty clay	Shallow marine to coastal	Medium
748-NAT-NB-VC-022	1.87	1.93	Silty sand with shell fragments	Shallow marine to coastal	Medium
748-NAT-NB-VC-022	1.93	4.4	Very stiff slightly sandy silty clay	Bedrock	Low
748-NAT-NB-VC-023	0	0.2	Firm slightly sandy silty clay with shell fragments	Reworked/weathered bedrock	Low
748-NAT-NB-VC-023	0.2	3.2	Very stiff slightly sandy silty clay	Bedrock	Low
748-NAT-NB-VC-024a	0	0.09	Orangish brown sandy gravel	Seabed sediments	Low

Hole ID	Depth from (m)	Depth to (m)	Description	Interpretation/ Unit	Priority
748-NAT-NB-VC-024a	0.09	4.11	Stiff slightly sandy silty clay	Bedrock	Low
748-NAT-NB-VC-025b	0	0.05	Orangish brown clayey slightly gravelly sand with shell fragments	Seabed sediments	Low
748-NAT-NB-VC-025b	0.05	4.84	Very stiff slightly sandy silty clay with siltstone	Bedrock	Low
748-NAT-NB-VC-026A	0	0.02	Orangish brown gravel	Seabed sediments	Low
748-NAT-NB-VC-026A	0.02	4.76	Very stiff slightly sandy silty clay with mudstone	Bedrock	Low
748-NAT-NB-VC-027A	0	0.02	Orangish brown slightly sandy gravel with shell fragments	Seabed sediments	Low
748-NAT-NB-VC-027A	0.02	4.7	Very stiff slightly sandy silty clay	Bedrock	Low
748-NAT-NB-VC-028	0	0.02	Orangish brown slightly sandy gravel with shell fragments	Seabed sediments	Low
748-NAT-NB-VC-028	0.02	3.09	Very stiff slightly sandy silty clay	Bedrock	Low
748-NAT-NB-VC-029	0	0.17	Orangish brown silty very gravelly sand with shell fragments	Seabed sediments	Low
748-NAT-NB-VC-029	0.17	2.73	Stiff slightly sandy silty clay	Bedrock	Low
748-NAT-NB-VC-030	0	0.12	Silty very gravelly sand with shell fragments	Seabed sediments	Low
748-NAT-NB-VC-030	0.12	4.66	Very stiff slightly sandy silty clay	Bedrock	Low
748-NAT-NB-VC-031	0	0.15	Orangish brown slightly sandy gravel with shell fragments	Seabed sediments	Low

Hole ID	Depth from (m)	Depth to (m)	Description	Interpretation/ Unit	Priority
748-NAT-NB-VC-031	0.15	3.73	Stiff slightly sandy silty clay	Bedrock	Low
748-NAT-NB-VC-032	0	0.25	Very stiff slightly gravelly sandy silty clay with shell fragments	Reworked/ weathered bedrock	Low
748-NAT-NB-VC-032	0.25	4.07	Very stiff slightly sandy silty clay	Bedrock	Low
748-NAT-NB-VC-033	0	0.18	Very silty gravelly sand with shell fragments	Seabed sediments	Low
748-NAT-NB-VC-033	0.18	2.66	Very stiff slightly sandy silty clay	Bedrock	Low
748-NAT-NB-VC-034	0	3.9	Very stiff silty clay	Bedrock	Low
748-NAT-NB-VC-035	0	0.05	Orangish brown slightly silty gravelly sand with shell fragments	Seabed sediments	Low
748-NAT-NB-VC-035	0.05	3.63	Very stiff slightly sandy silty clay	Bedrock	Low
748-NAT-NB-VC-036	0	0.22	Slightly silty gravelly sand with shell fragments	Seabed sediments	Low
748-NAT-NB-VC-036	0.22	4.07	Stiff to very stiff slightly sandy silty clay	Bedrock	Low
748-NAT-NB-VC-037	0	0.11	Clayey gravelly sand with shell fragments	Seabed sediments	Low
748-NAT-NB-VC-037	0.11	4.14	Very stiff slightly sandy silty clay	Bedrock	Low
748-NAT-NB-VC-038	0	0.16	Very soft sandy silty clay	Alluvium - fine grained minerogenic	Medium
748-NAT-NB-VC-038	0.16	0.24	Silty sand with shell fragments	Shallow marine to coastal	Medium

Hole ID	Depth from (m)	Depth to (m)	Description	Interpretation/ Unit	Priority
748-NAT-NB-VC-038	0.24	4	Very stiff slightly sandy silty clay	Bedrock	Low
748-NAT-NB-VC-039	0	0.16	Firm slightly sandy silty clay with pockets of gravelly sand and shell fragments	Reworked/ weathered bedrock	Low
748-NAT-NB-VC-039	0.16	3.39	Very stiff slightly sandy silty clay	Bedrock	Low
748-NAT-NB-VC-040	0	0.8	Silty very sandy gravel with shell fragments	Fluvial gravel	Low
748-NAT-NB-VC-040	0.8	1.82	Very sandy gravel with shell fragments	Fluvial gravel	Low
748-NAT-NB-VC-040	1.82	3.82	Slightly silty very sandy gravel with shell fragments	Fluvial gravel	Low
748-NAT-NB-VC-040	3.82	4.04	Very stiff slightly sandy silty clay	Bedrock	Low
748-NAT-NB-VC-041	0	0.12	Very soft slightly gravelly sandy silty clay with few shell fragments	Reworked/ weathered bedrock	Low
748-NAT-NB-VC-041	0.12	0.18	Slightly clayey sandy coarse gravel of siltstone	Reworked/ weathered bedrock	Low
748-NAT-NB-VC-041	0.18	4.8	Very stiff brown slightly sandy silty clay	Bedrock	Low
748-NAT-NB-VC-042	0	0.18	Orangish brown silty gravelly sand with shell fragments	Seabed sediments	Low
748-NAT-NB-VC-042	0.18	3.61	Stiff slightly sandy silty clay	Bedrock	Low
748-NAT-NB-VC-043	0	0.22	Slightly silty very sandy gravel with few shell fragments and few pockets of silty sand	Seabed sediments	Low
748-NAT-NB-VC-043	0.22	0.45	Slightly silty sand with many shell fragments	Seabed sediments	Low

Hole ID	Depth from (m)	Depth to (m)	Description	Interpretation/ Unit	Priority
748-NAT-NB-VC-043	0.45	0.98	Silty gravelly sand with shell fragments	Seabed sediments	Low
748-NAT-NB-VC-043	0.98	3.82	Orangish brown slightly silty sand with few shell fragments	Oxidised shallow marine sand	Low
748-NAT-NB-VC-043	3.82	4.71	Orangish brown silty slightly gravelly sand with many fine shell fragments	Oxidised shallow marine sand	Low
748-NAT-NB-VC-043	4.71	5.53	Very stiff slightly sandy silty clay	Bedrock	Low
748-NAT-NB-VC-044	0	0.69	Brown silty gravelly sand with shell fragments	Seabed sediments	Low
748-NAT-NB-VC-044	0.69	3.77	Stiff to very stiff slightly sandy silty clay	Bedrock	Low
748-NAT-NB-VC-045	0	0.15	Silty gravelly sand with shell fragments	Seabed sediments	Low
748-NAT-NB-VC-045	0.15	3.17	Very stiff slightly sandy silty clay	Bedrock	Low
748-NAT-NB-VC-046A	0	0.09	Silty gravelly sand	Seabed sediments	Low
748-NAT-NB-VC-046A	0.09	0.32	Dark brownish grey slightly gravelly very clayey sand with few organic fragments	Alluvium - fine grained organic	Medium
748-NAT-NB-VC-046A	0.32	1.25	Slightly sandy silty clay with few fine shell fragments	Alluvium - fine grained organic	Medium
748-NAT-NB-VC-046A	1.25	1.51	Slightly sandy organic silt with fine bivalves	Alluvium - fine grained organic	Medium
748-NAT-NB-VC-046A	1.51	2.23	Slightly sandy clayey silt with thin streaks of organic matter	Alluvium - fine grained organic	Medium
748-NAT-NB-VC-046A	2.23	2.36	Very clayey slightly gravelly sand with many fine shell fragments	Reworked/weathered bedrock	Low

Hole ID	Depth from (m)	Depth to (m)	Description	Interpretation/ Unit	Priority
748-NAT-NB-VC-046A	2.36	3.96	Very stiff silty clay	Bedrock	Low
748-NAT-NB-VC-047	0	0.07	Orangish brown slightly silty gravelly sand with shell fragments	Seabed sediments	Low
748-NAT-NB-VC-047	0.07	4.72	Firm to very stiff silty clay	Bedrock	Low
748-NAT-NB-VC-048	0	0.16	Silty gravelly sand with shell fragments	Seabed sediments	Low
748-NAT-NB-VC-048	0.16	4.63	Very stiff slightly sandy silty clay	Bedrock	Low
748-NAT-NB-VC-049	0	0.1	Slightly gravelly silty sand with shell fragments	Seabed sediments	Low
748-NAT-NB-VC-049	0.1	3.37	Firm to very stiff slightly sandy silty clay	Bedrock	Low
748-NAT-NB-VC-050	0	0.46	Orangish brown silty gravelly sand with coarse shell fragments	Seabed sediments	Low
748-NAT-NB-VC-050	0.46	2.93	Light greyish brown slightly gravelly silty sand with shell fragments	Seabed sediments	Low
748-NAT-NB-VC-050	2.93	3.5	Low strength grey slightly sandy silty clay with thin to thick laminae of black organic silty clay and bivalves	Alluvium - fine grained organic	Medium
748-NAT-NB-VC-050	3.5	4.04	Light orangish brown slightly sandy clayey silt	Alluvium - fine grained minerogenic	Medium
748-NAT-NB-VC-050	4.04	4.39	Greenish brown silty sand with few shell fragments	Shallow marine to coastal	Medium
748-NAT-NB-VC-051	0	0.47	Slightly silty gravelly sand with shell fragments	Seabed sediments	Low

Hole ID	Depth from (m)	Depth to (m)	Description	Interpretation/ Unit	Priority
748-NAT-NB-VC-051	0.47	0.61	Soft slightly sandy silty clay with thin partings of silt	Alluvium - fine grained minerogenic	Medium
748-NAT-NB-VC-051	0.61	1.69	Silty sand with shell fragments	Shallow marine to coastal	Medium
748-NAT-NB-VC-051	1.69	3.9	Silty sand with shell fragments and thick laminae of silty clay	Shallow marine to coastal	Medium
748-NAT-NB-VC-051	3.9	4.48	Silty sand with few shell fragments	Shallow marine to coastal	Medium
748-NAT-NB-VC-052	0	0.48	Orangish brown gravelly silty sand with many shell fragments	Seabed sediments	Low
748-NAT-NB-VC-052	0.48	1.1	Brown slightly silty sand with shell fragments	Shallow marine to coastal	Medium
748-NAT-NB-VC-052	1.1	3.91	Brownish grey silty slightly gravelly sand with shell fragments and very thin beds of soft silty clay	Shallow marine to coastal	Medium
748-NAT-NB-VC-052	3.91	5.29	Dense grey very silty sand with fine shell fragments	Shallow marine to coastal	Medium
748-NAT-NB-VC-053	0	0.29	Orangish brown silty sand with shell fragments	Seabed sediments	Low
748-NAT-NB-VC-053	0.29	0.79	Greyish brown silty sand with many shell fragments and pockets of black silty sand	Shallow marine to coastal	Medium
748-NAT-NB-VC-053	0.79	3.44	Brownish grey silty sand with many fine to medium shell fragments	Shallow marine to coastal	Medium
748-NAT-NB-VC-053	3.44	5.53	Grey silty sand with few shell fragments with thick laminae of silty clay	Shallow marine to coastal	Medium
748-NAT-NB-VC-054	0	0.75	Orangish brown silty sand with shell fragments	Seabed sediments	Low
748-NAT-NB-VC-054	0.75	0.97	Brownish grey silty sand with shell fragments	Shallow marine to coastal	Medium

Hole ID	Depth from (m)	Depth to (m)	Description	Interpretation/ Unit	Priority
748-NAT-NB-VC-054	0.97	5.06	Slightly silty sand with thick laminae of silty clay	Shallow marine to coastal	Medium
748-NAT-NB-VC-055A	0	0.45	Dark grey soft silty clay with thin laminae of black organic silt and shell fragments	Alluvium - fine grained organic	Medium
748-NAT-NB-VC-055A	0.45	0.58	Slightly silty sand with fine shell fragments	Shallow marine to coastal	Medium
748-NAT-NB-VC-055A	0.58	4.41	Brownish grey silty sand with thin to thick laminae of silty clay	Shallow marine to coastal	Medium
748-NAT-NB-VC-056	0	0.4	Dark grey silty sand with thin beds of silty clay	Shallow marine to coastal	Medium
748-NAT-NB-VC-056	0.4	3.42	Greyish brown silty sand with shell fragments and thin beds of silty clay	Shallow marine to coastal	Medium
748-NAT-NB-VC-056	3.42	4.14	Silty sand with fine to medium shell fragments	Shallow marine to coastal	Medium
748-NAT-NB-VC-056	4.14	4.24	Grey slightly sandy clayey silt	Reworked/weathered bedrock	Low
748-NAT-NB-VC-056	4.24	5.53	Very stiff slightly sandy silty clay	Bedrock	Low
748-NAT-NB-VC-057	0	1.92	Dark greyish black silty sand with shell fragments	Shallow marine to coastal	Medium
748-NAT-NB-VC-057	1.92	2.76	Grey silty sand	Shallow marine to coastal	Medium
748-NAT-NB-VC-057	2.76	4.41	Very stiff slightly sandy silty clay	Bedrock	Low
748-NAT-NB-VC-058	0	0.97	Orangish brown silty sand with a very thin bed of black silty sand	Shallow marine to coastal	Medium
748-NAT-NB-VC-058	0.97	1.43	Black silty fine sand	Shallow marine to coastal	Medium

Hole ID	Depth from (m)	Depth to (m)	Description	Interpretation/ Unit	Priority
748-NAT-NB-VC-058	1.43	1.86	Light greyish brown silty sand with shell fragments	Shallow marine to coastal	Medium
748-NAT-NB-VC-058	1.86	5.53	Grey sandy silt with fine shell fragments and pockets of organic matter	Reworked/ weathered bedrock	Low
748-NAT-NB-VC-059	0	1.95	Dark greyish black silty sand with shell fragments	Shallow marine to coastal	Medium
748-NAT-NB-VC-059	1.95	3.8	Brownish grey silty sand	Shallow marine to coastal	Medium
748-NAT-NB-VC-059	3.8	4.43	Greyish brown silty sand with thick laminations	Shallow marine to coastal	Medium
748-NAT-NB-VC-059	4.43	5.53	Grey slightly sandy clayey silt with thin beds of silty sand and bivalves	Shallow marine to coastal	Medium
748-NAT-NB-VC-060	0	1.96	Very silty sand with shell fragments and bivalves	Seabed sediments	Low
748-NAT-NB-VC-060	1.96	4.16	Dark brown fine silty sand with shell fragments	Shallow marine to coastal	Medium
748-NAT-NB-VC-060	4.16	4.55	Soft dark blackish grey silty clay	Shallow marine to coastal	Medium
748-NAT-NB-VC-060	4.55	5.22	Light brown soft slightly sandy silty clay with organic debris	Shallow marine to coastal	Medium
748-NAT-NB-VC-060	5.22	5.55	Brown mottled greenish brown silty sand	Shallow marine to coastal	Medium
748-NAT-NB-VC-061	0	0.23	Silty sand with shell fragments	Seabed sediments	Low
748-NAT-NB-VC-061	0.23	2.71	Firm slightly sandy silty clay with few shell fragments	Alluvium - fine grained minerogenic	Medium
748-NAT-NB-VC-061	2.71	3.05	Dark brown organic silty clay	Alluvium - fine grained organic	Medium

Hole ID	Depth from (m)	Depth to (m)	Description	Interpretation/ Unit	Priority
748-NAT-NB-VC-061	3.05	3.55	Light greyish brown slightly sandy clayey silt with thin laminae of organic matter	Alluvium - fine grained organic	Medium
748-NAT-NB-VC-061	3.55	4.27	Greenish brown silty sand	Non-marine sand	Medium
748-NAT-NB-VC-062A	0	1.35	Orangish brown silty sand with occasional pockets of sand and clay	Non-marine sand	Medium
748-NAT-NB-VC-062A	1.35	2.26	Light brownish grey silty sand with very thin laminae of dark grey sand	Non-marine sand	Medium
748-NAT-NB-VC-062A	2.26	3.15	Grey silty sand	Non-marine sand	Medium
748-NAT-NB-VC-062A	3.15	4	Dark grey silty sand with many fine shell fragments and abundant bivalves	Shallow marine to coastal	Medium
748-NAT-NB-VC-063	0	4.55	Structureless chalk	Bedrock	Low
748-NAT-NB-VC-064	0	5.14	Structureless chalk	Bedrock	Low
748-NAT-NB-VC-065	0	0.15	Dark greyish brown slightly gravelly silty sand with shell fragments	Seabed sediments	Low
748-NAT-NB-VC-065	0.15	0.96	Light greenish grey sandy gravel	Reworked/wethered bedrock	Low
748-NAT-NB-VC-065	0.96	5.05	Structureless chalk	Bedrock	Low
748-NAT-NB-VC-066	0	0.68	Dark orangish brown silty gravelly sand with few shell fragments	Seabed sediments	Low
748-NAT-NB-VC-066	0.68	1.45	Grey and orangish brown gravelly sandy silt	Reworked/wethered bedrock	Low
748-NAT-NB-VC-066	1.45	4.8	Structureless chalk	Bedrock	Low

Hole ID	Depth from (m)	Depth to (m)	Description	Interpretation/ Unit	Priority
748-NAT-NB-VC-067	0	0.13	Brown silty sandy gravel with shell fragments	Seabed sediments	Low
748-NAT-NB-VC-067	0.13	1.66	Very silty gravelly sand	Reworked/ weathered bedrock	Low
748-NAT-NB-VC-067	1.66	4.9	Structureless chalk	Bedrock	Low
748-NAT-NB-VC-068	0	1.04	Orangish brown silty sandy gravel with shell fragments	Seabed sediments	Low
748-NAT-NB-VC-068	1.04	4.69	Structureless chalk	Bedrock	Low
748-NAT-NB-VC-069	0	0.91	Greyish brown silty sand with few shell fragments	Seabed sediments	Low
748-NAT-NB-VC-069	0.91	1.37	Orangish brown silty sandy gravel with shell fragments	Seabed sediments	Low
748-NAT-NB-VC-069	1.37	5.09	Structureless chalk	Bedrock	Low
748-NAT-NB-VC-070A	0	0.51	Silty sandy coarse gravel	Seabed sediments	Low
748-NAT-NB-VC-071A	0	0.2	Brown medium to coarse gravel	Seabed sediments	Low
748-NAT-NB-VC-073	0	0.45	Dark brown silty sandy fine to coarse gravel with shell fragments	Seabed sediments	Low
748-NAT-NB-VC-073	0.45	5.5	Structureless chalk	Bedrock	Low
748-NAT-NB-VC-075	0	0.43	Orangish grey silty very gravelly sand with few shell fragments	Seabed sediments	Low
748-NAT-NB-VC-075	0.43	3.26	Very stiff slightly sandy silty clay	Bedrock	Low

Annex 4.7.A.6: Seabed Features of Archaeological Potential

Notes: Co-ordinates are in ETRS89 UTM31N; positional accuracy estimated $\pm 10\text{m}$

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7002	Wreck	406023	5784883	A1	10.8	8.4	0.4	-	An unrecorded wreck visible as a distinct and compact group of elongate, rounded and angular dark reflectors with bright shadows. The feature is distinct to the surrounding seabed and is situated in an area of seabed with slight sand mega ripples, further objects may be buried. The wreck appears very broken up and degraded with no distinguishable features, however, appears highly anthropogenic. This position 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. The wreck is situated 20.0m south-west of a recorded wreck in the UKHO records, a modern fishing vessel not covered by any of the 2021 geophysical datasets and not included in this gazetteer. The condition of the wreck suggests it is unlikely to be modern and related to this record.	SSS	-
7003	Magnetic	405963	5784650	A2_h	-	-	-	286	A large, sharp symmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7004	Magnetic	405983	5784555	A2_h	-	-	-	167	A large, sharp symmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7001	Mound	406039	5784891	A2_h	2.1	1.2	0.6	-	A distinct mound with steeply sloping sides and a flat peak, the feature is distinct to the featureless seabed. The feature extends beyond the edge of the data range and so the dimensions should be considered a minimum. No anomalous features were identified in the SSS or Mag. data at this location, however it is situated at the edge of the SSS data extents and close to a charted cable, that may be masking further Mag. anomalies. May be associated with the position of a UKHO recorded wreck Ocean Pride, a modern fishing vessel, situated 10.0m north, not included in this gazetteer, however the records location is not covered by any of the 2021 datasets and so this cannot be confirmed. Interpreted as a possible natural feature or may be possible debris.	MBES	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7005	Dark reflector	405983	5784506	A2_l	5.6	0.5	0.1	-	A distinct curvilinear dark reflector with a short bright shadow. Also identified in the MBES dataset a short linear mound with gently sloping sides, orientated approximately north to south and situated in a slight depression. May relate to nearby features 7006 - 7010 . This location was not directly covered by the Mag. data so it is not possible to ascertain whether ferrous material is present. Interpreted as a possible natural feature or may be possible debris.	SSS, MBES	-
7006	Debris	405977	5784489	A2_h	6.2	0.2	0.3	-	A distinct curvilinear dark reflector with a bright shadow across its length, may be two thin curvilinear objects that splay out at one end and attached to one another. The feature appears anthropogenic and may be related to nearby objects 7005, 7007 - 7010. No anomalous features were identified in the MBES data at this location. This position 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.	SSS	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7007	Debris	405977	5784487	A2_h	1.2	0.4	0.1	-	A short and thin curvilinear dark reflector with a bright shadow. Possibly two objects or a single object curved back on itself. Possibly related to nearby features 7005, 7006, 7008 - 7010 . No anomalous features were identified in the MBES data at this location. This position 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.	SSS	-
7008	Dark reflector	405976	5784485	A2_l	2.3	0.3	0.1	-	An indistinct elongate dark reflector with a faint shadow along its length. Possibly related to nearby objects 7005 - 7007, 7009 and 7010 . No anomalous features were identified in the MBES data at this location. This position 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 may be possible debris.	SSS	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7009	Seabed disturbance	405995	5784492	A2_l	4.6	3.5	0.2	-	An indistinct group of dark reflectors in a slight depression or area of disturbed seabed, two curvilinear dark reflectors and one rounded dark reflector are visible, the larger of the curvilinear measures 3.9 x 0.7. May relate to nearby features 7005 - 7008 and 7010 . Situated at the southern edge of a raised possible natural feature in the MBES data. This position 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.	SSS	-
7010	Debris	405996	5784503	A2_h	2.7	2.0	0.1	-	A distinct linear dark reflector with a bright shadow and fainter elongate dark reflector attached. The larger object measures 2.4 x 0.3m and the smaller object measures 1.9 x 0.2m. May relate to nearby features 7005 - 7009 . Visible in the MBES dataset as an uneven area of seabed. This position 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.	SSS	-
7011	Magnetic	405963	5784460	A2_h	-	-	-	313	A large, sharp asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7012	Magnetic	406028	5784447	A2_l	-	-	-	18	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7013	Magnetic	406070	5784455	A2_h	-	-	-	526	A very large, sharp asymmetric dipole with peak and trough on one profile line, visible on multiple profiles. No anomalous features were identified in the MBES or SSS data at this location, although this position was only partially covered by the MBES dataset. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7014	Magnetic	406082	5784517	A2_h	-	-	-	88	A medium, sharp asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7015	Magnetic	406150	5784657	A2_l	-	-	-	21	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7016	Magnetic	406158	5784579	A2_h	-	-	-	500	A large, sharp asymmetric dipole with peak and trough on one profile line in the Mag. data, also visible on other profile lines. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7017	Magnetic	406168	5784647	A2_h	-	-	-	71	A medium, sharp asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7018	Magnetic	406192	5784680	A2_h	-	-	-	165	A large, sharp asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7019	Magnetic	406207	5784621	A2_l	-	-	-	23	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7020	Magnetic	406255	5784695	A2_l	-	-	-	22	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7021	Magnetic	406307	5784582	A2_l	-	-	-	20	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7022	Magnetic	406323	5784703	A2_l	-	-	-	8	A small, broad symmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7023	Magnetic	406328	5784687	A2_l	-	-	-	10	A small, broad asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7024	Magnetic	406338	5784762	A2_h	-	-	-	47	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7025	Magnetic	406356	5784605	A2_l	-	-	-	13	A small negative monopole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7026	Magnetic	406368	5784692	A2_l	-	-	-	11	A small, broad asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7027	Magnetic	406539	5784803	A2_l	-	-	-	20	A small, broad asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7028	Debris	406799	5784706	A2_h	1.4	0.7	0.3	-	A distinct slightly curvilinear dark reflector with a bright shadow variable shadow, possibly suggesting uneven height. There is an indistinct linear feature extending to the SSE and some scouring, the feature is situated in an area of sand ripples and it may be partially buried. No anomalous features were identified in the MBES or Mag. data at this location. Interpreted as possible non-ferrous debris	SSS	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7029	Magnetic	406897	5784619	A2_h	-	-	-	36	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7030	Magnetic	407001	5784797	A2_l	-	-	-	8	A small, broad asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7031	Magnetic	407036	5784680	A2_h	-	-	-	44	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7032	Magnetic	407143	5784621	A2_l	-	-	-	13	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7033	Magnetic	407160	5784710	A2_l	-	-	-	12	A small, broad asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7034	Magnetic	407424	5784759	A2_l	-	-	-	11	A small, broad asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7035	Magnetic	407516	5784764	A2_l	-	-	-	6	A small, broad asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7036	Magnetic	407624	5784594	A2_h	-	-	-	43	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7037	Magnetic	407860	5784506	A2_h	-	-	-	35	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7038	Magnetic	407866	5784462	A2_I	-	-	-	17	A small, broad asymmetric dipole with peak and trough on one profile line in the Mag. data, also visible on adjacent line. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7039	Magnetic	407899	5784659	A2_I	-	-	-	14	A small, broad asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7040	Magnetic trend	407960	5784480	A2_I	220.0	-	-	85	A linear trend of eight Mag. anomalies with amplitudes varying from 6nT to 85nT in the Mag. data. The trend is orientated NNE to SSW. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7041	Magnetic	408011	5784373	A2_I	-	-	-	14	A small, broad asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7042	Magnetic	408225	5784555	A2_h	-	-	-	260	A large, sharp asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7043	Magnetic	408307	5784505	A2_h	-	-	-	43	A small, sharp asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7044	Magnetic	408591	5784402	A2_h	-	-	-	79	A medium, sharp asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7045	Dark reflector	408645	5784334	A2_l	2.4	0.1	0.1	-	A distinct, slightly curvilinear dark reflector with a short shadow. Situated on an uneven area of seabed, and relatively isolated. No anomalous features were identified in the MBES or Mag. data at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris	SSS	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7046	Magnetic	409486	5785477	A2_l	-	-	-	10	A small, broad asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7047	Dark reflector	409582	5785380	A2_h	2.9	2.4	2.8	-	A distinct sub-rounded dark reflector with a large, bright shadow and significant height. There is some possible scour to the south-east and the feature is situated in an area of mobile sediments. Visible as a large depression or scour in the MBES data, however the feature is not completely covered by the MBES data. This position was not directly covered by the Mag. dataset so it is not possible to ascertain whether ferrous material is present. May represent a natural feature or may represent possible debris.	SSS	-
7048	Magnetic	409181	5784294	A2_l	-	-	-	8	A small, broad symmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7049	Magnetic	409184	5784207	A2_I	-	-	-	12	A small, broad asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7050	Magnetic	408724	5784153	A2_I	-	-	-	8	A small, broad asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. May be associated with charted cable to the south, however this cannot be confirmed without further investigation. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7051	Magnetic	408920	5784114	A2_I	-	-	-	21	A small symmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. May be associated with charted cable to the south, however this cannot be confirmed without further investigation. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7052	Magnetic	409124	5783930	A2_l	-	-	-	15	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. May be associated with charted cable to the south, however this cannot be confirmed without further investigation. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7053	Magnetic	409096	5783829	A2_l	-	-	-	33	A small symmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. May be associated with the charted cable to the north, however this cannot be confirmed without further investigation. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7054	Magnetic	408332	5783718	A2_h	-	-	-	69	A medium, sharp asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7055	Magnetic	408816	5783589	A2_h	-	-	-	92	A medium symmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7056	Magnetic	408599	5783558	A2_l	-	-	-	5	A small, broad symmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7057	Mound	408563	5783502	A2_l	7.3	2.1	0.2	-	An elongate mound with steep sides and a pointed peak, the feature is situated in a slight depression or seabed disturbance measuring 19.1 x 4.7 x -0.2m and is anomalous to the surrounding seabed. No anomalous features were identified in the SSS data at this location. This location was not directly covered by the Mag. data so it is not possible to ascertain whether ferrous material is present. Interpreted as a possible natural feature or may be possible debris.	MBES	-
7058	Magnetic	408531	5783330	A2_h	-	-	-	56	A medium asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7059	Magnetic	408681	5783137	A2_h	-	-	-	25	A small, broad positive monopole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7060	Recorded wreck	408288	5783064	A3	-	-	-	-	The position of an unknown, recorded wreck in the UKHO database, last surveyed in 2017 and described as a defined wreck that is mostly in one piece, with MBES dimensions of 29.1 x 17.7 x 1.4m, lying 120/300 degrees with scour measuring 64.8m long and 1.1m deep. This position was not directly covered by any of the 2021 geophysical datasets and so it is not possible to comment on its condition. The position is situated outside of the study area, however a recommended exclusion zone may bring it within, and so it has been retained in this gazetteer.	-	UKHO_87913
7061	Magnetic	409410	5782951	A2_l	-	-	-	9	A small, broad asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7062	Magnetic	409650	5782198	A2_h	-	-	-	32	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7063	Magnetic	409889	5781205	A2_h	-	-	-	23	A small, broad symmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7064	Magnetic	409923	5781116	A2_h	-	-	-	30	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7065	Magnetic	409944	5780707	A1	-	-	-	3113	A very large, sharp asymmetric dipole with peak and trough on one profile line in the Mag. data, also visible on adjacent profile. No anomalous features were identified in the SSS or MBES data at this location. Possibly associated with the position of a UKHO and NMHR recorded wreck <i>HMS Dane</i> , a steel trawler with one boiler and single shaft, built in 1913 by Cochrane & Sons Ltd, mined 1915 with 8 crew lost. The wreck was last surveyed in 2016 and no remains were identified in the MBES data and the record was amended to 'dead'. Although no wreck material was identified on the seabed, this anomaly has been classified as A1 due to the potential for the buried remains of the <i>HMS Dane</i> at this location and interpreted as substantial ferrous debris either buried or with no surface expression.	Mag.	UKHO_10317, NMHR_912877

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7066	Magnetic	410256	5780625	A2_h	-	-	-	26	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7067	Magnetic	410190	5780419	A2_h	-	-	-	43	A small positive monopole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7068	Magnetic	410607	5779901	A2_h	-	-	-	38	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7069	Magnetic	410545	5779803	A2_l	-	-	-	25	A small asymmetric dipole with peak and trough on one profile line in the Mag. data, also visible on adjacent profile line. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7070	Magnetic	410180	5779161	A2_I	-	-	-	10	A small, broad asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS data at this location. This location was not directly covered by the MBES data. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7071	Magnetic	410212	5778801	A2_I	-	-	-	20	A small, broad asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7072	Magnetic	410566	5778598	A2_I	-	-	-	10	A small, broad asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7073	Recorded wreck	409983	5778623	A3	-	-	-	-	The position of UKHO recorded wreck <i>Ingstad</i> , a steam ship built in 1910 by Williamson & Son with triple expansion engine, one boiler and single shaft; the ship struck a mine laid by UC7 on 10/12/1915 while on route from Sunderland to Rouen, with one casualty. Last surveyed in 2016 and no remains were location, the record was amended to 'dead'. Also recorded by NMHR as the possible position of the <i>Ingstad</i> . The wreck's position is situated outside of the study area and is not covered by any of the 2021 geophysical datasets, however, as remains have been identified at this position previously it has been retained as a precaution in this gazetteer.	-	UKHO_10306, NMHR_912870
7074	Magnetic	410331	5778413	A2_h	-	-	-	68	A medium positive monopole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7075	Magnetic	409735	5777157	A2_l	-	-	-	15	A small negative monopole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7076	Magnetic	409911	5777057	A2_h	-	-	-	41	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7077	Magnetic	409448	5776635	A2_h	-	-	-	39	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7078	Magnetic	409822	5776336	A2_l	-	-	-	21	A small symmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7079	Magnetic	409591	5776280	A2_l	-	-	-	21	A small negative monopole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7080	Debris field	405146	5780671	A2_h	12.0	6.3	0.3	-	A distinct group of mounds, the north-western feature is a hollow circular mound that measures 4.8 x 4.4 x 0.3m, the objects to the south-east are slightly elongate and appear associated, may be a broken up larger feature. The debris field is situated close to an area of outcropping geology but appears anthropogenic. No anomalous features were identified in the SSS or Mag. data at this location. Interpreted as a possible non-ferrous debris field.	MBES	-
7081	Rope/chain	405107	5780575	A2_l	11.4	0.1	0.1	-	A distinct curvilinear dark reflector with a bright, short shadow across its length. The feature is situated on an uneven area of seabed. No anomalous features were identified in the MBES or Mag. data at this location. Interpreted as a possible length of non-ferrous rope or chain	SSS	-
7082	Seabed disturbance	405019	5780516	A2_l	12.7	7.2	0.3	-	Fairly distinct area of disturbed seabed comprising irregular, elongate and sub-rounded dark reflectors with associated shadows, situated within mobile sediments. The largest discernible object measures 3.9 x 3.1 x 0.3m. No anomalous features were identified in the MBES or Mag. data at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris.	SSS	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7083	Magnetic	404930	5780409	A2_h	-	-	-	122	A large, sharp asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7084	Dark reflector	405169	5780631	A2_l	1.4	0.2	0.1	-	An indistinct, elongate dark reflector with a bright shadow that forms a slight right angle, may be two objects. The feature is distinct to the surrounding seabed and may relate to nearby feature (7085) situated 5.0m south-east. Visible as a low-lying mound in the MBES dataset. No anomalous features were identified in the Mag. data at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris.	SSS	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7085	Debris field	405175	5780625	A2_h	8.6	2.1	0.6	-	A group of fairly distinct dark reflectors with bright shadows, the objects are curvilinear and angular and situated within an area of mobile sediments, the full extent of the feature may be buried. Also identified in the MBES dataset as a group of three distinct mounds, with slightly more indistinct mounds surrounding these, the largest mound measures 2.9 x 2.8 x 0.6 and has steeply sloping sides and a rounded peak. The other objects are slightly angular and the feature appears slightly anomalous to the surrounding seabed. No anomalous features were identified in the Mag. data at this location. Interpreted as a possible non-ferrous debris field.	SSS, MBES	-
7086	Magnetic	405101	5780532	A2_l	-	-	-	20	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7087	Magnetic	405203	5780629	A2_h	-	-	-	612	A very large, sharp asymmetric dipole with peak and trough on one profile line in the Mag. data, also visible on adjacent profile line. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7088	Magnetic	405149	5780515	A2_h	-	-	-	103	A large, sharp asymmetric dipole with peak and trough on one profile line in the Mag. data, also visible on adjacent profile line. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7089	Magnetic	405169	5780419	A2_h	-	-	-	58	A medium, broad asymmetric dipole with peak and trough over two profile lines in the Mag. data, also visible on adjacent profile line. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7090	Mound	405109	5780382	A2_l	4.5	1.2	0.1	-	A slightly curvilinear mound with gently sloping sides and a rounded peak, situated within an area of outcropping geology. No anomalous features were identified in the SSS or Mag. data at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris.	MBES	-
7091	Magnetic	405139	5780360	A2_h	-	-	-	34	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7092	Magnetic	405255	5780413	A2_h	-	-	-	103	A large, sharp positive monopole with peak and trough on one profile line in the Mag. data, also visible on adjacent profile. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7093	Mound	405410	5780323	A2_l	3.9	1.6	0.1	-	A very indistinct, elongate mound, with gently sloping sides and a rounded peak. The feature is situated in a slight depression and is situated 5.0m north-west of a similar mound (7094) and may be related. No anomalous features were identified in the SSS or Mag. data at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris.	MBES	-
7094	Mound	405415	5780321	A2_l	3.0	1.2	0.1	-	An indistinct elongate mound with gently sloping sides and a rounded peak. The feature is situated 5.0m south-east of a similar mound (7093) and may be related. No anomalous features were identified in the SSS or Mag. data at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris.	MBES	-
7095	Magnetic	405525	5780270	A2_h	-	-	-	35	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7096	Mound	405473	5780190	A2_h	8.5	4.8	0.8	-	A distinct oval shaped mound with steeply sloping sides and an uneven peak. The feature appears slightly textured and has scouring to the north for 30.0m and is -0.3m deep, the feature has some surrounding sediment accumulation and is situated on a relatively featureless seabed. No anomalous features were identified in the SSS or Mag. data at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris.	MBES	-
7097	Magnetic	405593	5780183	A2_l	-	-	-	20	A small symmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7098	Magnetic	405735	5780310	A2_l	-	-	-	23	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7099	Magnetic	405785	5780314	A2_l	-	-	-	32	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7100	Magnetic	405723	5780259	A2_l	-	-	-	25	A small positive monopole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7101	Magnetic	405668	5780180	A2_l	-	-	-	25	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7102	Magnetic	405639	5780102	A2_l	-	-	-	10	A small, broad asymmetric dipole with peak and trough on one profile line in the Mag. data, also visible on the adjacent profile. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7103	Magnetic	405787	5780261	A2_h	-	-	-	56	A medium asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7104	Magnetic	405782	5780203	A2_h	-	-	-	63	A medium, sharp symmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7105	Magnetic	405883	5780279	A2_h	-	-	-	44	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7106	Mound	405723	5780072	A2_l	6.6	2.0	0.2	-	An elongate mound with slightly bulbous ends, the feature has one steep side and one gently sloping side and is slightly anomalous to the surrounding seabed. No anomalous features were identified in the SSS or Mag. data at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris.	MBES	-
7107	Magnetic	406024	5779981	A2_l	-	-	-	11	A small, broad asymmetric dipole with peak and trough over two profile lines in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7108	Magnetic	406176	5780082	A2_I	-	-	-	15	A small, broad asymmetric dipole with peak and trough over two profile lines in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7109	Magnetic	406208	5779796	A2_I	-	-	-	18	A small symmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7110	Magnetic	406307	5779747	A2_I	-	-	-	12	A small, broad asymmetric dipole with peak and trough over two profile lines in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7111	Magnetic	406364	5779773	A2_I	-	-	-	11	A small, broad asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7112	Mound	406522	5779882	A2_l	14.2	1.1	0.1	-	A long linear low-lying mound that appears intermittent in the centre, it may be partially buried or two separate features. The feature is orientated north to south and is isolated on the seabed. No anomalous features were identified in the SSS or Mag. data at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris.	MBES	-
7113	Magnetic	406702	5779782	A2_l	-	-	-	17	A small, broad positive monopole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7114	Debris	406695	5779722	A2_h	1.3	0.6	0.6	29	Distinct angular and slightly elongate dark reflector with a bright, pointed shadow. The feature has some scour or seabed disturbance immediately to the north-west. Possibly associated with dark reflector (7115) 2.0m to its south-east. Also identified in the MBES data as a distinct mound with steeply sloping sides and a pointed peak. The feature is situated in a depression measuring 4.7 x 4.2 x -0.3m. Associated with a small symmetric dipole with peak and trough on one profile line in the Mag. data, indicating some ferrous material is present. Interpreted as possible ferrous debris	SSS, MBES, Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7115	Dark reflector	406697	5779721	A2_I	0.6	0.3	0.2	-	A distinct, slightly elongate dark reflector with an asymmetric thin bright shadow. Possibly associated with an item of ferrous debris (7114) 2.0m to its north-west. No anomalous features were identified in the MBES or Mag. data at this location, however the Mag. anomaly associated with 7114 may also be associated with this. Interpreted as a possible natural feature or may be possible debris.	SSS	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7116	Wreck	407157	5779594	A1	15.5	8.4	0.7	-	<p>A wreck that is visible in the SSS data as an indistinct spread of dark reflectors with slight shadows, multiple angular objects are visible within an area of disturbed seabed, the full extent of the feature may be buried. Also identified in the MBES data as a distinct mound with an uneven peak, that appears to be slightly textured, the feature has scour to the south approximately 25.0m long and 0.5m deep. The mound's edges are indistinct which may suggest it is partially buried. No anomalous features were identified in the Mag. data at this location.</p> <p>Associated with a UKHO record for an unknown wreck, last surveyed in 2017 with MBES dimensions of 10.2 x 5.0 x 1.0m. In the 2021 geophysical data the wreck has no distinguishable characteristics, the larger 2021 geophysical dimensions may indicate the wreck has become more exposed since 2018.</p> <p>Associated scouring and sediment accumulation also indicate it may periodically be buried.</p>	SSS, MBES	UKHO_87090
7117	Magnetic	407439	5779185	A2_I	-	-	-	14	<p>A small, broad asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location.</p> <p>Interpreted as possible ferrous debris either buried or with no surface expression.</p>	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7118	Magnetic	407357	5778828	A2_I	-	-	-	10	A small, broad positive monopole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7119	Magnetic	407491	5778761	A2_I	-	-	-	18	A small, broad asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7120	Wreck	407875	5778194	A1	22.2	9.9	0.4	111	An unrecorded wreck visible as a large oval shaped thin curvilinear dark reflector interpreted to be the hull with bright irregular shadows across its length, indicating uneven height. Internally indistinct angular and short and straight dark reflectors with shadows are visible that may be surviving deck structure. The wreck is situated in an area of mobile sediments. In the MBES data one end of the wreck is visible as a distinct curvilinear mound that appears to be mostly intact hull structure, internally indistinct linear mounds are visible suggesting the wreck is upright, there are some small angular mounds directly next to the hull that may be collapsed structure. The wreck is orientated east to west on the seabed and has scouring to the south for approximately 25.0m and 0.7m deep. The eastern end of the wreck is not visible and may be buried by sediments or highly degraded. Also associated with a large, sharp asymmetric dipole with peak and trough on one profile line in the Mag. data. Interpreted as an unknown wreck, not recorded in the UKHO or NMHR records.	SSS, MBES, Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7121	Magnetic	408178	5778150	A2_l	-	-	-	14	A small, broad asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7122	Magnetic	408099	5778119	A2_l	-	-	-	17	A small, broad symmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7123	Mound	407841	5777717	A2_l	2.1	1.9	0.3	-	A small angular mound in a depression measuring 11.1 x 5.0 x - 0.3m, the feature has scouring to the south-west. No anomalous features were identified in the SSS data at this location. This location was not directly covered by the Mag. data so it is not possible to ascertain whether ferrous material is present. Interpreted as a possible natural feature or may be possible debris.	MBES	-
7124	Magnetic	408189	5777354	A2_h	-	-	-	49	A small symmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7125	Magnetic	408393	5777227	A2_l	-	-	-	31	A small negative monopole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7126	Magnetic	408384	5777255	A2_h	-	-	-	65	A medium positive monopole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7127	Magnetic	408314	5777161	A2_l	-	-	-	29	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7128	Magnetic	408316	5777102	A2_h	-	-	-	111	A large positive monopole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7129	Magnetic	408301	5777054	A2_h	-	-	-	47	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7130	Magnetic	408260	5777031	A2_l	-	-	-	24	A small, broad positive monopole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7131	Magnetic	408274	5776986	A2_h	-	-	-	35	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7132	Magnetic	408730	5776756	A2_h	-	-	-	200	A large, sharp symmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7133	Debris field	408769	5776492	A2_h	45.6	1.8	0.1	240	Distinct curvilinear dark reflector oriented north-east to south-west on the seabed with a variable shadow and slight scour along its length. The feature has an angular object attached to its northern end, however it is situated within an area of mobile sediments and may be partially buried. Also identified in the MBES data as a long thin and indistinct in parts linear mound, appears to curve back on itself at the northern end. Also associated with a large, sharp asymmetric dipole with peak and trough on one profile line in the Mag. data at its northern end, indicating some ferrous material is present. Interpreted as a partially ferrous debris field.	SSS, MBES, Mag.	-
7134	Magnetic	408932	5776210	A2_l	-	-	-	13	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7135	Seabed disturbance	409083	5776027	A2_h	18.1	5.4	0.5	-	An area of disturbed seabed comprising an area of indistinct sub-rounded and irregular dark reflectors with irregular short shadows. In an area of seabed with mobile sediments to the SSW, the full extent may be buried. Visible in the MBES data as a textured area of seabed. This location was not directly covered by the Mag. data so it is not possible to ascertain whether ferrous material is present. Interpreted as a possible natural feature, or may be possible debris.	SSS	-
7136	Rope/chain	408516	5776064	A2_l	13.0	0.5	0.1	-	A fairly distinct short curvilinear dark reflector with a slight shadow. No anomalous features were identified in the MBES data at this location. This location was not directly covered by the Mag. data so it is not possible to ascertain whether ferrous material is present. Interpreted as a short length of rope or chain.	SSS	-
7137	Debris field	408640	5775986	A2_l	70.0	0.6	0.2	-	A distinct curvilinear dark reflector with a short shadow across its length. The feature has some indistinct, rounded dark reflectors attached along its length. Also identified in the MBES data as a long, thin and curvilinear low-lying mound, with gently sloping sides and rounded peak, indistinct in parts. No anomalous features were identified in the Mag. data at this location. Interpreted as a possible debris field, and may be fishing gear however, this can't be confirmed without visual inspection.	SSS, MBES	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7138	Rope/chain	408631	5775942	A2_I	16.9	1.3	0.2	-	Distinct curvilinear dark reflector with a bright even shadow along its length. Visible in the MBES data as a low-lying curvilinear mound. Possibly associated with debris field (7137) situated 7.0m north. This location was not directly covered by the Mag. data so it is not possible to ascertain whether ferrous material is present. Interpreted as a short length of rope or chain.	SSS	-
7139	Rope/chain	408680	5775860	A2_I	23.7	0.8	0.2	21	Distinct elongate and slightly curvilinear dark reflector with a bright shadow, uneven shadow, possibly suggesting uneven height. Visible as an uneven mound in the MBES data. Also associated with a small negative monopole with peak and trough on one profile line in the Mag. data, indicating some ferrous material is present. Interpreted as a partially ferrous rope or chain.	SSS, Mag.	-
7140	Magnetic	408965	5775993	A2_I	-	-	-	8	A small, broad asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7141	Magnetic	408994	5775909	A2_I	-	-	-	12	A small, broad positive monopole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7142	Magnetic	408782	5775887	A2_l	-	-	-	14	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7143	Rope/chain	408756	5775807	A2_l	116.0	0.7	0.2	54	A long, thin and distinct linear dark reflector with short variable shadow along its length. Situated in a region of relatively featureless seabed. Visible as a low-lying linear mound in the MBES data, orientated north-east to south-west on the seabed. Associated with three Mag. anomalies with amplitudes ranging from 17 - 54nT in the Mag. data where it crosses a Mag. line, indicating ferrous material is present. Interpreted as a partially ferrous rope or chain.	SSS, Mag.	-
7144	Debris	408767	5775844	A2_h	4.1	0.5	0.1	-	Distinct linear dark reflector with a short bright shadow. Situated 5.0m north-west of rope or chain 7143 and may be related. Visible as an elongate mound in the MBES data. No anomalous features were identified in the Mag. data at this location. Interpreted as non-ferrous linear debris.	SSS	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7145	Dark reflector	408755	5775767	A2_l	6.3	0.4	0.1	-	An indistinct linear dark reflector with very short shadow. On a different alignment but possibly associated with the possible rope or chain 8.0m west (7143). No anomalous features were identified in the MBES data at this location. This location was not directly covered by the Mag. data so it is not possible to ascertain whether ferrous material is present. Interpreted as a possible natural feature, or may be possible debris.	SSS	-
7146	Magnetic	408682	5775698	A2_h	-	-	-	57	A medium, sharp asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7147	Rope/chain	408750	5775430	A2_l	39.4	0.8	0.1	-	A distinct slightly curvilinear dark reflector with a short shadow. The feature is situated in an area of mobile sediments and orientated north to south on the seabed. No anomalous features were identified in the MBES or Mag. data at this location. Interpreted as a possible length of non-ferrous rope or chain	SSS	-
7148	Magnetic	409217	5775419	A2_l	-	-	-	24	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7149	Magnetic	409291	5775358	A2_h	-	-	-	81	A medium, sharp asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7150	Debris field	408902	5775296	A2_l	7.0	6.2	0.7	-	An area of disturbed seabed comprising indistinct curvilinear dark reflectors with associated bright shadows, possibly suggesting uneven height. Also identified in the MBES data as an indistinct mound or two smaller mounds very close together with sediment accumulation around the feature which may covering the features full extent and scour to the south for 9.0m, the feature appears to be at the northern end of a linear mound that extends for over 40.0m to the SSW, that may be a length of rope or chain, or scour. No anomalous features were identified in the Mag. data at this location. Interpreted as a possible debris field, and may be fishing gear however, this can't be confirmed without visual inspection.	SSS, MBES	-
7151	Magnetic	409467	5775305	A2_l	-	-	-	13	A small, broad asymmetric dipole with complex double peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7152	Magnetic	408865	5775110	A2_h	-	-	-	33	A small positive monopole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location, however it is situated in an area of outcropping geology. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7153	Mound	409160	5775131	A2_l	20.9	2.8	0.2	-	A long and thin curvilinear mound orientated north-west to south-east and perpendicular to the surrounding natural feature on this area of seabed. No anomalous features were identified in the SSS or Mag. data at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris.	MBES	-
7154	Rope/chain	408981	5775087	A2_l	64.8	0.3	0.1	-	A distinct slightly curvilinear dark reflector with a very slight shadow. The feature appears slightly intermittent across its extent and orientated NNE-SSW on the seabed. No anomalous features were identified in the MBES or Mag. data at this location. Interpreted as a possible length of non-ferrous rope or chain.	SSS	-
7155	Magnetic	409269	5774950	A2_h	-	-	-	101	A large, sharp asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7156	Magnetic	408847	5774833	A2_l	-	-	-	9	A small, broad symmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7157	Magnetic	408895	5774711	A2_l	-	-	-	9	A small, broad asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7158	Magnetic	409140	5774559	A2_h	-	-	-	40	A small, sharp asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7159	Magnetic	408756	5774331	A2_h	-	-	-	148	A large, sharp asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7160	Magnetic	409052	5774068	A2_I	-	-	-	32	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7161	Magnetic	408983	5773598	A2_I	-	-	-	25	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7162	Seabed disturbance	409031	5773571	A2_I	18.8	11.8	0.4	-	An area of disturbed seabed situated within an area of sand waves. An irregularly shaped mound is visible with some scouring present to the south for approximately 7.0m and - 0.3m deep. The feature may be partially buried. No anomalous features were identified in the SSS or Mag. data at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris.	MBES	-
7163	Mound	408613	5773554	A2_I	2.2	1.3	0.2	-	A small and distinct rectangular mound with steeply sloping sides and an uneven peak. The feature is distinct and isolated on a relatively featureless seabed. No anomalous features were identified in the SSS or Mag. data at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris.	MBES	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7164	Rope/chain	408771	5773495	A2_I	53.5	0.4	0.2	-	A distinct, slightly curvilinear dark reflector with a bright shadow across its length. The feature is orientated approximately north-east to south-west on the seabed. Visible as an indistinct low-lying mound in the MBES dataset. No anomalous features were identified in the Mag. data at this location. Interpreted as a possible length of non-ferrous rope or chain.	SSS, MBES	-
7165	Magnetic	408707	5773472	A2_I	-	-	-	22	A small, broad positive monopole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7166	Rope/chain	408583	5773439	A2_I	87.3	0.6	0.2	-	An indistinct and intermittent in places slightly curvilinear dark reflector. The feature has a bright, uneven shadow across its length, possibly suggesting uneven height. The feature is orientated approximately north to south on the seabed. Faintly visible as an indistinct low-lying mound in the MBES dataset. No anomalous features were identified in the Mag. data at this location. Interpreted as a possible length of non-ferrous rope or chain.	SSS	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7167	Magnetic	408993	5773374	A2_l	-	-	-	11	A small negative monopole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7168	Mound	408889	5773267	A2_l	2.5	1.2	0.4	-	A small and distinct rectangular mound with steeply sloping sides and an uneven peak. The feature is situated in a depression that measures 10.0 x 5.6 x -0.3m. No anomalous features were identified in the SSS data at this location. This position was not directly covered by the Mag. data 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.	MBES	-
7169	Magnetic	408499	5773146	A2_h	-	-	-	67	A medium asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7170	Mound	408887	5772459	A2_h	12.6	1.6	0.3	-	A slightly right-angled linear mound situated close to an area of sand mega ripples and on the southern edge of a likely natural outcropping. The feature has sediment accumulation and scour visible orientated to the south for 10.0m and is 0.6m deep, it may be partially buried. No anomalous features were identified in the SSS or Mag. data at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris.	MBES	-
7171	Dark reflector	408495	5772200	A2_l	8.3	0.3	0.1	-	A distinct curvilinear dark reflector with a short bright shadow, the shadow is slightly uneven which may indicate uneven height. No anomalous features were identified in the MBES or Mag. data at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris.	SSS	-
7172	Magnetic	408551	5772152	A2_l	-	-	-	29	A small asymmetric dipole with peak and trough on one profile line in the Mag. data, also visible on other profile lines. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7173	Wreck	408301	5772170	A1	36.8	15.2	0.6	34	A large wreck that is visible as a series of distinct but dispersed dark reflectors with bright shadows. Short linear and angular objects are visible, some aligned as parallel objects. Associated debris field (7174) has been identified 4.0m north, suggesting the wreck is degraded. The wreck extends beyond the SSS data range and so the dimensions should be considered a minimum, there may be significant scour that goes beyond the data range to the south-east. This position was not directly covered by the MBES data. Associated with a small, broad symmetric dipole with peak and trough on one profile line in the Mag. data on the closest line (46m east), suggesting the wreck may be partially ferrous. Associated with a UKHO and NMHR record for HMS <i>Tervani</i> , a trawler ship built in 1914 with one boiler and a triple expansion engine, with build dimensions of 48.8 x 7.9 x 4.3m. The vessel was sunk by mine in 1916. The wreck was last surveyed in 2017 with dimensions of 48.1 x 8.1 x 2.4m recorded, the wreck was described as being intact and partially buried.	SSS, Mag.	UKHO_10249, NMHR_912686

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7174	Debris field	408312	5772193	A1	25.5	12.2	0.9	-	A group of indistinct objects visible as small dark reflectors with shadows and bright reflectors. Angular objects are visible on a possible mound with a bright uneven shadow, possibly suggesting uneven height. The features are situated directly to the north-east of wreck (7173) and may be associated debris. This position was not directly covered by the MBES or Mag. data, so it is not possible to ascertain whether ferrous material is present. Interpreted as a debris field associated with wreck (7173).	SSS	-
7175	Debris	408311	5772051	A2_h	2.5	0.6	0.4	-	A distinct, slightly elongate dark reflector with a bright, tapered shadow. The feature has some associated scour to the east and is situated 22.0m to the south-east of wreck (7176). This position was not directly covered by the MBES or Mag. data, so it is not possible to ascertain whether ferrous material is present. Interpreted as possible debris associated with wreck (7176).	SSS	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7176	Wreck	408288	5772083	A1	41.4	10.2	0.4	-	A large wreck comprising multiple linear, curvilinear, elongate, and irregular dark reflectors with bright shadows. At the north-east of the wreck a distinctive curvilinear dark reflector measuring 23.7 x 1.3m is visible that may be a part of the hull, however little structure or discernible features are distinguishable in the SSS data. Associated debris (7175 , 7177-7181) has been identified in the vicinity, suggesting the wreck is degraded. The wreck extends beyond the SSS data range and so the dimensions should be considered a minimum and this position was not directly covered by the MBES or Mag. data, so it is not possible to ascertain whether ferrous material is present. Associated with a UKHO record for an unknown wreck, last surveyed in 2017. It was described as a being largely intact and partially buried, with dimensions of 41.7 x 6.5 x 2.9m.	SSS	UKHO_86578
7177	Debris	408291	5772108	A1	4.1	0.9	0.5	-	A distinct, angular dark reflector with a long bright shadow. The feature is situated in a depression and is situated 4m north-east of wreck (7176). This position was not directly covered by the MBES or Mag. data, so it is not possible to ascertain whether ferrous material is present. Interpreted as debris associated with wreck (7176).	SSS	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7178	Debris field	408294	5772085	A1	40.5	3.4	0.1		A group of distinct dark reflectors with shadows situated directly adjacent to the eastern edge of wreck 7176 . The features are elongate, angular and irregularly shaped and may be situated in an area of depression, the largest object measures 3.6 x 1.3m. This position was not directly covered by the MBES or Mag. data, so it is not possible to ascertain whether ferrous material is present. Interpreted as a debris field associated with wreck (7176) .	SSS	-
7179	Debris	408288	5772034	A2_h	3.6	0.5	0.3	-	A distinct, thin and elongate dark reflector with a bright, uneven shadow, possibly suggesting uneven height. The feature is situated in a depression and is situated 33m south of wreck (7176) . This position was not directly covered by the MBES or Mag. data, so it is not possible to ascertain whether ferrous material is present. Interpreted as possible debris that may be associated with wreck (7176) .	SSS	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7180	Debris field	408302	5772011	A2_h	22.1	4.5	0.3	-	A group of distinct dark reflectors with bright shadows orientated in a crescent shape on the seabed. The feature comprises elongate, curvilinear and angular objects. The feature is situated in a depression and is situated 46.0m south of wreck (7176). This position was not directly covered by the MBES or Mag. data, so it is not possible to ascertain whether ferrous material is present. Interpreted as a possible debris field that may be associated with wreck (7176).	SSS	-
7181	Debris	408295	5771999	A2_h	3.3	1.8	0.2	-	A distinct, slightly curvilinear dark reflector with a bright, flared shadow. The feature is situated 8.0m south-west of debris field (7180) and 68m south of wreck (7176). This position was not directly covered by the MBES or Mag. data, so it is not possible to ascertain whether ferrous material is present. Interpreted as debris that may be associated with wreck (7176).	SSS	-
7182	Debris	408452	5772085	A2_l	8.6	5.4	0.1	-	An irregularly shaped mound that may be multiple objects, a linear mound measuring 4.3 x 1.4m is visible in the centre of the feature and two smaller slightly elongate mounds either side. The feature is distinct to the surrounding seabed. No anomalous features were identified in the SSS or Mag. data at this location. Interpreted as possible non-ferrous debris.	MBES	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7183	Debris field	408443	5772054	A2_l	12.5	6.6	0.2	-	A possible debris field comprising three straight mounds, individually these measure approximately 2.9 x 1.6m. The features are relatively low lying but distinct to the surrounding seabed. No anomalous features were identified in the SSS or Mag. data at this location. Interpreted as a possible non-ferrous debris field.	MBES	-
7184	Magnetic	408389	5772026	A2_h	-	-	-	44	A small, sharp symmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7185	Magnetic	408617	5771809	A2_l	-	-	-	38	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7186	Mound	408832	5771817	A2_l	2.6	1.2	0.1	-	A small but distinct, elongate mound situated on a featureless area of seabed. No anomalous features were identified in the SSS or Mag. data at this location. Interpreted as a possible natural feature or may be non-ferrous debris.	MBES	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7187	Magnetic	408456	5771702	A2_l	-	-	-	26	A small positive monopole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7188	Magnetic	408509	5771587	A2_h	-	-	-	40	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. May relate to Mag. anomaly 7189 situated 30.0m east. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7189	Magnetic	408540	5771587	A2_h	-	-	-	41	A small symmetric dipole with peak and trough on one profile line in the Mag. data. May relate to Mag. anomaly 7188 situated 30.0m west. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7190	Magnetic	408698	5771628	A2_h	-	-	-	33	A small negative monopole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7191	Magnetic	408732	5771440	A2_l	-	-	-	43	A small, sharp symmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7192	Magnetic	408469	5771273	A2_h	-	-	-	67	A medium asymmetric dipole with peak and trough over two profile lines in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7193	Magnetic	408456	5771208	A2_l	-	-	-	47	A small, sharp asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7194	Mound	408220	5771113	A2_l	8.6	1.6	0.2	-	An elongate mound with gently sloping sides and a rounded, uneven peak. The feature is orientated east to west on the seabed. No anomalous features were identified in the SSS data at this location. This position was not directly covered by the Mag. data 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.	MBES	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7195	Dark reflector	408197	5771091	A2_h	3.4	0.6	0.2	-	A distinct curvilinear dark reflector with a bright short shadow, the object may be broken up. This position was not directly covered by the MBES or Mag. data, so it is not possible to ascertain whether ferrous material is present. Interpreted as a possible natural feature or may be possible debris.	SSS	-
7196	Dark reflector	408286	5771077	A2_h	6.7	1.1	0.5	-	A distinct elongate dark reflector with an uneven shadow, possibly suggesting uneven height. There is an area of disturbed seabed to the west of the feature. In the MBES data the feature is visible as an elongate mound with one steeply sloping side and the other gently sloping. The feature is possibly split in two near to its southern end, or slightly broken up and is orientated north to south on the seabed. No anomalous features were identified in the Mag data at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris.	SSS, MBES	-
7197	Magnetic	408275	5770970	A2_l	-	-	-	31	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7198	Magnetic	408666	5770865	A2_l	-	-	-	44	A small negative monopole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7199	Magnetic	408354	5770781	A2_l	-	-	-	17	A small negative monopole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7200	Magnetic	408257	5770675	A2_h	-	-	-	67	A medium, sharp asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7201	Magnetic	408631	5770494	A2_h	-	-	-	54	A medium, sharp asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7202	Magnetic	408225	5770154	A2_l	-	-	-	15	A small negative monopole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7203	Magnetic	408697	5769701	A2_h	-	-	-	67	A medium, sharp asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7204	Magnetic	408874	5769663	A2_l	-	-	-	19	A small, broad asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7205	Magnetic	408777	5769617	A2_l	-	-	-	36	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7206	Debris	408848	5769623	A2_h	7.6	0.9	0.1	-	A distinct, thin linear dark reflector with a bright shadow. The feature is isolated in an area of relatively featureless seabed. Faintly visible in the MBES dataset as an uneven area of seabed. This position was not directly covered by the Mag. data so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible linear item of debris	SSS	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7207	Magnetic	408842	5769435	A2_h	-	-	-	64	A medium positive monopole with peak and trough on one profile line, also visible on other profile lines in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7208	Magnetic	408860	5769377	A2_l	-	-	-	25	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7209	Magnetic	408808	5769265	A2_l	-	-	-	27	A small positive monopole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7210	Rope/chain	408874	5769228	A2_l	13.6	0.2	0.1	-	A distinct, thin slightly curvilinear dark reflector with a bright, uneven shadow, possibly suggesting uneven height. The feature is slightly intermittent and may be broken up or partially buried and is orientated NNW to SSE. Faintly visible in the MBES data as a low-lying linear mound. No anomalous features were identified in the Mag data at this location. Interpreted as a length of non-ferrous rope or chain.	SSS	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7211	Magnetic	408643	5769101	A2_l	-	-	-	30	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7212	Magnetic	408686	5768738	A2_h	-	-	-	47	A small negative monopole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7213	Magnetic	408325	5768651	A2_h	-	-	-	37	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7214	Magnetic	408222	5768596	A2_h	-	-	-	49	A small symmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7215	Magnetic	408216	5768497	A2_l	-	-	-	28	A small negative monopole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7216	Magnetic	408211	5768319	A2_l	-	-	-	15	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7217	Recorded wreck	407920	5767697	A3	-	-	-	-	The position of an unknown, recorded wreck in the UKHO data, last surveyed in 2020. The wreck was described as bring intact with some surrounding debris and scour to the south-west, measuring 73.4 x 19.9 x 2.9m orientated 129° on the seabed. This position was not directly covered by any of the 2021 geophysical datasets and so it is not possible to comment on its condition. The wrecks position is situated outside of the study area, however a recommended exclusion zone may bring it within, and so it has been retained in this gazetteer.	-	UKHO_80055
7218	Magnetic	407904	5767532	A2_h	-	-	-	86	A medium, sharp asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS data at this location. This position was not directly covered by the MBES data. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7219	Dark reflector	408243	5767563	A2_h	6.7	0.6	0.1	-	Two linear dark reflectors with short, bright shadows directly next to one another. The feature is isolated on a relatively featureless seabed. No anomalous features were identified in the MBES data at this location. This position was not directly covered by the Mag. data 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.	SSS	-
7220	Dark reflector	408248	5767564	A2_l	1.7	0.7	0.1	-	A distinct slightly angular dark reflector with a short shadow. Situated directly next to two linear dark reflectors (7219) and may be related. The feature is isolated on a relatively featureless seabed. No anomalous features were identified in the MBES data at this location. This position was not directly covered by the Mag. data 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.	SSS	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7221	Dark reflector	408354	5767487	A2_h	1.2	0.8	0.4	-	A small but distinct angular dark reflector with a bright shadow, isolated in an area of otherwise featureless seabed in the SSS data. Also identified in the MBES dataset as a small, distinct angular mound with steeply sloping sides and a pointed peak situated in a slight depression with scouring to the south-west measuring 7.0m and -0.3m deep. This position was not directly covered by the Mag. data so it is not possible to ascertain whether ferrous material is present at this location. Associated with a UKHO record for a small unidentified feature, measuring 0.7 x 0.6 x 0.5m, identified during a wreck investigation. Interpreted as a possible natural feature or may be possible debris.	SSS, MBES	UKHO_96272
7222	Magnetic	408405	5767012	A2_l	-	-	-	16	A small asymmetric dipole with peak and trough over two profile lines in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7223	Magnetic	408335	5766438	A2_l	-	-	-	24	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7224	Magnetic	408218	5766091	A2_h	-	-	-	92	A medium, sharp asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7225	Debris field	407579	5765003	A2_l	36.4	0.2	0.1	-	A distinct curvilinear dark reflector with a short shadow across its length. The feature may have some indistinct dark reflectors with shadows attached across its extent, however this is unclear and it is orientated north to south on the seabed. This position was not directly covered by the MBES or Mag. data 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 can't be confirmed without visual inspection.	SSS	-
7226	Magnetic	407743	5764807	A2_l	-	-	-	10	A small, broad asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7227	Magnetic	407615	5764770	A2_h	-	-	-	59	A medium, sharp asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7228	Mound	407615	5764732	A2_l	18.5	5.4	0.1	-	A long curvilinear mound that is disjointed in its centre with gently sloping sides and a slightly pointed peak. The feature is slightly anomalous to the surrounding seabed and may be associated with a small mound situated 15m to the south (7229). No anomalous features were identified in the SSS or Mag. data at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris.	MBES	-
7229	Mound	407617	5764717	A2_l	3.8	2.8	0.3	-	A small double peaked mound situated in a slight depression with some sediment build up on its northern edge. The feature is slightly anomalous to the surrounding seabed and may be associated with an elongate mound situated 15.0m to the north (7230). No anomalous features were identified in the SSS or Mag. data at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris.	MBES	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7230	Magnetic	407804	5764699	A2_h	-	-	-	120	A large, sharp asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7231	Recorded wreck	408207	5764777	A3	-	-	-	-	The position of an unknown, recorded wreck in the UKHO data, last surveyed in 2019. The wreck was described as having two visible structures of a suspected wreck present and dimensions of 19.9 x 3.6 x 4.0m from MBES data, orientated 215° on the seabed. This position was not directly covered by any of the 2021 geophysical datasets and so it is not possible to comment on its condition. The wreck's position is situated outside of the study area, however a recommended exclusion zone may bring it within, and so it has been retained in this gazetteer.	-	UKHO_92098

7232	Wreck	406866	5761733	A1	44.5	14.5	3.4	3415	<p>A large wreck that is visible in the SSS data as a distinct oval shaped thick curvilinear dark reflector which represents the hull outline. Internally there are indistinct linear and angular dark reflectors with shadows that are likely surviving deck structure. The wreck is orientated approximately north-east to south-west. In the MBES dataset one section of a large wreck, likely the stern is visible as an upright, mostly intact hull structure. Internally some upstanding deck structure is visible in the form of square and rounded mounds. At the south-west end of the deck two tall mounds are visible that may be boilers, this end of the wreck ends abruptly, suggesting the vessel may be broken in two, partially buried or very degraded, and there is associated debris surrounding the wreck (7233-7236). The wreck has substantial sediment accumulation on its southern end that may be burying further debris and as well as large, deep scouring surrounding the wreck, particularly to the SSW extending for 90.0m and up to -4.0m deep. Associated with a very large, sharp asymmetric dipole with peak and trough on one profile line in the Mag data, also visible on other profile lines, indicating substantial ferrous material is present. Associated with an unknown, recorded wreck in the UKHO and NMHR datasets, last surveyed in 2019. The wreck was reported as being generally intact and partially buried with the aft end broken off or degraded. The wreck had MBES dimensions of 31.6 x 7.2 x 4.4m and was orientated 69° on the</p>	SSS, MBES, Mag.	UKHO_14743, NMHR_879873
------	-------	--------	---------	----	------	------	-----	------	--	-----------------	-------------------------

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
									seabed. The larger geophysical dimensions in the most recent survey data may suggest the wreck has experienced further degradation and collapsed structure.		
7233	Debris	406846	5761731	A2_h	1.1	1.0	0.2	-	A distinct angular dark reflector with a fairly bright shadow, the feature is situated 4m west of wreck (7232) and may be related. Visible as a slight mound in the MBES data. No anomalous features were identified in the Mag. data at this location, however the large Mag. anomaly associated with wreck (7232) may be masking any smaller anomalies in this area. Interpreted as possible debris associated with wreck (7232).	SSS	-
7234	Debris	406871	5761750	A2_h	1.5	1.1	0.2	-	A distinct, angular dark reflector with a slight shadow. The feature is situated 9m north of wreck (7232) within a scour and is possibly associated debris. No anomalous features were identified in the MBES or Mag. data at this location, however the large Mag. anomaly associated with wreck (7232) may be masking any smaller anomalies in this area. Interpreted as possible debris associated with wreck (7232).	SSS	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7235	Debris	406887	5761746	A2_h	1.5	1.4	0.2	-	A small, indistinct angular dark reflector with a shadow or possibly two objects close to one another, situated 4m north of the north-east end of wreck (7232) and may be related. No anomalous features were identified in the MBES or Mag. data at this location, however the large Mag. anomaly associated with wreck (7232) may be masking any smaller anomalies in this area. Interpreted as possible debris associated with wreck (7232).	SSS	-
7236	Debris	406887	5761737	A2_h	3.4	2.4	0.2	-	An indistinct slightly right-angled dark reflector with a slight shadow, situated 3.0m east of the north-east end of wreck (7232) and may be related. No anomalous features were identified in the MBES or Mag. data at this location, however the large Mag. anomaly associated with wreck (7232) may be masking any smaller anomalies in this area. Interpreted as possible debris associated with wreck (7232).	SSS	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7237	Mound	406754	5760254	A2_I	3.4	3.0	0.5	-	A distinct mound that has gently sloping sides and a rounded peak, the feature has distinct scouring to the south-west measuring 7.5 x - 0.5m deep with sediment accumulation on its north-eastern side which is covering the features full extent. No anomalous features were identified in the SSS data at this location. This position was not directly covered by the Mag. data 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.	MBES	-
7238	Seabed disturbance	406776	5760172	A2_I	4.8	4.4	0.2	-	A small area of uneven, textured seabed on a relatively featureless seabed. The feature looks anomalous and may be buried objects. No anomalous features were identified in the SSS or Mag. data at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris.	MBES	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7239	Seabed disturbance	406463	5759836	A2_I	16.1	7.5	0.5	-	An area of disturbed seabed that is within an area of large sand waves, an angular mound is visible protruding through a sand waves crest and some sediment accumulation to the north. The feature is anomalous to the surrounding seabed and may be partially buried objects. No anomalous features were identified in the SSS or Mag. data at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris.	MBES	-
7240	Mound	406448	5759597	A2_I	2.0	1.1	0.2	-	A small elongate mound situated within large sand waves. The feature is distinct and anomalous to the surrounding seabed, its full extent may be partially buried. No anomalous features were identified in the SSS or Mag. data at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris.	MBES	-
7241	Recorded wreck	406658	5759338	A3	-	-	-	-	The position of a suspected, unknown, recorded wreck in the UKHO database, first identified in 2019. Described as being a suspected wreck identified by MBES survey with dimensions of 5.0 x 2.2m. No anomalous features were identified in any of the 2021 geophysical datasets, however, as remains have been identified at this position previously it has been retained as a precaution in this gazetteer.	-	UKHO_92145

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7242	Magnetic	406073	5758960	A2_l	-	-	-	43	A small, broad symmetric dipole with peak and trough on one profile line, also visible on adjacent profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7243	Mound	406280	5758898	A2_l	3.3	2.1	0.3	-	A small, slightly elongate mound situated at the edge of a sand wave crest. The feature is anomalous to the surrounding seabed and may be partially buried. No anomalous features were identified in the SSS data at this location. This position was not directly covered by the Mag. data 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.	MBES	-
7244	Magnetic	405381	5756110	A2_l	-	-	-	15	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7245	Magnetic	405891	5755022	A2_h	-	-	-	26	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7246	Magnetic	405575	5754518	A2_l	-	-	-	30	A small negative monopole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7247	Magnetic	406025	5754499	A2_l	-	-	-	23	A small negative monopole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7248	Magnetic	405946	5754337	A2_h	-	-	-	67	A medium negative monopole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7249	Mound	405897	5754276	A2_l	7.1	2.0	0.1	-	An indistinct elongate curvilinear mound with gently sloping sides and a rounded peak, orientated north to south on the seabed. The feature is isolated and anomalous to the surrounding seabed. No anomalous features were identified in the SSS or Mag. data at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris	MBES	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7250	Magnetic	406060	5754237	A2_l	-	-	-	15	A small negative monopole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7251	Magnetic	405900	5754149	A2_l	-	-	-	20	A small negative monopole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7252	Magnetic	406083	5754063	A2_h	-	-	-	33	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7253	Magnetic	405656	5753996	A2_h	-	-	-	53	A medium asymmetric dipole with peak and trough over two profile lines in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7254	Magnetic	405545	5753964	A2_h	-	-	-	79	A medium symmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7255	Magnetic	405613	5753891	A2_I	-	-	-	23	A small, broad asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7256	Magnetic	405623	5753822	A2_I	-	-	-	16	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7257	Debris field	405675	5753529	A2_I	26.7	3.4	0.2	29	An indistinct elongate area of seabed disturbance comprising at least two elongate dark reflectors with slight shadows. The largest object measures 3.4 x 0.7m. Also identified in the MBES dataset as two irregularly shaped mounds that individually measure 4.6 x 2.6 x 0.1 and 5.5 x 2.1 x 0.2m. The feature appears to be connected by an indistinct linear mound. Associated with a small asymmetric dipole with peak and trough on one profile line in the Mag. data, indicating some ferrous material is present. Interpreted as a possible debris field, and may be fishing gear however, this can't be confirmed without visual inspection.	SSS, MBES, Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7258	Mound	405632	5753514	A2_l	2.5	2.1	0.2	-	An oval mound situated within slight scour, situated 35m west of possible debris field (7257) and may be related. No anomalous features were identified in the SSS data at this location. This position was not directly covered by the Mag. data 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.	MBES	-
7259	Recorded wreck	405529	5753497	A3	-	-	-	-	The position of a recorded wreck in the UKHO and NMHR database, <i>Mexico</i> , a tanker vessel with build dimensions of 91.7 x 13.4 x 7.9m sunk in 1941. The wreck was last surveyed in 2016 and reported as being very broken up with only the bow and stern recognisable, with a strong Mag. anomaly and MBES dimensions of 95.0 x 30.0 x 6.2m. This position was not directly covered by any of the 2021 geophysical datasets and so it is not possible to comment on its condition. The wrecks position is situated outside of the study area, however a recommended exclusion zone may bring it within, and so it has been retained in this gazetteer.	-	UKHO_14616, NMHR_912623
7260	Magnetic	405920	5753443	A2_h	-	-	-	37	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7261	Magnetic	405830	5753354	A2_l	-	-	-	21	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7262	Magnetic	406093	5753273	A2_h	-	-	-	47	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7263	Magnetic	406059	5752790	A2_h	-	-	-	38	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7264	Mound	405894	5752070	A2_l	7.6	1.0	0.1	-	An indistinct linear mound with gently sloping sides and an uneven peak, situated within slight sand waves but lying perpendicular to them, orientated approximately north-east to south-west on the seabed. No anomalous features were identified in the SSS or Mag. data at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris.	MBES	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7265	Magnetic	406112	5750804	A2_l	-	-	-	22	A small negative monopole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7266	Debris	406470	5750842	A2_h	3.0	1.4	0.6	-	A distinct slightly curvilinear dark reflector with an uneven shadow, possibly suggesting uneven height. Identified in the MBES dataset as a small angular mound with steeply sloping sides and a pointed peak. This position was not directly covered by the Mag. data so it is not possible to ascertain whether ferrous material is present at this location. Situated 50.0m north-east of wreck 7269 and may be associated. Interpreted as possible debris.	SSS, MBES	-
7267	Debris	406474	5750827	A2_h	12.6	0.2	0.1	-	Distinct curvilinear dark reflector with a short shadow. No anomalous features were identified in the MBES data at this position. This position was not directly covered by the Mag. data so it is not possible to ascertain whether ferrous material is present at this location. Situated 38.0m north-east of wreck 7269 and may be associated. Identified as possible curvilinear debris or a short length of rope or chain associated with wreck 7269 .	SSS	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7268	Debris	406448	5750818	A2_h	2.8	0.4	0.3	-	A distinct curvilinear dark reflector with a bright shadow. No anomalous features were identified in the MBES or Mag. data at this location, however the large Mag. anomaly associated with wreck 7269 may be masking any smaller anomalies in this area. Situated 28m north-east of wreck 7269 and may be associated. Interpreted as possible debris associated with wreck 7269 .	SSS	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7269	Wreck	406448	5750777	A1	43.5	20.7	3.2	5114	A large wreck visible in the SSS data as a large elongate and intermittent dark reflector with bright shadows interpreted to be the hull. Within this multiple linear, elongate, and irregular dark reflectors with shadows are visible. One elongate object measures 13.1 x 1.6m. Identified in the MBES dataset as a spread of debris comprising a large rectangular mound that measures 13.6 x 4.3 x 3m with steeply sloping edges and a relatively flat peak, the feature is surrounded by linear and curvilinear mounds and sediment accumulation, some objects are very distinct and others may be partially buried. The feature has scouring orientated mainly to the south measuring 28.0m and is -0.5m deep. Identified in the Mag. dataset as a very large, sharp asymmetric dipole with peak and trough on one profile line, indicating substantial ferrous material is present. Associated with a UKHO and NMHR record for UC11 (Possibly), a UI-type WWI minelaying submarine that ran into one of its own mines and sank. The wreck is reported as being upturned, with a strong magnetic anomaly associated. The wreck was last surveyed in 2016 and described as being broken up with dimensions of 27.0 x 11.0 x 4.3m. The UKHO record suggests that the wreck may have been salvaged in the past.	SSS, MBES, Mag.	UKHO_14599, NMHR_908160

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7270	Debris field	406438	5750789	A1	32.3	11.8	0.8	-	Distinct group of dark reflectors with bright shadows comprising straight and elongate objects, the largest object measures 7.8 x 0.2m. Visible in the MBES dataset as a group of low-lying angular mounds. No anomalous features were identified in the Mag. data at this location, however the large Mag. anomaly associated with wreck 7269 may be masking any smaller anomalies in this area. Situated on the north-western edge of wreck 7269 and may be collapsed structure. Interpreted as a debris field associated with wreck 7269 .	SSS	-
7271	Debris	406441	5750764	A2_h	1.9	1.0	0.3	-	Distinct sub-rounded dark reflector with a tapered shadow situated at the southern edge of wreck 7269 . No anomalous features were identified in the MBES or Mag. data at this location, however the large Mag. anomaly associated with wreck 7269 may be masking any smaller anomalies in this area. Interpreted as possible debris associated with wreck 7269 .	SSS	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7272	Seabed disturbance	406440	5748793	A2_l	17.2	1.6	0.2	-	An area seabed disturbance comprising a small mound measuring 2.6 x 1.8m with an intermittent curvilinear mound attached, the feature is orientated east to west. No anomalous features were identified in the SSS dataset at this position. This position was not directly covered by the Mag. data 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.	MBES	-
7273	Debris field	406493	5748610	A2_l	270.0	10.5	0.3	-	A group of low-lying angular mounds that are connected by long and thick curvilinear mounds, areas of disturbed seabed are also visible around the feature. No anomalous features were identified in the SSS or Mag. datasets at this position. Interpreted as a possible debris field, and may be fishing gear however, this can't be confirmed without visual inspection.	MBES	-
7274	Magnetic	406290	5748615	A2_h	-	-	-	33	A small asymmetric dipole with peak and trough over two profile lines in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7275	Debris field	406553	5748345	A2_I	380.0	11.6	0.3	-	A large area of disturbed seabed comprising irregular mounds that are connected by indistinct curvilinear mounds and depressions. No anomalous features were identified in the SSS or Mag. datasets at this position. Interpreted as a possible non-ferrous debris field, and may be fishing gear however, this can't be confirmed without visual inspection.	MBES	-
7276	Mound	406583	5748299	A2_I	9.7	2.1	0.2	-	An elongate tapered mound with gently sloping sides and an uneven peak across its extent. No anomalous features were identified in the SSS or Mag. datasets at this position. Interpreted as a possible natural feature or may be possible non-ferrous debris.	MBES	-
7277	Magnetic	406759	5748271	A2_I	-	-	-	21	A small, broad positive monopole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7278	Magnetic	406782	5748114	A2_I	-	-	-	11	A small, broad positive monopole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7279	Dark reflector	406680	5747949	A2_I	3.1	0.8	0.4	-	Identified in the SSS dataset as an elongate dark reflector with a bright shadow in an area of relatively featureless seabed. Identified in the MBES dataset as an indistinct slightly elongate mound, the feature is angular with an uneven peak, with some sediment accumulation either side. No anomalous features were identified in the Mag. dataset at this position. Interpreted as a possible natural feature or possible non-ferrous debris.	SSS, MBES	-
7280	Mound	407618	5747877	A2_I	8.7	1.7	0.2	-	A distinct linear mound with relatively steep sides and an uneven peak, the feature is orientated approximately north to south and is anomalous to the surrounding seabed. No anomalous features were identified in the SSS dataset at this position. This position was not directly covered by the mag. data so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	MBES	-
7281	Magnetic	407632	5747855	A2_I	-	-	-	15	A small, broad asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7282	Magnetic	407299	5747491	A2_I	-	-	-	16	A small symmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7283	Magnetic	407597	5747510	A2_I	-	-	-	21	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7284	Recorded wreck	407938	5747882	A3	-	-	-	-	The position of an unknown, recorded wreck in the UKHO and NMHR records. The wreck was last surveyed in 2016 and reported as being upright in good condition with exception to the stern, with dimensions of 37.4 x 8.5 x 6.7m with scour and a strong Mag. anomaly associated. This position was not directly covered by any of the 2021 geophysical datasets and so it is not possible to comment on its condition. The position is situated outside of the study area, however a recommended exclusion zone may bring it within, and so it has been retained in this gazetteer.	-	UKHO_14570, NMHR_802570

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7285	Mound	407995	5747643	A2_l	2.8	1.2	0.5	-	A distinct elongate mound with a double peak, may be two objects next to one another, with steeply sloping sides. The feature has scouring to the north and sound extending for 10.0m either side. No anomalous features were identified in the SSS dataset at this position. This position was not directly covered by the mag. data so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	MBES	-
7286	Debris	408292	5747645	A2_h	5.1	4.1	1.4	20	Identified in the SSS dataset as a distinct elongate dark reflector with an irregular shadow, suggesting possibly multiple objects. The feature is isolated on an otherwise featureless seabed. Identified in the MBES dataset as a distinct 'T' shaped mound with a bulbous northern end and linear piece to the south, the object is tallest at its north end and has some sediment accumulation surrounding it. Associated with a small, broad asymmetric dipole with peak and trough over two profile lines, indicating some ferrous material is present. Interpreted as ferrous debris	SSS, MBES, Mag.	-
7287	Magnetic	408408	5747330	A2_h	-	-	-	27	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7288	Magnetic	408359	5747291	A2_l	-	-	-	19	A small, broad asymmetric dipole with peak and trough over two profile lines in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7289	Magnetic	408816	5747367	A2_h	-	-	-	53	A medium asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7290	Magnetic	408757	5747265	A2_h	-	-	-	43	A small negative monopole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7291	Debris field	408957	5747127	A2_l	51.1	1.7	0.5	14	A series of dark reflectors with shadows connected by an indistinct, thin slightly curvilinear dark reflector with a slight shadow. The feature is orientated north-east to south-west on the seabed. The largest object measures 2.3 x 1.7 x 0.5m, this is situated at the northern end of the feature. Elongate and angular objects area also visible across its length. Visible as a rounded mound with a low-lying linear mound attached to the south-west in the MBES dataset. Associated with a small, broad asymmetric dipole with peak and trough on one profile line in the Mag. data at its southern end, indicating some ferrous material is present. Interpreted as a partially ferrous debris field, and may be fishing gear however, this can't be confirmed without visual inspection.	SSS, Mag.	-
7292	Magnetic	409281	5747462	A2_h	-	-	-	37	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7293	Mound	409360	5747514	A2_l	4.1	2.9	0.2	-	A broad slightly angular mound at the edge of the data range, the feature is triangular shaped and situated on a featureless area of seabed. No anomalous features were identified in the SSS dataset at this position. This position was not directly covered by the Mag. data so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	MBES	-
7294	Magnetic	409349	5747333	A2_h	-	-	-	97	A medium negative monopole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7295	Magnetic	409346	5747263	A2_h	-	-	-	65	A medium positive monopole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7296	Magnetic	409443	5747370	A2_h	-	-	-	54	A medium positive monopole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7297	Dark reflector	409530	5747013	A2_I	3.3	0.7	0.3	-	A distinct linear dark reflector with a bright shadow. No anomalous features were identified in the MBES dataset at this position. This position was not directly covered by the Mag. data so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	SSS	-
7298	Magnetic	409731	5747004	A2_I	-	-	-	24	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7299	Dark reflector	410439	5747085	A2_I	2.9	2.5	0.4	-	A distinct elongate dark reflector with a short broad tapering shadow. In an area of seabed that is relatively featureless. Also identified in the MBES dataset as a small but distinct mound with steep sides and a pointed peak, the feature is within a small depression with sediment accumulation around its edges measuring 5.3 x 4.1 x -0.2m. This position was not directly covered by the Mag. data so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	SSS, MBES	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7300	Dark reflector	411028	5747071	A2_I	1.9	0.7	0.2	-	A distinct linear dark reflector with a bright, straight shadow. No anomalous feature was identified in the MBES data at this location. This position was not directly covered by the Mag. data so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	SSS	-
7301	Magnetic	411331	5746670	A2_I	-	-	-	21	A small, broad positive monopole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7302	Magnetic	413722	5745644	A2_I	-	-	-	22	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7303	Seabed disturbance	414029	5745700	A2_I	10.8	6.2	0.5	-	An area of disturbed seabed comprising an indistinct mound with a broad uneven peak measuring 5.5 x 4.0 x 0.5m. The feature has an indistinct, elongate object directly next to it and is situated within a depression or scour to its south-west, the full extent of the featured may be buried. No anomalous features were identified in the SSS or Mag. datasets at this position. Interpreted as a possible natural feature or possible non-ferrous debris.	MBES	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7304	Mound	414268	5744609	A2_l	1.7	1.3	0.2	-	An angular mound within a distinct depression or scour measuring 8.2 x 4.0 x -0.2m, the feature has sediment accumulation on its northern side. No anomalous features were identified in the SSS or Mag. datasets at this position. Interpreted as a possible natural feature or possible non-ferrous debris.	MBES	-
7305	Magnetic	414447	5744446	A2_h	-	-	-	57	A medium asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7306	Dark reflector	414197	5744148	A2_l	2.4	0.6	0.2	-	A distinct angular dark reflector with a bright uneven shadow, possibly suggesting uneven height. In an area of relatively featureless seabed. No anomalous features were identified in the MBES or Mag. datasets at this position. Interpreted as a possible natural feature or possible non-ferrous debris.	SSS	-
7307	Magnetic	414655	5743435	A2_h	-	-	-	25	A small symmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7308	Magnetic	414937	5743191	A2_h	-	-	-	80	A medium asymmetric dipole with peak and trough over two profile lines in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7309	Magnetic	414703	5743007	A2_l	-	-	-	36	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7310	Magnetic	414818	5742708	A2_h	-	-	-	66	A medium, sharp asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7311	Dark reflector	415009	5742568	A2_h	5.1	3.1	1.2	-	An indistinct dark reflector with a bright shadow situated within an area of disturbed seabed. Also identified in the MBES dataset as a large mound with relatively steep sides and a pointed peak, the feature is situated in a depression measuring 17.9 x 7.5 x -0.4m with sediment accumulation around it and scouring to the north and south. Situated 12.0m NNW of dark reflector 7312 and may be related. This position was not directly covered by the Mag. data so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	SSS, MBES	-
7312	Dark reflector	415014	5742557	A2_h	2.5	1.2	1.0	-	A distinct sub-rounded dark reflector with a bright tapered shadow. Also identified in the MBES dataset as a distinct mound with steeply sloping sides and a rounded peak, the feature has scouring to the south for 7.0m. Situated 12.0m SSE of larger dark reflector 7311 and may be related. This position was not directly covered by the Mag. data so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	SSS, MBES	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7313	Magnetic	414773	5742390	A2_h	-	-	-	41	A small symmetric dipole with peak and trough on one profile line in the Mag. data, also visible on adjacent profile. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7314	Magnetic	415303	5741542	A2_l	-	-	-	32	A small negative monopole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7315	Magnetic	415826	5739816	A2_l	-	-	-	14	A small, broad asymmetric dipole with peak and trough over two profile lines in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7316	Magnetic	416074	5739834	A2_l	-	-	-	15	A small, broad asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7317	Magnetic	416184	5739667	A2_l	-	-	-	22	A small, broad asymmetric dipole with peak and trough over two profile lines in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7318	Mound	415763	5739328	A2_l	3.7	3.4	0.4	-	An indistinct slightly angular mound situated within an area of sand waves, its full extent may be buried. No anomalous features were identified in the SSS or Mag. datasets at this position. Interpreted as a possible natural feature or possible non-ferrous debris.	MBES	-
7319	Dark reflector	415640	5738979	A2_h	2.0	1.0	0.3	-	A distinct, slightly angular dark reflector with a bright asymmetric shadow. The feature has some possible scour to the ESE and is situated in an area of sand waves, so the object may be partially buried. Identified in the MBES dataset as a small angular mound in a slight depression, the feature has some sediment accumulation around it. This position was not directly covered by the Mag. data so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	SSS, MBES	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7320	Magnetic	415680	5738730	A2_h	-	-	-	54	A medium symmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7321	Debris	416005	5738246	A2_h	3.2	2.1	0.4	127	An indistinct angular dark reflector with an asymmetric shadow. The feature is isolated within an area of mobile sediments and may be partially buried. Associated with a large, sharp symmetric dipole with peak and trough on one profile line in the Mag. data, indicating some ferrous material is present. No anomalous features were identified in the MBES dataset at this location. Interpreted as ferrous debris.	SSS, Mag.	-
7322	Magnetic	415780	5737825	A2_l	-	-	-	18	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7323	Dark reflector	415852	5737589	A2_h	2.9	2.4	0.8	-	A distinct sub-rounded dark reflector with a bright tapered shadow, the feature has some scour to the ESE and is isolated on a featureless area of seabed. Identified in the MBES dataset as a distinct triangular mound with steep sides, possible smaller angular mound attached to its eastern edge. The feature is in a slight depression measuring 13.8 x 8.6 x -0.6m. No anomalous features were identified in the Mag. dataset at this location. Interpreted as a possible natural feature or possible non-ferrous debris.	SSS, MBES	-
7324	Magnetic	415921	5737472	A2_l	-	-	-	28	A small, broad symmetric dipole with peak and trough over two profile lines in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7325	Debris	415156	5735670	A2_h	3.1	0.7	0.3	-	A distinct, slightly elongate dark reflector with a bright shadow situated within an area of disturbed seabed, it's full extent may be buried. Also identified in the MBES dataset as a distinct rectangular mound with steep edges and a rounded peak, the feature has scour to the south for 4.0m. No anomalous features were identified in the Mag. dataset at this location. Interpreted as possible non-ferrous debris.	SSS, MBES	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7326	Magnetic	414966	5735334	A2_I	-	-	-	13	A small, broad symmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7327	Dark reflector	414828	5735324	A2_I	3.0	1.2	0.3	-	A distinct angular dark reflector with a bright shadow situated in an area of mobile sediments. Identified in the MBES dataset as a distinct pointed mound with steep sides situated at the edge of an area of sand waves, the feature has some slight scour to the south measuring 5.0m. No anomalous features were identified in the Mag. dataset at this location. Interpreted as a possible natural feature or possible non-ferrous debris.	SSS, MBES	-
7328	Magnetic	415086	5734998	A2_I	-	-	-	19	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7329	Magnetic	414615	5734756	A2_I	-	-	-	19	A small, broad asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7330	Seabed disturbance	414889	5734696	A2_h	9.6	2.4	0.4	-	A distinct area of disturbed seabed with some possible indistinct internal dark reflectors with uneven shadows, or may be a depression. The feature has scouring to the south-east. Also identified in the MBES dataset as an elongate mound with varying height up to 0.4m, the feature is widest and tallest in its centre, with gently sloping sides and is anomalous to the surrounding seabed. This position was not directly covered by the Mag. data so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or possible debris.	SSS, MBES	-
7331	Dark reflector	414256	5734646	A2_l	3.5	2.0	0.2	-	A distinct angular dark reflector with an uneven shadow, possibly suggesting uneven height. No anomalous features were identified in the MBES or Mag. data at this location. Interpreted as a possible natural feature or possible non-ferrous debris.	SSS	-
7332	Magnetic	414339	5734664	A2_l	-	-	-	27	A small positive monopole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7333	Magnetic	414750	5734603	A2_l	-	-	-	17	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7334	Dark reflector	414045	5734379	A2_l	3.5	2.4	0.3	-	A distinct angular dark reflector, or possibly a small group of multiple dark reflectors with a bright shadow. The feature is situated in an area of relatively featureless seabed. No anomalous features were identified in the MBES data at this location. This position was not directly covered by the Mag. data 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.	SSS	-
7335	Mound	413978	5734168	A2_l	5.1	2.0	0.4	-	An elongate, thin mound with an uneven peak and relatively steeply sloping sides, very distinct to the surrounding seabed. No anomalous features were identified in the SSS or Mag. data at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris.	MBES	-
7336	Magnetic	414325	5734100	A2_h	-	-	-	46	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7337	Seabed disturbance	414023	5733969	A2_I	7.9	5.9	0.5	-	A distinct area of disturbed seabed comprising mounded objects and depressions situated within an area of sand waves, the feature has scouring to the south-west for 20.0m. No anomalous features were identified in the SSS or Mag. dataset at this position. Interpreted as a possible natural feature or may be possible non-ferrous debris.	MBES	-
7338	Mound	413314	5734253	A2_I	3.6	2.3	0.5	-	A distinct pointed mound with steeply sloping sides, the feature has some slight scour to the south measuring 6m and is situated in a slight depression. No anomalous features were identified in the SSS or Mag. dataset at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris.	MBES	-
7339	Seabed disturbance	413790	5733931	A2_I	4.7	2.2	0.5	-	A distinct area of disturbed seabed comprising indistinct dark reflectors and uneven shadows or depressions. The feature has some scour to the south. Also identified in the MBES dataset as an area of disturbed seabed that has an elongate mound within it, the feature is indistinct with gently sloping sides and scouring or a depression surrounding it. This position was not directly covered by the Mag. data 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.	SSS, MBES	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7340	Seabed disturbance	413173	5734109	A2_I	8.5	6.6	0.4	-	A distinct area of disturbed seabed comprising indistinct dark and bright reflectors, the feature is anomalous to the surrounding seabed. Also identified in the MBES dataset as a large and very distinct mound with steeply sloping sides and an uneven, broad peak. The feature is tallest at its northern end and is situated in a distinct depression measuring 14.6 x 11 x -0.6m, the feature is situated within sand waves that may be concealing its full extent. This position was not directly covered by the Mag. data 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.	SSS, MBES	-
7341	Magnetic	412880	5733973	A2_I	-	-	-	19	A small symmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7342	Magnetic	412861	5733965	A2_I	-	-	-	10	A small negative monopole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7343	Seabed disturbance	412652	5733845	A2_h	9.3	5.3	0.6	-	An area of disturbed seabed comprising indistinct dark reflectors and bright reflectors or depressions. The feature is isolated in an area of relatively featureless seabed. Also identified in the MBES dataset as a large distinct mound with gently sloping sides and a broad uneven peak, the feature is anomalous to the surrounding seabed and situated in a slight depression. No anomalous features were identified in the Mag. dataset at this position. Interpreted as a possible natural feature or may be possible non-ferrous debris.	SSS, MBES	-
7344	Magnetic	412468	5733895	A2_h	-	-	-	31	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7345	Dark reflector	412557	5733744	A2_h	1.9	1.4	0.8	-	A distinct angular dark reflector with a bright tapered shadow. The feature is situated in an area of mobile sediments and appears anomalous. Also identified in the MBES dataset as a distinct mound with steeply sloping sides and a rounded peak, situated within a depression measuring 8.3 x 4.1 x -0.2m. No anomalous features were identified in the Mag. dataset at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris.	SSS, MBES	-

7346	Wreck	412020	5733762	A1	97.0	25.2	11.1	1659	<p>A large wreck, one edge of the hull is visible as a distinct long and thick dark reflector with a very large, bright and uneven shadow. Within the hull there are multiple indistinct elongate and linear dark reflectors, indicating the wreck is upright and has some surviving deck structure. The wreck is orientated north-east to south-west and is situated in an area of mobile sediments. In the MBES dataset the wreck appears to be upright but lying slightly to one side with exposed hull visible on its southern side. The hull appears to be mostly intact where visible, with collapsed structure on its south-west end. The northern edge of the wreck is buried by sediments. On the deck a large square mound is visible at its centre measuring 8.7 x 4.2 x 4m, multiple linear and angular mounds are visible across the deck and a large mound is present at the north-eastern end of the vessel indicating surviving superstructure. The wreck has significant scour to the south for over 200m and up to -6.0m deep and is surrounded by sediment accumulation which may be concealing the full extents of the wreck and associated debris. Missing data in the north-eastern part of the vessel may suggest that there is overhanging structure. Associated with a very large, sharp asymmetric dipole with peak and trough on one profile line in the Mag. data, also visible on other profile lines, indicating substantial ferrous material is present. Recorded in the UKHO and NMHR dataset as the possible wreck of the <i>Salerno</i>, a two-boiler general cargo steamer that stuck a</p>	SSS, MBES, Mag.	UKHO_14419, NMHR_802191
------	-------	--------	---------	----	------	------	------	------	--	-----------------	-------------------------

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
									mine laid by UC-3 on a passage from Hull to Marseille. The wreck is recorded in 2016 as lying, broken up, on its starboard side.		
7347	Magnetic	411813	5733711	A2_h	-	-	-	182	A large negative monopole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. May be associated with wreck 7348 situated 100.0m west, being the closest Mag. line. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7348	Wreck	411708	5733710	A1	27.6	10.7	3.6	-	A distinct wreck with a thick curvilinear dark reflector interpreted to be the hull. Within this slatted internal dark reflectors with shadows are visible, suggest surviving deck structure and the wreck is upright. The wreck is orientated NNW to SSE with some sediment build-up to the north and south edges. This position was not directly covered by the MBES or Mag. datasets, however a large Mag. anomaly (7347) 100m east on the closest Mag. line may be associated. Recorded in the UKHO dataset as an unnamed dangerous wreck lying upright and in good condition. The wreck was last surveyed in 2016 and had MBES dimensions of 35.0 x 9.0 x 5.2m. May also be associated with an NMHR record situated 17.0m north-west as the possible wreck of the Volscian.	SSS	UKHO_14418, NMHR_802188

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7349	Debris	412390	5733359	A2_h	6.0	2.2	0.8	-	A distinct elongate dark reflector with a broad bright and uneven shadow, possibly suggesting uneven height. The feature is situated in an area of mobile sediments. Identified in the MBES dataset as an indistinct mound with uneven seabed on its south side, the mound is mostly rounded with some slight angular edges. No anomalous features were identified in the Mag. data at this location. Interpreted as non-ferrous debris.	SSS, MBES	-
7350	Dark reflector	411608	5733224	A2_h	4.1	1.9	0.4	-	A distinct sub-rounded dark reflector with a bright tapered shadow. The feature may be broken up and is situated within an area of mobile sediments. Identified in the MBES dataset as a distinct, slightly angular mound with steeply sloping sides and a rounded peak, anomalous to the surrounding seabed. No anomalous features were identified in the Mag. data at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris.	SSS, MBES	-
7351	Magnetic	411344	5732955	A2_l	-	-	-	22	A small negative monopole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7352	Dark reflector	411788	5732780	A2_I	4.2	0.9	1.1	-	Distinct linear dark reflector with a thin shadow appearing only at one end, suggesting uneven height. No anomalous features were identified in the MBES data at this location. This position was not directly covered by the Mag. data 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.	SSS	-
7353	Magnetic	411722	5732715	A2_I	-	-	-	52	A medium negative monopole with peak and trough on one profile line. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris that is either buried or with no surface expression.	Mag.	-
7354	Magnetic	411361	5732256	A2_I	-	-	-	32	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7355	Magnetic	410950	5732339	A2_I	-	-	-	10	A small, broad asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7356	Magnetic	411022	5732262	A2_l	-	-	-	18	A small symmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7357	Seabed disturbance	410825	5732168	A2_h	10.0	5.2	0.3	-	Identified in the SSS dataset as distinct circular area of disturbed seabed comprising indistinct dark reflectors with associated shadows or bright reflectors. Identified in the MBES dataset as a distinct, slightly angular mound with steeply sloping sides and a rounded peak, the feature is situated within an area of uneven seabed. This position was not directly covered by the Mag. data 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.	SSS, MBES	-
7358	Magnetic	411299	5731852	A2_l	-	-	-	16	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7359	Dark reflector	411491	5731800	A2_l	2.0	0.5	0.2	-	A distinct, elongate dark reflector with an asymmetric bright shadow, may be multiple objects or a broken-up anomaly. The feature is isolated in an area of relatively featureless seabed. This position was not directly covered by the MBES or Mag. data 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.	SSS	-
7360	Magnetic	410258	5730851	A2_l	-	-	-	10	A small negative monopole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7361	Dark reflector	409819	5730171	A2_l	1.7	0.7	0.3	-	A distinct sub-rounded dark reflector with a broad, bright shadow. The feature is isolated in an area of relatively featureless seabed. No anomalous features were identified in the MBES or Mag. dataset at this position. Interpreted as a possible natural feature or may be possible non-ferrous debris.	SSS	-
7362	Magnetic	409866	5729810	A2_h	-	-	-	28	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7363	Magnetic	409988	5729824	A2_h	-	-	-	25	A small negative monopole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7364	Mound	409456	5729111	A2_l	6.8	1.7	0.1	-	An indistinct curvilinear mound with gently sloping sides and a rounded peak, slightly anomalous to the surrounding seabed. No anomalous features were identified in the SSS dataset at this position. This position was not directly covered by the Mag. data 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.	MBES	-
7365	Magnetic	409304	5728975	A2_h	-	-	-	33	A small, broad asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7366	Mound	408250	5727739	A2_l	8.7	2.4	0.1	-	An indistinct elongate mound with gently sloping sides and a pointed, uneven peak orientated north to south on the seabed. No anomalous features were identified in the SSS data at this location. This position was not directly covered by the Mag. data, so it is not possible to ascertain whether ferrous material is present. Interpreted as a possible natural feature or may be possible debris.	MBES	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7367	Magnetic	408936	5727961	A2_h	-	-	-	49	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression	Mag.	-
7368	Magnetic	408274	5727043	A2_h	-	-	-	40	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7369	Magnetic	406950	5724035	A2_h	-	-	-	54	A medium symmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7370	Magnetic	406502	5722522	A2_l	-	-	-	11	A small, broad asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7371	Magnetic	406551	5722333	A2_l	-	-	-	19	A small, broad symmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBEs data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7372	Magnetic	406208	5721857	A2_h	-	-	-	57	A medium symmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7373	Rope/chain	405522	5719763	A2_l	34.0	1.2	0.1	-	A long thin and curvilinear low-lying mound that is indistinct in places. The anomaly is situated on a featureless area of seabed. No anomalous features were identified in the SSS data at this location. This position was not directly covered by the Mag. data so it is not possible to ascertain whether ferrous material is present. Interpreted as a possible length of rope or chain.	MBES	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7374	Seabed disturbance	405480	5719637	A2_h	20.2	15.6	0.1	-	An area of disturbed seabed comprising indistinct linear dark reflectors in an approximate oval shape on the seabed, possibly five indistinct features, some with short, narrow shadows. The longest feature is approximately 10.0m in length. The centre is featureless, matching the surrounding seabed. Also observed in the MBES data as an indistinct area of mounded objects, comprising thin linear mounds and rounded objects all of which are low-lying, distinct to a relatively featureless area of seabed. This position was not directly covered by the Mag. data so it is not possible to ascertain whether ferrous material is present. Interpreted as a possible natural feature or may be possible debris.	SSS, MBES	-
7375	Magnetic	405616	5719207	A2_h	-	-	-	68	A medium asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7376	Dark reflector	405560	5719209	A2_h	8.4	0.3	0.2	-	A short, curved dark reflector with a bright irregular shadow, possibly suggesting uneven height. The feature is isolated in an otherwise featureless seabed. No anomalous features were identified in the MBES or Mag. data at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris.	SSS	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7377	Magnetic	405547	5719164	A2_h	-	-	-	83	A medium, sharp symmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7378	Magnetic	405128	5719038	A2_h	-	-	-	30	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7379	Magnetic	405306	5718500	A2_h	-	-	-	58	A medium positive monopole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7380	Debris	405299	5718333	A2_h	3.1	2.9	0.6	-	A distinct rounded dark reflector with a distinct rounded shadow and a brighter internal area, suggesting it may be hollow. The feature has an indistinct curvilinear dark reflector attached. Also observed in the MBES data as a very distinct mound with steep sides and an uneven peak that has a depression in its centre, with sediment accumulation on its western side, the east edge of the feature is within -0.9m scour. There is a linear mound or scour extending from the south of the feature for 40.0m which becomes less defined further from the object. This position was not directly covered by the Mag. data so it is not possible to ascertain whether ferrous material is present. Interpreted as possible debris.	SSS, MBES	-
7381	Magnetic	404679	5717662	A2_h	-	-	-	59	A medium positive monopole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7382	Debris	404798	5717416	A2_h	4.0	2.2	0.3	218	A distinct angular mound with a slightly uneven peak. The feature has a linear mound or scour extending to the south-east. The feature is situated within a slight depression measuring 13.7 x 9 x 0.4m. No anomalous features were identified in the SSS data at this location. Associated with a large asymmetric dipole on two profile lines in the Mag. data, indicating ferrous material is present. Interpreted as possible ferrous debris.	MBES, Mag.	-
7383	Mound	404495	5717279	A2_l	3.9	1.9	0.2	-	A slightly elongate mound with an uneven peak, one side of the feature is steeper than the other. The feature is situated in an area of sand waves and may be partially buried. No anomalous features were identified in the SSS or Mag. data at this location. Interpreted as a possible natural feature or may be possible debris.	MBES	-
7384	Magnetic	404074	5716545	A2_h	-	-	-	56	A medium negative monopole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7385	Magnetic	403798	5716313	A2_h	-	-	-	104	A large, sharp positive monopole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7386	Magnetic	403493	5715591	A2_h	-	-	-	25	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7387	Seabed disturbance	402952	5714903	A2_h	6.4	2.4	0.9	-	An area of disturbed seabed comprising an indistinct, slightly elongate dark reflector with bright uneven shadow, possibly suggesting uneven height. The feature is situated within depressions and may be partially buried. Also observed in the MBES data as an area of seabed disturbance comprising an irregularly shaped object in a slight depression. The feature is distinct from the surrounding relatively featureless seabed. This position was not directly covered by the Mag. data so it is not possible to ascertain whether ferrous material is present. Interpreted as a possible natural feature or may be possible debris.	SSS, MBES	-
7388	Magnetic	402873	5714317	A2_l	-	-	-	21	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7389	Magnetic	403256	5714299	A2_h	-	-	-	31	A small positive monopole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7390	Magnetic	403025	5714049	A2_l	-	-	-	14	A small, broad asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7391	Magnetic	401849	5711655	A2_h	-	-	-	26	A small symmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7392	Magnetic	401555	5711168	A2_h	-	-	-	55	A medium asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7393	Magnetic	401300	5710198	A2_h	-	-	-	36	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7394	Magnetic	400485	5709101	A2_h	-	-	-	55	A medium, sharp symmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7395	Magnetic	400349	5708479	A2_h	-	-	-	26	A small, broad positive monopole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7396	Magnetic	399779	5708107	A2_l	-	-	-	12	A small, broad symmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7397	Magnetic	399938	5707865	A2_l	-	-	-	13	A small, broad symmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7398	Magnetic	399864	5707824	A2_h	-	-	-	37	A small, broad positive monopole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7399	Mound	399722	5707720	A2_l	5.2	3.4	0.4	-	A distinct oval mound with gently sloping sides and a rounded peak. The feature is situated within a slight depression with some sediment accumulation either side. The feature is isolated in an area of sand waves with scour extending 8.0m to the south-west. No anomalous features were identified in the SSS data at this location. This position was not directly covered by the Mag. data so it is not possible to ascertain whether ferrous material is present. Interpreted as a possible natural feature or may be possible debris.	MBES	-
7400	Magnetic	399776	5707514	A2_l	-	-	-	19	A small, broad asymmetric dipole with peak and trough over two profile lines in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7401	Magnetic	399940	5707411	A2_h	-	-	-	57	A medium, sharp asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7402	Magnetic	400143	5706755	A2_l	-	-	-	22	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7403	Magnetic	399992	5706701	A2_h	-	-	-	38	A small negative monopole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7404	Magnetic	400246	5706616	A2_h	-	-	-	29	A small negative monopole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7405	Magnetic	400148	5706546	A2_l	-	-	-	16	A small, broad asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7406	Magnetic	400037	5706347	A2_h	-	-	-	62	A medium asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7407	Magnetic	400237	5705658	A2_l	-	-	-	10	A small, broad symmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7408	Magnetic	400123	5704049	A2_l	-	-	-	13	A small, broad asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7409	Magnetic	399782	5703456	A2_l	-	-	-	24	A small symmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7410	Magnetic	399789	5702802	A2_I	-	-	-	22	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7411	Debris field	399923	5702680	A2_I	43.7	1.9	-	-	An indistinct linear dark reflector with no shadow with dark reflectors attached measuring 0.9 x 0.8m every 10.0m along its length. May relate to similar anomaly 7412 situated 45.0m west. Faintly visible in the MBES data as a series of regularly spaced depressions. No anomalous features were identified in the Mag. data at this location. Interpreted as a possible debris field, and may be fishing gear however, this can't be confirmed without visual inspection.	SSS	-
7412	Debris field	399834	5702673	A2_I	45.2	1.2	-	-	An indistinct linear dark reflector with no shadow with dark reflectors attached measuring 0.9 x 0.8m every 10.0m along its length. May relate to similar anomaly 7411 situated 45.0m east. Faintly visible in the MBES data as a series of regularly spaced depressions. No anomalous features were identified in the Mag. data at this location. Interpreted as a possible debris field, and may be fishing gear however, this can't be confirmed without visual inspection.	SSS	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7413	Magnetic	399896	5702207	A2_h	-	-	-	179	A large, sharp asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

7414	Wreck	399938	5701754	A1	116.6	36.6	6.8	27020	<p>A large wreck that is visible in the SSS data as a large spread of distinct linear and curvilinear dark reflectors with bright shadows. The wreck is upright with slatted features visible, no superstructure is identifiable within the deck. The wreck has some associated debris in the vicinity and a rope or chain that is either attached or snagged on its south-eastern edge (7415 and 7416). The hull of the wreck is not defined suggesting it is very broken up. In the MBES dataset the wreck is orientated approximately ENE to WSW on a relatively featureless area of seabed. The wreck appears upright, but is highly degraded with collapsed hull surrounding it. Internally possible surviving deck structure is visible, three distinct square shaped mounds in its centre, thin linear mounds and smaller rounded and angular mounds across the deck. The wreck has significant sediment accumulation and scour on either side which may be burying collapsed structure and associated debris. Large scouring is present to the north and south of the wreck, particularly to the south, measuring 140.0 x 54.0 x -5.2m. Associated with a very large, sharp asymmetric dipole with peak and trough on one profile line in the Mag. data, which is also visible on other profile lines indicating substantial ferrous material is present. Recorded by the UKHO and NMHR as <i>Saidieh</i>, a 3303 gross ton steam ship built in 1878. The vessel was sunk in 1915 by UB6, a German submarine. The wreck was last surveyed in 2017 and described as</p>	SSS, MBES, Mag.	UKHO_13968, NMHR_904723
------	-------	--------	---------	----	-------	------	-----	-------	--	-----------------	-------------------------

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
									being partially broken up and buried with dimensions of 112.5 x 21.1 x 5.8m.		
7415	Rope/chain	399942	5701695	A2_l	131.5	0.3	-	-	A long, slightly curvilinear dark reflector with a shadow along its length and a small dark reflector with tapered shadow attached. The feature is orientated north to south on the seabed and its northern end appears to be snagged on wreck 7414 . Also observed in the MBES data as a faint curvilinear mound with a small angular mound at its southern end, situated in a slight depression. No anomalous features were identified in the Mag. data at this location, however the large Mag. anomaly associated with wreck 7414 may be masking any smaller anomalies in this area. Interpreted as a possible length of rope or chain.	SSS, MBES	-
7416	Debris	399959	5701726	A2_h	5.6	2.3	-	-	A small, slightly indistinct angular dark reflector with a bright shadow. The feature is situated 18m south of wreck 7414 and may be associated debris. Also identified in the MBES data as a low-lying mound in a slight depression. No anomalous features were identified in the Mag. data at this location, however the large Mag. anomaly associated with wreck 7414 may be masking any smaller anomalies in this area. Interpreted as possible debris associated with wreck 7414 .	SSS, MBES	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7417	Rope/chain	399935	5701637	A2_l	17.6	0.7	0.0	-	An indistinct linear dark reflector with no clear shadow. No anomalous features were identified in the MBES data at this location. This position was not directly covered by the Mag. data so it is not possible to ascertain whether ferrous material is present. Identified as possible short length of rope or chain.	SSS	-
7418	Magnetic	399904	5701607	A2_h	-	-	-	50	A medium asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data as this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7419	Magnetic	399755	5701631	A2_h	-	-	-	21	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data as this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7420	Debris field	399783	5700869	A2_I	460.0	2.6	0.1	-	A long, thin and curvilinear dark reflector with a short variable shadow. A series of regularly spaced small dark reflectors measuring approximately 1.0 x 0.5 x 0.1m are attached to the feature at approximately 10.0m spacings, some of which have very short, tapered shadows and slight scour. Also identified in the MBES data as a very long, narrow curvilinear mound with objects or depressions attached along its length. The feature is attached or snagged to a modern wreck not included in this gazetteer. No anomalous features were identified in the Mag. data at this location. Interpreted as a possible debris field, and may be fishing gear however, this can't be confirmed without visual inspection.	SSS, MBES	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7421	Debris field	399964	5700944	A2_h	17.1	5.1	0.3	646	A small cluster of slightly angular dark reflectors with variable tapered and flat-topped shadows indicating uneven height. One linear object is visible, however the feature is situated within an area of mobile sediments and its full extent may be buried. Also identified in the MBES data as an indistinct, angular mound with two smaller indistinct linear mounds attached, one to the north and one to the south, and several small mounds are visible to the west. Associated with a very large, sharp asymmetric dipole with peak and trough on one profile line in the Mag. data, indicating ferrous material is present. Interpreted as a ferrous debris field	SSS, MBES, Mag.	-
7422	Debris field	398692	5700518	A2_l	156.0	0.4	0.0	-	An indistinct, sinuous, curvilinear dark reflector with no visible shadow in a slight depression with some disturbed sediment along its length and some small indistinct dark reflectors attached. Also identified in the MBES data as a linear alignment of indistinct mounds and depressions, some of which are connected by an intermittent linear mound. This position was not directly covered by the Mag. data so it is not possible to ascertain whether ferrous material is present. Interpreted as a possible debris field, and may be fishing gear however, this can't be confirmed without visual inspection.	SSS, MBES	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7423	Debris field	399650	5700438	A2_I	601.0	0.8	0.2	-	A long, thin and curvilinear dark reflector with small dark reflectors measuring approximately 0.5 x 0.5m attached at roughly 10.0m intervals along its length, some of which have tapered shadows. Faintly visible in the MBES data as a low-lying curvilinear mound orientated north the south on the seabed, the feature curves back on itself at its northern end. No anomalous features were identified in the Mag. data at this location. Interpreted as a possible non-ferrous debris field, and may be fishing gear however, this can't be confirmed without visual inspection.	SSS	-
7424	Mound	399893	5700565	A2_I	6.0	5.0	0.4	-	A linear V-shaped mound with gently sloping sides and a rounded peak. The feature is distinct to the surrounding seabed with frequent natural features. No anomalous features were identified in the SSS data at this location. This position was not directly covered by the Mag. data so it is not possible to ascertain whether ferrous material is present. Interpreted as a possible natural feature or may be possible debris.	MBES	-
7425	Magnetic	399932	5700534	A2_I	-	-	-	21	A small symmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

7426	Wreck	399876	5700385	A1	51.6	11.9	3.4	10094	<p>A large wreck that is visible as a distinct, elongate and distinct curvilinear dark reflector with a bright uneven shadow that is interpreted to be the hull, this appears to be intact. Within the hull linear and curvilinear dark reflectors are visible that represent surviving deck structure, some features are slatted. One end of the vessel is highly degraded and may be buried. The wreck has a large number of associated debris and debris fields identified in the vicinity (7427 - 7436). It is orientated WNW to ESE on the seabed. In the MBES data the stern of the wreck appears to be to the WNW and the bow to ESE, a large piece of the bow appears to have broken off the wreck. The hull is mostly intact, however there is a dip visible in the centre of the wreck which may suggest it is broken in two, it appears slightly bowed and has large amounts of sediment accumulation at either side of the hull up to 5.0m high that may be burying its full extent. The wreck is upright with two triangular mounds visible in its centre that may be boilers, some surviving deck structure is visible as linear mounds at the stern and small uneven angular mounds at the bow end of the vessel. The wreck is surrounded by scouring, particularly at the bow and stern up to 2.0m deep. Associated with a very large, sharp asymmetric dipole with peak and trough on one profile line in the Mag. data, also visible on adjacent profile lines, indicating substantial ferrous material is present. Recorded by the UKHO and NMHR as an</p>	SSS, MBES, Mag.	UKHO_13958, NMHR_831796
------	-------	--------	---------	----	------	------	-----	-------	--	-----------------	-------------------------

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
									unknown wreck that was last surveyed in 2017. The wreck was reported as being upright and intact with dimensions of 50.8 x 9.0 x 3.7m and with 25.0m of scour up to 2.7m deep.		
7427	Debris	399823	5700418	A2_h	1.0	1.0	0.1	-	A small angular mound situated in a slight depression, the feature is situated 36.0m north-west of wreck 7426 and may be associated debris. No anomalous features were identified in the SSS data at this location. No anomalous features were identified in the Mag. data at this location, however the large Mag. anomaly associated with wreck 7426 may be masking any smaller anomalies in this area. Interpreted as possible debris associated with wreck 7426 .	MBES	-
7428	Debris	399853	5700410	A2_h	1.1	0.2	0.1	-	A small indistinct mound situated in a slight depression, the feature is situated 13.0m north of wreck 7426 and may be associated debris. No anomalous features were identified in the SSS data at this location. No anomalous features were identified in the Mag. data at this location, however the large Mag. anomaly associated with wreck 7426 may be masking any smaller anomalies in this area. Interpreted as possible debris associated with wreck 7426 .	MBES	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7429	Debris field	399892	5700414	A2_h	15.9	8.9	0.4	-	An indistinct group of angular dark reflectors, some with indistinct shadows. The feature is situated in an area of mobile sediment and its full extent may be buried. Situated 20.0m north of wreck 7426 . Visible as an angular mound in the MBES data. This position was not directly covered by the Mag. data so it is not possible to ascertain whether ferrous material is present. Interpreted as a possible debris field associated with wreck 7426 .	SSS	-
7430	Debris field	399891	5700390	A1	15.1	9.6	0.5	-	A group of small angular dark reflectors with shadows, situated on the northern edge of wreck 7426 . The feature comprises one large curved dark reflector with a tall, tapered shadow and smaller rounded dark reflectors with irregular shadows. Also identified in the MBES data as a group of indistinct mounds with sediment accumulation surrounding it, one mound measures 1.0 x 1.0m. This position was not directly covered by the Mag. data so it is not possible to ascertain whether ferrous material is present. Interpreted as a debris field associated with wreck 7426 .	SSS, MBES	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7431	Debris	399843	5700382	A2_h	2.9	0.6	0.5	-	A small, square dark reflector with two parallel bright linear reflectors across it and a clear, tapered shadow. Situated 11.0m south-west of wreck 7426 and may be associated. This position was not directly covered by the Mag. data so it is not possible to ascertain whether ferrous material is present. Interpreted as possible debris associated with wreck 7426 .	SSS	-
7432	Debris	399857	5700383	A2_h	7.0	3.5	0.1		Small, compact area of indistinct dark reflectors with short shadows. The feature is situated 2.0m south of wreck 7426 and may be associated debris. No anomalous features were identified in the MBES data at this location. This position was not directly covered by the Mag. data so it is not possible to ascertain whether ferrous material is present. Interpreted as possible debris associated with wreck 7426 .	SSS	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7433	Debris	399846	5700382	A1	13.5	1.7	0.8	-	A distinct long and straight dark reflector with a bright, irregular shadow, possibly suggesting uneven height. Also identified in the MBES data as a distinct linear mound orientated east to west on the seabed, the feature has gently sloping sides and an uneven peak that is slightly taller at the western end, it has some sediment accumulation at this end. The feature is situated 10.0m south-west of wreck 7426 . This position was not directly covered by the Mag. data so it is not possible to ascertain whether ferrous material is present. Interpreted as linear debris associated with wreck 7426 .	SSS, MBES	-
7434	Debris field	399899	5700368	A1	10.5	7.7	0.4	-	An indistinct group of linear and angular dark reflectors with clear shadows, situated at the ESE end of wreck 7426 . No anomalous features were identified in the MBES data at this location. This position was not directly covered by the Mag. data so it is not possible to ascertain whether ferrous material is present. Interpreted as a debris field associated with wreck 7426 .	SSS	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7435	Rope/chain	399917	5700360	A2_l	30.4	0.4	0.4	-	A thin, curvilinear dark reflector with a short, variable shadow, possibly suggesting uneven height. The feature has a small dark reflector with a tapered shadow at its centre measuring 1.0 x 1.0 x 0.4m. The feature is situated 15.0m ESE of wreck 7426 . No anomalous features were identified in the MBES data at this location. No anomalous features were identified in the Mag. data at this location, however the large Mag. anomaly associated with wreck 7426 may be masking any smaller anomalies in this area. Interpreted as possible rope or chain.	SSS	-
7436	Seabed disturbance	399870	5700361	A2_h	19.3	9.6	0.1	-	An area of disturbed seabed comprising indistinct dark reflectors, some with slight shadows. The features are situated within an area of mobile sediments and the full extent may be buried. Situated 12.0m south of wreck 7426 . No anomalous features were identified in the MBES data at this location. No anomalous features were identified in the Mag. data at this location, however the large Mag. anomaly associated with wreck 7426 may be masking any smaller anomalies in this area. Interpreted as a possible natural feature or possible debris associated with wreck 7426 .	SSS	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7437	Mound	399827	5700357	A2_l	1.3	1.1	0.3	-	A small angular mound with steeply sloping sides and a pointed peak. The feature is situated within a slight depression measuring 5.3 x 3.2 x 0.2m and 41.0m south-west of wreck 7426 . No anomalous features were identified in the SSS data at this location. This position was not directly covered by the Mag. data so it is not possible to ascertain whether ferrous material is present. Interpreted as a possible natural feature or possible debris.	MBES	-
7438	Dark reflector	399836	5700347	A2_h	4.2	1.5	0.4	-	A distinct, rounded dark reflector with a bright rounded shadow with two peaks, possibly suggesting uneven height. The feature is situated 42.0m south-west of wreck 7426 . No anomalous features were identified in the MBES data at this location. This position was not directly covered by the Mag. data so it is not possible to ascertain whether ferrous material is present. Interpreted as a possible natural feature or possible debris.	SSS	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7439	Dark reflector	399955	5700349	A2_h	13.0	2.1	1.8	-	An indistinct dark reflector, rounded at its northern end and with a very large, irregular tapered shadow, possibly suggesting uneven height. The feature is situated within an area of mobile sediment and its full extent may be buried. Situated 52.0m ESE of wreck 7426 . This position was only partially covered by the MBES data and not directly covered by the Mag. data so it is not possible to ascertain whether ferrous material is present. Interpreted as a possible natural feature or possible debris.	SSS	-
7440	Debris	399532	5699786	A2_h	3.6	0.5	-	20	A short, linear dark reflector with a short, tapered shadow, distinct from the surrounding seabed. Also identified in the MBES data as a small, distinct elongate mound with gently sloping sides and a rounded peak, with scour to the south extending up to 7.0m. Associated with a small, broad asymmetric dipole with peak and trough on one profile line in the Mag. data, indicating some ferrous material is present. Interpreted as possible ferrous debris.	SSS, MBES, Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7441	Debris	399534	5699728	A2_h	7.0	3.0	1.4	-	A large, indistinct but highly irregular dark reflector with a distinct irregular shadow and a darker linear reflector visible in its centre, casting a very large, tapered shadow. Possibly a cluster of objects situated within an area of mobile sediments. Also identified in the MBES data as a small angular mound with steeply sloping sides and pointed peak, distinct from surrounding seabed and situated within an area of disturbed seabed or scour measuring 5.8 x 5.8 x -0.2m. This position was not directly covered by the Mag. data so it is not possible to ascertain whether ferrous material is present. Interpreted as possible debris.	SSS, MBES	-
7442	Magnetic	399667	5699652	A2_h	-	-	-	85	A medium, sharp symmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7443	Mound	399800	5698254	A2_l	1.7	1.6	0.6	-	A very distinct rounded mound with a rounded peak and steeply sloping sides, with scour extending to the south measuring 10.6 x 4.0 x -0.4m. The feature is anomalous to the surrounding seabed. No anomalous features were identified in the SSS or Mag. data at this location. Interpreted as a possible natural feature or possible non-ferrous debris.	MBES	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7444	Dark reflector	399692	5697904	A2_l	4.9	0.4	0.1	-	A short, linear dark reflector with a short, even shadow, distinct from the surrounding seabed. No anomalous features were identified in the MBES data at this location. This position was not directly covered by the Mag. data so it is not possible to ascertain whether ferrous material is present. Interpreted as a possible natural feature or possible debris.	SSS	-
7445	Dark reflector	399756	5697714	A2_l	2.7	1.8	0.7	-	A small, sub-rounded dark reflector with a broad, slightly irregular shadow. Also identified in the MBES data as a rounded mound with an uneven peak and gently sloping sides, anomalous to the surrounding seabed. This position was not directly covered by the Mag. data so it is not possible to ascertain whether ferrous material is present. Interpreted as a possible natural feature or possible debris.	SSS, MBES	-
7446	Debris	399772	5697454	A2_h	6.4	1.0	0.1	13	A straight linear dark reflector with a bright, even shadow. No anomalous features were identified in the MBES data at this location. Associated with a small, broad, symmetric dipole with peak and trough on one profile line in the Mag. data, indicating some ferrous material is present. Interpreted as possible ferrous debris.	SSS, Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7447	Magnetic	400034	5697397	A2_h	-	-	-	61	A medium asymmetric dipole with peak and trough over two profile lines in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7448	Rope/chain	399746	5697156	A2_l	72.8	0.4	0.3	-	A long, thin and slightly curvilinear dark reflector with a bright, uneven shadow along its length, possibly suggesting uneven height. Visible in the MBES data as a linear mound. This position was not directly covered by the Mag. data so it is not possible to ascertain whether ferrous material is present. Interpreted as a possible length of rope or chain.	SSS	-
7449	Magnetic	399777	5697081	A2_h	-	-	-	34	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7450	Magnetic	399906	5696893	A2_l	-	-	-	12	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7451	Dark reflector	399470	5696686	A2_l	3.4	0.3	0.1	-	A short and thin straight dark reflector with a very short shadow, distinct from the surrounding seabed. No anomalous features were identified in the MBES data at this location. This position was not directly covered by the Mag. data so it is not possible to ascertain whether ferrous material is present. Interpreted as a possible natural feature or possible debris.	SSS	-
7452	Magnetic	399660	5696507	A2_l	-	-	-	16	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7453	Magnetic	400075	5696077	A2_h	-	-	-	749	A very large, sharp asymmetric dipole with peak and trough on one profile line in the Mag. data. Located 74.0m NNW of 7454 and may be related. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7454	Magnetic	400088	5696004	A2_h	-	-	-	250	A large negative monopole with peak and trough on one profile line in the Mag. data. Located 74.0m SSE of 7453 and may be related. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7455	Magnetic	399735	5696003	A2_h	-	-	-	319	A large negative monopole with peak and trough on one profile line in the Mag. data, visible across multiple profiles. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7456	Magnetic	400121	5695791	A2_h	-	-	-	39	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7457	Rope/chain	399767	5695437	A2_l	22.0	1.7	0.2	-	A long, thin and distinct 'v' shaped dark reflector with a bright irregular shadow, possibly suggesting uneven height. This position was not directly covered by the MBES or Mag. data, so it is not possible to ascertain whether ferrous material is present. Interpreted a short length of rope or chain	SSS	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7458	Debris	399862	5695446	A2_h	11.4	6.0	0.2	178	A thin and angular dark reflector with a bright shadow. Identified in the MBES data as a distinct thin, linear mound, the object is orientated north to south on the seabed and is situated in slight scour measuring 11.4 x 6.0 x -0.1m. A possible rope or chain (7459) is associated or snagged on its southern end. Associated with a large, sharp symmetric dipole with peak and trough on one profile line in the Mag. data, indicating ferrous material is present. Interpreted as possible ferrous debris.	MBES, Mag.	-
7459	Rope/chain	399920	5695259	A2_l	406.0	0.9	0.4		A very long, thin and slightly curvilinear dark reflector with a short even shadow along its length. The feature is orientated north to south on the seabed and may be associated or snagged on debris (7458). Visible in the MBES data as thin, low-lying linear mound. No anomalous features were identified in the Mag. data at this location, however the Mag. anomaly associated with debris (7458) may also be associated with the northern end of this feature. Interpreted as a possible length of rope or chain.	SSS	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7460	Rope/chain	399919	5695105	A2_I	19.7	0.2	0.1	-	A very indistinct, slightly curvilinear and thin dark reflector with a slight shadow across its length. May be associated with dark reflectors 7461 and 7462 situated at its south-west end. No anomalous features were identified in the MBES or Mag. data at this location. Interpreted as a possible natural feature or possible non-ferrous debris.	SSS	-
7461	Dark reflector	399907	5695100	A2_I	3.6	0.2	0.1	-	An indistinct, short straight dark reflector with a bright shadow, distinct from the surrounding seabed. May be associated with rope or chain and dark reflector 7460 and 7462 . No anomalous features were identified in the MBES or Mag. data at this location. Interpreted as a possible natural feature or possible non-ferrous debris.	SSS	-
7462	Dark reflector	399911	5695101	A2_I	3.2	0.5	0.1	-	An indistinct, short straight dark reflector with a short, slightly irregular shadow, distinct from the surrounding seabed. May be associated with rope or chain and dark reflector 7460 and 7461 . No anomalous features were identified in the MBES or Mag. data at this location. Interpreted as a possible natural feature or possible non-ferrous debris.	SSS	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7463	Dark reflector	400375	5695034	A2_h	2.5	1.6	0.7	-	A small, angular dark reflector with a long, narrow shadow. Also identified in the MBES data as a distinct square-shaped mound with an uneven peak and steeply sloping sides, situated within a depression measuring 6.3 x 5.8 x -0.4m. No anomalous features were identified in the Mag. data at this location. Interpreted as a possible natural feature or possible non-ferrous debris.	SSS, MBES	-
7464	Dark reflector	399898	5694743	A2_l	8.3	0.2	0.1	-	A short, narrow and indistinct curvilinear dark reflector with a very short, even shadow. No anomalous features were identified in the MBES data at this location. This position was not directly covered by the Mag. data so it is not possible to ascertain whether ferrous material is present. Interpreted as a possible natural feature or possible debris.	SSS	-
7465	Dark reflector	400363	5694651	A2_h	3.7	2.0	0.3	-	A small rounded dark reflector with a curved linear feature extending from one end, with a short irregular shadow. No anomalous features were identified in the MBES data at this location. This position was not directly covered by the Mag. data so it is not possible to ascertain whether ferrous material is present. Interpreted as a possible natural feature or possible debris.	SSS	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7466	Debris field	400520	5694286	A2_l	200.0	1.4	0.7	-	A long, thin and curvilinear dark reflector with variable shadow across its length. Angular dark reflectors with irregular shadows measuring up to 3.0 x 1.1 x 0.7m are attached across its length. Also identified in the MBES data as several irregular and angular mounds with steep sides and uneven peaks with linear scour linking them, spaced approximately 8.0m apart and orientated north to south on the seabed. This position was not directly covered by the Mag. data so it is not possible to ascertain whether ferrous material is present. Interpreted as a possible debris field, and may be fishing gear however, this can't be confirmed without visual inspection.	SSS, MBES	-
7467	Rope/chain	400584	5693996	A2_l	82.6	0.4	0.1	-	A long, thin and slightly curvilinear dark reflector with a short, even shadow along its length. No anomalous features were identified in the MBES or Mag. data at this location. Interpreted as a possible length of non-ferrous rope or chain.	SSS	-
7468	Debris field	400234	5693791	A2_h	24.0	8.0	0.2	69	A compact cluster of linear and angular dark reflectors, some of which have clear, irregular shadows. Visible as an uneven area of seabed in the MBES data. Associated with a medium asymmetric dipole with peak and trough on one profile line in the Mag. data, indicating some ferrous material is present. Interpreted as a possible ferrous debris field.	SSS, Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7469	Magnetic	400217	5693818	A2_h	-	-	-	83	A medium asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Located 21.0m north-west of 7468 and may be related. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7470	Magnetic	400239	5693716	A2_h	-	-	-	52	A medium symmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7471	Debris field	400576	5693563	A2_h	25.1	11.5	0.3	-	A group of thin linear dark reflectors with short even shadows situated within an area of mobile sediments. The feature is situated 16m north of wreck 7472 and may be associated debris. Faintly visible in the MBES data as an uneven area of seabed within mobile sediments. This position was not directly covered by the Mag. data so it is not possible to ascertain whether ferrous material is present. Interpreted as a debris field possibly associated with wreck 7472 .	SSS	-

7472	Wreck	400613	5693545	A1	52.5	38.7	1.6	5443	<p>A large wreck visible as an area of dispersed elongate, angular and curvilinear dark reflectors with bright shadows. The hull is not distinguishable and there are no distinct superstructure features visible, suggesting the wreck is very broken up and degraded. The wreck is situated in an area of mobile sediments and the full extents may be buried. In the MBES data the wreck is visible as a group of elongate, angular and rounded objects situated within depressions. The largest linear object measures 7.7 x 2.8 x 0.6m, a large angular mound at the western end of the wreck measures 4.1 x 2.8m, this has a very flat peak and steep edges, some data points are missing which may suggest its peak is overhanging. Large scouring is visible to the south of the wreck measuring 24.0m long and 0.6m deep. The wreck is surrounded by slight sand waves and has some outcropping geology to the north. Associated with a very large, sharp asymmetric dipole with peak and trough on one profile line in the Mag. data, which is also visible on adjacent profile lines indicating substantial ferrous material is present. Recorded in the UKHO and NMHR database as <i>Selma</i> (Possibly), a 1654 gross ton steam ship that was sunk by a mine in 1915. The wreck was last surveyed in 2018 and reported as consisting of broken and dispersed debris in scour with dimensions of 30.0 x 23.3 x 0.8m.</p>	SSS, MBES, Mag.	UKHO_ 14944, NMHR_904908, KHER_ MKE13527
7473	Magnetic	400597	5693367	A2_h	-	-	-	28	<p>A small asymmetric dipole with peak and trough on one profile line in the</p>	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
									Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.		
7474	Dark reflector	400652	5693360	A2_I	3.3	0.5	0.1	-	A short linear dark reflector with short, slightly flared shadow. The feature is slightly distinct from the surrounding relatively featureless seabed. No anomalous features were identified in the MBES or Mag. data at this location. Interpreted as a possible natural feature or possible non-ferrous debris.	SSS	-
7475	Dark reflector	400673	5693301	A2_I	4.3	0.6	0.1	-	A short curvilinear dark reflector with a short shadow, distinct from surrounding seabed. No anomalous features were identified in the MBES data at this location. This position was not directly covered by the Mag. data so it is not possible to ascertain whether ferrous material is present. Interpreted as a possible natural feature or possible debris	SSS	-
7476	Dark reflector	400681	5693307	A2_I	4.2	0.9	0.1	-	A short linear dark reflector with a short shadow. No anomalous features were identified in the MBES data at this location. This position was not directly covered by the Mag. data so it is not possible to ascertain whether ferrous material is present. Interpreted as a possible natural feature or possible debris.	SSS	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7477	Magnetic	400737	5693257	A2_l	-	-	-	15	A small, broad positive monopole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7478	Rope/chain	400319	5693201	A2_l	66.9	0.1	0.1	-	A long, thin and slightly curvilinear dark reflector with a clear shadow. No anomalous features were identified in the MBES data at this location. This position was not directly covered by the Mag. data so it is not possible to ascertain whether ferrous material is present. Interpreted as a possible length of rope or chain	SSS	-
7479	Magnetic	400360	5693182	A2_h	-	-	-	44	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7480	Magnetic	400427	5693015	A2_h	-	-	-	103	A large, sharp asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7481	Dark reflector	400356	5692778	A2_l	4.2	1.8	0.4	-	Very indistinct elongate dark reflector, possibly a cluster of objects, with a bright, triangular shadow. Also identified in the MBES data as an irregularly shaped angular mound with gently sloping sides, situated within a depression measuring 7.9 x 7.2 -0.2m. This position was not directly covered by the Mag. data so it is not possible to ascertain whether ferrous material is present. Interpreted as a possible natural feature or possible debris.	SSS, MBES	-
7482	Magnetic	400539	5692750	A2_h	-	-	-	36	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7483	Debris field	400222	5692726	A2_l	32.2	3.6	0.6	-	A long, narrow curvilinear dark reflector with a short shadow across its length. The feature has two distinct sub-angular dark reflectors attached to it at either end. Also identified in the MBES data as two large objects connected by an indistinct curvilinear low-lying mound, the southern object is distinct and angular, measuring 5.2 x 3.1 with scouring to the south for 5.0m and -0.3m deep, the northern object is indistinct and measures 8.9 x 2.2 x 0.2m, the feature is orientated approximately north to south and is isolated on a featureless seabed. No anomalous features were identified in the Mag. data at this location. Interpreted as a possible non-ferrous debris field, and may be fishing gear however, this can't be confirmed without visual inspection.	SSS, MBES	-
7484	Dark reflector	399961	5692255	A2_h	3.7	1.5	0.4	-	A short linear dark reflector with a short, rounded shadow and some minor scour. Also identified in the MBES data as an elongate mound with steep sides and a pointed peak, situated within a depression measuring 8.3 x 5.1 x -0.1m. This position was not directly covered by the Mag. data so it is not possible to ascertain whether ferrous material is present. Interpreted as a possible natural feature or possible debris.	SSS, MBES	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7485	Magnetic	399764	5691844	A2_l	-	-	-	19	A small negative monopole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7486	Debris field	399496	5691437	A2_h	45.0	4.1	0.4	-	A group of elongate linear and curvilinear dark reflectors with bright uneven shadows, possibly suggesting uneven height. The linear features may be short lengths of rope or chain or debris. Also identified in the MBES data as an elongate linear mound which is angled at its centre with several indistinct objects attached along its length; the larger of these measure 1.8 x 1.3 x 0.2m at the north-west end, and 1.5 x 1.3 x 0.2m at the south-east end. Situated 34.0m south-west of a recorded wreck 7500 and may be associated. No anomalous features were identified in the Mag. data at this location, however the large Mag. anomaly (7487) situated 90.0m north-east may be masking any smaller anomalies in this area. Interpreted as a possible debris field.	SSS, MBES	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7487	Magnetic	399532	5691524	A1	-	-	-	4317	A very large, sharp asymmetric dipole with peak and trough on one profile line in the Mag. data. Also visible on other profile lines. No anomalous features were identified in the SSS or MBES data at this location, although there are frequent small mounds in the vicinity of this position. Situated 60.0m NNE of a recorded wreck 7500 and may be associated. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7488	Debris field	399521	5691542	A2_h	10.1	0.7	0.3	-	An indistinct alignment of rounded dark reflectors with short, tapered shadows, and possible short linear reflectors. Visible as an uneven area of seabed in the MBES data. The feature is situated within an area of mobile sediments and may be partially buried. This position was not directly covered by the Mag. data so it is not possible to ascertain whether ferrous material is present, however this is situated 17.0m north-west of very large Mag. anomaly 7487 and may be associated. Interpreted as a possible debris field.	SSS	-
7489	Rope/chain	398846	5691561	A2_l	58.0	1.0	0.1	-	A long, highly sinuous dark reflector with a short, even shadow, somewhat distinct from surrounding seabed. This position was not directly covered by the MBES or Mag. data, so it is not possible to ascertain whether ferrous material is present. Interpreted as a possible length of rope or chain.	SSS	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7490	Recorded wreck	398419	5691708	A3	-	-	-	-	The position of a recorded wreck in the UKHO and NMHR records for <i>Frons Olivae</i> , a trawler sunk in 1915 by a mine. The wreck was last surveyed in 2018 and described as being largely intact and partially buried with MBES dimensions of 33.2 x 8.9 x 2.4m. This position is situated outside of the study area and was not directly covered by any of the 2021 geophysical datasets, however a recommended exclusion zone may bring it within, and so it has been retained in this gazetteer.	-	UKHO_13876, NMHR_904905, KHER_MKE13524
7491	Dark reflector	399081	5691412	A2_h	3.6	0.5	0.2	-	A straight dark reflector with a bright, rounded shadow. No anomalous features were identified in the MBES data at this location. This position was not directly covered by the Mag. data so it is not possible to ascertain whether ferrous material is present. Interpreted as a possible natural feature or possible debris.	SSS	-
7492	Rope/chain	399040	5691198	A2_l	15.8	0.5	0.1	-	A short, thin and slightly curvilinear dark reflector with a short, even shadow along its length. No anomalous features were identified in the MBES or Mag. data at this location. Interpreted as a short length of non-ferrous rope or chain.	SSS	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7493	Magnetic trend	398528	5690154	A2_I	210.0	-	-	33	A series of Mag. anomalies ranging from 12nT to 33nT in the Mag. data. The trend is orientated approximately east to west and may be associated with the very large Mag. anomaly associated with wreck (7494) situated to the east. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7494	Wreck	398780	5690035	A1	51.3	42.2	1.0	8421	<p>A wreck visible as a large spread of highly anomalous rounded, curved, linear and angular dark reflectors with shadows of varying heights. The features are situated within an area of sand waves, and there is the potential for further debris to be buried in the vicinity. In the MBES data an area of disturbed seabed within sand waves is visible containing three compact groups of distinct mounds. An elongate object is visible measuring 2.2 x 1.2m and the largest mound measures 2.8 x 1.8m. Smaller rounded and angular mounds are also visible and the feature has scouring to the south for 13.0m and up to -0.4m deep. Associated with a very large, sharp asymmetric dipole with peak and trough on one profile line and visible on multiple profiles in the Mag. data suggesting substantial ferrous material is present. Associated with a recorded wreck in the UKHO dataset, Klar, a steam ship that was on passage to Rouen when it struck a mine in 1915. The vessel had build dimensions of 45.7 x 7.6 x 5.2m. The location was last surveyed in 2018 and was not located by MBES survey and so the record was amended to 'dead', however in earlier surveys small pieces of wreck have been identified. As the wreck is highly degraded, broken up and situated within sand waves it may have become more exposed since the last survey date. Interpreted as a highly broken up wreck.</p>	SSS, MBES, Mag.	UKHO_15175, KHER_MKE13520

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7495	Recorded wreck	398693	5689906	A3	-	-	-	-	A recorded wreck now amended to 'dead' in the UKHO and NMHR databases for <i>Yvonne</i> , a steam ship with build dimensions of 56.1 x 8.5 x 4.3m that was sunk in 1940 when it struck a mine. No anomalous features were identified in any of the 2021 geophysical datasets, however, as remains have been identified at this position previously it has been retained as a precaution in this gazetteer.	-	UKHO_13861, NMHR_904901
7496	Magnetic	398476	5689868	A2_h	-	-	-	51	A medium positive monopole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7497	Magnetic	398352	5689848	A2_h	-	-	-	37	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7498	Mound	397891	5689330	A2_l	2.1	0.7	0.2	-	A small but distinct angular mound with an uneven peak, situated at the base of a sand wave. The feature is anomalous to the surrounding seabed. No anomalous features were identified in the SSS data at this location. This position was not directly covered by the Mag. data 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.	MBES	-
7499	Dark reflector	399055	5690566	A2_h	3.7	0.9	0.1	-	A thin, slightly elongate dark reflector with a bright shadow, isolated on a relatively featureless seabed. No anomalous features were identified in the MBES or Mag data at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris.	SSS	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7500	Recorded wreck	399517	5691466	A3	-	-	-	-	The position of a recorded obstruction in the UKHO record and an unknown wreck in the NMHR records, first identified in 1953. The wreck was last surveyed in 2018 and was not located by MBES survey. In 1998 the record was amended to 'dead'. No anomalous features were identified in any of the 2021 geophysical datasets at this position, however a very large Mag. anomaly (7487) has been identified situated 60.0m NNE and a debris field (7486) has been identified 35.0m south-west that may or may not be associated. As remains have been found in this position previously it has been retained as a precaution in this gazetteer.	-	UKHO_13872, NMHR_
7501	Magnetic	398550	5689502	A2_h	-	-	-	104	A large, sharp asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7502	Magnetic	397980	5689221	A2_l	-	-	-	20	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7503	Magnetic	398176	5688873	A2_l	-	-	-	11	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7504	Magnetic	397940	5688780	A2_h	-	-	-	31	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7505	Magnetic	397854	5688543	A2_h	-	-	-	32	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7506	Magnetic	398170	5688536	A2_h	-	-	-	109	A large asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7507	Magnetic	397700	5688425	A2_l	-	-	-	74	A medium asymmetric dipole with peak and trough on one profile line in the Mag. data. Possibly part of a Mag. trend with 7508 , however this is unclear. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7508	Magnetic	397955	5688391	A2_l	-	-	-	72	A medium asymmetric dipole with peak and trough on one profile line in the Mag. data. Possibly part of a Mag. trend with 7507 , however this is unclear. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7509	Magnetic	398006	5688311	A2_l	-	-	-	26	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7510	Magnetic	397710	5688308	A2_l	-	-	-	14	A small, broad asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7511	Magnetic	397565	5688214	A2_h	-	-	-	34	A small symmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7512	Magnetic	397711	5688100	A2_l	-	-	-	36	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7513	Debris	397913	5687722	A2_h	2.9	2.4	0.6	-	A distinct, angular dark reflector with very small shadows, the feature is situated within an area of mobile sediments and its full extent may be buried. Visible in the MBES data an indistinct mound with an uneven peak. This position was not directly covered by the Mag. data so it is not possible to ascertain whether ferrous material is present at this location. Associated with a UKHO record for a mast like structure protruding above the seabed, it was last surveyed in 2021 and had recorded dimensions of 2.2 x 1.0 x 1.4m. Interpreted as debris.	SSS	UKHO_91384
7514	Magnetic	397648	5687663	A2_l	-	-	-	43	A small, broad asymmetric dipole with peak and trough over two profile lines in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7515	Magnetic	397498	5687586	A2_l	-	-	-	17	A small, broad positive monopole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS data at this location. Visible as a slight disturbance of a sand wave in the MBES dataset. Interpreted as possible ferrous debris either buried or with little surface expression.	Mag.	-
7516	Magnetic	397892	5687383	A2_h	-	-	-	49	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7517	Magnetic	397792	5687314	A2_l	-	-	-	8	A small, broad asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7518	Magnetic	397778	5687232	A2_l	-	-	-	10	A small, broad asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7519	Magnetic	397679	5687374	A2_h	-	-	-	32	A small symmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7520	Magnetic	397455	5687366	A2_h	-	-	-	58	A medium symmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7521	Dark reflector	397283	5687176	A2_h	5.2	0.6	0.1	-	A thin, straight linear dark reflector with a short uneven shadow, possibly suggesting uneven height. No anomalous features were identified in the MBES data at this location. This position was not directly covered by the Mag. data 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.	SSS	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7522	Rope/chain	397333	5687104	A2_I	149.0	0.8	0.1	17	A long and relatively straight linear dark reflector which is slightly curved and wider at the north-eastern end. A short consistent shadow is visible across its length and it is orientated north-east to south-west on the seabed. Visible in the MBES dataset as an indistinct, thin linear mound. Associated with two small Mag. anomalies where the features crosses a Mag. line, indicating some ferrous material is present. May relate to rope or chain (7523) situated 28.0m north-east of its northern end. Interpretated as a possible length of partially ferrous rope or chain.	SSS, Mag.	-
7523	Rope/chain	397422	5687136	A2_I	33.0	0.3	0.1	-	An indistinct, slightly curvilinear dark reflector that is slightly intermittent and has varied width. The feature has a short bright shadow across its length. No anomalous features were identified in the MBES data at this location. This position was not directly covered by the Mag. data so it is not possible to ascertain whether ferrous material is present at this location. May be associated with a long length of rope or chain situated 28.0m south-west (7522). Interpretated as a possible length of rope or chain.	SSS	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7524	Magnetic trend	397551	5687019	A2_I	360.0	-	-	69	A series of Mag. anomalies ranging from 6nT to 69nT in the Mag. data. The trend is orientated approximately north-west to south-east and may be associated with the two rope or chains identified to the west (7522 and 7523). No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7525	Mound	397511	5686872	A2_I	3.1	1.8	0.2	-	An elongate mound with steep sides and uneven peak, the feature is situated within sand waves and has some slight scouring to the south-west, slightly anomalous to the surrounding seabed. No anomalous features were identified in the MBES or Mag. data at this location. Interpreted as a possible natural feature or may be possible debris.	MBES	-
7526	Dark reflector	397363	5686838	A2_I	2.6	1.9	1.1	-	A distinct, oval shaped dark reflector with a bright tapered shadow and significant height. The feature is highly anomalous the surrounding seabed. Identified in the MBES data as a very distinct, isolated mound with steep sides and a rounded peak, the feature is situated in a depression measuring 6.7m and - 0.2m deep, with scour to the south-west measuring 18.0m. This position was not directly covered by the Mag. data 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.	SSS, MBES	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7527	Magnetic	397567	5686758	A2_l	-	-	-	16	A small negative monopole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7528	Magnetic	397431	5686681	A2_h	-	-	-	26	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7529	Magnetic	397477	5686562	A2_l	-	-	-	12	A small symmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7530	Magnetic	397218	5686594	A2_l	-	-	-	34	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7531	Debris	397071	5686592	A2_h	6.1	1.4	0.1	-	An indistinct short and straight, linear dark reflector with a short bright shadow. The feature is isolated on a relatively featureless area of seabed. No anomalous features were identified in the MBES data at this location. This position was not directly covered by the Mag. data so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as possible linear debris.	SSS	-
7532	Magnetic	397265	5686450	A2_l	-	-	-	35	A small negative monopole with peak and trough on one profile line in the Mag. data, also visible on other profile lines. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7533	Magnetic	397180	5686382	A2_l	-	-	-	34	A small asymmetric dipole with peak and trough on one profile line in the Mag. data, also visible on other profile lines. Visible as an uneven area of seabed in the MBES data. No anomalous features were identified in the SSS data at this location. Interpreted as possible ferrous debris either buried or with little surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7534	Rope/chain	397105	5686306	A2_I	72.1	0.4	0.1	-	A long, thin and slightly curvilinear dark reflector with a short, bright shadow across its extent. The feature is orientated approximately north-east to south-west on the seabed. Faintly visible in the MBES data as a long, thin low-lying curvilinear mound. This position was not directly covered by the Mag. data so it is not possible to ascertain whether ferrous material is present at this location. May be associated with debris field (7535) situated 13m north-east. Interpreted as a possible length of rope or chain.	SSS	-
7535	Debris field	397160	5686331	A2_I	52.5	0.7	0.1	14	An indistinct, long and slightly curvilinear dark reflector with a short shadow across its length. The feature curves round at its western end and has a very small dark reflector with a shadow at the eastern end. The feature has some sediment disturbance surrounding it and the full extent may be buried. The feature is visible in the MBES dataset as a long right-angled mound within slight sand waves. Associated with a small symmetric dipole with peak and trough on one profile line in the Mag. data, indicating some ferrous material is present. Interpreted as a possible partially ferrous debris field, and may be fishing gear however, this can't be confirmed without visual inspection.	SSS, Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7536	Magnetic	397146	5686310	A2_h	-	-	-	120	A large, sharp asymmetric dipole with peak and trough over two profile lines in the Mag data, also visible on other profile lines. No anomalous features were identified in the SSS or MBES data at this location. May be associated with the partially ferrous debris field (7535) situated 20.0m north. Interpreted as possible ferrous debris either buried or with little surface expression.	Mag.	-
7537	Dark reflector	397040	5686333	A2_l	8.2	0.7	0.1	-	A distinct, slightly curvilinear dark reflector with a short shadow. The feature is situated on an uneven area of seabed. No anomalous features were identified in the MBES data at this location. This position was not directly covered by the Mag. data 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.	SSS	-
7538	Magnetic	396963	5686272	A2_h	-	-	-	24	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7539	Magnetic	397345	5686261	A2_h	-	-	-	120	A large, sharp asymmetric dipole with peak and trough on one profile line in the Mag. data, also visible on other profile lines. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7540	Magnetic	397385	5686245	A2_h	-	-	-	19	A small symmetric dipole with peak and trough on one profile line with a complex with double peak in the Mag. data. May be associated with very large Mag. anomaly (7539) on the adjacent line 43.0m to the west. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7541	Magnetic	397021	5686145	A2_h	-	-	-	568	A very large, sharp asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7542	Debris	396881	5685977	A2_h	6.8	5.9	0.3	181	An indistinct, oval shaped dark reflector that is brighter in the centre, suggesting it may be hollow with no shadow. Visible in the MBES data as an oval mound with an uneven peak with some sediment build up and seabed disturbance surrounding it. Associated with a large, sharp asymmetric dipole with peak and trough on one profile line in the Mag. data, indicating some ferrous material is present. Interpreted as a possible ferrous item of debris.	SSS, Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7543	Magnetic	397034	5685696	A2_h	-	-	-	59	A medium negative monopole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7544	Magnetic	396889	5685710	A2_h	-	-	-	88	A medium, sharp asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7545	Magnetic	396823	5685608	A2_l	-	-	-	26	A small negative monopole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7546	Rope/chain	396607	5685728	A2_l	25.0	1.7	0.3	-	A long, thin and predominantly straight dark reflector with a short bright shadow across its length. The feature has an angular object at its centre and is distinct to the surrounding seabed. Visible in the MBES dataset as a low-lying linear mound with an irregular rounded mound at its centre. This position was not directly covered by the Mag. data so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible length of rope or chain.	SSS	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7547	Rope/chain	396655	5685575	A2_l	218.0	0.6	0.3	13	A long, thin and slightly curvilinear dark reflector with a short shadow across its extent. A small, angular dark reflector with a long thin shadow measuring 2.8 x 0.5 x 1.8m is situated at the southern end of the feature. Also identified in the MBES dataset as a long and slightly curvilinear mound that is sometimes intermittent across its length, situated within an area of slight sand waves. The feature is orientated north to south on the seabed. Associated with two small Mag. anomalies where it crosses a Mag. line, indicating some ferrous material is present. Interpreted as a partially ferrous rope or chain.	SSS, MBES, Mag.	-
7548	Magnetic	396641	5685442	A2_h	-	-	-	65	A medium, sharp asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7549	Magnetic	396626	5685335	A2_h	-	-	-	25	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7550	Magnetic	396598	5685323	A2_I	-	-	-	7	A small, broad asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7551	Magnetic	396603	5685272	A2_I	-	-	-	8	A small, broad positive monopole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7552	Dark reflector	396527	5685690	A2_I	3.2	1.0	0.4	-	A slightly elongate dark reflector with a bright shadow. Also identified in the MBES dataset as an elongate mound with steep sides and uneven peak, slightly anomalous to the surrounding seabed. This position was not directly covered by the Mag. data 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.	SSS, MBES	-
7553	Rope/chain	396543	5685673	A2_I	10.1	0.3	0.1	-	A long, thin and slightly curved linear dark reflector with a short shadow. The feature is indistinct and visible as a low-lying mound in the MBES dataset. This position was not directly covered by the Mag. data so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible short length of rope or chain.	SSS	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7554	Rope/chain	396509	5685570	A2_I	80.9	0.6	0.2	23	A long, straight dark reflector with a short shadow across its length. The feature gets more sinuous at the south-west end. Visible as a low-lying mound in the MBES dataset, orientated north-east to south-west on the seabed. Associated with a small asymmetric dipole with peak and trough on one profile line, complex with double peak in the Mag. data, indicating some ferrous material is present. Interpreted as a possible length of partially ferrous rope or chain.	SSS, Mag.	-
7555	Rope/chain	396369	5685613	A2_I	89.3	0.5	0.2	-	A long, thin and slightly curvilinear dark reflector with a bright shadow visible along its length. Indistinctly visible in the MBES dataset as a low-lying curvilinear mound orientated approximately north-east to south-west. May be associated with similar feature (7556) situated 15.0m from its south-western end. No anomalous features were identified in the Mag. data at this location. Interpreted as a possible length of non-ferrous rope or chain.	SSS	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7556	Rope/chain	396314	5685569	A2_I	57.1	0.3	0.2	-	A long, thin and slightly curvilinear dark reflector with a bright shadow visible along its length. Indistinctly visible in the MBES dataset as a low-lying curvilinear mound orientated approximately ENE to WSW. May be associated with similar feature (7555) situated 15.0m from its north-eastern end. This position was not directly covered by the Mag. data so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible length of rope or chain.	SSS	-
7557	Dark reflector	396462	5685398	A2_I	4.4	0.8	0.2	-	A short, straight, linear dark reflector with a short, rounded shadow. Faintly visible in the MBES dataset as a low-lying elongate mound. This position was not directly covered by the Mag. data 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.	SSS	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7558	Wreck	396356	5685266	A1	106.1	49.5	3.1	3614	A large wreck visible as a large cluster of densely packed angular, irregular and linear dark reflectors with varying shadows, some features are very tall. The hull of the wreck is not visible suggesting it is highly degraded and the wreck has some associated debris identified in the vicinity (7559 and 7560). Areas of sediment accumulation are visible within the feature and further objects may be buried. Also identified in the MBES dataset as a large area of disturbed seabed situated in a large depression up to 2.0m deep and comprising numerous angular and rounded mounds and smaller depressions. Associated with a very large, sharp asymmetric dipole with peak and trough on multiple profile lines in the Mag. dataset, indicating substantial ferrous material is present. Associated with UKHO and NMHR records for the <i>Bravore</i> , a steam ship built in 1916 with two boilers and a triple expansion engine and build dimensions of 71.6 x 11.6 x 4.9m. The wreck is recorded as being scattered across a large area, an almost circular depression with debris within and a strong magnetic anomaly associated and geophysical dimensions of 80.5 x 44.9 x 3.6m. Interpreted as a highly degraded wreck.	SSS, MBES, Mag.	UKHO_13837, NMHR_904884, KHER_MKE13503

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7559	Debris	396301	5685224	A2_h	2.4	0.8	0.6	-	An oval shaped slightly angular dark reflector with a short shadow. Situated approximately 20.0m south-west of wreck 7558 and may be related. Visible as an oval mound in the MBES dataset. No anomalous features were identified in the Mag. data at this location, however the large Mag. anomaly associated with wreck 7558 may be masking any smaller anomalies in this area. Interpreted as possible debris associated with wreck 7558 .	SSS	-
7560	Debris	396294	5685212	A2_h	3.5	0.9	0.4	-	An oval shaped slightly angular dark reflector with a short shadow. Situated approximately 30.0m south-west of wreck 7558 and may be related. Visible as an oval mound in the MBES dataset. No anomalous features were identified in the Mag. data at this location, however the large Mag. anomaly associated with wreck 7558 may be masking any smaller anomalies in this area. Interpreted as possible debris associated with wreck 7558 .	SSS	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7561	Debris	396393	5685166	A2_h	4.3	1.3	0.7	-	A short, thin linear dark reflector with a bright shadow. The feature is situated on an uneven area of seabed and 80.0m south of wreck 7558 . Also identified in the MBES dataset as a slightly elongate mound with steeply sloping sides and an uneven peak, the feature is isolated and situated in a slight depression measuring 5.3 x 2.5 x -0.1m. This position was not directly covered by the Mag. data so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible linear item of debris.	SSS, MBES	-
7562	Rope/chain	396189	5685189	A2_l	76.3	0.6	0.1	-	A long, thin and slightly curvilinear dark reflector with a very short shadow along its length. The feature is slightly irregular and indistinct in places, orientated north-east to south-west on the seabed. No anomalous features were identified in the MBES or Mag. data at this location. Interpreted as a possible length of non-ferrous rope or chain.	SSS	-
7563	Magnetic	396213	5685225	A2_l	-	-	-	25	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. Situated 12.0m north of rope or chain 7562 and may be related. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7564	Magnetic	396144	5685374	A2_h	-	-	-	26	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7565	Magnetic	396009	5685497	A2_h	-	-	-	84	A medium, sharp symmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7566	Debris	395958	5685446	A2_h	8.0	2.1	0.5	127	A distinct and highly angular dark reflector with some linear features internally. The feature has a large irregular shadow, possibly suggesting uneven height with some scour and surrounding sediment disturbance. Also identified in the MBES dataset as a distinct linear mound with steeply sloping sides and a slightly uneven peak, the object is situated in a depression measuring 16.4 x 12.7 x -0.5m. Associated with a large, sharp positive monopole with peak and trough on one profile line in the Mag. data, indicating ferrous material is present. Associated with a UKHO record for a linear contact with scour to the north-east and south-west and MBES dimensions of 6.9 x 1.7 x 0.1m. Interpreted as ferrous linear debris.	SSS, MBES, Mag.	UKHO_75358

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7567	Magnetic	395847	5685464	A2_l	-	-	-	11	A small, broad asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7568	Debris	395742	5685438	A2_h	1.8	1.7	0.2	31	An indistinct angular mound or possibly three very small mounds directly next to one another. The feature is isolated on a slightly uneven area of seabed. No anomalous features were identified in the SSS data at this location. Associated with a small positive monopole with peak and trough on one profile line in the Mag. data, indicating some ferrous material is present. Interpreted as possible ferrous debris.	MBES, Mag.	-
7569	Debris	395944	5685305	A2_h	9.3	0.5	0.1	-	A long, thin and distinct linear dark reflector with a bright shadow across its length. No anomalous features were identified in the MBES data at this location. This position was not directly covered by the Mag. data so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as possible linear debris.	SSS	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7570	Rope/chain	395903	5685240	A2_I	24.3	1.2	0.4	-	An indistinct, slightly curvilinear dark reflector with a bright shadow, the shadow is larger at the western end, possibly suggesting uneven height. Indistinctly visible in the MBES data as a low-lying linear mound, orientated north-west south-east on the seabed. Located 30.0m east of similar feature 7571 and may be related. This position was not directly covered by the Mag. data so it is not possible to ascertain whether ferrous material is present at this location, although a Mag. anomaly is situated 11.0m south of the south-east end of this feature and may be related. Interpreted as a possible length of rope or chain.	SSS	-
7571	Rope/chain	395852	5685229	A2_I	48.3	0.6	0.2	11	A long, thin and slightly curvilinear dark reflector with a short shadow along its length. The feature is orientated north-east to south-west on the seabed. The feature is faintly visible in the MBES data as an intermittent linear mound. Located 30.0m west of similar feature 7571 and may be related. Associated with a small, broad positive monopole with peak and trough on one profile line in the Mag. data, at its south-west end, indicating ferrous some material is present. Interpreted as a partially ferrous length of rope or chain.	SSS, Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7572	Debris	395821	5685159	A2_h	14.1	0.5	0.2	-	A short, curvilinear dark reflector with a clear shadow which is larger at the northern end, possibly suggesting uneven height. No anomalous features were identified in the MBES or Mag. data at this location. Interpreted as non-ferrous curvilinear debris.	SSS	-
7573	Debris	395836	5685133	A2_h	1.9	1.5	0.5	636	A hollow and rounded dark reflector with a bright, tapered shadow, may be two objects close together, situated in a large depression measuring 3.0 x 1.8m. The feature is visible in the MBES data as an irregular mound. Associated with a very large, sharp positive monopole with peak and trough on one profile line in the Mag. data, also visible on the adjacent profile lines, indicating ferrous material is present. Interpreted as possible ferrous debris.	SSS, Mag.	-
7574	Magnetic	396178	5685080	A2_h	-	-	-	31	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7575	Magnetic	396125	5685111	A2_l	-	-	-	11	A small, broad asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7576	Dark reflector	396108	5685095	A2_h	4.3	1.5	0.5	-	An elongate dark reflector with a clear, slightly irregular shadow with a flat top. Visible in the MBES data as a slightly elongate mound with gently sloping sides and an even peak, the feature is isolated on a relatively featureless, slightly uneven seabed. This position was not directly covered by the Mag. data 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.	SSS, MBES	-
7577	Dark reflector	396043	5685079	A2_h	4.6	0.4	0.1	-	A distinct, short, linear dark reflector with a short slightly irregular shadow, possibly suggesting uneven height. No anomalous features were identified in the MBES data at this location. This position was not directly covered by the Mag. data 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.	SSS	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7578	Debris field	396001	5685045	A2_h	38.0	29.2	0.8	235	A large area of indistinct linear and angular dark reflectors with slightly irregular shadows, a possible linear feature protrudes to the south-west. The feature is situated on an uneven area of seabed and its full extent may be buried. Also identified in the MBES data as a group of distinct mounds, approximately six objects, the largest measures 1.6 x 1.4 x 0.6m, anomalous to the surrounding seabed. The feature has an area of seabed disturbance to the south and south-east extending for a maximum of 20.0m. Associated with two large, sharp asymmetric dipoles with peak and troughs on one profile line in the Mag. data, indicating ferrous material is present. Interpreted as a ferrous debris field.	SSS, MBES, Mag.	-
7579	Dark reflector	395729	5685112	A2_l	3.6	0.2	0.2	-	A very narrow, short and straight linear dark reflector with a short, triangular shadow. The object is small but distinct. No anomalous features were identified in the MBES or Mag. data at this location. Interpreted as a possible natural feature or may be possible debris.	SSS	-
7580	Magnetic	395651	5685276	A2_h	-	-	-	59	A medium, sharp asymmetric dipole with peak and trough on one profile line in the Mag. data, also visible on adjacent profile line. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7581	Magnetic	395841	5685335	A2_I	-	-	-	8	A small, broad asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7582	Magnetic	395798	5685326	A2_I	-	-	-	15	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7583	Magnetic	395933	5685228	A2_I	-	-	-	6	A small, broad asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7584	Dark reflector	395985	5685211	A2_I	1.4	0.3	0.2	-	A thin, slightly elongate dark reflector with a bright shadow. Visible as a slightly elongate mound in the MBES dataset. This position was not directly covered by the Mag. data 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.	SSS	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7585	Rope/chain	395728	5685369	A2_I	10.8	0.2	0.2		A long, thin and slightly curvilinear dark reflector with a short, bright shadow, the feature has a small dark reflector with a bright squared off shadow attached, measuring 0.3 x 0.1 x 0.1m. Faintly visible in the MBES dataset as a linear depression. No anomalous features were identified in the Mag. data at this location. Interpreted as a possible short length of rope or chain.	SSS	-
7586	Rope/chain	395738	5685362	A2_I	47.7	0.2	0.2		A long thin, slightly curved dark reflector with a short, bright shadow. The feature is orientated north-east to south-west on the seabed. Faintly visible in the MBES dataset as a linear depression. No anomalous features were identified in the Mag. data at this location. Interpreted as a possible length of rope or chain.	SSS	-
7587	Magnetic	395716	5685333	A2_I	-	-	-	10	A small symmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7588	Debris	395756	5685310	A2_h	2.3	0.1	0.1	144	An indistinct elongate dark reflector with a bright shadow, the feature is isolated on an uneven area of seabed. No anomalous features were identified in the MBES data at this location. Associated with a large, sharp asymmetric dipole with peak and trough on one profile line in the Mag. data, indicating some ferrous material is present. Interpreted as possible ferrous debris.	SSS	-
7589	Dark reflector	395729	5685174	A2_l	2.4	0.4	0.2	-	A distinct straight dark reflector with a parallel dark reflector directly next to it and with an uneven shadow, possibly suggesting uneven height. No anomalous features were identified in the MBES or Mag. data at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris.	SSS	-
7590	Dark reflector	395635	5685338	A2_l	2.2	0.4	0.8	-	An elongate and slightly curved dark reflector with a bright rounded shadow, anomalous to the surrounding seabed. Visible as an uneven area of seabed in the MBES data. This position was not directly covered by the Mag. data 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.	SSS	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7591	Magnetic	395629	5685137	A2_h	-	-	-	52	A medium, sharp asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7592	Magnetic	395626	5685100	A2_l	-	-	-	20	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7593	Magnetic	395575	5685079	A2_l	-	-	-	13	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7594	Magnetic	395470	5685406	A2_l	-	-	-	21	A small symmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7595	Dark reflector	395559	5685235	A2_l	4.5	0.1	0.1	-	A long thin and straight dark reflector with a bright shadow. No anomalous features were identified in the MBES or Mag. data at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris.	SSS	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7596	Magnetic	395409	5685277	A2_I	-	-	-	5	A small, broad asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7597	Magnetic	395481	5685134	A2_I	-	-	-	26	A small negative monopole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7598	Dark reflector	395468	5685097	A2_I	1.4	0.3	0.2	-	An indistinct slightly elongate dark reflector with a bright uneven shadow, situated within a wider boulder field but slightly anomalous. No anomalous features were identified in the MBES or Mag. data at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris.	SSS	-
7599	Magnetic	395356	5685268	A2_I	-	-	-	9	A small, broad asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7600	Magnetic	395319	5685228	A2_h	-	-	-	33	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7601	Dark reflector	395308	5685099	A2_l	1.1	0.6	0.6	-	A distinct angular dark reflector with a bright uneven shadow, possible suggesting uneven height. The feature is slightly anomalous and isolated on the seabed. No anomalous features were identified in the MBES or Mag. data at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris.	SSS	-
7602	Debris	395258	5685143	A2_h	3.8	0.3	0.1	-	A thin and elongate dark reflector with a short, bright shadow. The feature is situated on an uneven area of seabed and is isolated. No anomalous features were identified in the MBES or Mag. data at this location. Interpreted as a possible short linear item of non-ferrous debris.	SSS	-
7603	Debris	395189	5685054	A2_h	4.9	0.3	0.2	8	An indistinct, thin and 'v' shaped dark reflector with a bright, short shadow across its length. No anomalous features were identified in the MBES data at this location. Associated with a small, broad asymmetric dipole with peak and trough on one profile line in the Mag. data, indicating some ferrous material is present. Interpreted as a ferrous item of debris.	SSS, Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7604	Debris	395142	5685049	A2_h	2.4	0.1	0.1	-	A thin and straight dark reflector with a bright shadow, situated on an uneven area of seabed. No anomalous features were identified in the MBES data at this location. This position was not directly covered by the Mag. data so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as linear item of debris.	SSS	-
7605	Magnetic	395110	5685137	A2_h	-	-	-	44	A small positive monopole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7606	Debris	394960	5685020	A2_h	2.4	2.2	0.3	-	A distinct dark reflector with a bright uneven shadow, possibly suggesting uneven height. The feature has two linear pieces visible and is situated on an uneven area of seabed. Visible as a small irregular mound in a depression in the MBES data. No anomalous features were identified in the Mag. data at this location. Interpreted as possible non-ferrous debris.	SSS	-
7607	Magnetic	394902	5684971	A2_l	-	-	-	21	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7608	Magnetic	394774	5685247	A1	-	-	-	1452	A very large, sharp asymmetric dipole with peak and trough on one profile line in the Mag. data. Situated approximately 35.0m south of a charted cable. Associated with a UKHO record for an obstruction first identified in 2019, described as a large rectangular object in a pile with small square objects measuring 12.1 x 8.9 x 0.5m. This position is situated 40.0m outside of the SSS and MBES data extents, however, a precautionary exclusion zone would extend inside the study area.	Mag.	UKHO_91237, NMHR_831756, KHER_MKE9818
7609	Mound	394862	5684925	A2_I	14.0	1.0	0.6	-	A long curvilinear and intermittent mound with varying height, generally steeply sloping sides, orientated east to west on an uneven area of seabed. No anomalous features were identified in the SSS or Mag. data at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris.	MBES	-
7610	Magnetic	394773	5685158	A2_I	-	-	-	18	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7611	Debris	394674	5685135	A2_h	3.8	0.7	0.2	184	An irregularly shaped, elongate dark reflector with some slight seabed disturbance surrounding it. Visible in the MBES dataset as a slightly elongate mound within a depression. Associated with a large, sharp asymmetric dipole with peak and trough on one profile line in the Mag. data, indicating some ferrous material is present. Interpreted as a ferrous item of debris.	SSS, Mag.	-
7612	Magnetic	394619	5685125	A1	-	-	-	4084	A very large, sharp asymmetric dipole with peak and trough on one profile line in the Mag. data. May be associated with very large Mag. anomaly 7613 situated 50.0m west. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7613	Magnetic	394568	5685116	A1	-	-	-	1627	A very large, sharp asymmetric dipole with peak and trough on one profile line in the Mag. data. May be associated with very large Mag. anomaly 7612 situated 50.0m east. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7614	Magnetic	394626	5684988	A2_h	-	-	-	86	A medium negative monopole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Possible north-east to south-west trend with 7615 and 7616 . Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7615	Magnetic	394596	5684935	A2_h	-	-	-	50	A medium negative monopole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Possible north-east to south-west trend with 7614 and 7616 . Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7616	Magnetic	394584	5684910	A2_h	-	-	-	47	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Possible north-east to south-west trend with 7614 and 7615 . Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7617	Debris field	394428	5685138	A2_h	27.3	7.5	0.9	-	A large spread of distinct dark reflectors with large bright shadows, the feature comprises elongate, curvilinear and angular objects, the largest object measures 4.5 x 0.5m. Visible as an uneven area of seabed in the MBES dataset. This position was not directly covered by the Mag. data so it is not possible to ascertain whether ferrous material is present at this location. Associated with a UKHO record for an obstruction found by MBES survey in 2019 measuring 14.7 x 3.5m. Interpreted as a possible debris field.	SSS	UKHO_91236
7618	Magnetic	394399	5684996	A2_l	-	-	-	21	A small asymmetric dipole with peak and trough over two profile lines in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7619	Debris	394381	5684886	A2_l	0.8	0.6	0.4	7	A distinct curvilinear dark reflector with a bright, long shadow. No anomalous features were identified in the MBES data at this location. Associated with a small, broad symmetric dipole with peak and trough on one profile line in the Mag. data, indicating some ferrous material is present. Interpreted as possible ferrous debris	SSS, Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7620	Dark reflector	394285	5684915	A2_l	2.0	0.2	0.2	-	A thin and slightly elongate dark reflector with a bright shadow, the feature is situated on an uneven area of seabed. No anomalous features were identified in the MBES or Mag. data at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris.	SSS	-
7621	Dark reflector	394268	5684943	A2_l	2.6	0.8	0.4	-	A distinct and slightly right-angled dark reflector with a bright shadow, the feature is situated on an uneven area of seabed. Visible as a slightly curvilinear mound in a depression in the MBES data. This position was not directly covered by the Mag. data 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.	SSS	-
7622	Debris	394107	5684882	A2_h	5.9	0.2	0.2	-	A long and thin linear dark reflector with an uneven shadow, possibly suggesting uneven height. The feature is situated on an uneven area of seabed. No anomalous features were identified in the MBES data at this location. This position was not directly covered by the Mag. data so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as possible debris.	SSS	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7623	Debris	394125	5684866	A2_h	5.4	0.2	0.3	81	A long and thin dark reflector with a bright shadow. The feature is situated on an uneven area of seabed and has some scouring to the north. Faintly visible as an elongate low-lying mound in the MBES data. Associated with a medium, sharp asymmetric dipole with peak and trough on one profile line, also visible on an adjacent line in the Mag. data, indicating some ferrous material is present. Interpreted as possible ferrous debris.	SSS	-
7624	Magnetic	394101	5684816	A2_l	-	-	-	22	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7625	Dark reflector	394024	5684936	A2_l	1.1	1.1	0.3	-	An indistinct hollow dark reflector with a bright shadow, slightly anomalous to the surrounding seabed. Visible as a mound in the MBES data. No anomalous features were identified in the Mag. data at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris.	SSS	-
7626	Magnetic	394041	5684948	A2_l	-	-	-	18	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7627	Magnetic	394019	5684998	A2_I	-	-	-	14	A small symmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7628	Dark reflector	393982	5684920	A2_I	1.5	1.3	0.4	-	A distinct hollow dark reflector with a bright rounded shadow, the feature has some slight scour to the south. Visible as a mound in a depression in the MBES data. This position was not directly covered by the Mag. data 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.	SSS	-
7629	Dark reflector	393918	5685060	A2_I	1.7	1.7	0.4	-	An indistinct slightly angular dark reflector with a bright tapered shadow within a depression or area of slight seabed disturbance. Also identified in the MBES data as a distinct square mound with steep edges and a gently sloping peak. The feature is in a slight depression measuring 8.2 x 5.9m and is situated on an uneven area of seabed. This position was not directly covered by the Mag. data 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.	SSS, MBES	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7630	Dark reflector	393897	5685037	A2_I	1.4	0.4	1.1	-	A small, angular dark reflector with a very long tapered shadow and significant height. Also identified in the MBES dataset as a distinct, angular mound with a double peak and gently sloping uneven sides, may be multiple objects next to one another. This position was not directly covered by the Mag. data 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.	SSS, MBES	-
7631	Magnetic	393912	5684931	A1	-	-	-	1894	A very large negative monopole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7632	Dark reflector	393744	5684981	A2_I	6.4	2.9	0.3	-	A distinct rectangular dark reflector with a bright shadow, the feature is anomalous to the surrounding seabed. Visible as a mound in the MBES data. This position was not directly covered by the Mag. data 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.	SSS	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7633	Debris	393716	5684916	A2_h	2.3	0.4	0.2	-	A distinct elongate and slightly dark reflector with a bright shadow, the feature is right angled at one end. Visible as a slight mound in the MBES data. No anomalous features were identified in the Mag. data at this location. Interpreted as possible debris.	SSS	-
7634	Debris	393697	5684909	A2_h	3.0	0.9	0.3	-	A distinct elongate dark reflector with a bright, uneven shadow, the feature may be multiple objects aligned. Visible as an uneven area of seabed in the MBES dataset. This position was not directly covered by the Mag. data so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as possible debris.	SSS	-
7635	Debris field	393682	5684904	A2_h	13.4	4.9	0.5	92	A group of distinct elongate and angular dark reflectors with bright shadows, directly next to one another, the largest object measures 3.4 x 1.5 x 0.4m. Also identified in the MBES data as an area of disturbed seabed comprising two low lying elongate objects within a slight depression and angular mounds, situated on a slightly uneven area of seabed. Associated with a medium, sharp asymmetric dipole with peak and trough on one profile line, also seen on adjacent profile in the Mag. data, indicating ferrous material is present. Interpreted as a ferrous debris field.	SSS, MBES, Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7636	Dark reflector	393656	5684884	A2_l	2.3	1.4	0.9	-	A distinct oval dark reflector with a bright, uneven shadow possibly suggesting uneven height. The feature has some possible smaller angular objects directly next to it, and may be broken up or partially buried. Also identified in the MBES data as a distinct rectangular mound with steeply sloping sides and a flat peak. The feature is situated in a depression or scour measuring 10.7 x 6.7 x -0.2m and orientated north-east to south-west. This position was not directly covered by the Mag. data 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.	SSS, MBES	-
7637	Dark reflector	393630	5684895	A2_l	4.4	0.2	0.3	-	A small elongate dark reflector with a bright, slightly flared shadow, distinct to the surrounding seabed. No anomalous features were identified in the MBES or Mag. data at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris.	SSS	-
7638	Debris	393742	5684873	A2_h	2.2	0.4	0.2	67	A distinct, slightly elongate dark reflector with a bright shadow. No anomalous features were identified in the MBES data at this location. Associated with a medium, sharp positive monopole with peak and trough on one profile line in the Mag. data, indicating some ferrous material is present. Interpreted as ferrous debris.	SSS, Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7639	Magnetic	393735	5684844	A2_h	-	-	-	366	A large, sharp positive monopole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7640	Dark reflector	393797	5684837	A2_l	1.6	0.3	0.1	-	A distinct, slightly elongate dark reflector with a bright shadow. No anomalous features were identified in the MBES data at this location. This position was not directly covered by the Mag. data 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.	SSS	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7641	Debris field	393821	5684780	A2_h	10.6	5.5	0.9	-	An area of disturbed seabed comprising indistinct dark reflectors with shadows and some possible bright reflectors and depressions. The features are indistinct and may be buried by mobile sediments. Also identified in the MBES data as an indistinct mound, with some slight peaks and angular edges visible with some possible surrounding sediment accumulation. No anomalous features were identified in the Mag. data at this location, although a Mag. anomaly (7642) was identified approximately 28.0m to the west. Associated with a UKHO recorded obstruction, first identified in 2019, with MBES dimensions of 5.9 x 5.7 x 0.8m, and described as an object with some structure that might indicate it is man-made. Interpreted as a possible non-ferrous debris field	SSS, MBES	UKHO_91238
7642	Magnetic	393792	5684771	A2_h	-	-	-	96	A medium, sharp symmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7643	Magnetic	393747	5684764	A2_l	-	-	-	26	A small, sharp asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7644	Dark reflector	393467	5684935	A2_l	2.0	0.5	0.6	-	A distinct thin and slightly curved dark reflector with a very bright shadow, the feature has some sediment accumulation to the south. Also identified in the MBES data as a distinct angular mound situated in a depression or scour measuring 8.3 x 7.5 x -0.2m. No anomalous features were identified in the Mag. data at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris.	SSS, MBES	-
7645	Debris	393351	5684847	A2_h	0.4	0.3	0.4	21	A small and angular dark reflector with a long, bright and slightly irregular shadow. Associated with a small asymmetric dipole with peak and trough on one profile line in the Mag. data, indicating some ferrous material is present. Interpreted as ferrous debris.	SSS	-
7646	Mound	393325	5684724	A2_l	5.7	2.0	0.7		An irregular series of six multiple mounds, the largest measures 0.8 x 0.8m, situated on a relatively featureless area of seabed. No anomalous features were identified in the SSS or Mag. data at this location. Based on form may be a data artefact but this cannot be certain and therefore has been retained as a precaution and may also be interpreted as a possible natural feature or may be possible debris.	MBES	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7647	Magnetic	393042	5685011	A1	-	-	-	91	A medium, sharp asymmetric dipole with peak and trough on one profile line in the Mag. data. Likely to be larger than recorded due to missing data points at this location. This position was not directly covered by the SSS or MBES datasets. Corresponds with a recorded obstruction in the UKHO records, identified in a 2019 MBES survey with dimensions of 8.0 x 5.7 x 0.6m, and described as possibly being a degraded or broken apart wreck or other, possibly debris. This position was not directly covered by the 2021 SSS or MBES datasets and so it is not possible to comment on its condition. The position is situated outside of the study area, however as possible wreck material this record would be given an exclusion zone which will bring it within, and so it has been retained in this gazetteer. Interpreted as ferrous debris of unknown origin.	Mag.	UKHO_91206
7648	Magnetic	392991	5684949	A2_I	-	-	-	13	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7649	Magnetic	392903	5684871	A2_l	-	-	-	10	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7650	Debris	392922	5684830	A2_h	0.7	0.6	0.2	10	A small dark reflector with a shadow that is part of a distinct depression around the feature, the depression measures 2.0 x 1.3m. No anomalous features were identified in the MBES data at this location. Associated with a small asymmetric dipole with peak and trough on one profile line in the Mag. data, indicating some ferrous material is present. Interpreted as ferrous debris.	SSS, Mag.	-
7651	Rope/chain	392975	5684722	A2_l	12.6	0.6	0.1	-	A long, thin and straight dark reflector with a bright shadow, the feature is slightly wider at this southern end and is orientated north-west to south-east on the seabed. No anomalous features were identified in the MBES or Mag. data at this location. Interpreted as a possible short length of rope or chain.	SSS	-
7652	Magnetic	392797	5684720	A2_h	-	-	-	43	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7653	Magnetic	392730	5684718	A2_l	-	-	-	18	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7654	Magnetic	392525	5684814	A2_l	-	-	-	10	A small, broad asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7655	Dark reflector	392528	5684769	A2_l	1.1	1.1	0.3	-	A distinct, hollow dark reflector with a long, bright shadow situated on an otherwise featureless area of seabed. Visible as a mound in the MBES data. No anomalous features were identified in the Mag. data at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris.	SSS	-
7656	Debris	392409	5684944	A2_h	7.3	0.3	0.6	61	A distinct, slightly disjointed straight dark reflector with an uneven shadow, possibly suggesting uneven height. The feature is situated within an area of mobile sediment and may be partially buried. No anomalous features were identified in the MBES data at this location. Associated with a medium, sharp asymmetric dipole with peak and trough on one profile line in the Mag. data, indicating some ferrous material is present. Interpreted as ferrous debris.	SSS, Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7657	Mound	392389	5684863	A2_I	3.1	1.5	1.1	-	Two slightly angular mounds directly next to one another, or a broken up single feature. The larger mound has steeply sloping sides and a pointed peak, the mound to the west is low-lying and rounded. May be associated with similar feature (7658), situated 25.0m east. No anomalous features were identified in the SSS or Mag. data at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris.	MBES	-
7658	Mound	392414	5684863	A2_I	4.1	1.3	0.5	-	A group of three mounds in a slight alignment, the eastern mound is elongate with gently sloping sides and a rounded peak, the western mounds are smaller and slightly more angular. May be associated with similar feature (7657), situated 25.0m west. No anomalous features were identified in the SSS or Mag. data at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris.	MBES	-
7659	Magnetic	392326	5684846	A2_I	-	-	-	8	A small, broad asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7660	Magnetic	392401	5684704	A2_I	-	-	-	10	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7661	Magnetic	392083	5684935	A2_I	-	-	-	22	A small positive monopole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7662	Magnetic	392192	5684855	A2_I	-	-	-	7	A small, broad asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7663	Magnetic	392157	5684838	A2_I	-	-	-	24	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7664	Magnetic	392106	5684849	A2_I	-	-	-	15	A small, broad asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7665	Magnetic	392168	5684748	A2_I	-	-	-	8	A small, broad asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7666	Magnetic	392127	5684739	A2_I	-	-	-	14	A small, broad asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7667	Mound	391859	5684932	A2_I	3.6	1.6	0.5	-	An elongate irregularly shaped mound, the feature has an uneven, slightly angular peak and is possibly made up of multiple objects close together. No anomalous features were identified in the SSS or Mag. data at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris.	MBES	-
7668	Magnetic	391563	5684782	A2_I	-	-	-	10	A small, broad asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7669	Dark reflector	391597	5684738	A2_l	4.0	0.9	0.2	-	A distinct hollow dark reflector with a bright shadow situated close to an area of mobile sediments. No anomalous features were identified in the MBES or Mag. data at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris.	SSS	-
7670	Magnetic	391497	5684935	A2_h	-	-	-	36	A small symmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7671	Magnetic	391428	5684900	A2_l	-	-	-	13	A small, broad asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7672	Debris	391372	5684875	A2_h	1.7	0.3	0.1	18	A distinct straight dark reflector with a bright shadow, appears to be within an area of mobile sediments and may be partially buried. No anomalous features were identified in the MBES data at this location. Associated with a small asymmetric dipole with peak and trough on one profile line in the Mag. data. Interpreted as ferrous debris.	SSS	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7673	Magnetic	391325	5684823	A2_l	-	-	-	10	A small symmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7674	Dark reflector	391206	5684668	A2_l	2.0	0.7	0.5	-	A distinct dark reflector with a bright uneven shadow, may be two objects but they appear to be attached to one another. The feature is situated in an area of mobile sediments and the full extent may be buried. No anomalous features were identified in the MBES data at this location. This position was not directly covered by the Mag. data 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.	SSS	-
7675	Dark reflector	391244	5684835	A2_l	1.2	0.9	0.3	-	A distinct, slightly angular dark reflector with a bright, uneven shadow possibly suggesting uneven height. No anomalous features were identified in the MBES or Mag. data at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris.	SSS	-
7676	Magnetic	391222	5684925	A2_h	-	-	-	45	A small asymmetric dipole with peak and trough on one profile line in the Mag. data, also visible on another profile. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7677	Magnetic	391194	5684942	A2_h	-	-	-	34	A small symmetric dipole with peak and trough on one profile line in the Mag. data. May be related to Mag. anomaly (7678) situated 14.0m north-west. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7678	Magnetic	391188	5684954	A2_h	-	-	-	82	A medium negative monopole with peak and trough on one profile line in the Mag. data. May be related to Mag. anomaly (7677) situated 14.0m south-east. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7679	Magnetic	391101	5684977	A2_l	-	-	-	8	A small, broad symmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7680	Magnetic	391035	5684989	A2_l	-	-	-	14	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7681	Magnetic	390990	5684947	A2_l	-	-	-	6	A small, broad asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7682	Dark reflector	390942	5684838	A2_h	3.7	1.0	1.4	-	A distinct elongate dark reflector with a very long shadow and significant height, situated within an area of mobile sediments, the shadow is longest at one end suggesting uneven height. Also identified in the MBES data as a slightly elongate mound with steeply sloping sides and a pointed peak. The feature has some sediment accumulation on its north and south edge. No anomalous features were identified in the Mag. data at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris.	SSS, MBES	-
7683	Magnetic	390928	5684863	A2_l	-	-	-	26	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7684	Magnetic	390969	5685099	A2_l	-	-	-	21	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS data at this location. This position was not directly covered by the MBES data. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7685	Magnetic	390809	5684911	A2_l	-	-	-	5	A small, broad asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7686	Magnetic	390766	5685120	A2_h	-	-	-	30	A small asymmetric dipole with peak and trough over two profile lines in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7687	Magnetic	390616	5685030	A2_l	-	-	-	9	A small, broad symmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7688	Magnetic	390674	5684946	A2_h	-	-	-	165	A large, sharp asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7689	Magnetic	390692	5685212	A2_l	-	-	-	17	A small symmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS data at this location. This position was not directly covered by the MBES data. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7690	Magnetic	390600	5685224	A2_l	-	-	-	16	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. May relate to large Mag. anomaly (7691) situated 20.0m west. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7691	Magnetic	390580	5685223	A2_h	-	-	-	125	A large, sharp positive monopole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7692	Magnetic	390564	5685166	A2_h	-	-	-	264	A large, sharp asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7693	Magnetic	390536	5685087	A2_l	-	-	-	19	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7694	Magnetic	390507	5685028	A2_l	-	-	-	13	A small, broad asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7695	Magnetic	390434	5685265	A2_h	-	-	-	61	A medium, sharp positive monopole with peak and trough on one profile line in the Mag. data, also visible on adjacent profile. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7696	Magnetic	390339	5685265	A2_h	-	-	-	123	A large, sharp positive monopole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7697	Magnetic	390292	5685263	A2_l	-	-	-	5	A small, broad asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7698	Magnetic	390320	5685251	A2_l	-	-	-	12	A small symmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7699	Magnetic	390354	5685236	A2_l	-	-	-	6	A small, broad asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7700	Magnetic	390332	5685227	A2_h	-	-	-	39	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7701	Magnetic	390347	5685132	A2_l	-	-	-	8	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7702	Magnetic	390324	5685074	A2_l	-	-	-	13	A small symmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7703	Magnetic	390200	5685326	A2_h	-	-	-	28	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7704	Magnetic	390178	5685294	A2_h	-	-	-	33	A small symmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7705	Magnetic	390212	5685238	A2_l	-	-	-	9	A small, broad asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7706	Magnetic	390099	5685387	A2_l	-	-	-	12	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. May be related to Mag. anomaly (7707) situated 10.0m south-east. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7707	Magnetic	390109	5685383	A2_l	-	-	-	11	A small symmetric dipole with peak and trough on one profile line in the Mag. data. May be related to Mag. anomaly (7706) situated 10.0m north-west. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7708	Magnetic	390089	5685327	A2_h	-	-	-	36	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7709	Magnetic	390027	5685205	A2_l	-	-	-	13	A small symmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7710	Magnetic	390031	5685399	A2_l	-	-	-	7	A small, broad symmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7711	Magnetic	389878	5685267	A2_h	-	-	-	53	A medium, sharp asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7712	Mound	389924	5685398	A2_l	18.1	1.3	0.2	-	A thin, straight, linear mound orientated NNE to SSW, the feature is indistinct at its centre. No anomalous features were identified in the SSS or Mag. data at this location. May be a data artefact but it also has the potential to be a natural feature or possible non-ferrous linear debris.	MBES	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7713	Magnetic	389940	5685500	A2_h	-	-	-	347	A large, sharp positive monopole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7714	Magnetic	389904	5685517	A2_h	-	-	-	86	A medium, sharp asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7715	Magnetic	389870	5685532	A2_l	-	-	-	33	A small, sharp positive monopole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7716	Magnetic	389844	5685455	A2_h	-	-	-	34	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7717	Magnetic	389794	5685436	A2_h	-	-	-	36	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7718	Magnetic	389719	5685380	A2_l	-	-	-	7	A small, broad asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7719	Magnetic	389777	5685469	A2_l	-	-	-	12	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7720	Dark reflector	389784	5685554	A2_I	1.4	0.5	0.1	-	An elongate, slightly right-angled dark reflector with a bright shadow, the western end of the feature is larger than the rest and may be broken up or two objects close together. Situated 34m north of wreck (7721) and may be related. Visible in the MBES data as a mound on the edge of a natural ridge. No anomalous features were identified in the Mag. data at this location, however the large Mag. anomaly associated with wreck 7721 may be masking any smaller anomalies in this area. Interpreted as a possible natural feature or may be possible debris.	SSS	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7721	Wreck	389778	5685519	A1	8.5	4.7	0.4	9085	<p>A wreck visible in the SSS data as an area of disturbed seabed comprising three distinct dark reflectors with slight shadows; a thin right-angled object measuring 5.0 x 0.6m and two smaller angular features either side. The feature is situated within an area of mobile sediments and the full extent is likely buried. Also identified in the MBES data as an area of disturbed seabed comprising an angular object measuring 2.1 x 1.2 x 0.2m, within a slight depression. Associated with a very large, sharp asymmetric dipole with peak and trough over two profile lines in the Mag. data, and also visible over multiple profiles either side, indicating substantial ferrous material is present. This feature is associated with a UKHO record for an unknown wreck, first identified in 2016, and possibly a barge. The wreck was last surveyed in 2019, with recorded MBES dimensions of 37.4 x 3.9 x 0.9m, and was described as lying upright oriented 196° on the seabed. The seabed disturbance identified in the 2021 data has therefore been interpreted as a wreck. The previously reported dimensions and appearance suggest that this wreck has become almost completely buried in mobile sediments since 2019 and little can be said about its present condition.</p>	SSS, MBES, Mag.	UKHO_85569

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7722	Magnetic	389688	5685483	A2_l	-	-	-	27	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. May be associated with similar Mag. anomaly 18.0m south (7723). No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7723	Magnetic	389685	5685465	A2_l	-	-	-	22	A small symmetric dipole with peak and trough on one profile line in the Mag. data. May be associated with similar Mag. anomaly 18.0m north (7722). No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7724	Magnetic	389625	5685593	A2_h	-	-	-	31	A small positive monopole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7725	Magnetic	389595	5685522	A2_l	-	-	-	13	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7726	Magnetic	389442	5685570	A2_h	-	-	-	53	A medium negative monopole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7727	Magnetic	389420	5685550	A2_l	-	-	-	19	A small symmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7728	Magnetic	389374	5685488	A2_h	-	-	-	56	A medium asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7729	Magnetic	389335	5685526	A2_h	-	-	-	255	A large, sharp asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7730	Dark reflector	389308	5685530	A2_I	2.6	0.5	0.1	-	A short and straight dark reflector with a slight shadow, situated in an area of mobile sediment and may be partially buried. No anomalous features were identified in the MBES or Mag. data at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris.	SSS	-
7731	Magnetic	389373	5685687	A2_I	-	-	-	15	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7732	Dark reflector	389339	5685653	A2_I	0.7	0.4	0.1	-	A distinct square shaped dark reflector with a bright straight shadow. Situated within sand waves and a little anomalous to the surrounding seabed. Visible as a slight mound in the MBES data. No anomalous features were identified in the Mag. data at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris.	SSS	-
7733	Magnetic	389326	5685592	A2_I	-	-	-	15	A small, broad asymmetric dipole with peak and trough over two profile lines in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7734	Dark reflector	389297	5685678	A2_I	1.1	0.6	0.3	-	A small but distinct slightly irregular dark reflector with a bright shadow, the object has a thin linear piece extending into the shadow and is situated in a depression within an area of mobile sediments. Visible as an oval mound in the MBES data. No anomalous features were identified in the Mag. data at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris.	SSS	-
7735	Magnetic	389249	5685662	A2_I	-	-	-	21	A small positive monopole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7736	Magnetic	389128	5685635	A2_I	-	-	-	25	A small positive monopole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7737	Magnetic	389114	5685595	A2_I	-	-	-	23	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7738	Magnetic	389141	5685678	A2_I	-	-	-	16	A small, broad asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7739	Dark reflector	389065	5685637	A2_I	1.5	0.2	0.2	-	A thin and elongate dark reflector with a bright, slightly irregular shadow, possibly suggesting uneven height. The feature is isolated within an area of mobile sediments. No anomalous features were identified in the MBES or Mag. data at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris.	SSS	-
7740	Mound	389062	5685898	A2_I	2.4	0.8	0.5	-	An elongate mound with steep sides and a double peak, angular object, possibly two mounds very close together and slightly anomalous to the surrounding seabed. No anomalous features were identified in the SSS data at this location. This position was not directly covered by the Mag. data 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.	MBES	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7741	Magnetic	389090	5685870	A2_h	-	-	-	46	A small, sharp asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7742	Magnetic	389125	5685832	A2_l	-	-	-	14	A small, broad asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7743	Dark reflector	389072	5685797	A2_h	2.1	0.7	0.3	-	A thin and elongate dark reflector with a bright uneven shadow, possibly suggesting uneven height. The feature is distinct in an area of large mobile sediments. No anomalous features were identified in the MBES or Mag. data at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris.	SSS	-
7744	Magnetic	389046	5685784	A2_l	-	-	-	18	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7745	Dark reflector	389003	5685644	A2_I	3.0	1.5	0.3	-	A distinct elongate dark reflector with a bright, tapered and slightly irregular shadow, situated at the edge of a large sand wave and may be partially buried. No anomalous features were identified in the MBES or Mag. data at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris.	SSS	-
7746	Dark reflector	388972	5685741	A2_I	2.2	1.8	0.3	-	An indistinct dark reflector that appears to be made up of small linear objects that are crossed with a very small angular dark reflector attached, the feature has a bright uneven shadow and is situated within an area of mobile sediments and may be partially buried. No anomalous features were identified in the MBES data at this location. This position was not directly covered by the Mag. data 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.	SSS	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7747	Dark reflector	388855	5685938	A2_I	2.0	0.3	0.2	-	A distinct elongate dark reflector with a bright, uneven shadow possibly suggesting uneven height situated on a rough and uneven area of seabed. Situated 2.0m east of a similar dark reflector (7748) and may be related. No anomalous features were identified in the MBES data at this location. This position was not directly covered by the Mag. data 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.	SSS	-
7748	Dark reflector	388853	5685938	A2_I	0.8	0.7	0.2	-	An indistinct curved dark reflector with a bright rounded shadow. Situated 2.0m west of a similar elongate dark reflector (7747) and may be associated. No anomalous features were identified in the MBES data at this location. This position was not directly covered by the Mag. data 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.	SSS	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7749	Seabed disturbance	388824	5685846	A2_I	12.5	9.2	0.2	-	An area of disturbed seabed comprising an indistinct group of dark reflectors with bright shadows, small curvilinear and angular objects are visible, the largest measures 1.4 x 0.9m. The feature is situated on a very uneven area of seabed with outcropping geology but appears slightly anomalous. Visible as a textured area of seabed in the MBES data. No anomalous features were identified in the Mag. data at this location, however a medium Mag. anomaly is situated 13.0m west (7750) and may be related. Interpreted as a possible natural feature or may be possible debris.	SSS	-
7750	Magnetic	388804	5685848	A2_I	-	-	-	65	A medium, sharp asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location, however this is situated on an area of textured seabed in the MBES data. May represent a natural feature or may represent possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7751	Magnetic	388757	5685821	A2_I	-	-	-	18	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location, however this is situated on an area of textured seabed in the MBES data. May represent a natural feature or may represent possible ferrous debris either buried or with no surface expression.	Mag.	-
7752	Magnetic	388711	5685841	A2_I	-	-	-	16	A small symmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location, however this is situated on an area of textured seabed in the MBES data. May represent a natural feature or may represent possible ferrous debris either buried or with no surface expression.	Mag.	-
7753	Dark reflector	388769	5685797	A2_I	1.1	0.3	0.2	-	An indistinct, slightly elongate dark reflector with a bright slightly uneven shadow, possibly suggesting uneven height. The feature is situated on an uneven area of seabed. No anomalous features were identified in the MBES or Mag. data at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris.	SSS	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7754	Magnetic	388890	5685827	A2_l	-	-	-	20	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. May relate to Mag. anomalies 7755 and 7757 and ferrous debris 7756 to the south-west. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7755	Magnetic	388880	5685820	A2_h	-	-	-	60	A medium, sharp asymmetric dipole with peak and trough over two profile lines in the Mag. data. May relate to Mag. anomalies 7754 and 7757 and ferrous debris 7756 to the north-east and south-west. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7756	Debris	388875	5685796	A2_h	3.3	0.2	0.2	29	A long and thin dark reflector with a bright uneven shadow suggesting uneven height. No anomalous features were identified in the MBES data at this location. Associated with a small asymmetric dipole with peak and trough on one profile line in the Mag. data, indicating some ferrous material is present. May relate to Mag. anomalies 7754 , 7755 and 7757 situated north-east and south-west. Interpreted as possible ferrous debris.	SSS	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7757	Magnetic	388881	5685776	A2_l	-	-	-	13	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. May relate to ferrous debris 7756 and Mag. anomalies 7754 and 7755 situated north-west. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7758	Debris	388798	5685736	A2_h	4.4	0.3	0.4	-	A distinct curvilinear dark reflector with a bright, uneven shadow. Also identified in the MBES data as an elongate, curvilinear mound with steeply sloping sides and a rounded peak. No anomalous features were identified in the Mag. data at this location. Interpreted as possible non-ferrous debris.	SSS, MBES	-
7759	Dark reflector	388849	5685984	A2_l	2.5	0.3	0.3	-	A thin and distinct curvilinear dark reflector with a bright shadow across its length. The feature has some possible sediment accumulation around it and may be in a slight depression. No anomalous features were identified in the MBES or Mag. data at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris.	SSS	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7760	Debris	388771	5685991	A2_h	1.3	0.8	0.3	86	A distinct angular dark reflector with a bright uneven shadow, possibly suggesting uneven height. The feature may be two objects adjacent to one another and is situated on an uneven area of seabed. No anomalous features were identified in the MBES data at this location. Associated with a medium, sharp positive monopole with peak and trough on one profile line in the Mag. data, indicating some ferrous material is present. Interpreted as ferrous debris.	SSS, Mag.	-
7761	Seabed disturbance	388721	5686056	A2_l	9.5	4.2	0.2	-	An area of disturbed seabed comprising elongate and rounded dark reflectors with slight shadows, approximately seven objects are visible and the largest measures 2.1 x 0.3m. Situated on an uneven area of seabed and appears slightly anomalous. No anomalous features were identified in the MBES data at this location. This position was not directly covered by the Mag. data 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.	SSS	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7762	Dark reflector	388684	5686078	A2_I	0.8	0.4	0.4	-	A slightly elongate dark reflector with a very long, thin and bright shadow, situated in a wider boulder field but distinct and one of three similar anomalies in close proximity to one another (7763 and 7764). No anomalous features were identified in the MBES data at this location. This position was not directly covered by the Mag. data 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.	SSS	-
7763	Dark reflector	388685	5686078	A2_I	0.6	0.2	0.4	-	A slightly elongate dark reflector with a very long, thin and bright shadow, situated in a wider boulder field but distinct and one of three similar anomalies in close proximity to one another (7762 and 7764). No anomalous features were identified in the MBES data at this location. This position was not directly covered by the Mag. data 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.	SSS	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7764	Dark reflector	388687	5686086	A2_I	0.7	0.5	0.6	-	A slightly elongate dark reflector with a very long, thin and bright shadow, situated in a wider boulder field but distinct and one of three similar anomalies in close proximity to one another (7762 and 7763). No anomalous features were identified in the MBES data at this location. This position was not directly covered by the Mag. data 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.	SSS	-
7765	Seabed disturbance	388598	5686006	A2_I	5.6	2.4	0.1	-	An area of disturbed seabed comprising a group of indistinct dark reflectors with shadows, curved and elongate objects are visible on an uneven area of seabed. The feature is slightly anomalous to the surrounding seabed. No anomalous features were identified in the MBES or Mag. data at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris.	SSS	-
7766	Seabed disturbance	388606	5685950	A2_I	6.6	4.6	0.3	-	An area of disturbed seabed comprising a small group of distinct angular and curvilinear dark reflectors with shadows, the largest object measures 0.7 x 0.3m. The feature is situated in an area of outcropping geology but appears anomalous. No anomalous features were identified in the MBES or Mag. data at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris.	SSS	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7767	Dark reflector	388607	5685908	A2_h	1.4	1.0	0.3	-	A small and distinct hollow dark reflector with a large, bright shadow, situated on an uneven area of seabed. No anomalous features were identified in the MBES or Mag. data at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris.	SSS	-
7768	Magnetic	388597	5685895	A2_l	-	-	-	8	A small, broad asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7769	Debris	388623	5685829	A2_h	5.1	0.2	0.5	-	A distinct 'v' shaped dark reflector with a bright shadow that is much larger at one end indicating uneven height. No anomalous features were identified in the MBES data at this location. This position was not directly covered by the Mag. data so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible item of debris.	SSS	-
7770	Debris	388623	5685776	A2_h	3.1	0.2	0.2	-	A distinct short and straight dark reflector with a large, bright shadow. This position was not directly covered by the MBES or Mag. data, so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible item of debris.	SSS	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7771	Magnetic	388590	5685829	A2_h	-	-	-	65	A medium, sharp positive monopole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7772	Magnetic	388530	5685874	A2_h	-	-	-	128	A large, sharp symmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7773	Magnetic	388494	5686159	A2_h	-	-	-	184	A large, sharp asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS data at this location. This position was not directly covered by the MBES data. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7774	Magnetic	388386	5686169	A2_h	-	-	-	33	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7775	Magnetic	388381	5686029	A2_h	-	-	-	55	A medium, sharp asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7776	Debris	388451	5686010	A2_h	2.6	0.7	0.3	48	A distinct elongate dark reflector with an angular object attached at one end, the shadow is uneven and tallest at the angular end. The feature is situated in a distinct depression. Visible in the MBES data as an elongate mound in a slight depression. Associated with a small asymmetric dipole with peak and trough on one profile line in the Mag. data, indicating some ferrous material is present. Interpreted as ferrous debris.	SSS, Mag.	-
7777	Debris	388502	5685973	A2_h	4.1	0.7	0.6	-	A distinct elongate dark reflector that has a slight kink in its centre, the object has a bright shadow that is largest in the centre suggesting uneven height. The feature is situated on an uneven area of seabed and has scour to the west for 5.0m. No anomalous features were identified in the MBES data at this location. This position was not directly covered by the Mag. data so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible item of debris.	SSS	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7778	Dark reflector	388396	5685959	A2_h	0.8	0.7	0.5	-	A distinct triangular dark reflector with a very bright long, tapered shadow. The feature is situated in a slight depression. No anomalous features were identified in the MBES or Mag. data at this location, however the large Mag. anomaly associated with debris (7779) 6.0m south-east may also be associated with this anomaly. Interpreted as a possible natural feature or may be possible non-ferrous debris.	SSS	-
7779	Debris	388401	5685956	A2_h	2.3	0.6	0.4	282	A distinct curvilinear dark reflector with a bright pointed shadow. Visible in the MBES data as a small oval mound in a depression. Associated with a large, sharp asymmetric dipole with peak and trough on one profile line in the Mag data, indicating ferrous material is present. Interpreted as possible ferrous debris.	SSS, Mag.	-
7780	Debris	388415	5685914	A2_h	3.6	0.8	0.5	24	An elongate and slightly angular dark reflector with a bright, tapered shadow, the feature may be broken up or partially buried. Visible as a small angular mound in the MBES data. Associated with a small positive monopole on one profile line in the Mag. data, indicating some ferrous material is present. Interpreted as possible ferrous debris.	SSS, Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7781	Debris	388421	5685909	A2_h	1.0	0.6	0.2	-	A distinct hollow dark reflector with a bright shadow, situated on an uneven area of seabed. No anomalous features were identified in the MBES or Mag. data at this location, however the Mag. anomaly associated with debris (7780) situated 7.0m north-west may also be associated with this anomaly. Interpreted as possible debris.	SSS	-
7782	Dark reflector	388349	5685887	A2_l	3.3	0.8	0.3	-	An elongate dark reflector with a very long shadow. This position was not directly covered by the MBES or Mag. data 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.	SSS	-
7783	Bright reflector	388350	5685913	A2_h	0.7	0.6	-	-	A very small but distinct, hollow bright reflector. No anomalous features were identified in the MBES data at this location. This position was not directly covered by the Mag. data 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.	SSS	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7784	Dark reflector	388324	5685966	A2_l	1.6	0.7	0.3	-	A distinct right angled dark reflector with a bright shadow situated close to large sand waves. Also identified in the MBES data as an oval area of disturbed seabed comprising a depression with an uneven base possibly containing objects and one distinct, angular mound measuring 1.5 x 1.4 x 0.2m. No anomalous features were identified in the Mag. data at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris.	SSS, MBES	-
7785	Magnetic	388289	5685940	A2_h	-	-	-	71	A medium, sharp asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7786	Magnetic	388268	5685993	A2_l	-	-	-	33	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7787	Magnetic	388273	5686139	A2_l	-	-	-	26	A small symmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7788	Magnetic	388244	5686091	A2_I	-	-	-	14	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7789	Magnetic	388154	5686041	A2_I	-	-	-	38	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. May be associated with nearby Mag. anomalies 7790 and 7791 . No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7790	Magnetic	388140	5686022	A2_I	-	-	-	16	A small, broad asymmetric dipole with peak and trough on one profile line in the Mag. data. May be associated with nearby Mag. anomalies 7789 and 7791 . No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7791	Magnetic	388153	5686017	A2_I	-	-	-	36	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. May be associated with nearby Mag. anomalies 7789 and 7790 . No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7792	Magnetic	388099	5686267	A2_l	-	-	-	17	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7793	Magnetic	388109	5686210	A2_h	-	-	-	39	A small symmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7794	Magnetic	388063	5686169	A2_h	-	-	-	141	A large, sharp asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7795	Magnetic	388084	5686134	A2_h	-	-	-	150	A large, sharp positive monopole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7796	Magnetic	388016	5686164	A2_l	-	-	-	16	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7797	Magnetic	387996	5686127	A2_I	-	-	-	24	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7798	Magnetic	388024	5686090	A2_I	-	-	-	29	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7799	Magnetic	387892	5686169	A2_I	-	-	-	26	A small positive monopole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7800	Magnetic	387936	5686388	A2_I	-	-	-	12	A small symmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7801	Magnetic	387904	5686311	A2_I	-	-	-	14	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7802	Magnetic	387878	5686247	A2_h	-	-	-	846	A very large, sharp positive monopole with peak and trough on one profile line in the Mag. data. Also visible on adjacent profiles. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7803	Magnetic	387864	5686227	A2_h	-	-	-	44	A small asymmetric dipole with peak and trough over two profile lines in the Mag. data. Situated 23.0m SSW of very large Mag. anomaly 7802 and may be related. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7804	Magnetic	387749	5686429	A2_l	-	-	-	33	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7805	Magnetic	387790	5686396	A2_l	-	-	-	19	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7806	Magnetic	387796	5686369	A2_l	-	-	-	17	A small symmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7807	Magnetic	387727	5686373	A2_l	-	-	-	44	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7808	Magnetic	387764	5686337	A2_h	-	-	-	98	A medium, sharp positive monopole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7809	Magnetic	387701	5686346	A2_l	-	-	-	11	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7810	Magnetic	387818	5686251	A2_l	-	-	-	16	A small symmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7811	Magnetic	387677	5686486	A2_l	-	-	-	18	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7812	Magnetic	387634	5686360	A2_l	-	-	-	25	A small positive monopole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7813	Magnetic	387622	5686289	A2_l	-	-	-	16	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7814	Magnetic	387589	5686524	A2_h	-	-	-	264	A large, sharp asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7815	Magnetic	387555	5686496	A2_l	-	-	-	18	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7816	Magnetic	387477	5686548	A2_h	-	-	-	74	A medium, sharp asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7817	Magnetic	387490	5686542	A2_l	-	-	-	13	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. May be associated with medium Mag. anomaly 7816 situated 15.0m north-west. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7818	Magnetic	387518	5686410	A2_l	-	-	-	22	A small negative monopole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7819	Magnetic	387448	5686446	A2_l	-	-	-	26	A small, broad symmetric dipole with peak and trough over two profile lines in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7820	Magnetic	387390	5686392	A2_l	-	-	-	37	A small symmetric dipole with peak and trough over two profile lines in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7821	Magnetic	387365	5686326	A2_h	-	-	-	58	A medium, sharp asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS data at this location. This position was not directly covered by the MBES data. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7822	Magnetic	387270	5686639	A2_l	-	-	-	8	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7823	Magnetic	387322	5686464	A2_l	-	-	-	22	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7824	Magnetic	387282	5686418	A2_l	-	-	-	20	A small negative monopole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7825	Magnetic	387197	5686549	A2_l	-	-	-	16	A small negative monopole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7826	Magnetic	387123	5686465	A2_h	-	-	-	25	A small, sharp symmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7827	Magnetic	387162	5686719	A2_h	-	-	-	43	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7828	Magnetic	387109	5686684	A2_h	-	-	-	190	A large, sharp asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7829	Magnetic	387148	5686669	A2_l	-	-	-	24	A small, sharp asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7830	Magnetic	387175	5686650	A2_h	-	-	-	50	A medium, sharp asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7831	Magnetic	387030	5686689	A2_h	-	-	-	69	A medium, sharp asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7832	Magnetic	387090	5686616	A2_h	-	-	-	54	A medium asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7833	Magnetic	387102	5686588	A2_h	-	-	-	319	A large, sharp asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7834	Magnetic	387125	5686579	A2_h	-	-	-	91	A medium, sharp symmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7835	Magnetic	387138	5686566	A2_h	-	-	-	87	A medium, sharp asymmetric dipole with peak and trough over two profile lines in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	-
7836	Dark reflector	387092	5686572	A2_l	2.3	1.7	0.1	-	An indistinct oval shaped hollow dark reflector with a bright shadow. Also identified in the MBES data as a round depression with sediment build up surrounding it. This position was not directly covered by the Mag. data 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.	SSS, MBES	-

WA ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Magnetic amplitude (nT)	Description	Anomaly type	External reference
7837	Debris	387040	5686575	A2_h	1.6	0.2	0.2	104	A thin, elongate dark reflector with a broad, indistinct shadow. No anomalous features were identified in the MBES data at this location. Associated with a large, sharp asymmetric dipole with peak and trough on one profile line in the Mag data, indicating some ferrous material is present. Interpreted as ferrous debris.	SSS, Mag.	-

Annex 4.7.A.7: Additional Seabed Features Not Identified in Marine Geophysical Survey Data

Notes: Co-ordinates are in ETRS89 UTM31N

WA ID	Wreck category	Name	Easting	Northing	Length (m)	Width (m)	Height (m)	Description	External reference
2001	Wreck	<i>F Stobart</i>	410706	5778778	70	-	-	Possible remains of the 1916 wreck of a British cargo vessel, located approximately 2.5 miles east of Aldeburgh. This vessel is also recorded at another location (7073) less than 100m beyond the study area and is charted by the UKHO.	NMHR_1457876
2002	Obstruction - foul ground		408354	5770041	-	-	-	Recorded by the UKHO as an anchor, ten metres of chain, 150 metres of negatively buoyant nylon rope and 20m of polypropylene rope, all lost in 2022.	UKHO_89809
2003	Obstruction - foul ground		408354	5767487	0.62	0.71	0.46	Recorded by the UKHO as a small unidentified isolated feature observed in bathymetry with minimal scouring present around it.	UKHO_96272
2004	Dangerous wreck		408081	5765927	52	32	2.2	Recorded by the UKHO as an amorphous rounded shape, commonly associated with nets, possibly concealing debris below, or a possible unidentified wreck.	UKHO_10890
2005	Dangerous wreck		407527	5759249	22.4	6.54	5.1	Recorded by the UKHO as a partially buried and broken apart unidentified wreck. Identified during a survey as a small wreck lying northeast-southwest.	UKHO_14722, NMHR_879857
2006	Dangerous wreck (dead)	<i>Patrick Michael</i>	407342	5757133	-	-	-	The dangerous wreck of a fishing vessel that sank in 1975 during passage from Ipswich for Dundee after striking an underwater object. The record was amended to 'dead' in 1995 after not being located during a survey. Remains of the vessel, particularly of a buried nature, may still exist in the area.	UKHO_14703
2007	Dangerous wreck	<i>Thyra</i>	406725	5756364	84	20	9.6	Dangerous partially buried wreck of Swedish steamship, <i>Thyra</i> , that sank in February 1942 after striking a mine whilst enroute from Hartlepool for London. The ship was taken in tow and later sank.	UKHO_14685, NMHR_912638

WA ID	Wreck category	Name	Easting	Northing	Length (m)	Width (m)	Height (m)	Description	External reference
2008	Dangerous wreck (dead)	<i>Zoroaster</i>	406124	5750234	-	-	-	Possible remains of the wreck of a British steamship, which foundered in December 1916 after detonating a German mine. The record was amended to 'dead' following it not being located in a survey.	UKHO_14593, NMHR_908154
2009	Obstruction (dead)		408658	5747654	-	-	-	This record for a seabed obstruction was amended to 'dead' after it could not be located during a survey in 1995.	UKHO_14567
2010	Dangerous wreck (dead)	UC21	400390	5706466	-	-	-	Record for the dangerous wreck of submarine, UC21, although since 1970 the submarine has not been located in any survey and the record was amended to 'dead'.	UKHO_14050
2011	Obstruction - foul ground (dead)		400356	5705725	-	-	-	This record for a seabed obstruction, believed to be a fisherman's fastener, was amended to 'dead' after it could not be located during a survey in 1996.	UKHO_14035
2012	Dangerous wreck	<i>Lauri Coin</i>	399656	5700989	11	4.18	2.534	Record for a dangerous wreck for <i>Lauri Coin</i> , a sailing vessel that sank in 2019 with all members of the crew safely recovered. The wreck is recording as sitting upright with the mast collapsed across the bow.	UKHO_92106
2013	Obstruction - foul ground		397413	5688511	2.75	1.42	0.9	An obstruction, recorded as being a strong magnetic anomaly, is described as a firm, rounded contact in a scour hole.	UKHO_75328
2014	Obstruction - foul ground		396685	5687829	2.98	2.14	1.1	An obstruction, recorded as being a moderate magnetic anomaly, is described as a single contact in a scour hole, possibly a boulder.	UKHO_75359
2015	Dangerous wreck	<i>Merel</i> (part of) (possibly)	396319	5687285	5.23	4.56	2.5	The possible wreck of the British merchant steamship, <i>Merel</i> , lost in December 1939 after striking a mine whilst enroute from Le Havre to London carrying a general cargo. During the latest survey in 1986, the wreck is in two sections, with the northern section thought to be buried.	UKHO_13851, NMHR_904891, KHER_MKE13510

WA ID	Wreck category	Name	Easting	Northing	Length (m)	Width (m)	Height (m)	Description	External reference
2016	Dangerous wreck	<i>HMS Arctic Trapper</i>	396677	5687300	3.09	2.74	2	The remains of a British armed patrol trawler that sank in October 1941 following an attack by a German aircraft. The wreck is well broken up on the seabed and is partially visible. An additional NMHR record for this wreck also exists 0.6km to the south (2017).	UKHO_13849, NMHR_904892
2017	Wreck	<i>HMS Arctic Trapper</i>	396601	5686840	-	-	-	An NMHR record for the wreck of HMS Arctic Trapper located 0.6km to the south of the UKHO record and corresponding NMHR record (2016).	NMHR_1200047
2018	Dangerous wreck	<i>Rydal Force</i>	396458	5686181	6	3.49	2	The dangerous wreck of the collier steamship, <i>Rydal Force</i> , lost in April 1940 having struck a mine. The ship was enroute from Sunderland for Cowes carrying a cargo of 1250 tons of coal. The wreck is recorded as being only just above the general seabed.	UKHO_13843, NMHR_904887, KHER_MKE13506
2019	Obstruction		393309	5686201	2.5	0.8	0	A small obstruction recorded by the UKHO with little further details.	UKHO_91216
2020	Wreck (dead)	<i>Pisces</i>	389200	5685809	-	-	-	Remains of the fishing vessel, <i>Pisces</i> , lost in December 1995 with the recovery of the crew of one. The record has been amended to 'dead' as the wreck was not located during the latest survey in 2019.	UKHO_15159
2021	Obstruction - foul ground		387402	5686098	-	-	-	The remains of a former beacon tower that sank in October 2019 and recorded as foul ground by the UKHO.	UKHO_92626

Annex 4.7.A.8: Maritime Recorded Losses

NMHR ID	Name	Nationality	Type of craft	Construction	Built	Lost	Reason for loss	Journey	Area
1447262	<i>Sally</i>	British		Wood		1771	Stranded	Zeeland to London	Suffolk
1300863	<i>Trafalgar</i>	British	Cargo vessel	Wood		1812	Stranded	Shields to London	Suffolk
1347240	<i>Jane</i>	British	Cargo vessel	Wood	1818	1820	Stranded	London to South Shields	Suffolk
1347237	<i>Neptune</i>	British	Craft	Wood		1820	Grounded, founded	South Shields to London	Suffolk
1352057	<i>Diligence</i>	British	Cargo vessel	Wood		1824	Gale conditions, stranded	St Petersburg to London	Suffolk
1243043	<i>Vine</i>	British	Brig	Wood	1806	1827	Collision, foundered		Suffolk
1243441	<i>Hector</i>	British	Craft	Wood		1830	Gale conditions, stranded	Danzig to London	Suffolk
1243263	<i>Thomas</i>	British	Craft	Wood		1830	Foundered	Poole to Kingston Upon Hull	Suffolk
1246090	<i>Caldecot Castle</i>	British	Cargo vessel	Wood		1833	Grounded, foundered	Newcastle to London	Suffolk
1316300	<i>Hope</i>	Unknown		Wood		1841	Stranded	Goole to London	Suffolk

NMHR ID	Name	Nationality	Type of craft	Construction	Built	Lost	Reason for loss	Journey	Area
1337509	<i>William And Ann</i>	British	Sloop	Wood		1853	Stranded	Goole to Southampton	Suffolk
1244322	<i>Richard White</i>	British	Cargo vessel	Wood		1853	Gale conditions, foundered	South Shields to London	Suffolk
1337604	<i>Henry Morton</i>	British	Snow	Wood	1848	1859	Stranded		Suffolk
1337612	<i>Content</i>	British		Wood	1839	1861	Collision, stranded		Suffolk
913705	<i>Princess Alice</i>	British	schooner	Wood	1843	1862	Stranded		Suffolk
1321541	<i>Margaret</i>	British	Cargo vessel	Wood	1858	1878	Gale conditions, grounded	Goole to unknown	Suffolk
1338992	<i>Agatha</i>	British	Lightship	Wood	1859	1891	Gale conditions, grounded		Suffolk
1339163	<i>Saint Louis</i>	French	Brig	Wood	1876	1893	Gale conditions, stranded	Newcastle Upon Tyne to Courcelles	Suffolk
1339135	<i>Caroline</i>	British	Dandy	Wood	1882	1893	Gale conditions, stranded	Lowestoft	Suffolk
1339381	<i>Speedwell</i>	British	Ketch	Wood	1883	1899	Burnt	Seaham to Rochford	Suffolk
1457634	<i>Rym</i>	Norwegian	Cargo vessel			1915	Torpedoed, foundered	Newcastle Upon Tyne to Rochford	Suffolk/Essex

NMHR ID	Name	Nationality	Type of craft	Construction	Built	Lost	Reason for loss	Journey	Area
1259389	<i>HMS Malta</i>	British	trawler	Iron	1897	1915	Mined, foundered	Oran to Leith	Suffolk
1339958	<i>Carmenta</i>	British	Brigantine	Wood	1875	1916	Grounded, stranded	Shields, Newcastle Upon Tyne to London, Whitstable	Suffolk
1596482	<i>Hannah Ransom</i>	British	Schooner	Wood	1870	1919	Grounded	Newcastle to Boulogne	Suffolk
1214228	<i>Carlisle</i>	British	Warship, Fourth Rate Ship of the Line	Wood	1693	1696	Grounded, foundered	The Downs to the Nore/Sheerness	Suffolk/Essex
1213853	<i>York</i>	British	Warship, Fourth Rate Ship of the Line	Wood	1654	1703	Gale conditions, stranded	The Downs to Sheerness	Suffolk/Essex
1213859	<i>Thomas And Mary</i>	British	Cargo vessel	Wood		1772	Stranded	Shields to London	Suffolk/Essex
1325424	<i>Madonna Del Rosario</i>	Italian	Cargo vessel	Wood		1781	Grounded, founded	Livorno to London	Suffolk/Essex
1340865	<i>True Briton</i>	British		Wood		1808	Stranded	Shields to London	Suffolk/Essex
1341666	<i>Lord Melville</i>	British		Wood		1810	Stranded	Aberdeen to London	Suffolk/Essex
1300841		Unknown	Brig	Wood		1812	Grounded, stranded		Suffolk/Essex

NMHR ID	Name	Nationality	Type of craft	Construction	Built	Lost	Reason for loss	Journey	Area
1241481	<i>Elizabeth</i>	British	Cargo vessel	Wood		1813	Stranded	Shields to London	Suffolk/ Essex
1301769	<i>Good Intent</i>	British	Cargo vessel	Wood		1816	Stranded	Liverpool to Great Yarmouth	Suffolk/ Essex
1250761	<i>Maria</i>	British	Brig	Wood		1818	Stranded	Shields to London	Suffolk/ Essex
1346591	<i>Bridget</i>	British		Wood		1819	Stranded		Suffolk/ Essex
1346588	<i>Euphan</i>	British		Wood		1819	Stranded	Scotland to London	Suffolk/ Essex
1347118	<i>London</i>	British	Brig	Wood	1877	1820	Gale conditions, grounded, foundered	Great Yarmouth to London	Suffolk/ Essex
1251281	<i>Streamlet</i>	British	Craft	Wood	1823	1823	Stranded	Sunderland to unknown	Suffolk/ Essex
1359803	<i>Maldon</i>	British		Wood		1825	Stranded	Grangemouth to London	Suffolk/ Essex
1359772	<i>London</i>	British	smack	Wood		1825	Stranded	Arbroath to London	Suffolk/ Essex
1360350	<i>Wear Packet</i>	British	Cargo vessel	Wood		1826	Foundered	Sunderland to London	Suffolk/ Essex
1238404	<i>Jason</i>	British	Craft	Wood		1827	Stranded	Poole to Scotland	Suffolk/ Essex
1357683	<i>Unity</i>	British		Wood		1828	Stranded	Sunderland to unknown	Suffolk/ Essex

NMHR ID	Name	Nationality	Type of craft	Construction	Built	Lost	Reason for loss	Journey	Area
									Essex
1355995	<i>Superb</i>	British	Smack	Wood		1829	Grounded, stranded	Aberdeen to London	Suffolk/ Essex
1356226	<i>Fanny</i>	British	Barque	Wood		1829	Stranded	London to Shields, Newcastle Upon Tyne	Suffolk/ Essex
1243504	<i>Anne</i>	British	Cargo vessel	Wood		1830	Grounded, recovered	Sunderland to London	Suffolk/ Essex
1243543	<i>Liberty</i>	British	Brig	Wood		1830	Stranded	Newcastle	Suffolk/ Essex
1243401	<i>Vivid</i>	British	cargo vessel	Wood		1830	Stranded	Newcastle to London	Suffolk/ Essex
1316283	<i>Buckingham</i>	Unknown	cargo vessel	Wood		1841	Stranded	St Petersburg to London	Suffolk/ Essex
1214112		Unknown	Barque	Wood		1852	Foundered		Suffolk/ Essex
1215073	<i>Australia</i>	Scottish/Dutch	Barque	Wood	1856 ?	1859	Stranded	Shields to Cadiz	Suffolk/ Essex
1337715	<i>Antilles</i>	British	Brig	Wood	1834	1863	Foundered		Suffolk/ Essex
1337772	<i>Pauline</i>	British	Schooner			1865	Gale conditions, foundered	Newcastle Upon Tyne to Portugal	Suffolk/ Essex
1265576	<i>Dickey Sam</i>	British	Barque	Wood	1841	1866	Stranded	Shields to Alexandria	Suffolk/ Essex

NMHR ID	Name	Nationality	Type of craft	Construction	Built	Lost	Reason for loss	Journey	Area
1214128	<i>British Banner</i>	British	Barque	Wood	1855	1873	Collision, foundered		Suffolk/Essex
1214130	<i>Arina</i>	British	Schooner	Wood	1821	1877	Gale conditions, stranded	London to Hartlepool	Suffolk/Essex
1214806	<i>Martha Levana</i>	Norwegian	Sloop	Wood	1860	1877	stranded	Bergen to San Sebastian	Suffolk/Essex
1215045	<i>Caroline</i>	French	Barque	Wood	1826	1877	Stranded	South Shields to Marseille	Suffolk/Essex
1214830	<i>Emma</i>	British	Cargo vessel	Wood	1936	1878	Gale conditions, stranded	Seaham to Chatham	Suffolk/Essex
1338335	<i>Henry And Polly</i>	British	Dandy	Wood	1877	1879	Gale conditions, foundered	Great Yarmouth to London	Suffolk/Essex
1338408	<i>Glencoe</i>	British	Brigantine	Wood		1882	Gale conditions, stranded	Hartlepool to Burnham	Suffolk/Essex
1338566	<i>Kong Sverre</i>	Norwegian	Barque	Wood	1868	1882	Grounded	Hudiksvall to Honfleur	Suffolk/Essex
1338574	<i>Pride Of The Ocean</i>	British	Cargo vessel	Wood	1853	1883	Stranded	Hamburg to New York	Suffolk/Essex
1338585	<i>Polymnia</i>	Norwegian	Cargo vessel	Wood	1873	1883	Stranded	Liepaja to Rochester	Suffolk/Essex
1338575	<i>Loreley</i>	German	Barque	Wood	1863	1883	Gale conditions, foundered	Klaipeda to London	Suffolk/Essex

NMHR ID	Name	Nationality	Type of craft	Construction	Built	Lost	Reason for loss	Journey	Area
1214934	<i>Salem</i>	British	Schooner	Wood		1884	Gale conditions, foundered	Felixstowe to Porthmadog	Suffolk/Essex
1214887	<i>Ellida</i>	Norwegian	Brig	Wood	1871	1884	Stranded	Fredrikstad to London	Suffolk/Essex
1214943	<i>William</i>	British	Brigantine	Wood	1860	1884	Grounded, foundered	Hartlepool to London	Suffolk/Essex
1338837	<i>Rock City</i>	Norwegian	Cargo vessel	Wood	1853	1890	Gale conditions, foundered	Drobak to London	Suffolk/Essex
1338868	<i>John And Edward</i>	Dutch	Ketch	Wood	1873	1890	Gale conditions, foundered	River Colne to River Colne	Suffolk/Essex
1213947	<i>Curler</i>	British	Cargo vessel	Steel	1891	1898	Collision, foundered	Grays to River Tyne	Suffolk/Essex
1267610	<i>Nimbus</i>	Norwegian	Barque	Wood	1878	1898	Collision, foundered	London to Pitea	Suffolk/Essex
1213926	<i>Mary Nixon</i>	British	Cargo vessel	Iron	1865	1898	Collision, foundered	Kingston Upon Hull to London	Suffolk/Essex
1339217	<i>Francesco Crispi</i>	Italian	cargo vessel	Wood		1898	Gale conditions, stranded	Blyth to Palermo	Suffolk/Essex
1214005	<i>Lyn</i>	Norwegian	Brig	Wood	1861	1899	Explosion, foundered	Swansea to Oslo	Suffolk/Essex
1213985	<i>Lyon</i>	British	cargo vessel		1857	1899	Collision, foundered	Sunderland to London	Suffolk/Essex

NMHR ID	Name	Nationality	Type of craft	Construction	Built	Lost	Reason for loss	Journey	Area
1253784	<i>HMS Hind</i>	British	Yawl	Wood	1880	1900	Stranded		Suffolk/ Essex
1339500	<i>Whim</i>	British	schooner	Wood	1865	1900	Stranded	Ipswich to Hebburn	Suffolk/ Essex
1259509	<i>Vigilant</i>	British	Cutter	Wood		1915	Mined, foundered	Harwich to unknown	Suffolk/ Essex
1269169	<i>HMS Agamemnon II</i>	British	Trawler	Steel	1907	1915	Mined, foundered		Suffolk/ Essex
1486524	<i>HMS Japan</i>	British	Trawler, minesweeper	Steel	1904	1915	Mined, foundered		Suffolk/ Essex
1269129	<i>Leuctra</i>	British	Cargo vessel	Steel	1899	1915	Torpedoed	Rosario (Maranhao), Rosario (Santa Fe) to Kingston Upon Hull	Suffolk/ Essex
1552294	<i>Princesse Marie Jose</i>	British	Cargo vessel	Steel	1909	1915	Mined, foundered	Dunston to Bordeaux	Suffolk/ Essex
1259234	<i>Prince Albert</i>	Belgian	Cargo vessel	Steel	1904	1915	Mined, foundered	River Tees to Bizerte	Suffolk/ Essex
1460383	<i>Michail Ontchoukoff</i>	Danish	Cargo vessel	Steel	1905	1916	Mined, foundered	Rosario to Aarhus	Suffolk/ Essex
1443761	<i>Forth</i>	British	Cargo vessel	Steel	1886	1916	Mined, foundered	London to Leith	Suffolk/ Essex
1541035	<i>HMS Strymon</i>	British	Admiralty Vessel,	Steel	1899	1917	Mined, foundered		Suffolk/ Essex

NMHR ID	Name	Nationality	Type of craft	Construction	Built	Lost	Reason for loss	Journey	Area
			Trawler, Minesweeper						
1460367	<i>Marie Leonhardt</i>	British	Collier	Steel	1902	1917	Mined, foundered	Hartlepool to London	Suffolk/ Essex
1300012	<i>French Rose</i>	British	Cargo vessel	Steel	1915	1917	Mined, scuttled, foundered	Le Treport to Goole	Suffolk/ Essex
1340082	<i>Trevisa</i>	British	Cargo vessel		1915	1917	Stranded		Suffolk/ Essex
1488605	<i>HMS Forward III</i>	British	Drifter		1907	1917	Mined, foundered		Suffolk/ Essex
1340165	<i>Ostpreussen</i>	British	Collier	Steel	1901	1917	Mined, foundered	Sunderland to London	Suffolk/ Essex
1300021	<i>HMS St Seiriol</i>	British	Minesweeper	Steel	1914	1918	Mined, foundered		Suffolk/ Essex
1214205	<i>Cairnside</i>	British	Cargo vessel	Wood	1913	1919	Stranded	Erith to Leith	Suffolk/ Essex
1300082	<i>Mazeppa</i>	British	Ketch	Wood	1887	1930	Collision, foundered	Keadby to Rye	Suffolk/ Essex
1236654	<i>Equestrian</i>	British	Cargo vessel	Wood		1934	Stranded	Charlestown, Cornwall to London	Suffolk/ Essex
1260079	<i>Sea Fisher</i>	British	Cargo vessel	Steel	1920	1936	Collision, foundered	Blyth to Hayle	Suffolk/ Essex
1572769		French	Warship	Wood		1217	Battle of Sandwich (First	For Lisbon	Kent

NMHR ID	Name	Nationality	Type of craft	Construction	Built	Lost	Reason for loss	Journey	Area
							Barons' War)		
1445925		British	Cargo vessel	Wood		1417	Stranded	London to Calais	Kent
1445905		British	Cargo vessel	Wood		1417	Stranded	London to Calais	Kent
1445910		British	Cargo vessel	Wood		1417	Stranded	London to Calais	Kent
1445924		British	Cargo vessel	Wood		1417	Stranded	London to Calais	Kent
1364617	<i>Lusitania</i>	British		Wood		1721	Gale conditions, stranded	Canary Islands destination	Kent
1368557	<i>Wiltshire</i>	British				1735	Gale conditions		Kent
1461000			Cargo vessel	Wood		1748	Stranded	Dublin to Livorno	Kent
1248621		French	Fishing vessel	Wood		1752	Gale conditions		Kent
1248661		French	Fishing vessel	Wood		1752	Gale conditions		Kent
1248646		French	Fishing vessel	Wood		1752	Gale conditions		Kent
1248641		French	Fishing vessel	Wood		1752	Gale conditions		Kent
1248663		French	Fishing vessel	Wood		1752	Gale conditions		Kent

NMHR ID	Name	Nationality	Type of craft	Construction	Built	Lost	Reason for loss	Journey	Area
1248648		French	Fishing vessel	Wood		1752	Gale conditions		Kent
882128		British	Fishing vessel	Wood		1752	Gale conditions		Kent
1248644		French	Fishing vessel	Wood		1752	Gale conditions		Kent
1248647		French	Fishing vessel	Wood		1752	Gale conditions		Kent
1248601		French	Fishing vessel	Wood		1752	Gale conditions		Kent
1248643		French	Fishing vessel	Wood		1752	Gale conditions		Kent
894920	<i>Le Ferme</i>	French		Wood		1755	Wrecked	Marseilles to Le Havre	Kent
1249000	<i>Venyowa</i>		Cargo vessel	Wood		1757	Beached, stranded	London to North Carolina	Kent
1333910	<i>King Of Prussia</i>	British	Warship	Wood		1765	Snow conditions, beached/capsized	To the Downs	Kent
882161	<i>Prince Of Wales</i>	British		Wood		1781	Stranded	London to Dublin	Kent
1025613	<i>Rose</i>	British		Wood		1787	Gale conditions, foundered	Newcastle upon Tyne for Sandwich	Kent

NMHR ID	Name	Nationality	Type of craft	Construction	Built	Lost	Reason for loss	Journey	Area
1250101	<i>Neutrality</i>			Wood		1808	Gale conditions, beached	Malaga to London	Kent
1025614		British	Collier	Wood		1808	Foundered		Kent
1341155	<i>Havant</i>			Wood		1808	Collision with pier, gale conditions	Gt Yarmouth to Portsmouth	Kent
882173	<i>Lady Ann</i>	British		Wood		1809	Stranded	London to Grenada	Kent
1025615	<i>Ann</i>			Wood		1809	Gale conditions, stranded		Kent
1250641	<i>Samuel And Elizabeth</i>		Cargo vessel	Wood		1816	Collision with pier	London to Liverpool	Kent
1250621	<i>Summer</i>	British		Wood		1818	Gale conditions		Kent
1347423	<i>Arharheten</i>			Wood		1820	Gale conditions	Gothenburg to Lisbon	Kent
1345767						1820	Gale conditions		Kent
1347415	<i>Edward Henrick</i>			Wood		1820	Gale conditions	Barth to Lisbon	Kent
1494484	<i>Cornelia</i>	Dutch	Cargo vessel	Wood		1824	Gale conditions, stranded	Jakarta to Batavia	Kent

NMHR ID	Name	Nationality	Type of craft	Construction	Built	Lost	Reason for loss	Journey	Area
1360206	<i>Rising Sun</i>	Irish	Yacht	Wood		1825	Gale conditions, foundered		Kent
1250361			Sloop, cargo vessel	Wood		1830	Stranded on shoals		Kent
1250341	<i>Squaw</i>	British		Wood		1830	Gale conditions	Limerick to London	Kent
1250381	<i>Po</i>	British	Cargo vessel	Wood		1832	Stranded	London to Bristol	Kent
1251631	<i>Robert</i>		Smack	Wood		1852	Foundered		Kent
882204	<i>London</i>	British	Brig	Wood		1852	Stranded	Hartlepool to Rochester	Kent
882205	<i>Victory</i>	English	Schooner	Wood		1852	Gale conditions, stranded	Sunderland for Maldon	Kent
1251641	<i>Vengeur</i>	French	Cargo vessel, brig	Wood		1860	Gale conditions	Hartlepool to River Charente, France	Kent
1251725	<i>Amand</i>	French	Cargo vessel, brigantine	Wood		1860	Gale conditions, run aground	Sunderland to Nantes	Kent
882231	<i>Navarno</i>	British	Schooner	Wood	1827	1867	Snow storm, foundered	Hartlepool to Ramsgate	Kent
1251768		British	Leisure craft, yacht	Wood		1870	Gale conditions	Ramsgate to Ramsgate	Kent

NMHR ID	Name	Nationality	Type of craft	Construction	Built	Lost	Reason for loss	Journey	Area
882256	<i>George Valentine</i>	British		Wood		1873	Gale conditions	Darlington to Cherbourg	Kent
882267				Wood		1877	Stranded		Kent
882263	<i>Hedvig Sophia</i>	Swedish	barque	Wood	1851	1877	Collision, gale conditions	Dunkirk for Cardiff	Kent
1252622	<i>Northern Belle</i>	British	Fishing vessel	Wood		1881	Collision with ship, gale conditions	Deal to Deal	Kent
882285		French	Brig	Wood		1881	Stranded, capsized		Kent
1193697	<i>Lorma</i>	Norwegian	Schooner, barque	Wood	1876	1891	Collision with ship, gale conditions	Liverpool for Copenhagen	Kent
1258748	<i>Elizabeth And Mary</i>	British	Lugger	Wood	1883	1894	Capsized, foundered	Ramsgate to Ramsgate	Kent
1258810	<i>Champion</i>	British	Fishing vessel, ketch	Wood	1866	1898	Gale conditions	Ramsgate to Ramsgate	Kent

Annex 4.7.A.9: Aviation Recorded Losses

NMHR ID	Name	Type of craft	Nationality	Lost	Area
1329983	ANSON MK I N9919	Reconnaissance Aircraft	British	1940	Kent
1327923	DEFIANT MK I L6966	Fighter	British	1940	Kent
1328021	DEFIANT MK I L7027	Fighter	British	1940	Kent
1328103	BLENHEIM MK I L8665	Bomber	British	1940	Kent
1329420	ANSON MK I N5065	Reconnaissance Aircraft	British	1940	Kent
1318335	TYPHOON IB DN560	Fighter Bomber	British	1943	Kent
1340724	SPITFIRE MK XII MB799	Fighter	British	1943	Kent
1602379	B-17G 42-31243	B-17G Flying Fortress	American	1943	Kent

Annex 4.7.A.10: Intertidal Sites and Findspots

Notes: Co-ordinates are in ETRS89 UTM31N. Centrepoinets of polygons are provided where used.

WA ID	Type	Period	Description	Easting	Northing	Associated reference	County
1001	Site	Modern (Second World War)	An extensive length of Second World War beach scaffolding visible on aerial photographs, running for approximately 3.5km. A component of a much larger anti-invasion defence along the coast. The scaffolding is no longer in place, but elements may still exist in the area or may be buried.	404784	5780167	SHER_MXS19838 (also referenced by SHER as ARG 051)	Suffolk
1002	Site	Medieval - Post-medieval	Slight earthworks of a possible medieval/post medieval V-shaped fish trap visible in the exposed mud of Pegwell Bay on RAF aerial photographs taken in 1950. The feature comprises a V-shaped gully in the mud pointing south-east towards the sea in the direction of the receding tide. The two arms measure 103m and 135m in length.	386837	5686875	NMHR_1625664	Kent
1003	Findspot	Unknown	Circular metal rim protruding from sand. Inside diameter approximately 180mm outside diameter 280mm.	386496	5686924	CITIZAN_84726	Kent
1004	Site	Modern (Second World War)	WWII post alignment in the intertidal zone of Pegwell Bay comprising 81 circular posts visible on military aerial photographs taken in 1942. The aligned posts functioned as an anti-landing defence (both seaborne and airborne), inhibiting enemy movement in the intertidal zone and access inland.	386560	5687212	KHER_MWX43173	Kent

WA ID	Type	Period	Description	Easting	Northing	Associated reference	County
1005	Site	Modern	Rifle range first visible on OS 1st Edition mapping from 1877 and noted as being 'disused' on the 1908 edition.	386235	5687223	KHER_MWX43720	Kent
1006	Site	Modern (Second World War)	WWII coastal defence measure in the form of wire obstacle, visible on military aerial photographs.	385763	5686566	KHER_MWX43183	Kent

National Grid plc
National Grid House,
Warwick Technology Park,
Gallows Hill, Warwick.
CV34 6DA United Kingdom

Registered in England and Wales
No. 4031152
nationalgrid.com