

## NOTICE TO MARINERS

### **Berwick Bank**

## Wind Farm - Notice to Mariners, date 01/10/2021

Mariners are advised that SSE Renewables will be deploying a bottom mounted ADCP device recording metocean data at three locations within the proposed Berwick Bank Wind Farm array area. An associated guard buoy is currently deployed at each location. All locations referred to are outlined in Table 1 and displayed Figure 1.

It is proposed that three stumpy moorings (M) and a near-bed frame (NB) will be installed on the sea bed within 175m to the three guard buoys which were installed during a previous wave buoy campaign. These locations are all within the Berwick Bank Wind Farm (BBWF) in the outer Firth of Forth on the east coast of Scotland. It should be noted that the near-bed frame will only be situated at one of these three sites at any one time.

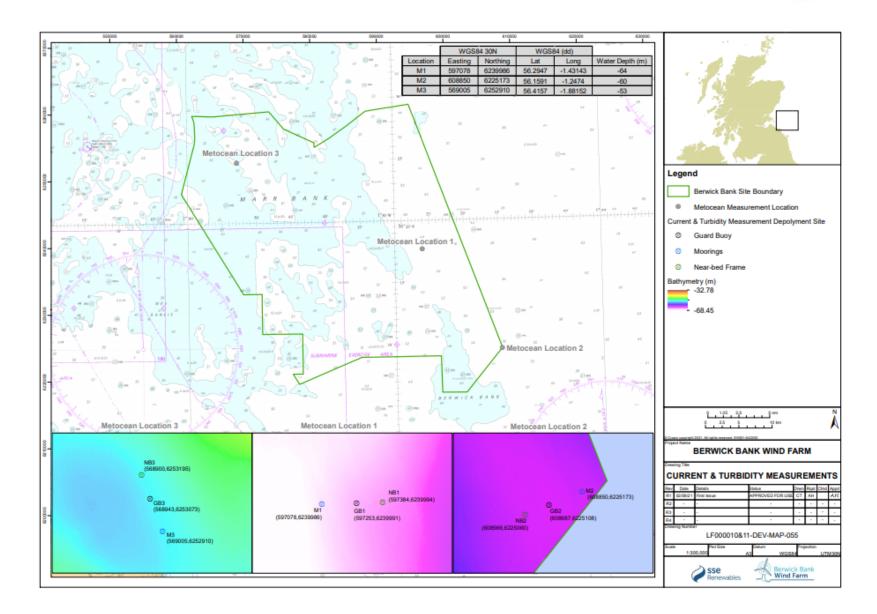
The equipment will be deployed during October 2021, with an estimated start date for deployment set for the 14th October 2021. However, this may be subject to change due to weather and/or operational delays. The stumpy moorings will be deployed for 12 months with maintenance and monitoring completed at each three-month interval. The one near-bed frame will be deployed for three months at two sites and 6 months at one site, equating to a deployment duration of 12 months in total.

Location	Туре	Ref	BNG EPSG:27700	BNG EPSG:27700
			Easting	Northing
1	Guard Buoy	1	597253.00	6239991.00
	Near-bed Frame	1	597078.00	6239986.00
	Wave Buoy	1	597384.00	6239994.00
2	Guard Buoy	2	608687.00	6225108.00
	Near-bed Frame	2	608850.00	6225173.00
	Wave Buoy	2	608566.00	6225060.00
3	Guard Buoy	3	568943.00	6253073.00
	Near-bed Frame	3	569005.00	6252910.00

### Table 1 – Location of buoys to be removed



Wave Buoy	3	568900.00	6253195.00
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## Deployment

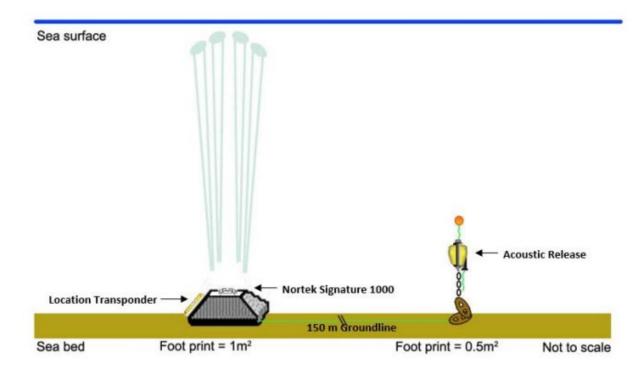
The proposed locations of the guard buoys are illustrated in Figure 1. Each deployment comprises one guard buoy (see Figure 3), one stumpy mooring and one near-bed frame (Figure 2).

The three stumpy moorings will be deployed in October 2021 for a period of approximately 12 months. The near-bed frame will be installed for 3 months at two site locations and 6 months at another. The guard buoys which were previously deployed will also remain in position for the same 12-month period. The deployment will be undertaken from a single vessel (currently proposed to be The Forth Warrior) and deployment is expected to take up to three days (including transfer to site and testing of the equipment). All equipment will be loaded at the port of Burntisland (although may be subject to change) using the vessels cranes before heading to the offshore locations.

The guard buoys which are already on location (featuring a Sabik M850 LED Lantern) have their own dedicated mooring system (see Figure 3). The system comprises a gannet buoy, moored with 22 mm pendant chain, attached to a cast iron sinker weight with a footprint of 1.6 m x 1.2 m. Each of the guard buoys features a thrash chain (approximately 28 mm in diameter) which will interact with the seabed. The length of these trash chains for guard buoy 1, 2 and 3 are 56 m, 62 m and 56 m, respectively.

The three stumpy moorings, each housing a Nortek Signature 250 Khz instrument and a RBR Concerto Conductivity Temperature Depth (CTD) with a Turner Cyclops Optical Backscatter Sensor(OBS). These are single point moorings with 200 kg weight, with no ground line. These will be located 175 m from the guard buoy with an estimated footprint of 1 m<sup>2</sup>.

The near-bed frame is a single reinforced fibreglass bed frame, housing a Nortek Signature 1000 Acoustic Doppler Current Profiler (ADCP). It has a footprint of 2 m x 2 m. Attached to the bed frame will be a 200 m groundline. A 50 kg weight and the acoustic release will be at the other end of this groundline. The deployed position of this weight and acoustic release will be parallel to the tide.



# Figure 2 - Near-bed Frame Schematic (provided for contextual purposes only – actual length of groundline is 200 m and footprint of near-bed frame is 4 m<sup>2</sup>)

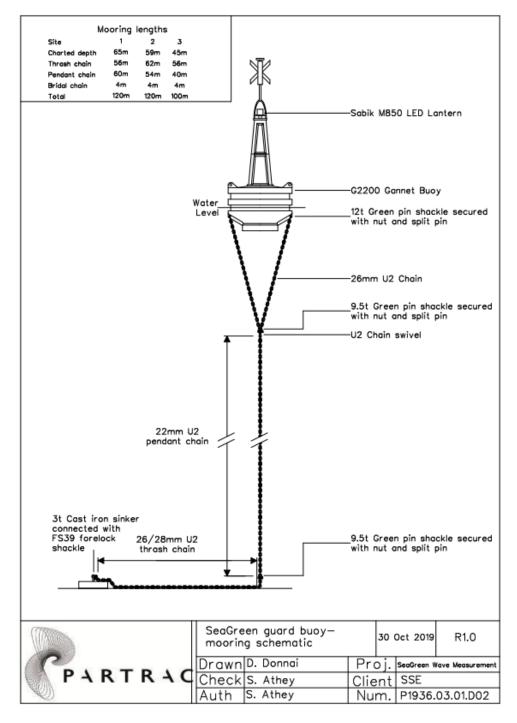


Figure 3 - Guard Buoy Mooring Schematic (already installed)

## **General Safety Advice**

The work boat will exhibit appropriate lights and shapes prescribed by the International Regulations for Preventing Collisions at Sea; relative to their operations. All vessels engaged in the activity will also transmit an Automatic Identification System (AIS) message. The activity location is defined by the coordinates in Table 1, which provides the location of the buoys to be removed.

ALL VESSELS ARE REQUESTED to give the work boat engaged in the deployment activity a wide berth.

MARINERS ARE REMINDED to navigate with caution and keep continued watch on VHF Ch. 71 & 16 when navigating the area.

## **Deployment Vessel**



## **Forth Warrior**

## **Vessel Contact Details**

Forth Warrior Vessel Call Sign: 2JHR8 MMSI: 235116011 IMO: 9803742 Bridge: +44 (0) 7825 696702 Vessel Sat Phone: +87 (0) 7764 68449 Vessel Email: mvwarrior@briggsmarine.com

## **Contact Details**

Further marine enquiries should be addressed to the following person:

Robert Begley, Briggs Marine

Office Telephone: +44 (0) 1592 872939

Mobile: +44 (0) 7809 338902

Email: <a href="mailto:rbegley@briggsmarine.co.uk">rbegley@briggsmarine.co.uk</a>

## **Contact Details – Fisheries Liaison**

Onshore fisheries liaison for this survey will be co-ordinated by Brown and May Marine (BMM). If there are commercial fishery queries, please contact Sophie Farenden, Office T: 01379 872149; Mobile T: 07525 128344 (sophie.farenden@brownmay.com).

Due to the restricted size of the support vessel there will not be an offshore fisheries liaison officer (FLO) aboard. However, the skipper of the vessel will issue regular broadcasts whilst the vessel is operating to ensure minimal disruption and that vessels maintain an appropriate and safe distance. SSE Renewables are not expecting any fishermen to relocate gear; on this occasion the vessels will work around any gear on location.

## FURTHER DETAILS ARE AVAILABLE FROM:

Adrian How SSE Renewables 1 Waterloo St., Glasgow, G2 6AY Telephone: +44 (0) 141 224 7053 / +44 (0) 7342 026 379 Email: <u>adrian.how@sse.com</u>

If not available, please contact: Douglas Watson SSE Renewables (at the above address), Mobile: +44 (0) 7342 028219 Email: <u>douglas.watson2@sse.com</u>