Program of Requirements

Name project		
Location	**NCP**	**North Sea, offshore blocks G16, G17 & G18**
	Place	**North Sea (Dutch EEZ)**
	Toponym	**IJmuiden Ver Wind Farm Zone**
Project	**IJVWFZ – Archaeological Field Survey**	

Position within the Archaeological Process
Prospective Field Survey (Geophysical stage)

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Authority Approval		
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1. Administrative data				
1	Project name	IJmuiden Ver WFZ - Archaeological Field Survey		
2	Province	n.a.		
3	Council	n.a.		
4	Place	North Sea (NCP, Dutch EEZ), offshore blocks K17, P2, P3,P5 &P6		
5	Toponym	Wind Farm Zone IJmuiden Ver (IJVERWFZ)		
6	Chart	1801-01		
7	Coordinates Geodetic datum: ETRS89 Projection: UTM31N ESPG 25831	**IJVWFZ coordinates of geophysical survey area**		
		Point	Easting	Northing
		IA-01	532565.6	5875414.0
		IA-02	550708.7	5859616.2
		IA-03	538483.2	5843300.6
		IA-04	521530.2	5848849.9
		IA-05	527528.4	5860175.6
8	ARCHIS CIS-code	4637001100 (archaeological desk study)		
9	Surface investigation area	483 km^2		
10	Present use	Shipping, fishing, military		
11	Oceanographic Parameters	Tidal currents, salt water, depth varying between 17.0 and 46.0 meter LAT; average 28.9 meter LAT		
12	Area Administrator	Department of Waterways and Public Works - Team Sea and Delta (Rijkswaterstaat Zee en Delta)		
13	Authorities	Netherlands Enterprise Agency (RVO) advised by the Cultural Heritage Agency (Rijksdienst voor Cultureel Erfgoed, RCE)		

2. Motive	
Objective	The purpose of the archaeological assessment is to test the desk study based predictive model for archaeological remains in the area. The expectancy covers remains of shipping related objects (wrecks), airplanes from World War II and prehistoric settlements. The goals set for this assessment are: • To determine the historical or archaeological value of contacts found in the geophysical survey; • The validate the locations of known wrecks; • Preliminary assessment of the prehistoric landscape based on the seismic data.
Motive for this survey in relation to the activities planned	The activities planned comprise the installation of the offshore wind farm Ijmuiden Ver. Cables interconnecting the foundations and connecting the wind farm area to shore will be trenched into the seabed. These activities can affect archaeological remains. Additionally the scouring around turbine and platform foundations can affect archeological remains. The desk study summarizes that ship wrecks, World war II related objects and prehistoric landscapes may be potentially affected. So far, it is unknown if any of these objects are of archeological value. [1] In accordance with the Dutch Cultural Heritage Act (Erfgoedwet 2016) efforts should be made to preserve archaeological remains *in situ*. Dutch Law and derived policies prescribe that archaeological research shall be carried out in case a disturbance of the seabed is foreseen in the course of activities planned. The motive for the current survey stems from the aim to strive for *in situ* preservation of archaeological remains.
Selection Decision	The assessment of the survey data shall result in an advice with respect to potential further research by the development and use of the windfarm in accordance with the criteria set by the Dutch Archaeological Quality Standard (in Dutch: KNA Waterbodems 4.1)[2]

[1] Van den Brenk et al, 2020

[2] Dutch: Kwaliteitsnorm Nederlandse Archeologie Waterbodems (KNA-WB 4.1).

3. Previous research	
2008	Archaeological desk study Wind farm zone Tromp Binnen Van den Brenk, S., B.E.J.M. van Mierlo en W.B.Waldus, 2008. Archeologisch bureauonderzoek aanleg windturbinepark Tromp-Binnen en kabelroutes naar de Nederlandse kust. Periplus Archeomare rapport 08A014.
2020	Archaeological desk study Net op Zee Hollandse Kust (IJmuiden Ver Alpha en Beta) Van den Brenk, S., R. van Lil en R. Cassée, 2020. Bureauonderzoek Net op zee IJmuiden Ver Alpha en Beta, Platform en tracéalternatieven voor kabels. Periplus Archemare reports 19A004-04A/B.
2020	Missiaen et al, in prep. Bruine banken, witte kliffen en fossiele bossen.
The results are incorporated in the archaeological desk study below	

Archaeological desk study	
Contractor	Periplus Archeomare
Period	2020
Publication	van Lil, R., S. van den Brenk and R. Cassée, Amsterdam 2020: Archaeological Desk study Wind Farm Zone IJmuiden Ver. Periplus Archeomare report 19A029-01.

Results

The IJVWFZ has a high probability for the presence of (remains of) ship wrecks and WWII plane wrecks. Intact prehistoric landscapes and related *in situ* remains of Paleolithic and Early Mesolithic camp sites and inhumations are expected to have been preserved in places.

Shipwrecks and other objects

A total of 37 contacts are known from database sources.

Known contacts		Archaeological value		
		Yes	No	Unknown
Wreck	19	-	1	18
Anchor	3	-	-	3
Obstruction	9	-	1	8
Wellhead	6	-	6	-
Total	**37**	**-**	**8**	**29**

Further research is needed to determine the cultural-historical value of the wrecks and objects of potential archaeological interest and assess whether undiscovered shipwrecks are present.

Plane wrecks

During World War II, many airplanes crashed into the North Sea. Several sources are ambiguous about the number of aircraft still missing. It is however certain that at least hundreds of planes have been lost in the North Sea area. Remains are found on a regular base by fishermen or during sand extraction. It is quite possible to expect (remains of) plane wrecks within the research area.

Prehistory

Remains of *in situ* prehistoric camp sites are expected within the context of the following units:

Boxtel Formation (Middle Paleolithic, Late Paleolithic and Mesolithic)

Late Paleolithic and Mesolithic camp sites and inhumations can occur in the cover sand dunes and ridges (top of Wierden Member and embedded Usselo Bed), and along the valleys of small streams (Singraven Member). The covering Basal Peat Bed and Velsen Bed can contain well-preserved lost objects, intentional depots and dumps. The Boxtel Formation can also occur at a deeper level, at the base of the Eem Formation. Here the formation consists of gravel, sand, loam or peat and can contain *in situ* Middle Paleolithic remains.

Brown Bank Member

Remains of Neanderthal camp sites can be expected along the shores of fresh water lakes and beaches of lagoons which developed at the transition from Eemian to Weichselian. The sediments (clay and sand) are part of the Brown Bank Member. Within the peat of the covering Woudenberg Formation well-preserved lost objects, intentional depots and dumps can be encountered.

Ice-pushed ridge

The ice-pushed deposits of the Formation 4.1.1 and Egmond Ground Formation can contain reworked flint artefacts from Lower and Middle Palaeolithic times. At the top of the ice-pushed ridge in situ remains of camp sites and inhumations of Neanderthal and Late Palaeolithic and Mesolithic hunters and gatherers. The ice-pushed ridge pre-dates the above-mentioned Eemian, Weichselian and Early *Holocene* deposits. The archaeological levels of interest are expected under a 2 to 7 meter cover of *Holocene* deposits in the north-eastern part of the area.

At this stage little is known about the integrity of the *Pleistocene* landscape. By means of subbottom profiling the occurrence geological units (both horizontal as vertical) and archaeological levels herein can be mapped. The character of layer boundaries (erosive or non-erosive) can be interpreted. It is unlikely however that archaeological remains of Palaeolithic and Mesolithic camp sites can be identified with sufficient certainty (based on the geophysical and geotechnical surveys) to impose restrictions on wind farm development. At this stage focus should therefore not be put on tracing prehistoric camp sites but on a pragmatic employment of geophysical techniques in order to obtain a better insight in (the integrity of) the *Pleistocene* landscape. The insights gained shall be used to a) refine the archaeological predictive model and b) allocate areas with a high expectancy for *in situ* prehistoric remains.

In accordance with the AMZ cycle it is advised to conduct a field investigation (in Dutch '*Inventariserend veldonderzoek opwaterfase*') in order to test the archaeological predictive model and further specify the type, vertical and lateral extent, age, integrity and preservation of ship wrecks, prehistoric landscapes and potential archaeological levels.
In general, similar investigations carried out in the past consist of a geophysical survey with *side scan sonar*, *magnetometer* and *subbottom profiler*. The resulting data should be assessed after the general processing, interpretation and reporting has been performed by the survey contractor.

Based on the processed seismic data the survey contractor will advise on the borehole sample locations to acquire the information on soil parameters needed for construction purposes.

The archaeological contractor will advise whether borehole sample analysis is recommended to assess the presence and integrity of Pleistocene and Early Holocene landscapes and assess the probability that related in situ prehistoric remains will be affected by the planned activities. If the competent authorities decide that an additional research by borehole sample analysis shall be carried out it is advised to consult with the archaeological contractor and the RCE to determine the sample locations and sample strategy. Previous geotechnical campaigns carried out in the course of offshore wind farm development have shown that all borehole samples collected for engineering purposes will indeed be used for geotechnical purposes. The fitness of the remaining samples for archaeological purposes is limited, because samples are disturbed and no full continuous sequence of undisturbed samples is available. It is therefore advised to select a number of locations where exclusively for archaeological research high quality borehole samples are taken. The archaeological borehole sampling shall be incorporated in the program of borehole data acquisition for engineering purposes.

The results of the current archaeological assessments will provide a lot of information which can be used for archaeological research as part of future activities such as the installation of infield cables.

The archaeological assessment of the data shall to be conducted by a geophysical specialist (KNA prospector Waterbodems). The data quality from the surveys needs to match the demands for this archaeological assessment. To ensure compatibility between the site investigation and the required quality for this assessment it is recommended to define a Program of Requirements (In Dutch: 'Programma van Eisen') in accordance with the 'KNA' (the Dutch quality standards for archaeological research), to be authorized by the competent authority.
During the installation of the wind turbines and construction of the cables archaeological remains may be encountered that were fully covered by sediment or not identified as archaeological remains during the geophysical survey. In accordance with the Malta convention incorporated in the Erfgoedwet (2016) it is required to report those findings to the competent authority. This notification for archaeological finds should be included in the specifications or scope of work.

4. Archaeological expectation based on preliminary investigations	
Maritime related finds	(Parts of) vessel construction, cargo, ballast materials, inventory and personal effects.
WWII related remains	Remains of ship wrecks, airplanes and conventional unexploded ordinance
Prehistory	Drowned prehistoric landscapes and related archaeological remains

Goal and Research Questions	
4.1 Goal	The purpose of the archaeological assessment is to test the desk study based predictive model for archaeological remains in the area. The expectancy covers remains of shipping related objects (wrecks), airplanes from World War II and prehistoric settlements. The goals set for this assessment are: • To determine the historical or archaeological value of contacts found in the geophysical survey; • To validate the locations of known wrecks; • Preliminary assessment of the prehistoric landscape based on the seismic data.
4.2 Primary Question	Are any archaeological remains present within the Area of Interest and to what extent are these remains traceable?
4.3 Research Questions	With respect to side scan sonar, magnetometer and multibeam survey: • Are there any phenomena visible on the seabed? If so: • What is the description of these phenomena? • Do these phenomena have a man-made or natural origin? If these phenomena can be designated to be man-made: • What classification can be attached? If these phenomena can be classified as archaeological: • Is it possible to interpret the nature of the archaeological objects? If these phenomena can be identified as natural: • What is the nature of these natural phenomena? • Based on the acoustic image is it possible to designate zones of high, middle or low marine activity on the seabed? If so: • How can these zones be interpreted? General: • What is the relation between the observed objects and the topography of the seabed? Based on this relationship can risk-prone areas be marked selectively? • If no acoustic phenomena can be observed, are there any clues that this is a consequence of either natural erosion, sedimentation or human interference? <u>With respect to the seismic data and geotechnical survey:</u> • Is it possible to map the occurrence (horizontal extent and depth) of the stacked Pleistocene landscapes? If so: • What is the depth of the Pleistocene landscape(s) relative to a) LAT and b) the present seabed?

	• From Pleistocene to Holocene deposits is the transition gradual or instantaneous (erosive)? • Are channel-like features observed? If so: - What are the characteristics of the channel-like features in terms of spacial distribution (width, depth, shape, extent), channel infill composition, stratigraphic position and age. • Are occurrences of peat and/or organic clay observed? If so: - What is the spacial distribution (depth, extent) stratigraphic position and age of these deposits. • Can zones be identified where prehistoric settlement remains are to be expected? If so: • Could these expected settlement remains be affected by the installation of the cables based on their vertical position related to the seabed? • Are there any indications observed on the seismic profiles for the presence of buried (man-made) objects? If so: • Based on the presence of buried objects and its correlation with side scan sonar, magnetometer en multibeam data can something be said about the nature of these buried objects?
4.4 Restrictions	Investigation 'with restrictions' is not applicable (for explanation, see: memoRIA 2 en 6 (Information bulletin of the Dutch Inspection Agency for Archaeology ("Erfgoedinspectie")).

5. Methodology and Techniques	
5.1 Methodology and Techniques: strategy	Generally the Dutch Archaeological Quality Standard (KNA wb 4.1) is applicable. For surface mapping the seabed of the area of interest is to be recorded fully covered by means of high-resolution side scan sonar and multibeam echosounder. For the mapping of ferro-metalic, buried or exposed objects a magnetometer is required. For the modelling of the subsurface a sub-bottom profiler is required. For the interpretation of the seismic profiles the results of the geotechnical sampling and CPT's are being used.
5.2 Methodology and Techniques: execution	For a standard inventory of the remains of airplanes, shipwrecks and maritime objects the following conditions are applicable: • Frequency of the side scan Sonar minimal at 400 kHz; • Maximum range setting of 50 meter for the side scan sonar; • Height of the sonar transducer above the sea bed should be 10-15% of range • A vessel track distance of maximally 40 meters is allowed to ensure at least 100% overlay between adjacent lines • A vessel track distance for the magnetometer of maximally 40 meter to ensure the detection of sizeable ferromagnetic (iron) wreck remains. For the reconstruction of the drowned prehistoric landscape the seismic profiles at least need to penetrate the seabed to the level of disturbance The survey vessel requires an accurate positioning system (preferably RTK). The possible offset between the GPS antennae and the survey equipment

	need to be verified through calibration relative to a fixed point of reference. Prior to and after the acquisition of data a sounding profile needs to be recorded to determine the velocity of sound in the water column. At a traveling speed of 4 knots the highest possible resolution of data is guaranteed. In order to meet the goals set for this stage of archaeological research, which comprises a refinement of the archaeological predictive model and allocation of areas with a high archaeological expectancy, it is mandatory to discuss the survey operations with the survey contractor, the archaeological contractor and the RCE prior to the execution of the survey.

5.3 Restrictions	Due to the sizeable extent of the area of interest (>450 km^2) and its location at sea it is practically not achievable to hold on to all the above mentioned conditions for this field investigation. Therefore the proposition is to adhere to the following minimal conditions: • Fully surface covering multibeam data set conform IHO (2008) norm 1A • Fully surface covering side scan sonar records with a maximum vessel track distance of 75 meter and an overlap of minimally 100 % to ensure that all objects larger than 0.5 meter can be detected; • Height of the sonar transducer should be 10-15% of range • track distance between adjacent survey lines of maximal 75 meter; • The vessel speed should not exceed 6 knots. • Known shipwrecks in the research area will be surveyed with a high resolution sonar / mbes in order to make a first indication of the archaeological value The presence of shallow gas, i.e. related to peat in the Holocene sediments, can result in acoustic blanking of the seismic signal. As a result the Pleistocene landscape will not be visible at these locations. The presence of boulders can make it difficult to distinguish buried wreck remains, unless phenomena such as scouring on the seabed are observed, that provide additional information about the dimensions and nature of the buried object. Also results from the magnetometer can add to the interpretation of the buried object. Positioning using RTK (Real Time Kinematic) may not achievable at sea. DGPS may be used instead. Deliverables: • georeferenced side scan sonar images of all contacts; • georeferenced side scan sonar mosaic; • a side scan sonar listing containing (at least) all identified contacts including their number, center location, description and interpretation; • a grid file (geotiff) of the interpolated total field residual anomalies; • a magnetometer listing containing (at least) all identified anomalies including their number, location, total field residual anomaly and description (dipole / monopole); • ArcInfo ASCII grid files (or equivalent xyz-grid format) of all the interpreted seismostratigraphic units (in mLAT); • examples of seismic profiles which illustrate the seismostratigraphic and geological constellation; • a subbottom profiler listing containing (at least) all identified targets including their number, location (ETRS89 UTM31 easting and northing) and depth of burial; • a correlation of side scan sonar contacts, magnetic anomalies and

	subbottom profiler target with known infrastructure and one another. • full survey reports including alignment charts. If deliverables are not provided proper archaeological analyses are not possible. This could lead to extra additional research.

6. Analysis	
6.1 Processing and analysis of geophysical data	The (comprehensive) data set must be processed and analyzed in order to provide answers the research questions posed. Geophysical data shall be analyzed by an experienced geophysicist (KNA status prospector maritime archaeology). A senior prospector maritime archaeology or a senior maritime archaeologist evaluates the data analysis and the reported results, conclusions and the advice. During the analysis and interpretation of the data, the insights gained during desk research and insights gained from comparable surveys (from other wind farms) are used, where necessary integrated, not only look at the current research area, but also utilize recent knowledge gained. Also view raw data to view first impression of 'trends' in the data and contact geophysical surveyor about their ideas / interpretations. Additionally, there will be an excellent advice for a follow-up, in which it has already been agreed with the geophysical contractor where any drilling and / or probing for the benefit of archeology is necessary. In short, include consultation moments with the geophysical contractor.
6.2 Limitations	None

7. Final product: reporting and depositing	
7.1 deliverables	A comprehensive report is part of the assignment. The final report shall be drawn up in accordance to KNA specification VS05wb. An English written report is to be delivered including a Dutch summary. The contractor produces a draft version of the report to the authority. The authority will review quality of the content of report delivered. Along with the final product a receipt of the delivery of documentation will be handed over by the receiving party. Along with the final report digital data carrier is delivered containing: • A listing of contacts of potential archaeological interest including positions and dimensions (in GIS format); • Images of all sonar and/or multibeam contacts of archaeological interest; • Digital maps of the interpreted magnetometer, side scan sonar data, subbottom profiler data; • Subbottom profiler data of archaeological interest. If during the survey results in additional information with respect to objects known from the NCN-database or if man-made objects are encountered which have not been found before, this information shall be delivered digitally in a standard format to the area administrator (Department of Waterways and Public Works - Team Sea and Delta).
7.2 Content final report	Refer to KNA VS05wb. For this project in particular side scan sonar, magnetometer, subbottom profiler and multibeam recordings play an important role in the interpretation of archaeological objects under water.
7.3 Publication and format of final report	The final report is issued by the contracting party. The report is part of the in house publication series of the contractor. The report is delivered to the

	Cultural Heritage Agency (digitally and analogue), the area administrator Department of Waterways and Public Works - Team Sea and Delta, the Royal Library and the digital archive DANS.
7.4 Deposition	Relevant results shall be registered in Archis within two months after completion of the standard report. Digital data will be handed over to the e-depot (www.edna.nl) within two years after completion of the field survey. Seismic data should be handed over to TNO.
7.5 Limitations	None

8. Prerequisites	
8.1 Personnel	The survey must carried out or supervised by an archaeological company which is in the possession of a license to perform archaeological research in Dutch waters. The survey shall be supervised by a senior prospector maritime archaeology or a senior maritime archaeologist with a solid background in analogues projects at sea. Both for field work as for the analysis and reporting an experienced project leader with specific knowledge of the area is required.
8.2 Lead-time field work	In consultation with company
8.3 Work conditions	In agreement with ARBO law.
8.4 Quality control, supervision, consultation and evaluation	The Netherlands Enterprise Agency (RVO) and the Cultural Heritage Agency (RCE) supervise the process of archaeological research. Solely RVO and RCE are entitled to change the Program of Requirements.
8.5 Selection Procedure during field work	Consultation moments with the geophysical contractor will be planned to coordinate activities, analysis, planning, etc. so that any subsequent phase (drilling / probing) can be coordinated.
8.6 Field work period; deadline draft report	Field work: Start Q2 2020 Draft report: Q3 2020
8.7 Procedure QC final product by authorities	The Netherlands Enterprise Agency (RVO), the Cultural Heritage Agency and the company review quality of the content of the draft version of the report. After finalizing the survey the period of time applicable for the QC is agreed upon.

9. Change of plans	
9.1 Changes during field survey	In consultation with the survey company and authorities.
9.2 Procedure for change after completion of field survey	Not applicable.
9.3 Procedure for change during analysis, reporting or conservation	In consultation with the survey company and authorities.

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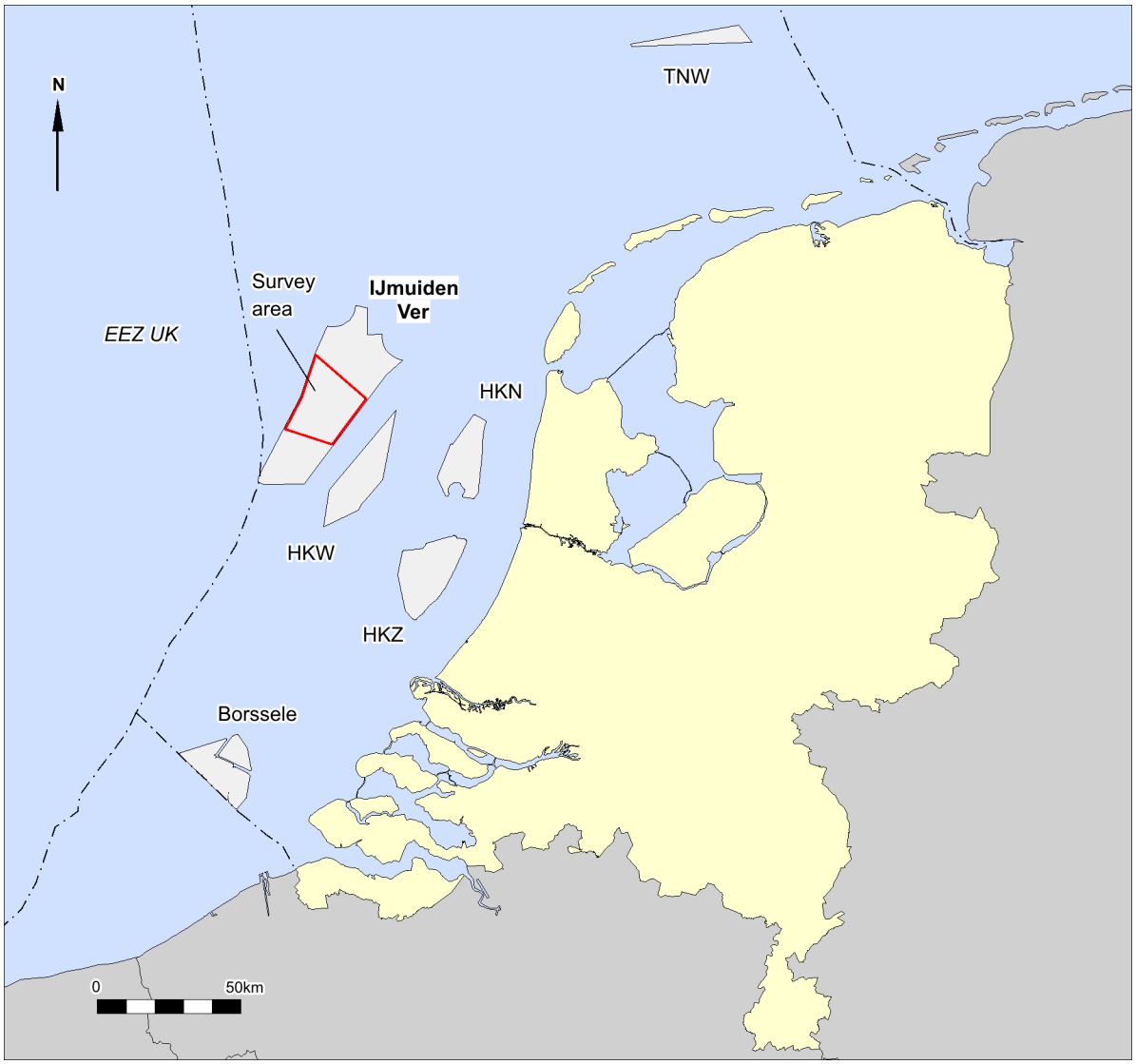
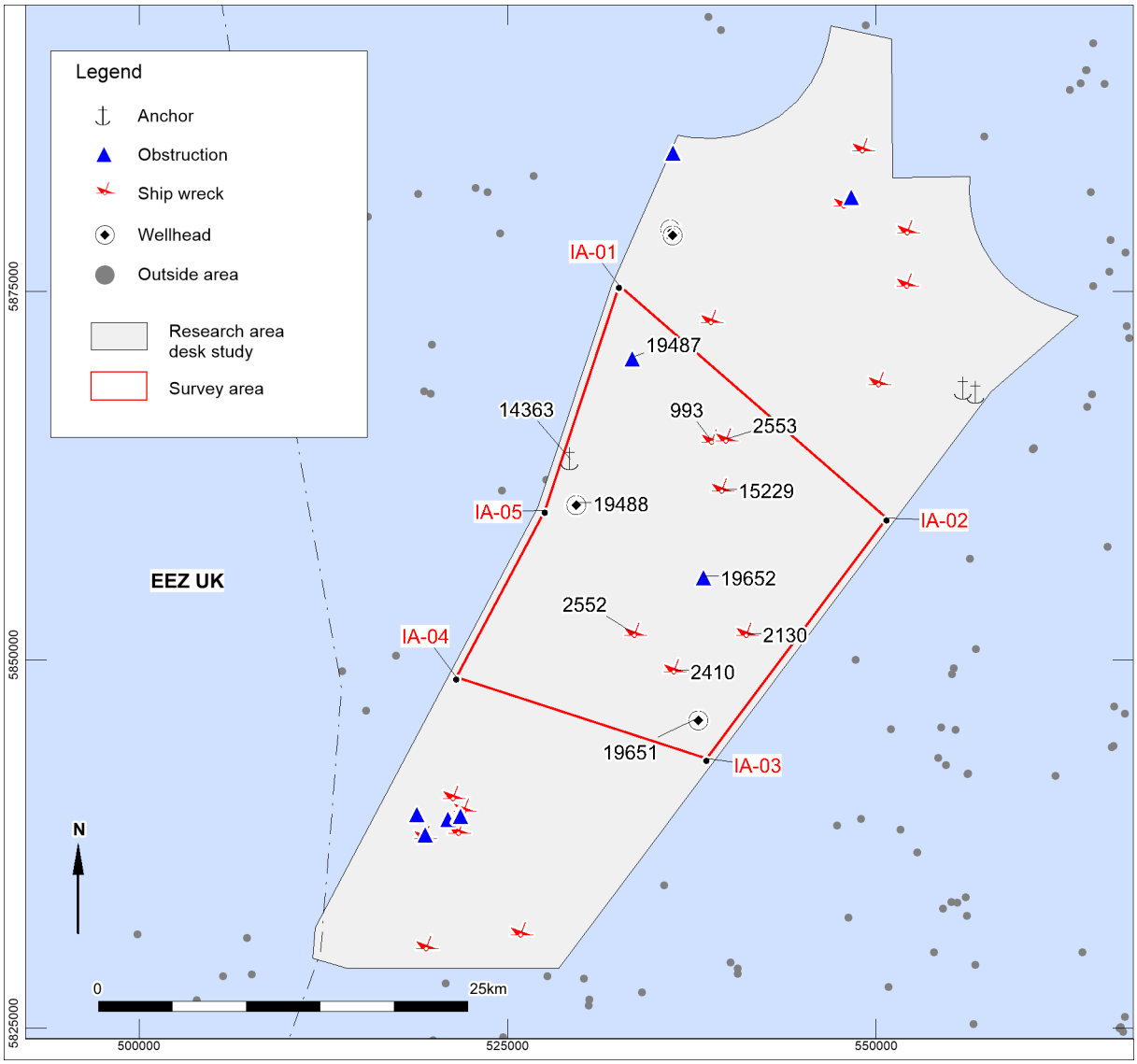
Appendix 1. Location map



Appendix 2. Known objects in the research area (from archaeological desk study)



NCN	Type	Description	Database			ETRS89 UTM31N			Arch.
			SR92	NIhono	ARCHIS	Easting	Northing	R95	Exp.
52	Wreck	Iron frame, possible wreck,survey 1997	69	249	-	522011	5839869	0	unkn.
54	Wreck	Distributed remains of wreck, survey 1997, 5x3x3m	71	322	-	519336	5838009	0	unkn.
993	**Wreck**	**Unknown wreck, survey 2014**	**-**	**634**	**-**	**538818**	**5864893**	**0**	**unkn.**
1074	Wreck	Fishing vessel Janet (KU-39)	-	736	-	538789	5873038	5	unkn.
1134	Wellhead	Wellhead	-	821	-	536015	5879402	20	no
1212	Wreck	Unknown wreck, survey 2012, 42x7x1.9m	12171	909	-	547794	5880945	1	unkn.
2070	Wreck	Unknown wreck, survey 2002	-	2262	-	525851	5831463	0	unkn.

NCN	Type	Description	Database			ETRS89 UTM31N			Arch.
			SR92	Nlhono	ARCHIS	Easting	Northing	R95	Exp.
2094	Wreck	Unknown wreck, survey 2002	-	2288	-	521298	5840711	0	unkn.
2130	**Wreck**	**Wreck Maria Christina, survey 2002**	**-**	**2325**	**-**	**541188**	**5851810**	**0**	**unkn.**
2410	**Wreck**	**Unknown wreck, survey 2014**	**-**	**2766**	**4030781**	**536247**	**5849319**	**1**	**unkn.**
2431	Wreck	Unknown wreck, survey 2015	-	2796	-	549061	5884686	1	unkn.
2472	Wreck	Unknown wreck, survey 2002	-	2858	-	521664	5838360	0	unkn.
2552	**Wreck**	**Unknown wreck, survey 2002, Copperwreck (MARIAD)**	**-**	**3003**	**4030465**	**533582**	**5851813**	**1**	**unkn.**
2553	**Wreck**	**Unknown wreck, survey 2012, 48x8x3.3m**	**12170**	**3004**	**4030668**	**539777**	**5864995**	**1**	**unkn.**
2615	Obs.	Contact, Man-made	11933	-	-	520970	5839275	20	unkn.
2620	Obs.	Steel frame, survey 2001	11935	-	-	521724	5839557	20	unkn.
2621	Obs.	Steel frame, survey 2001	11934	-	-	521816	5839502	20	unkn.
2723	Wreck	Unknown wreck, survey 2015		3248	-	550137	5868805	1	unkn.
2724	Wreck	Unknown wreck, survey 2012, 30x6x1.5m	12172	3249	-	552076	5875522	1	unkn.
2725	Obs.	Foul ground (obstruction)		3250	-	536209	5884528	25	unkn.
14363	**Anchor**	**Anchor, survey 2005**	**11172**	**-**	**-**	**529245**	**5863645**	**25**	**unkn.**
14388	Anchor	Anchor with chain, survey 2006, length 83m	11197	-	-	555902	5868449	25	unkn.
14417	Anchor	Anchor with chain, survey 2007, length 50m	11226	-	-	556760	5868154	25	unkn.
15229	**Wreck**	**Wreck coaster Olaf, sunk 07-11-1986, (partly) salvaged, 101x13x13.1m**	**11984**	**-**	**-**	**539521**	**5861584**	**0**	**no**
16340	Wreck	Unknown wreck, survey 2013	-	3869	-	519461	5830539	5	unkn.
19388	Obs.	Obstruction	-	4000	-	548339	5881497	25	unkn.
19475	Obs.	Obstruction	-	3907	-	519397	5838248	25	unkn.
19477	Obs.	Obstruction	-	3908	-	518867	5839615	25	unkn.
19480	**Wellhead**	**Wellhead**	**-**	**100391**	**-**	**529553**	**5860674**	**25**	**no**
19487	**Obs.**	**Foul ground (obstruction)**	**-**	**100544**	**-**	**533457**	**5870571**	**25**	**unkn.**
19488	**Wellhead**	**Wellhead**	**-**	**100541**	**-**	**529645**	**5860690**	**25**	**no**
19555	Wellhead	Wellhead	-	100834	-	536017	5879403	25	no
19562	Wellhead	Wellhead	-	100226	-	536198	5879001	25	no
19651	**Wellhead**	**Wellhead**	**-**	**3905**	**-**	**537932**	**5846061**	**25**	**no**

NCN	Type	Description	Database			ETRS89 UTM31N			Arch.
			SR92	Nlhono	ARCHIS	Easting	Northing	R95	Exp.
19652	**Obs.**	**Pipeline**	**-**	**329**	**-**	**538292**	**5855686**	**25**	**no**
19767	Wreck	Unknown wreck, survey 2015	-	4043	-	552091	5879120	1	unkn.

Records in **bold** should be within the boundaries of the survey area
NCN: Nationaal Contactnummer Nederland
Nlhono nr. From the Dutch Hydrographic Service
R95: Accuracy (in m) for the location

*NOTE: no investigation has been carried out on these wrecks yet; therefore the actual archaeological value of these wrecks has not been determined yet.