

RACE BANK

OFFSHORE WIND FARM

April 2016 Newsletter



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Introduction

Welcome to the first newsletter of 2016 for Race Bank Offshore Wind Farm. This edition will look at our landfall works, which are the next stage in the Project's development.

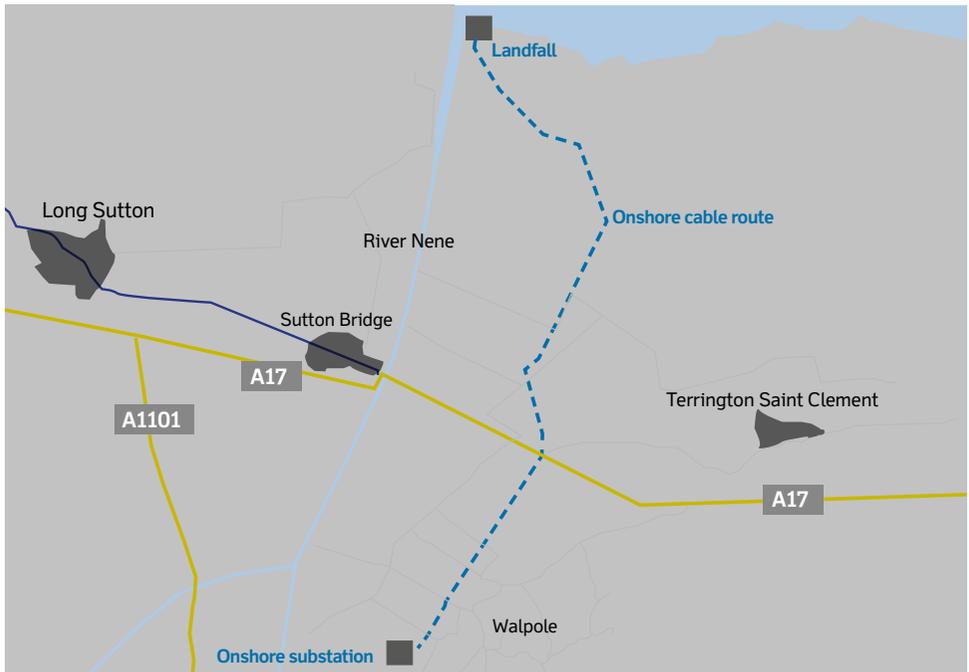
Race Bank is a key UK Offshore Wind Farm that will provide power for up to 500,000 homes. Onshore construction began in early 2015 and is now well underway. We began with an onshore substation and the onshore cable works, which are now nearing completion.

1. Landfall

Our next significant step will be to connect the onshore cables to the offshore cables at landfall just north of Sutton Bridge. This process is expected to commence in April 2016.

Landfall works for Race Bank offer unique challenges such as a saltmarsh and a sea defence bank that are both environmentally sensitive and important to the local area.

To ensure that we take the best possible approach, DONG Energy has worked closely with local people, environmental stakeholders and specialist contractors such as Mott MacDonald and Jan De Nul to develop an innovative, site specific approach.



2. Sea defence preparation

Approximately 30 days



Our first step at the sea defence is to spend two weeks setting up our construction site. You may see construction workers, vehicles and activity such as the installation of temporary fencing.



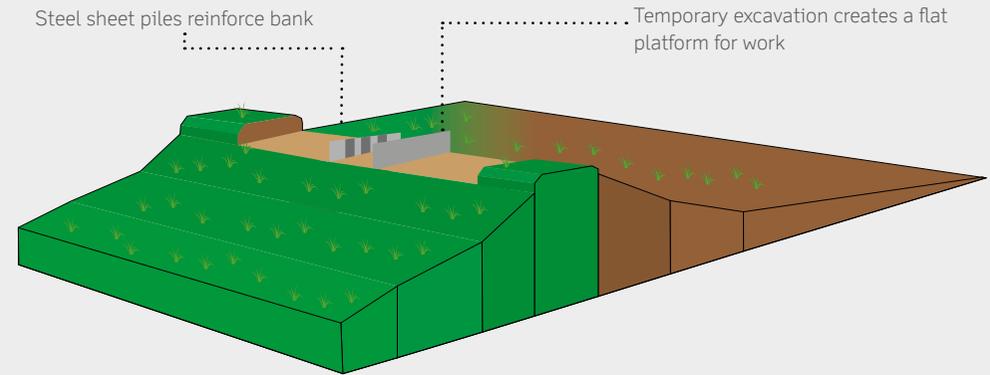
Next we will add a diversion footpath to ensure that people can continue to use the Sir Peter Scott Walk.



We insert our first in a series of steel sheet piles into the bank to reinforce it prior to temporary excavation.



We then make our first careful excavation of the sea defence. This first step takes a section of soil from the top of the sea defence to create a flat working platform that is still 5.15 metres above sea level.

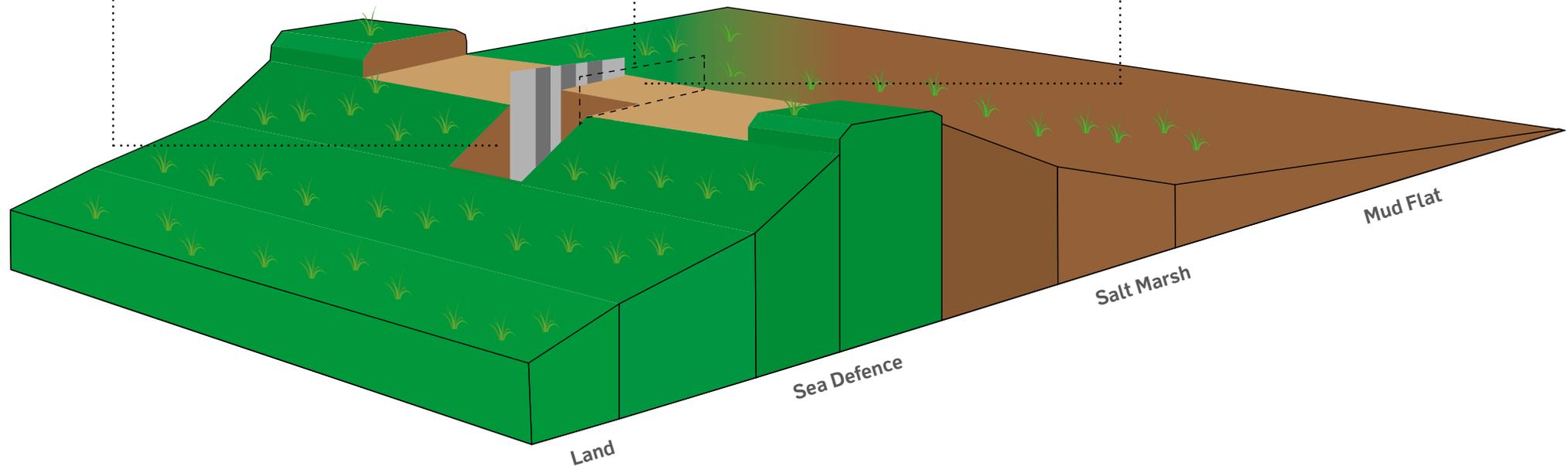


The lower section of the sea defence nearest the land is then removed, leaving the seaward facing section still in place. The excavated material is carefully stored nearby.

Sea defence section nearest the land temporarily removed

Reinforcing steel sheet piles still in place

Sea defence section nearest the sea still in place



3. Sunfish and Moonfish arrival

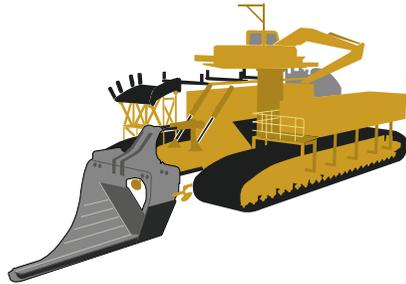
Approximately 15 days

Our next step is to begin preparing for the arrival of our specialist cable laying equipment by sea.

A barge arrives with equipment specifically designed for Race Bank. This includes two cable laying machines called Sunfish and Moonfish designed by Jan De Nul to lay and install the cables.

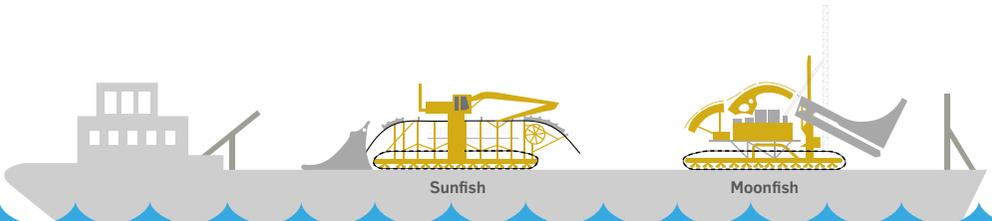
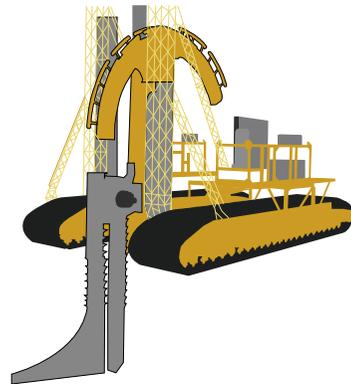
Sunfish

Sunfish is designed for laying and installing both cables along the saltmarsh section of landfall. Wide, flat caterpillar tracks help to minimise impact on the saltmarsh by distributing weight over a large area. Sunfish is controlled from a drivers cab seated high above the water line.



Moonfish

Moonfish is designed for laying and installing both cables along the mudflat section of landfall closer to the sea. It is controlled from and linked to the barge at all times. It can even operate entirely underwater.



4. East cable installation

Approximately 5 days

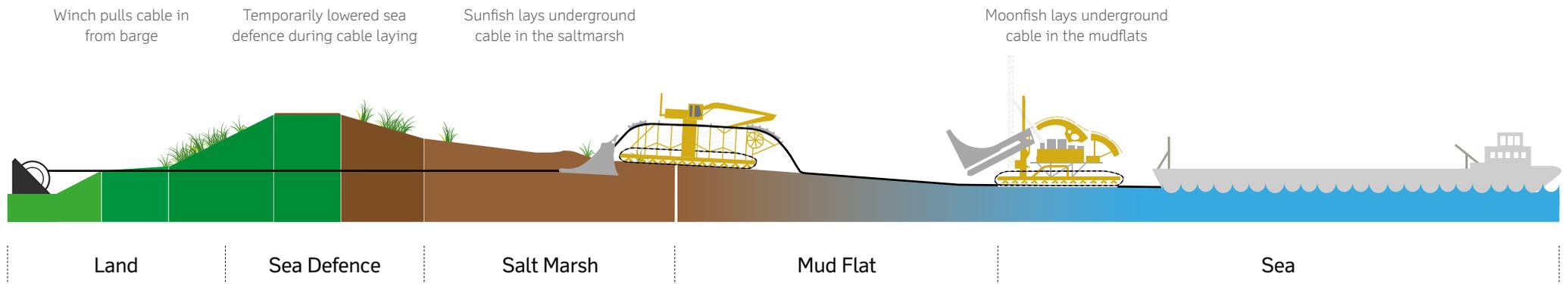
Once Sunfish has alighted the barge it will track toward the sea defence whilst laying cable rollers.

At the same time the final section of the sea defence nearest to the sea will be temporarily removed with excavators.

Once Sunfish reaches the foot of the sea defence, it pulls the electrical cable from the offshore barge inshore toward the sea defence with the help of a winch.

Sunfish then returns offshore to the barge while simultaneously installing the cable 1.5 metres below ground level. It achieves this by smoothly lifting the earth section in front, laying the cable underneath and replacing the earth section behind while it moves along.

Once it reaches Moonfish in the intertidal area, Sunfish temporarily returns to the barge to await the laying of the second cable. Moonfish continues to install cable across the intertidal mudflats and also returns to the barge once complete.



5. Temporary reinstatement

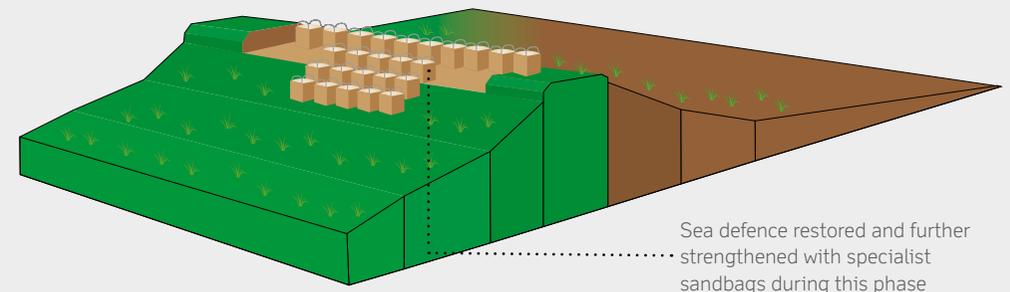
Approximately 30 days

The sea defence excavation will only be open for a limited number of days during the installation of the East cable.

Once the East cable is installed, the sea defence is reinstated to 5.15 metres above sea level. Both the seaward and land facing sections are completely restored.

Specialist sandbags are then temporarily installed bringing the height to 7.7 metres above sea level. This is even higher than the original sea defence height.

There is then a period of around one month until the next available tide allows the barge to arrive in the intertidal area again for the West cable installation.



6. West cable installation

Approximately 5 days



The installation of the West cable follows the same steps as the East cable.

7. Permanent reinstatement

Approximately 10 days

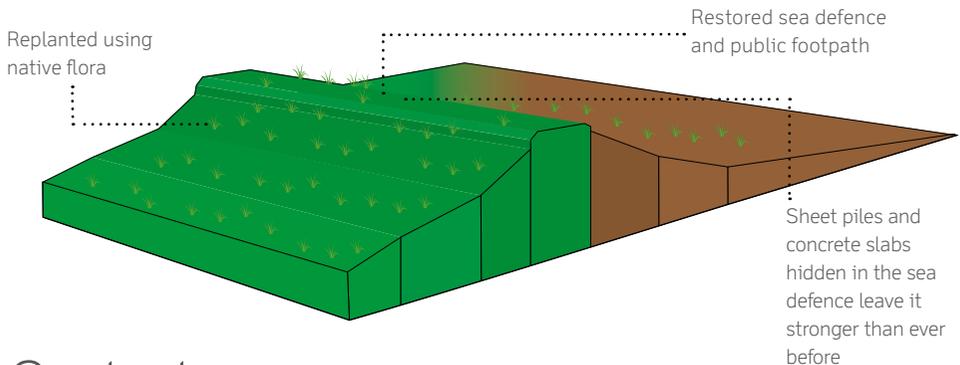
Full reinstatement of the sea defence to the original standard or better is a priority for DONG Energy.

We will remove the top sections of the steel sheet piles but their base will be kept in place to add further reinforcement to the defence. Concrete over the cables will add further strength.

The soil from the sea defence will be tested and will either be reused or replaced with a better and more secure mix. It will then be replanted using native flora.

We will fully reinstate the original footpath along the Sir Peter Scott Walk and withdraw all construction related equipment.

We will monitor the bank for 10 years ensuring that every aspect of reinstatement is a success.



Contact us

We will continue to engage with local communities throughout the development of Race Bank Offshore Wind Farm. To find out more please contact a member of the Project team:



Call the freephone Project information line on **0800 111 4478** (9am to 5pm, Mon-Fri, with an answer phone facility to take calls outside of these hours)



Email the enquiries address: **racebank@dongenergy.co.uk**



Visit the Project website: **www.dongenergy.co.uk** (search “Race Bank”)

Or contact our Community Liaison Officer Brian Jones:

Call **077 9508 7823** or Email: **community@race-bank.co.uk**

Should you require this document in large print, audio or Braille then please call **0800 111 4478**.

All graphics and maps in this document are for illustrative purposes only. Dates and figures are based on available information and are subject to change.

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