

# NOTICE TO MARINERS

## 19.04.2017

### DUDGEON OFFSHORE WIND FARM CONSTRUCTION WORKS

**NOTICE IS HEREBY GIVEN** that construction activities are in progress at the Dudgeon Offshore Wind Farm.

Wind turbine generators will be installed until Q3 2017. All construction work is planned to be completed late 2017.

#### **Service Operation Vessel**

The ESVAGT NJORD will be performing preparation support for the operation of the wind farm and will be in regular transit between the Dudgeon site and Great Yarmouth.

#### **Wind Turbine Generator Installation**

The SEA CHALLENGER will perform installation of the wind turbine generators (WTG) from January 2017 until Q3-2017. WTG installation and commissioning work will be performed at the following locations in April – May:

Location	Easting	Northing	Lon DD	Lat DD	Depth LAT [m]
Sub-Station	391 870	5 902 955	1,378776	53,264808	-21,1
L01	391 174	5 901 522	1,368835	53,251789	-21,0
L02	391 122	5 900 148	1,368526	53,239433	-19,9
L03	391 760	5 899 631	1,378257	53,234918	-20,2
L04	392 399	5 899 114	1,388002	53,230402	-21,0
L05	393 038	5 898 596	1,397745	53,225877	-20,6
K01	392 045	5 902 246	1,381639	53,258473	-21,5
K02	391 907	5 900 928	1,380019	53,246602	-21,2
K03	392 640	5 900 334	1,391200	53,241413	-20,8
K04	393 373	5 899 739	1,402378	53,236214	-21,0
K05	393 676	5 898 079	1,407470	53,221359	-21,8
T01	392 212	5 903 533	1,383706	53,270071	-21,5
T02	392 948	5 902 936	1,394938	53,264856	-22,1
T03	394 241	5 900 466	1,415137	53,242920	-21,8
T04	394 974	5 899 873	1,426312	53,237737	-22,3
T05	394 840	5 898 551	1,424742	53,225832	-21,2
J01	392 777	5 901 653	1,392808	53,253293	-23,1

Location	Easting	Northing	Lon DD	Lat DD	Depth LAT [m]
J02	393 509	5 901 060	1,403974	53,248112	-22,5
J03	394 107	5 899 145	1,413569	53,231024	-21,7
J04	394 315	5 897 562	1,417208	53,216841	-22,3
J05	394 954	5 897 045	1,426945	53,212322	-21,2
F01	392 353	5 904 837	1,385377	53,281817	-21,7
F02	393 254	5 905 526	1,398654	53,288190	-23,2
F03	392 649	5 906 016	1,389417	53,292470	-22,8
F04	392 044	5 906 506	1,380177	53,296750	-22,4
F05	391 439	5 906 996	1,370936	53,301030	-22,0
F06	390 834	5 907 486	1,361693	53,305308	-22,3
E01	391 477	5 904 129	1,372486	53,275276	-22,2
E02	391 619	5 905 431	1,374170	53,287004	-22,4
E03	390 886	5 906 025	1,362975	53,292191	-20,7
E04	390 153	5 906 619	1,351778	53,297377	-20,6
E05	390 229	5 907 976	1,352448	53,309586	-21,5
E06	389 624	5 908 466	1,343201	53,313863	-21,1
B01	391 313	5 902 840	1,370468	53,263661	-21,5
B02	390 441	5 902 117	1,357649	53,256985	-19,9
B03	389 708	5 902 711	1,346460	53,262170	-20,5
B04	388 975	5 903 306	1,335268	53,267364	-19,3
B05	388 041	5 904 311	1,320916	53,276197	-18,2
B06	387 985	5 903 523	1,320354	53,269105	-18,2
H01	393 086	5 904 243	1,396567	53,276627	-21,4
G01	393 859	5 905 036	1,407890	53,283908	-23,6
G02	394 465	5 904 546	1,417139	53,279626	-23,6
H02	393 820	5 903 649	1,407769	53,271438	-23,5

**COORDINATE REFERENCE SYSTEM:**

Datum: WGS84

Projection: UTM Zone 31N

**Accommodation Vessel**

The VESTLAND CYGNUS will be on location until Q4-2017 as accommodation vessel for Turbine commissioning.

**Commissioning activities**

For the commissioning and construction work there are several Crew Transfers Vessels operating in the wind farm area on a daily basis. This activity is ongoing and will continue until commissioning completes in Q4 2017.

## **Rock Installation**

A rock installation campaign for scour protection of foundations will be ongoing in the period early May until mid-June. Vessel spread; Rock installation vessel Van Oord – HAM 602, a survey vessel, and 4 bulk carriers for rock supply.

The three intended anchor locations for the rock transfer from the bulk carriers are identified in the plot later in this notice.

## **Cable Protection Installation**

The vessel Smit Kamara will install cable protection around the OSS, This operation will be performed late April, lasting a few days.

## **Guard Vessel**

The RESOLUTE or the ADVENTURE will be present at the site to safe guard the wind farm area.

## **GENERAL**

**MARINERS ARE HEREBY INFORMED** that a statutory construction Safety Zone (exclusion zone) is in place at the wind farm site. This safety zone is defined by:

- A 500 metres radius around each wind turbine, offshore sub-station and their foundations whilst work is being performed as indicated by the presence of construction vessels; and
- A 50 metres radius around each wind turbine, the offshore sub-station platform and associated foundation structures installed, complete or incomplete but waiting to be commissioned as part of the Dudgeon offshore wind farm where personnel are present on, or are being landed on or being taken from the structures.

**All vessels will exhibit appropriate lights and shapes prescribed by the International Regulations for Preventing Collisions at Sea.**

**ALL VESSELS ARE REQUESTED** to give all construction and support vessels a wide berth.

**MARINERS ARE ADVISED** to navigate with caution and keep continued watch on VHF Ch. 16 when navigating the area.

A further notice to mariners will be issued when these works are completed, expected autumn 2017.

Please direct any enquiries regarding this notice to Statoil Wind Control Centre:  
statoilwindcontrol@statoil.com

A copy of this notice can also be found at:

<http://dudgeonoffshorewind.co.uk/news/notice-to-mariners>

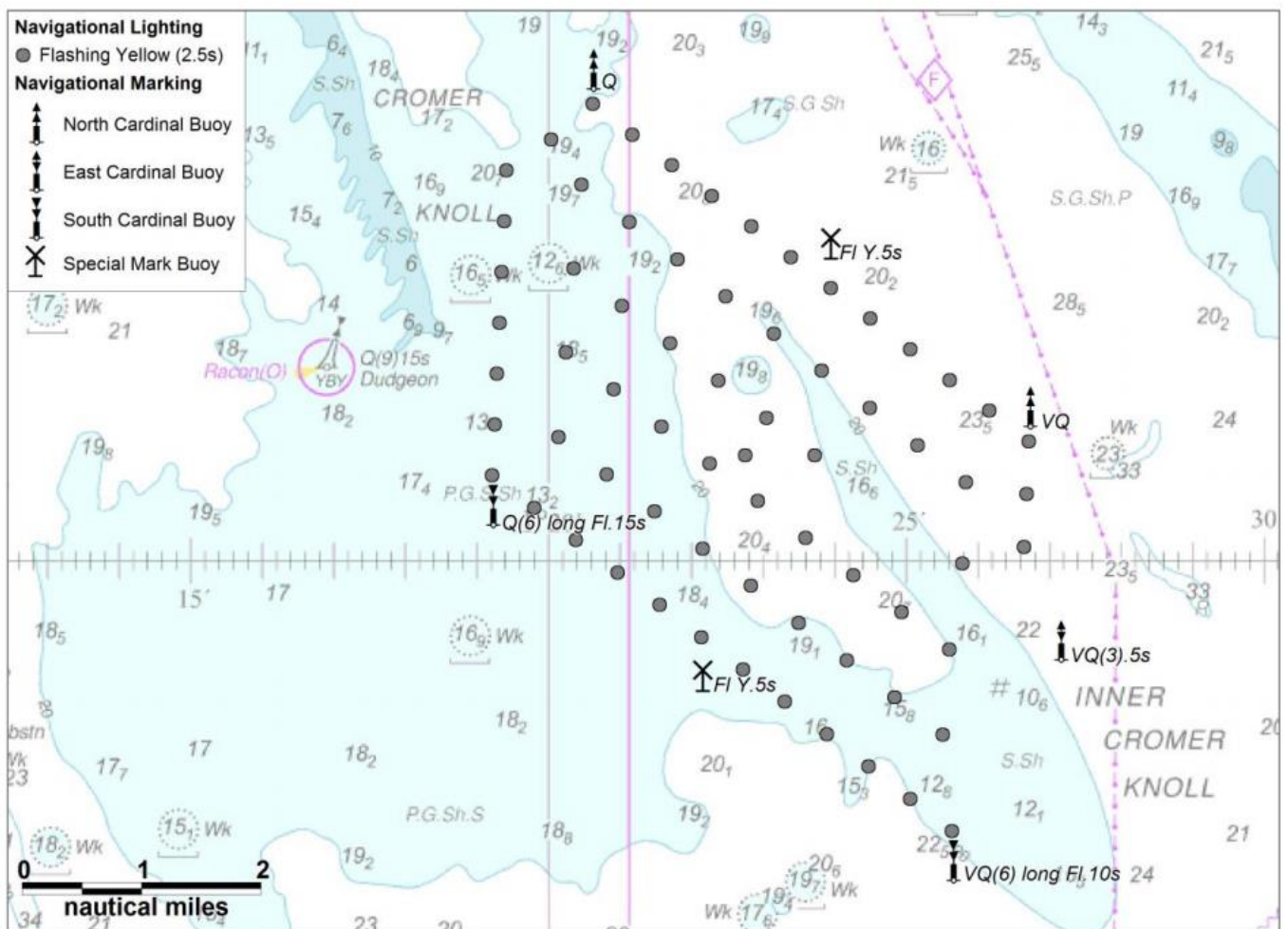
### Fishing

**The Dudgeon Wind Farm area is closed to fishing.** The coordinates for the area of the closed area are included below.

## SITE DETAILS

### Position of Navigation Buoys demarcating the Dudgeon Offshore Wind Farm site

Mark	Location	Name	Latitude	Longitude	Status	Flash Character	Code	Range
North Cardinal	NW Cardinal	<b>N-DOW</b>	53° 19,102' N	1° 20,592' E	Temporary	Q	601	5nm
Special Mark	Special Mark North	<b>DOW - SM - N</b>	53° 17,631' N	1° 23,919' E	Temporary	Fl.Y.5s	328	5nm
North Cardinal	North East Cardinal	<b>NE - DOW</b>	53° 16,277' N	1° 26,691' E	Temporary	VQ	501	5nm
East Cardinal	East Cardinal	<b>E- DOW</b>	53° 14,320' N	1° 27,123' E	Temporary	VQ(3).5s	508	5nm
South Cardinal	SE Cardinal	<b>S - DUDGEON</b>	53° 12,470' N	1° 25,617' E	<b>Permanent</b>	VQ(6) long Fl.10s	516	5nm
Special Mark	Special Mark South	<b>DOW - SM - S</b>	53° 14,012' N	1° 22,132' E	Temporary	Fl.Y.5s	328	5nm
South Cardinal	SW Cardinal	<b>SW - DOW</b>	53° 15,451' N	1° 19,188' E	Temporary	Q(6) long Fl.15s	631	5nm

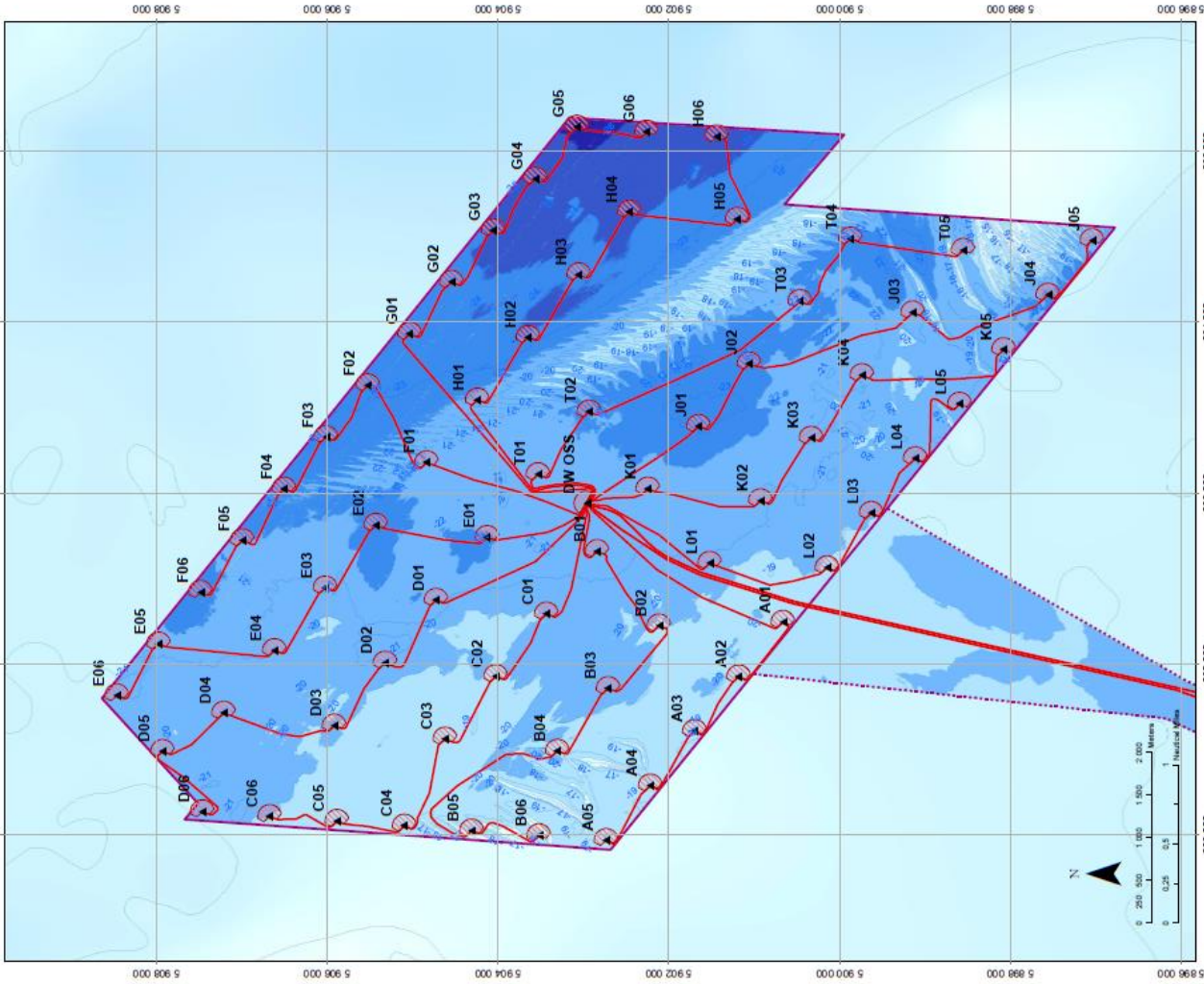




# WTG ID and locations (coordinates)

**WTG and Substation Locations**

WTG ID	Easting	Northing	Lon DD	Lat DD	Depth LAT
A01	390483.0	500066.0	1.38777	53.24347	-18.5
A02	398945.0	501153.0	1.34042	53.24869	-18.6
A03	398206.0	500700.0	1.33629	53.25282	-18.2
A04	388588.0	500218.0	1.32849	53.25702	-18.2
A05	387628.0	500278.0	1.31872	53.26201	-18.6
A06	391131.0	500470.0	1.32789	53.25985	-21.5
B01	390709.0	500711.0	1.34640	53.26170	-18.6
B02	388275.0	500308.0	1.33628	53.25784	-19.3
B03	388954.0	500431.0	1.32098	53.27017	-18.2
B04	387685.0	500323.0	1.32054	53.26910	-18.2
B05	390580.0	500434.0	1.35027	53.28105	-18.2
B06	388448.0	500427.0	1.34810	53.27404	-18.8
C01	390117.0	500462.0	1.33637	53.27020	-18.4
C02	388007.0	500509.0	1.32147	53.28328	-18.4
C03	388153.0	500687.0	1.32240	53.29382	-18.4
C04	390741.0	500476.0	1.34124	53.26747	-20.0
C05	388200.0	500675.0	1.32262	53.29474	-21.7
C06	390006.0	500523.0	1.35022	53.28570	-20.9
D01	389271.0	500620.0	1.33873	53.29091	-20.2
D02	389420.0	500713.0	1.34057	53.30262	-20.2
D03	388871.0	500793.0	1.33359	53.30891	-20.3
D04	388265.0	500746.0	1.32316	53.30466	-20.3
D05	391477.0	500412.0	1.37470	53.27576	-22.2
D06	391610.0	500431.0	1.37488	53.27627	-22.4
E01	390889.0	500025.0	1.32975	53.25704	-20.7
E02	390153.0	500161.0	1.35178	53.25181	-20.7
E03	390220.0	500791.0	1.32448	53.30686	-21.5
E04	388254.0	500466.0	1.34301	53.31383	-21.1
E05	392353.0	500467.0	1.36837	53.28187	-21.7
E06	392524.0	500520.0	1.38007	53.28816	-23.2
F01	392324.0	500609.0	1.38017	53.28816	-23.2
F02	392324.0	500609.0	1.38017	53.28816	-23.2
F03	392324.0	500609.0	1.38017	53.28816	-23.2
F04	392324.0	500609.0	1.38017	53.28816	-23.2
F05	391430.0	500696.0	1.37028	53.30103	-22.0
F06	390834.0	500749.0	1.37163	53.30508	-22.3
F07	388980.0	500850.0	1.40780	53.31054	-24.4
F08	390204.0	500741.0	1.42031	53.24688	-22.5
F09	395204.0	500180.0	1.42031	53.24688	-22.5
F10	392212.0	500333.0	1.38706	53.27071	-21.5
F11	392212.0	500333.0	1.38706	53.27071	-21.5
F12	392440.0	500390.0	1.39438	53.29466	-22.1
F13	394241.0	500460.0	1.41637	53.24202	-21.8
F14	394674.0	500673.0	1.42832	53.23737	-22.3
F15	394940.0	500653.0	1.42832	53.23532	-21.2
F16	392777.0	500165.0	1.36288	53.25393	-23.1
F17	393509.0	500100.0	1.40397	53.24812	-22.5
F18	394107.0	500145.0	1.41359	53.23104	-21.7
F19	394315.0	500752.0	1.41728	53.21694	-22.3
F20	394654.0	500704.0	1.42084	53.21222	-21.2
F21	392245.0	500246.0	1.38163	53.25947	-21.5
F22	391807.0	500028.0	1.36130	53.24602	-21.2
F23	392940.0	500334.0	1.39130	53.24143	-20.8
F24	393373.0	500730.0	1.40237	53.23674	-21.8
F25	393670.0	500070.0	1.40470	53.22139	-21.8
F26	391774.0	500152.0	1.36856	53.25178	-21.0
F27	391120.0	500746.0	1.36826	53.25433	-18.9
F28	391700.0	500663.0	1.37057	53.24915	-20.2
F29	391700.0	500663.0	1.37057	53.24915	-20.2
F30	393230.0	500620.0	1.39735	53.23577	-21.0
F31	391870.0	500265.0	1.37876	53.23408	-21.1



**Dudgeon Offshore Windpark**

STATIONARY REFERENCE SYSTEM  
 Prime Meridian: UTM Zone 31N  
 Datum: ETRS89  
 Ellipsoid: GRS80  
 Spheroid: WGS84

UK / North Norfolk

Scale: 1:50000

Map ID: C177-DOW-N-XE-0001-01

Map Date: 15/03/2014

Map Version: 1.0

Map Author: Statoil

Map Reviewer: Statoil

Map Status: Approved

Map Category: Planning

Map Sub-category: Substation Locations

Map Description: WTG and Substation Locations

Map Legend:

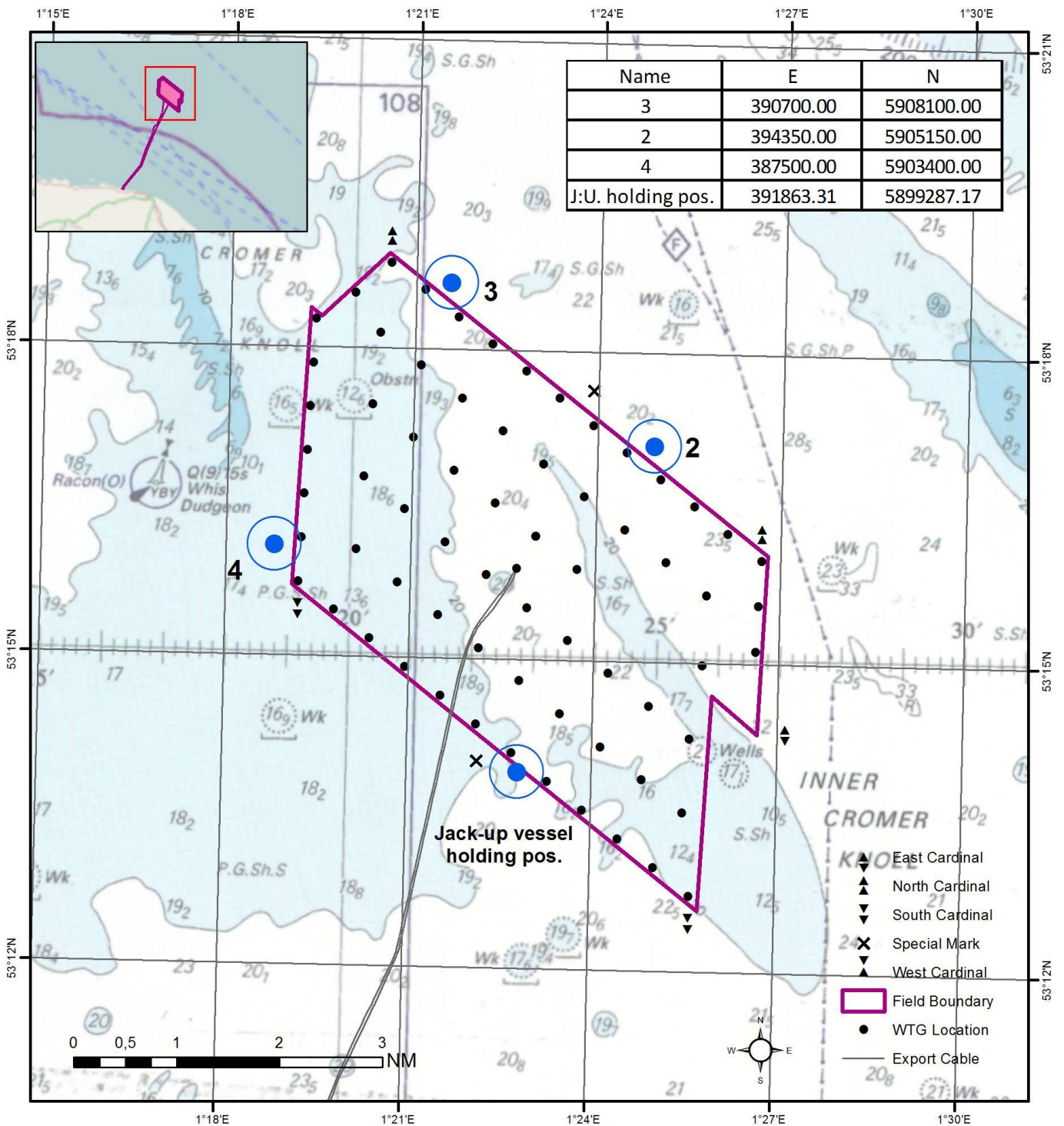
- WTG Layout Design Basis
- Sub Station
- Planned Interarray Cable Route
- Planned Export Cable Route
- Consented Field Outline
- Bathymetry (m rel. to LAT)

Bathymetry Legend:

- < -26
- 24 -26
- 22 -24
- 20 -22
- 18 -20
- 16 -18
- 14 -16
- 12 -14

This map features bathymetry from seabed survey: ST13504 DOWF Sub and Seabed Mapping (2013) according to the subcontractor's error budget for this survey the accuracy is as follows:  
 The (horizontal) accuracy for navigation is +/- 20 cm (horizontal determined by the dynamic position calibration for primary and secondary navigation system)  
 The (vertical) accuracy bathymetry: At 20m water depth the Total Vertical Uncertainty is +/- 27cm. At 50m water depth the Total Vertical Uncertainty is +/- 33 cm.

## Rock Installation Campaign. Anchor locations for rock transfer





## KEY CONSTRUCTION VESSEL CONTACT DETAILS

### ESVAGT NJORD



**Call sign:** OWZN2

**Bridge Phone:** VSAT.TEL: +45 32 71 26 89; / GSM: +45 32 71 26 85

**E-mail:** njord@esvagtvesel.com

### SEA CHALLENGER



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**E-mail:** seachallenger@a2sea.com / Master mast\_sc@a2sea.com



## VESTLAND CYGNUS



**Callsign:** C6BW7

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## Van Oord – HAM 602



**Callsign:** PENF

**Bridge Phone:** +31 888 26 3946

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## ADVENTURE



**Callsign:** 2IFE4

**Bridge Phone:** V-sat 01947750717

**E-mail:** [adventureGS@gmail.com](mailto:adventureGS@gmail.com) / [adventure.guard1@gmail.com](mailto:adventure.guard1@gmail.com)

## Resolute



**Callsign:** MLPD5

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## Advance WY77



**Callsign:** MZNA6

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**E-mail:** [adventureGS@gmail.com](mailto:adventureGS@gmail.com)

## Smit Kamara



**Callsign:** ORLB

**Bridge Phone:**

**E-mail:**



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 M/V Norbris



## Norbris

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