

Construction Activities

Walney Offshore Wind Farm project is located approximately 14km west of Walney Island in the East Irish Sea. The project is being constructed in two parts; 'Walney 1' - on which construction commenced in 2010 with the installation of 51 turbines; and 'Walney 2' - on which construction is starting this year (2011) also with 51 turbines. Each turbine has a capacity of 3.6MW, giving 'Walney 1' a total capacity of 183.6MW, and 'Walney 2' a further capacity of 183.6MW, making a combined total of up to 367.2MW.

'Walney 1' is connected to shore and the national grid through an export cable from the offshore substation and landing at Heysham, whilst 'Walney 2' will be connected to the shore and National Grid through a second export cable from a second offshore substation to a landing at Cleveleys.

Key Programme Dates

Dates	Activity	Vessels
February - April 2011	Scour protection Work	Tideway Rollingstone
April - September 2011	Foundation Installation	Svanen, Goliath
May 2011	Sub Station Installation	Rambiz
June - December 2011	Turbine Installation	Kraken, Leviathan
May 2011	Export Cable Installation	Stemat Spirit
August - December 2011	Interarray Cable installation	Stemat 82

Advisory Safety Zones

At all times during construction an Advisory Safety Zone of 500m is requested around all installation vessels and a 50m Advisory Safety Zone around each turbine and substation structure after installation. After the installation of the export cable a 200m anchorage exclusion zone is requested. All vessels are requested to respect the Advisory Safety Zones, which as well as reducing the risk of collision damage will provide protection to the installation vessels, the export cables and the wind turbine structures.

Buoyage

During construction of 'Walney 2', the whole of the wind farm perimeter will be marked by seven cardinal buoys (positions of all buoys are overleaf). These incorporate the existing buoys used during the construction of 'Walney 1' and three new buoys to include 'Walney 2'.

Vessels

Construction vessels will exhibit the appropriate signals for day and night. Some vessels may have anchors and cables extending out to 500m and possibly be using diving services. Various tugs and barges will be in the vicinity of the construction site and may be restricted in their ability to manoeuvre. Crew and workboats will also be transporting members of the workforce to and from Barrow as well as from the accommodation vessel 'Wind Ambition', with other construction vessels transiting between the wind farm site and the port of Mostyn.

Contact Details

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Long 3° 42' West 41' 40' 39' 38' 37' 36' 35' 34' 33' 32' 31' 30' 29' 28' 27' 26' 25' 24' Long 3° 23' West

Lat 54° 8' North

Lat 54° 8' North







Kingfisher Awareness Chart

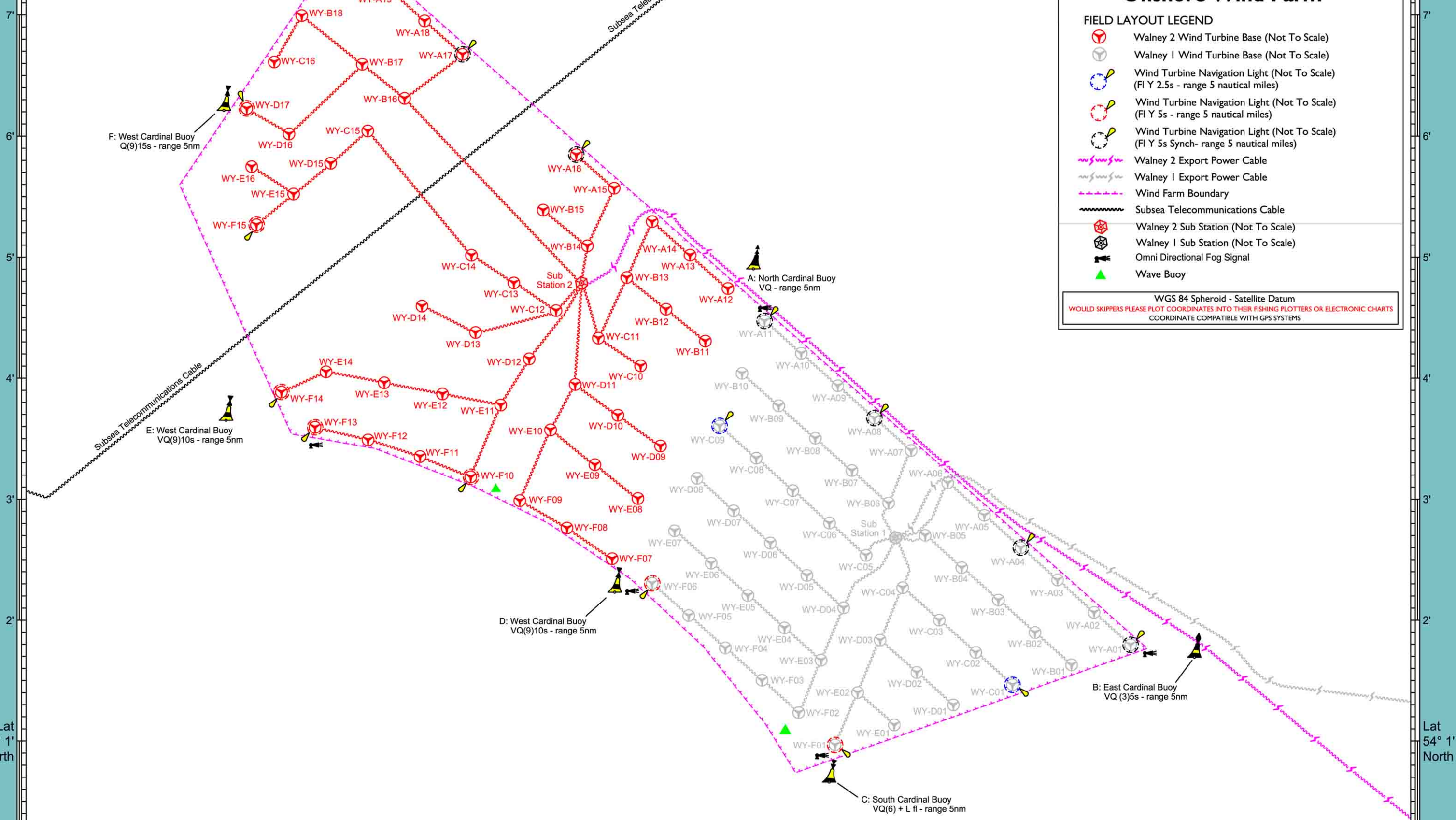
Proposed Walney 2 Offshore Wind Farm

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FIELD LAYOUT LEGEND

-  Walney 2 Wind Turbine Base (Not To Scale)
-  Walney 1 Wind Turbine Base (Not To Scale)
-  Wind Turbine Navigation Light (Not To Scale) (FI Y 2.5s - range 5 nautical miles)
-  Wind Turbine Navigation Light (Not To Scale) (FI Y 5s - range 5 nautical miles)
-  Wind Turbine Navigation Light (Not To Scale) (FI Y 5s Synch- range 5 nautical miles)
-  Walney 2 Export Power Cable
-  Walney 1 Export Power Cable
-  Wind Farm Boundary
-  Subsea Telecommunications Cable
-  Walney 2 Sub Station (Not To Scale)
-  Walney 1 Sub Station (Not To Scale)
-  Omni Directional Fog Signal
-  Wave Buoy

WGS 84 Spheroid - Satellite Datum
WOULD SKIPPERS PLEASE PLOT COORDINATES INTO THEIR FISHING PLOTTERS OR ELECTRONIC CHARTS
COORDINATE COMPATIBLE WITH GPS SYSTEMS



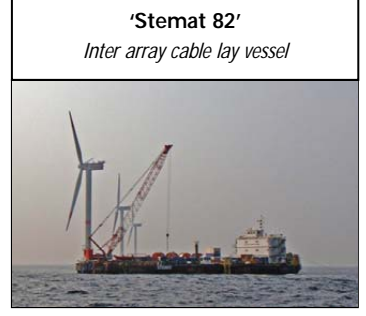
Long 3° 42' West 41' 40' 39' 38' 37' 36' 35' 34' 33' 32' 31' 30' 29' 28' 27' 26' 25' 24' Long 3° 23' West

Lat 54° 1' North

Lat 54° 1' North

Examples of Vessels Involved

In addition to these vessels, numerous tugboats, crew boats, barges and other vessels will also be utilised.



Wind Farm Coordinates

Export Cable Routes			
Export Cable – Walney 1		Export Cable – Walney 2	
Nº	Position	Nº	Position
1.	54°01.457'N 02°54.678'W	1.	53°53.222'N 03°02.753'W
2.	54°01.380'N 02°54.808'W	2.	53°53.281'N 03°03.407'W
3.	54°01.553'N 02°56.403'W	3.	53°53.481'N 03°05.600'W
4.	54°01.545'N 02°56.568'W	4.	53°53.617'N 03°06.845'W
5.	54°01.507'N 02°56.749'W	5.	53°53.646'N 03°07.101'W
6.	54°01.237'N 02°57.614'W	6.	53°53.682'N 03°07.480'W
7.	54°01.210'N 02°57.809'W	7.	53°53.833'N 03°09.023'W
8.	54°01.174'N 02°57.924'W	8.	53°54.044'N 03°10.329'W
9.	54°01.083'N 02°58.103'W	9.	53°54.384'N 03°11.440'W
10.	54°00.431'N 02°58.947'W	10.	53°54.402'N 03°11.497'W
11.	54°00.351'N 02°59.182'W	11.	53°54.585'N 03°11.984'W
12.	54°00.029'N 03°00.904'W	12.	53°54.599'N 03°12.019'W
13.	53°59.922'N 03°01.293'W	13.	53°54.626'N 03°12.093'W
14.	53°58.687'N 03°04.300'W	14.	53°54.647'N 03°12.147'W
15.	53°58.605'N 03°04.465'W	15.	53°54.696'N 03°12.279'W
16.	53°58.569'N 03°04.590'W	16.	53°54.781'N 03°12.443'W
17.	53°58.549'N 03°04.761'W	17.	53°54.862'N 03°12.601'W
18.	53°58.268'N 03°05.826'W	18.	53°54.916'N 03°12.705'W
19.	53°58.126'N 03°06.853'W	19.	53°54.944'N 03°12.761'W
20.	53°58.121'N 03°07.245'W	20.	53°55.945'N 03°14.707'W
21.	53°58.165'N 03°07.563'W	21.	53°56.786'N 03°15.901'W
22.	53°58.406'N 03°08.858'W	22.	53°58.235'N 03°18.408'W
23.	53°58.867'N 03°10.747'W	23.	53°59.159'N 03°20.486'W
24.	53°58.900'N 03°10.944'W	24.	53°59.369'N 03°20.958'W
25.	53°59.006'N 03°11.361'W	25.	53°59.451'N 03°21.143'W
26.	53°59.204'N 03°12.762'W	26.	53°59.559'N 03°21.309'W
27.	53°59.505'N 03°14.445'W	27.	53°59.900'N 03°21.931'W
28.	53°59.488'N 03°14.949'W	28.	54°00.790'N 03°23.795'W
29.	53°59.551'N 03°15.155'W	29.	54°01.376'N 03°24.971'W
30.	54°00.165'N 03°16.307'W	30.	54°01.581'N 03°25.390'W
31.	54°00.914'N 03°17.659'W	31.	54°01.792'N 03°25.822'W
32.	54°01.186'N 03°18.137'W	32.	54°02.794'N 03°28.435'W
33.	54°01.380'N 03°18.499'W	33.	54°03.044'N 03°28.963'W
34.	54°01.626'N 03°18.675'W	34.	54°03.420'N 03°29.704'W
35.	54°01.417'N 03°18.880'W	35.	54°04.211'N 03°31.182'W
36.	54°01.329'N 03°19.369'W	36.	54°05.193'N 03°33.083'W
37.	54°01.223'N 03°21.045'W	37.	54°05.317'N 03°33.258'W
38.	54°01.227'N 03°21.394'W	38.	54°05.356'N 03°33.333'W
39.	54°01.457'N 03°24.724'W	39.	54°05.383'N 03°33.419'W
40.	54°01.505'N 03°24.933'W	40.	54°05.394'N 03°33.514'W
41.	54°01.123'N 03°25.143'W	41.	54°05.386'N 03°33.613'W
42.	54°01.782'N 03°25.394'W	42.	54°05.365'N 03°33.690'W
43.	54°01.857'N 03°25.557'W	43.	54°05.330'N 03°33.761'W
44.	54°02.934'N 03°28.589'W	44.	54°05.272'N 03°33.828'W
45.	54°03.128'N 03°28.984'W	45.	54°04.969'N 03°34.059'W
46.	54°03.190'N 03°29.219'W	46.	54°04.923'N 03°34.107'W
47.	54°03.180'N 03°29.441'W	47.	54°04.876'N 03°34.188'W
48.	54°03.111'N 03°29.615'W	48.	54°04.799'N 03°34.412'W
49.	54°03.045'N 03°29.692'W	49.	54°04.772'N 03°34.497'W
50.	54°02.761'N 03°29.942'W		
51.	54°02.682'N 03°30.137'W		

Installed Walney 1 Turbine Positions	
Nº	Position
WY-A01	54°01.796'N 03°26.839'W
WY-A02	54°02.064'N 03°27.353'W
WY-A03	54°02.332'N 03°27.868'W
WY-A04	54°02.599'N 03°28.383'W
WY-A05	54°02.867'N 03°28.898'W
WY-A06	54°03.135'N 03°29.413'W
WY-A07	54°03.403'N 03°29.928'W
WY-A08	54°03.670'N 03°30.444'W
WY-A09	54°03.938'N 03°30.959'W
WY-A10	54°04.206'N 03°31.475'W
WY-A11	54°04.473'N 03°31.990'W
WY-B01	54°01.630'N 03°27.670'W
WY-B02	54°01.898'N 03°28.185'W
WY-B03	54°02.166'N 03°28.700'W
WY-B04	54°02.434'N 03°29.215'W
WY-B05	54°02.701'N 03°29.730'W
WY-B06	54°02.969'N 03°30.245'W
WY-B07	54°03.237'N 03°30.760'W
WY-B08	54°03.504'N 03°31.276'W
WY-B09	54°03.772'N 03°31.791'W
WY-B10	54°04.040'N 03°32.307'W
WY-C01	54°01.465'N 03°28.502'W
WY-C02	54°01.733'N 03°29.017'W
WY-C03	54°02.000'N 03°29.532'W
WY-C04	54°02.268'N 03°30.047'W
WY-C05	54°02.536'N 03°30.562'W
WY-C06	54°02.803'N 03°31.077'W
WY-C07	54°03.071'N 03°31.592'W
WY-C08	54°03.339'N 03°32.108'W
WY-C09	54°03.606'N 03°32.623'W
WY-D01	54°01.299'N 03°29.334'W
WY-D02	54°01.567'N 03°29.848'W
WY-D03	54°01.835'N 03°30.364'W
WY-D04	54°02.102'N 03°30.878'W
WY-D05	54°02.370'N 03°31.394'W
WY-D06	54°02.638'N 03°31.909'W
WY-D07	54°02.905'N 03°32.424'W
WY-D08	54°03.173'N 03°32.940'W
WY-E01	54°01.133'N 03°30.165'W
WY-E02	54°01.401'N 03°30.680'W
WY-E03	54°01.669'N 03°31.195'W
WY-E04	54°01.936'N 03°31.710'W
WY-E05	54°02.204'N 03°32.225'W
WY-E06	54°02.471'N 03°32.741'W
WY-E07	54°02.739'N 03°33.256'W
WY-F01	54°00.968'N 03°30.997'W
WY-F02	54°01.235'N 03°31.511'W
WY-F03	54°01.503'N 03°32.026'W
WY-F04	54°01.770'N 03°32.542'W
WY-F05	54°02.038'N 03°33.057'W
WY-F06	54°02.305'N 03°33.572'W
Substation	54°02.682'N 03°30.148'W

Proposed Walney 2 Turbine Positions	
Nº	Position
WY-A12	54°04.741'N 03°32.506'W
WY-A13	54°05.017'N 03°33.039'W
WY-A14	54°05.294'N 03°33.572'W
WY-A15	54°05.570'N 03°34.106'W
WY-A16	54°05.846'N 03°34.639'W
WY-A17	54°06.675'N 03°36.240'W
WY-A18	54°06.951'N 03°36.774'W
WY-A19	54°07.227'N 03°37.308'W
WY-A20	54°07.522'N 03°37.877'W
WY-B11	54°04.307'N 03°32.823'W
WY-B12	54°04.570'N 03°33.376'W
WY-B13	54°04.832'N 03°33.929'W
WY-B14	54°05.094'N 03°34.483'W
WY-B15	54°05.389'N 03°35.106'W
WY-B16	54°06.312'N 03°37.057'W
WY-B17	54°06.593'N 03°37.652'W
WY-B18	54°06.995'N 03°38.503'W
WY-C10	54°04.102'N 03°33.734'W
WY-C11	54°04.331'N 03°34.329'W
WY-C12	54°04.559'N 03°34.924'W
WY-C13	54°04.788'N 03°35.518'W
WY-C14	54°05.016'N 03°36.114'W
WY-C15	54°06.043'N 03°37.574'W
WY-C16	54°06.612'N 03°38.890'W
WY-D09	54°03.440'N 03°33.455'W
WY-D10	54°03.694'N 03°34.055'W
WY-D11	54°03.948'N 03°34.655'W
WY-D12	54°04.160'N 03°35.302'W
WY-D13	54°04.378'N 03°36.057'W
WY-D14	54°04.596'N 03°36.812'W
WY-D15	54°05.776'N 03°38.926'W
WY-D16	54°06.018'N 03°38.682'W
WY-D17	54°06.228'N 03°39.276'W
WY-E08	54°03.006'N 03°33.772'W
WY-E09	54°03.285'N 03°34.377'W
WY-E10	54°03.573'N 03°35.002'W
WY-E11	54°03.778'N 03°35.703'W
WY-E12	54°03.870'N 03°36.522'W
WY-E13	54°03.962'N 03°37.342'W
WY-E14	54°04.053'N 03°38.161'W
WY-E15	54°05.522'N 03°38.618'W
WY-E16	54°05.748'N 03°39.208'W
WY-F07	54°02.508'N 03°34.135'W
WY-F08	54°02.762'N 03°34.770'W
WY-F09	54°02.988'N 03°35.435'W
WY-F10	54°03.185'N 03°36.125'W
WY-F11	54°03.353'N 03°36.838'W
WY-F12	54°03.490'N 03°37.570'W
WY-F13	54°03.595'N 03°38.316'W
WY-F14	54°03.886'N 03°38.788'W
WY-F15	54°05.268'N 03°39.140'W
Substation	54°04.771'N 03°34.507'W

Consented Wind Farm Boundary – Walney 1	
Nº	Position
1.	54°02.300'N 03°33.804'W
2.	54°04.583'N 03°32.061'W
3.	54°01.776'N 03°26.660'W
4.	54°00.737'N 03°31.555'W
5.	54°01.140'N 03°31.977'W
6.	54°01.780'N 03°32.853'W

Consented Wind Farm Boundary - Walney 2	
Nº	Position
1.	54°02.300'N 03°33.803'W
2.	54°04.583'N 03°32.062'W
3.	54°07.603'N 03°37.894'W
4.	54°05.597'N 03°40.170'W
5.	54°04.442'N 03°39.341'W
6.	54°03.572'N 03°38.579'W
7.	54°03.440'N 03°37.478'W
8.	54°03.128'N 03°36.105'W
9.	54°02.803'N 03°35.038'W

Positions of Wind Farm Buoys	
Nº	Position
a.	54°04.920'N 03°32.150'W
b.	54°01.690'N 03°25.920'W
c.	54°00.670'N 03°31.090'W
d.	54°02.230'N 03°34.120'W
e.	54°03.670'N 03°39.710'W
f.	54°06.230'N 03°39.740'W
g.	54°07.890'N 03°37.850'W

Positions of Wave Buoys	
Nº	Position
1.	54°01.090'N 03°31.701'W
2.	54°03.083'N 03°35.781'W