

\*\* All timings given in this presentation are projected and therefore subject to change

## **Your Area**

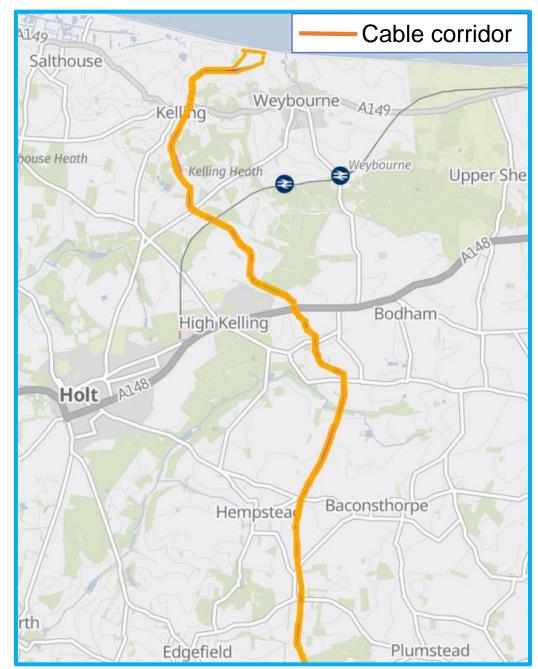
This pack is an overview of the main activities in area of the Hornsea Three cable route from landfall near Weybourne down to between Edgefield and Plumsted.

We shall be working from the north of the route down to the south. Activities described in this pack will generally begin in the north of this area on the indicated start date and end in the south end at the indicated end date. Although this is generally the case, there will be variance in some areas due to local circumstances.

This means that you will not see continuous activity along the whole of the cable corridor. Rather you will likely be able to see periods of local activity for a few weeks, or in some cases a few days, before we move to a different section of the cable corridor.

We shall provide regular updates to this pack as appropriate.

If you have any questions about this pack, or the Hornsea Three project in general, please use the contact details provided in the final slide.



### **Access Point Installation**

### **Description**

In order to access each land plot for construction works, new gated construction traffic access points (bell mouths) need to be installed at highway entrance/exit points. The bell mouths provide access to the work area for plant, machinery, materials and anything else required to ensure the project is delivered on time.

Timeframes for installation vary depending on their size and complexity, however we will inform communities of disruption through Advance Work Notices. As with all work in the highway, some short-term disruption may occur where a road closure or lane-closure is required.

### **Timings**

May 2023 - July 2023\*

\*Please note that, although our works are planned between these times, we shall not be working continuously in one area for this whole period. We shall continue to inform you of especially disruptive works in your area via Advance Work Notices.



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# **Topsoil Stripping**



### **Description**

Prior to topsoil stripping, demarcation fencing is installed to define the construction corridor using post and rope or stockproof fencing where applicable.

This avoids any organic matter growth and to stop the topsoil becoming damaged when the construction works are ongoing.

Excavators will scrape back the soil, which will then be piled at the side of the working area, to form a soil bund.

These soil bunds are then seeded to reduce penetration of rainwater and other matter. Topsoil and subsoil will be stored separately on a field-by-field basis.

### **Timings**

May 2023 - August 2023\*





## **Land Drainage**



### **Description**

Pre-construction drainage is installed where necessary to ensure the continuity of existing drainage systems.

Post-construction drainage will then be installed to help the land return to its pre-construction state.

### **Timings**

June 2023 – July 2023\*





## **Haul Road Installation**

### **Description**

A temporary unbound road (haul road) is constructed along the length of the cable route and used by all plant, machinery and construction vehicles whilst travelling through the stripped fields.

The presence of the haul road will protect the subsoil from damage and create a safe, designated route for our construction traffic.

It's also important that the aggregate is separated from the parent subsoil – a separation membrane helps ensure this.

HGV tipper wagons will be required to deliver the stone to site.

### **Timings**

May 2023 – September 2023\*

\*Please note that, although our works are planned between these times, we shall not be working continuously in one area for this whole period. We shall continue to inform you of especially disruptive works in your area via Advance Work Notices.



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## **Duct Installation**



#### **Description**

Duct installation works consist of trench excavations through the land, in which ducting will be laid. The ducting acts as a protective casing and pulling conduit for the HV cables installed later in the project. Upon completion of laying ducting, the trench will be reinstated with subsoil prior to the cable installation.

A specialist insulating material is used to surround the ducting, to aid in the thermal resistivity of the cable when they are energized. This helps reduce the risk of overheating.

A team of groundworkers use excavator machines to complete the digging and backfilling of the trenches.

### **Timings**

### July 2023 – September 2023\*





# Horizontal Directional Drilling (HDD) Orsted

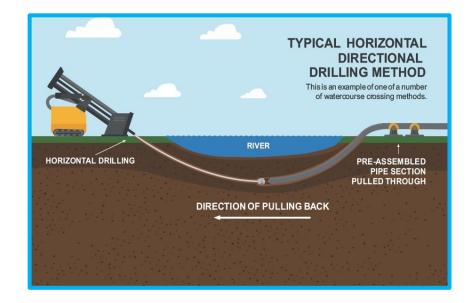
### **Description**

Horizontal directional drills, also known as directional boring, are a minimal impact trenchless method of installing underground utilities, in this case ducting for high voltage cables.

There will be approximately 95 HDD's on the Hornsea Three scheme under roads, woodland, rivers and rail links, removing the requirement to open-trench and minimising disruption.

### **Timings**

May 2023 - March 2024\*





# **Joint Bay Construction**

### **Description**

The construction of joint bays is required, to enable the installation and jointing of the cable sections to form a complete circuit.

The joint bays are typically every 1-1.2km, dependent on the length of the cable, road access, topography, soil type, rivers, roads and other physical land constraints.

During construction, deliveries of stone and concrete, and potentially other materials will take place.

### Timings

August 2023 – May 2024\*

\*Please note that, although our works are planned between these times, we shall not be working continuously in one area for this whole period. We shall continue to inform you of especially disruptive works in your area via Advance Work Notices. The design of joint bays can vary across different projects, with the Hornsea Three design still in development.

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Further detail around the design of the joint bays will be provided when designs have been confirmed.

## **Cable Installation and Jointing**

### Orsted

### **Description**

Within the joint bays, the sections of cable are jointed together to enable the transfer of power from the offshore windfarms to the convertor station and ultimately the grid. This jointing occurs at each designated joint bay – see previous page.

Before the cable can be pulled through the duct, it must be swabbed with brushes and sponges to clear any dirt, sand, water or other matter – failing to do this could damage the cable when it is pulled through the ducts at high tensions. Once the duct is proven to be clear, a rope will be blown through to subsequently pull the cable back through.

The cable jointers will then undertake welding works to join the cables within metal containers – these containers ensure a controlled environment to facilitate the jointing operation.

### **Timings**

October 2023 - July 2024\*



## Reinstatement



### **Description**

Once all construction works are complete, the route will be reinstated to allow the land to return to its previous use.

The reinstatement operations are:

- removal of haul road
- topsoiling,
- installation of post-construction drainage,
- removal of fencing and temporary access
- reinstatement of hedgerows, fencing & existing gateways where necessary.

### **Timings**

Expected in 2026/2027

We will only be able to complete the reinstatement of the land once the whole of the cable route has been completed and tested.





### **Contact Us**

If you'd like to get in touch or follow the latest updates regarding Hornsea 3 and the wider Ørsted UK team, please visit our website or follow us on social media.

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