Project Title	Seagreen Wind Energy Ltd
Document Reference Number	LF000009-MIP-MA-MAN-NOT-0001

Seagreen Offshore Wind Farm.

Weekly Notice of Operations 45/2021

Issue Date – 08th November 2021.

Notice of Operations on Seagreen Offshore Wind Farm.

Work planned for the period 08-11-2021 to 14-11-2021.

Construction activities commenced on Seagreen Offshore Wind Farm on Thursday 17th December with works at the export cable landfall site. This notice will be updated weekly giving information of the progress and resources involved in the construction of the windfarm. The intention is to give notice of the activities involved in the construction phase of the project. Should anyone have any questions regarding construction operations we kindly ask that you put them forward well in advance.

The Seagreen Offshore Wind Farm is located in the outer Firth of Forth and Firth of Tay region of the North Sea. The site is situated approximately 17.5 nautical miles East-southeast of the Port of Montrose where the project Marine Coordination Centre will be located during the construction and operational phases. The first phase of the development will consist of 114 suction bucket foundation structures, with associated 114 10MW offshore wind turbine generators, 1 HVAC offshore substation platform, associated inter array and export cabling. The generated power will be transmitted to the National Grid via 3 subsea transmission cables making landfall at Carnoustie, Angus, to the Southwest of the development site. Grid connection will

be achieved at the Tealing onshore substation. The second phase of the project will consist of 36 piled foundation structures, with associated 36 Wind Turbine Generators, associated inter array and export cabling and one additional 1 HVAC offshore substation platform. The phase 2 transmission cable is proposed to make landfall at Cockenzie, East Lothian (subject to appropriate licensing).

The Seagreen development site is highlighted below in red, the export cable corridor is highlighted in blue.

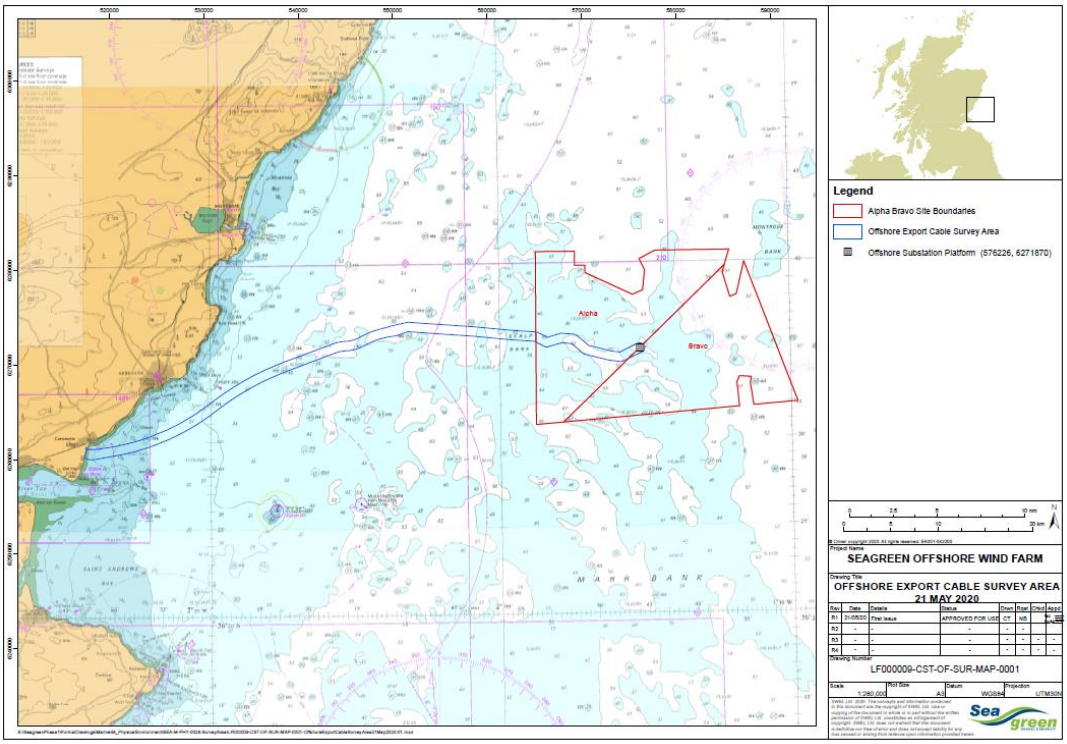


Fig 1 – Seagreen offshore wind farm location and export cable corridor.

1. Contact details for Marine Coordination

The following contact can provide more information if required.

Telephone Number (24/7 Operations)	+44 (0) 333 344 5255
Email for Marine Coordinator	seagreenmarinecoordination@sse.com
Address	Seagreen Wind Energy Ltd, Inchbraoch House Montrose Port Authority, South Quay Ferryden, Montrose, Angus DD10 9SL

2. Export cable works.

2.1 Export Cable Landfall works.

Works continue on the reinstatement of Carnoustie beach revetement. Trenching works on the three export cable protection pipes has been suspended until such time that the export cables are pulled into the protection pipes. Further details are below in section 2.2. The landfall works area is shown below in Fig 2.

Fig 2 – Landfall works area located at Carnoustie Barry Golf Links.

2.2 Nearshore export cable protection and diving works.

Trenching operations on the 3 self-submersible cable protection pipes have been suspended until export cable pull-in works commence at a date to be confirmed.

Six temporary rock bag moorings have been placed on the seabed. They will remain in place and be used during the export cable pull-in. These temporary moorings will be surface marked by day-glo pellet buoys. The locations and coordinates of these temporary moorings are shown below in Fig 3 and Table 1.

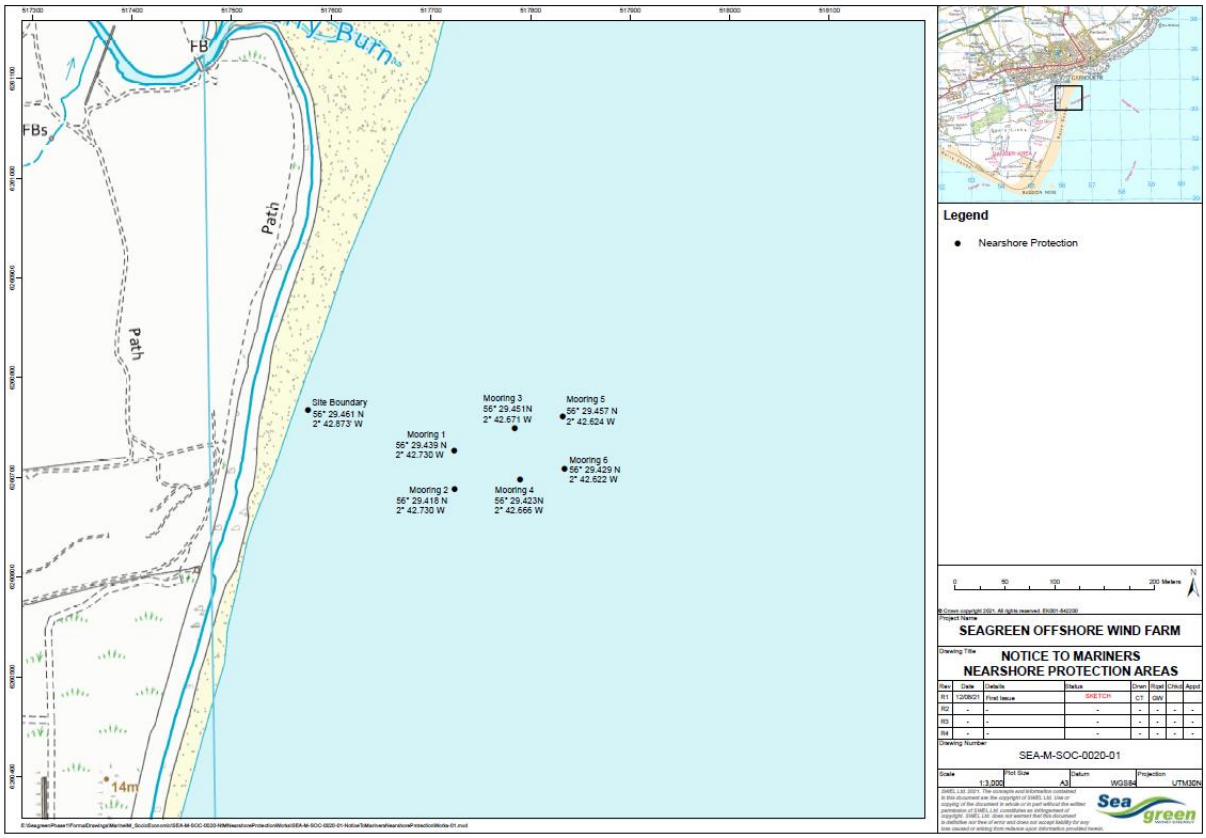


Fig 3

ID	**Latitude** (DDM WGS 84)	**Longitude** (DDM WGS 84)
Site Boundary	56° 29.461' N	2° 42.873' W
Mooring 1	56° 29.439' N	2° 42.730' W
Mooring 2	56° 29.418' N	2° 42.730' W
Mooring 3	56° 29.451' N	2° 42.671' W
Mooring 4	56° 29.423' N	2° 42.666' W
Mooring 5	56° 29.457' N	2° 42.624' W
Mooring 6	56° 29.429' N	2° 42.622' W

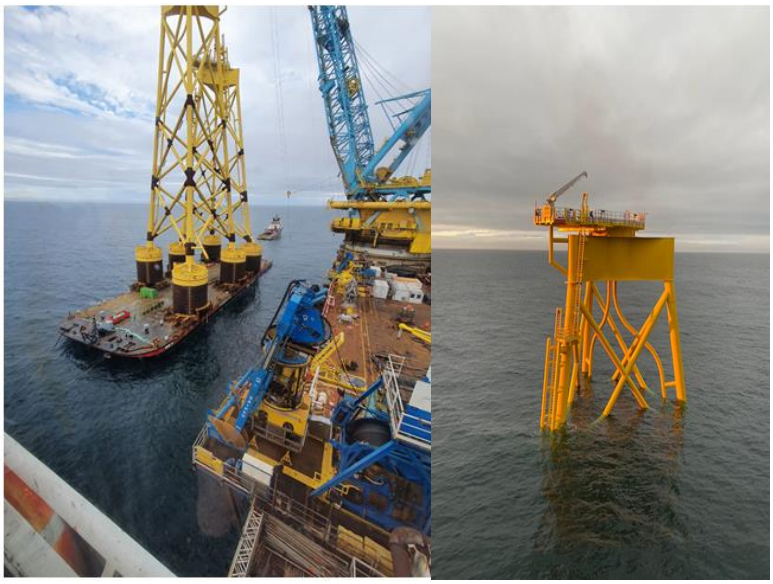
Table 1 – Temporary mooring coordinates.

3. Boulder clearance works.

The boulder clearance campaign continues by utilising EDT Hercules. A replacement boulder clearance vessel is currently being sourced and details will be promulgated when known. The completion date of the campaign will be promulgated when known.

4. Installation of suction bucket caisson jacket foundations.

Installation of suction bucket caisson foundation jacket structures has stopped until further notice, it is expected this will re-commence towards the end of November 21.



5. Scour Protection Installation

The installation of seabed scour protection rock to the wind turbine generator suction caisson foundation structures within the Seagreen site boundary has been suspended until further notice.

6. Foundation Grout Installation

Seaway 7 will install grout to the wind turbine generator foundation suction caisson voids within the Seagreen site boundary.

The supply vessel EDT Hercules will transport the grouting mix to the Seagreen site. The vessel will set up at the required foundation location and connect a grout hose to the suction caisson. The grouting mixture will

then be injected into the caisson void. A remotely operated vehicle (ROV) will also be utilised in this operation.

The EDT Hercules arrived on site to commence works on the 26th October 2021. An example of a wind turbine generator foundation and suction caisson is shown below.

WTG foundation structure

Foundation caisson

Vessel Name – EDT Hercules	
General Description and Dimensions:	Grouting Vessel: LOA 88.8m x 19.6m Beam
Call Sign:	5BAM4
MMSI:	210776000
Satellite communications details	Mobile +44 2037 699906
Direct Bridge/ Masters Number	hercules.bridge@edtoffshore.com
Onshore Representative:	George Cooper Seaway 7 +44 (0) 7545 642881

7. Inter Array Cable Installation.

On behalf of Seagreen Wind Energy Ltd, Seaway 7 will install, trench and test inter-array cabling between the wind turbine generator foundation structures within the Seagreen site boundary as shown in fig 1. Operations will commence with cable lay and trenching between wind turbine generator foundation structures, inter array cables will also be installed into the Offshore Substation Platform at a date to be confirmed.

Three vessels will be involved in the inter-array cabling operation, further details of their operations are below.

Siem Day – This vessel will act as the Installation Support vessel, cable installation technicians will be deployed to the wind turbine generator foundation structures using the vessels' motion compensated gangway system.

Maersk Connector – This vessel will lay the inter array cable between adjacent foundation structures.

Prior to cable laying operations commencing Maersk Connector will perform a pre lay grapnel run along the cable route between the two foundation structures, this is required to remove any debris that may hamper cable lay operations, any debris will be brought ashore for disposal.

Seaway Aimery – On completion of the cable lay operation this vessel will trench the surface laid cable between the foundation structures. A remotely operated trenching vehicle will be used to bury the inter array cables to the required depth, Details of Siem Aimery will be promulgated prior to arrival at the work site.

Vessel Name – Siem Day	
General Description and Dimensions:	120.8m x 25.9m x 6.1m
Call Sign:	LAFB8
MMSI:	257651000
Direct Bridge/ Masters Number	+47 919 04982
Onshore Representative:	George Cooper Seaway 7 +44 (0) 7545 642881

Vessel Name – Maersk Connector	
General Description and Dimensions:	138.0m x 28.0m x 5.5m
Call Sign:	OWEB2
MMSI:	219275000
Direct Bridge/ Masters Number	+47 2103 8003 +870 773 805 074
Onshore Representative:	George Cooper Seaway 7 +44 (0) 7545 642881

8. Guard Vessel Deployment.

In line with foundation installation activities commencing Seaway 7 has deployed a site Guard Vessel. The Guard vessel will make six hourly VHF radio broadcasts containing information regarding the Seagreen development including installation activity, safety zone information and site demarcation buoyage information. The Guard Vessels' shall be relieved regularly, the Guard Vessel Shemarah II is on station until further notice.

Vessel Name – GV Shemarah II LH65	
General Description and Dimensions:	Fishing vessel. 27.0m x 8.0m x 1.0m
Call Sign:	MVRR7
MMSI:	232007650
Direct Bridge/ Masters Number	+44 7774 810625 donaldmoodie@moodiemarine.com
Onshore Representative:	Alastair Macdonald Alastair.Macdonald@Subsea7.com

9. Website

The official website for Seagreen Offshore Wind Farm can be found at

https://seagreenwindenergy.com

This contains all Seagreen Weekly Notices of Operations and Notices to Mariners, together with a large amount of general information about the project.

There is also a Twitter feed at @seagreenwind

10. Distribution List

A central list of recipients is maintained by Seagreen Marine Coordination, if you are not the appropriate recipient or do not wish to receive these notices please contact Marine Coordination as per the details in section 1 of this notice.

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11. Seagreen weekly vessel report.

Seagreen Offshore Windfarm
Vessels & Operators

Reference to Marine Licence Conditions 3.1.2 (OWF Alpha and Bravo ML), 3.1.2 (OTA ML) and 3.1.2 (Open Cut at Landfall ML)

Insert date 08-11-21

Vessel Data Matrix OWF/OTA/Open Cut at Landfall

No Ref	Vessel Picture	Vessel Name / Flag	Type / Function	Operator	Contact / contact details	Call sign / MMSI / IMO	LOA (m) Beam (m) Draft (m	Date on Site	Marine Licence(s) applicable
1		GV Shemarah 11	Guard Vessel	Seaway7	Frits Van-Dorst Project Engineer +31 62972 5402	MVRR7 232007650	27m x 8m	26/10/2021	OWF Alpha & Bravo ML
2		EDT Hercules	Grouting Operations	Seaway7	George Cooper Seaway 7 +44 (0) 7545 642881	5BAM4	127.4m x 23.5m	26/10/2021	OWF Alpha & Bravo ML
3		Wem 4	CTV	Seaway7	George Cooper Seaway 7 +44 (0) 7545 642881	MIZP8 232035358	25mx7m	06/10/2021	OWF Alpha & Bravo ML
4		Seacat Volunteer	CTV	SWEL	Graeme Watters Lead Marine Coordinator +44 (0) 7932 229828	2HCP6 235102528	25.1mx 8m	15/10/2021	OWF Alpha & Bravo ML
5		Siem Day	Installation Support Vessel	Seaway7	George Cooper Seaway 7 +44 (0) 7545 642881	LAFB8 257651000	120.8x25.9x6.1	09/11/2021	OWF Alpha & Bravo ML
6		Maersk Connector	Cable Layer	Seaway7	George Cooper Seaway 7 +44 (0) 7545 642881	OWEB2 219275000	138x28x5.5	13/11/2021	OWF Alpha & Bravo ML