

Hornsea 3 Cable installation progress update

September 2024

Welcome

This update offers insights into the ongoing onshore construction activities of the Hornsea 3 Offshore Wind Farm from 02 September to the end of September 2024.

As a valued stakeholder, we are committed to keeping you informed through these monthly updates.

Our goal is to maintain open and transparent communication throughout the construction period.

Descriptions of the activities presented in this update are provided in the glossary at the end.

Hornsea 3 Offshore Wind Farm

We're building the world's largest offshore wind farm 121km off the Norfolk coast and 160km off the Yorkshire coast.



Up to 231 offshore wind turbines



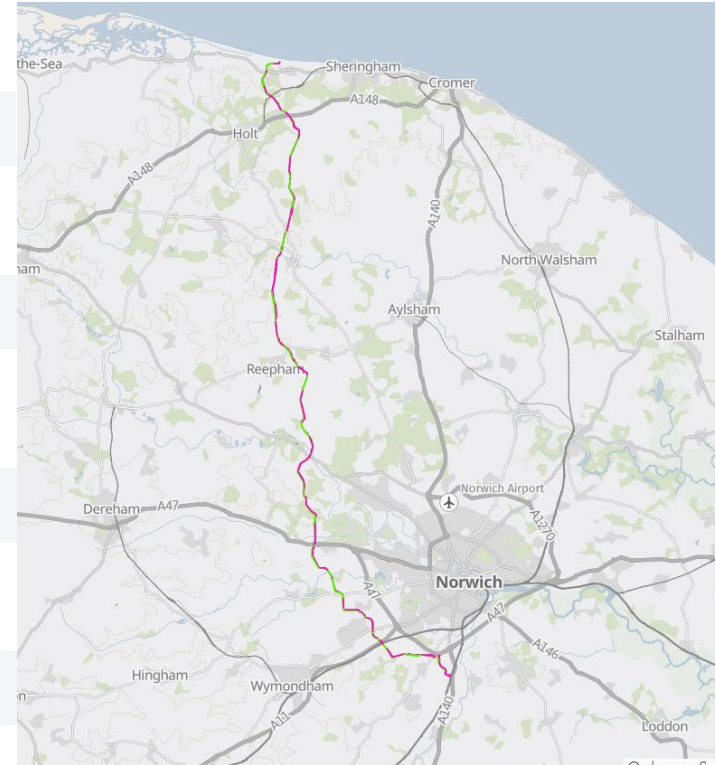
A 54km cable installed underground



c. 2.9GW of green electricity



Enough clean energy to power
3 million UK homes



Hornsea 3 cable route from landfall (Weybourne) to the Converter Station (Swardeston)

Where is Hornsea 3?

Kingston Upon Hull

Immingham

Grimsby

Skegness

Boston

King's Lynn

Peterborough

Hornsea 2

P2

P1

P3

Hornsea 1

Hornsea 3

Cromer

Norwich

Great Yarmouth

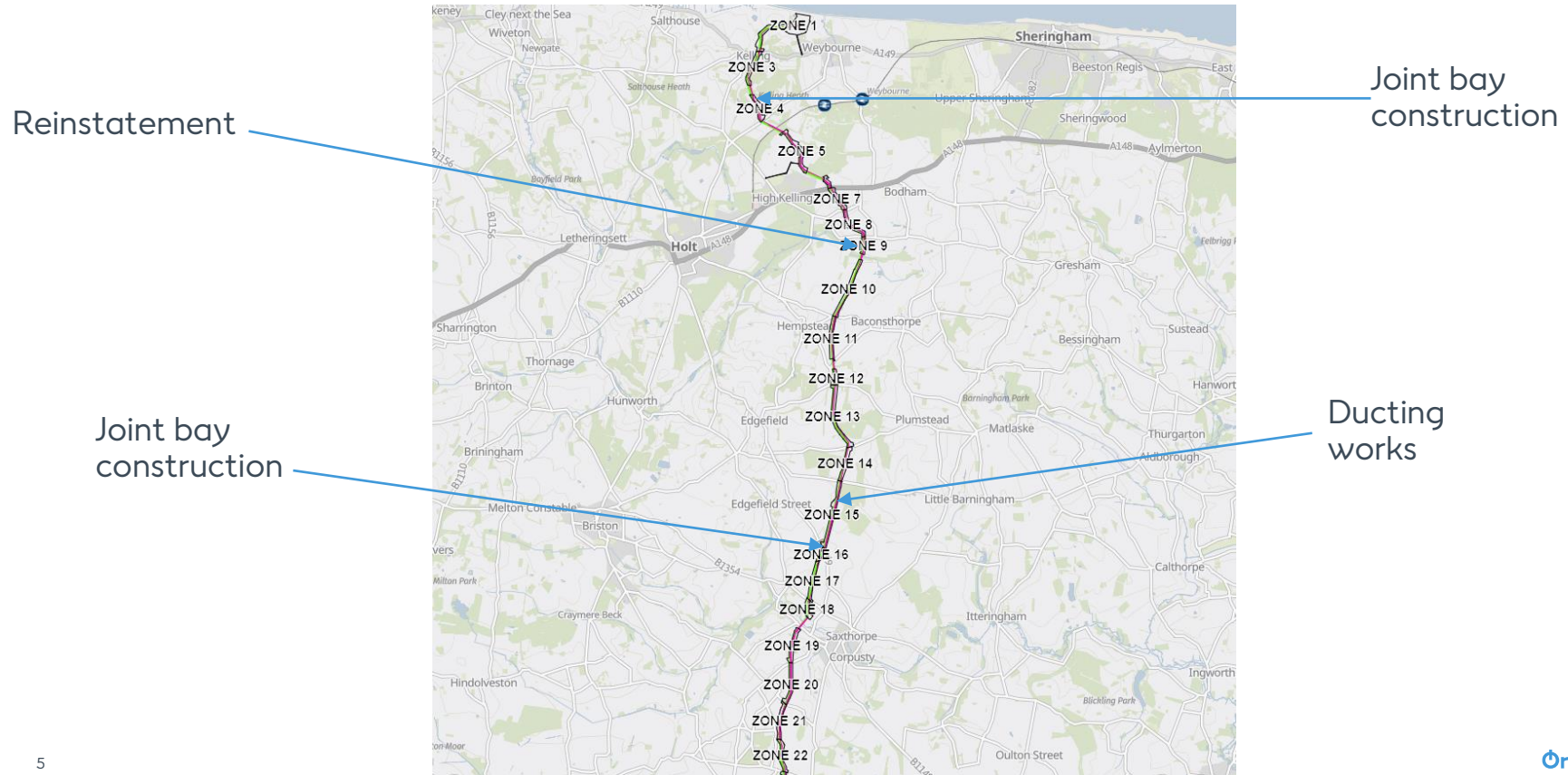


- Hornsea 3
- Offshore Cable Route Corridor
- Onshore Cable Route Corridor
- Onshore Converter Station
- Landfall point



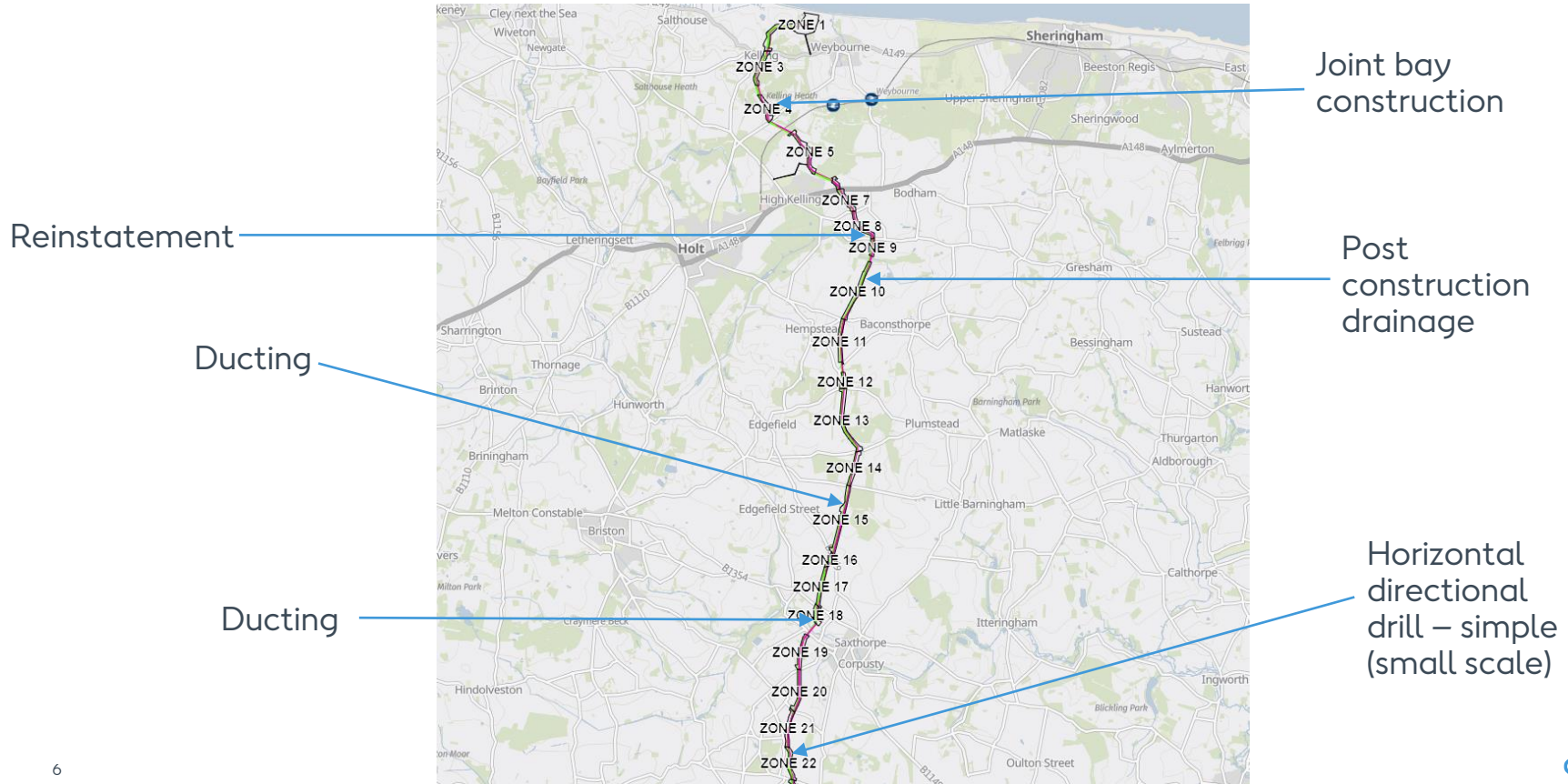
North Norfolk / Broadland construction activities w/c 02 September 2024

The map provided below sets out the activities that were undertaken w/c 02 September 2024 along the onshore cable route from Weybourne, North Norfolk through to Heydon, Broadland.



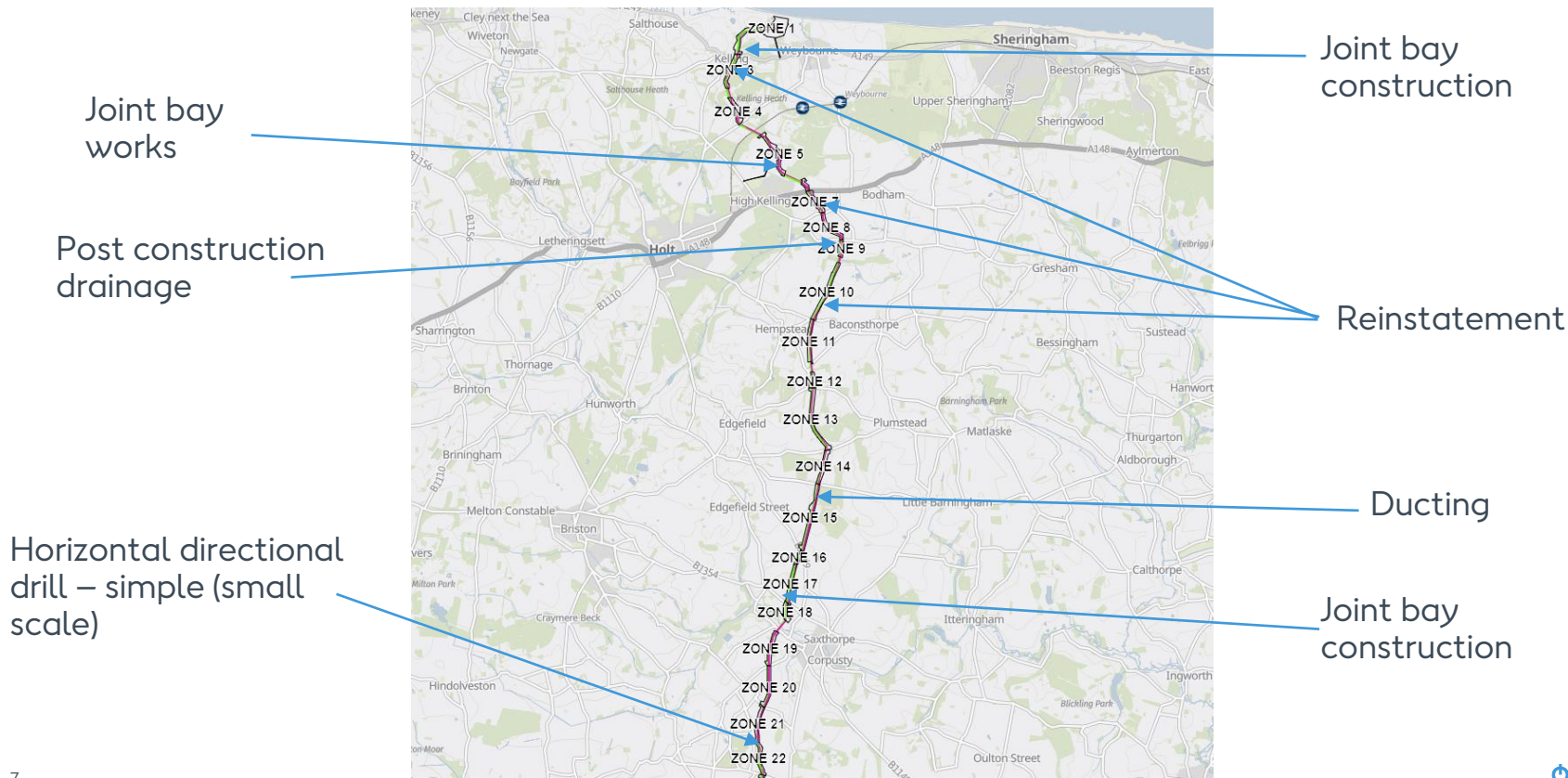
North Norfolk / Broadland construction activities w/c 09 September 2024

The map provided below sets out the activities that were undertaken w/c 09 September 2024 along the onshore cable route from Weybourne, North Norfolk through to Heydon, Broadland.



North Norfolk / Broadland construction activities w/c 16 September 2024

The map provided below sets out the activities that were undertaken w/c 16 September 2024 along the onshore cable route from Weybourne, North Norfolk through to Heydon, Broadland.



North Norfolk / Broadland construction activities w/c 23 September 2024

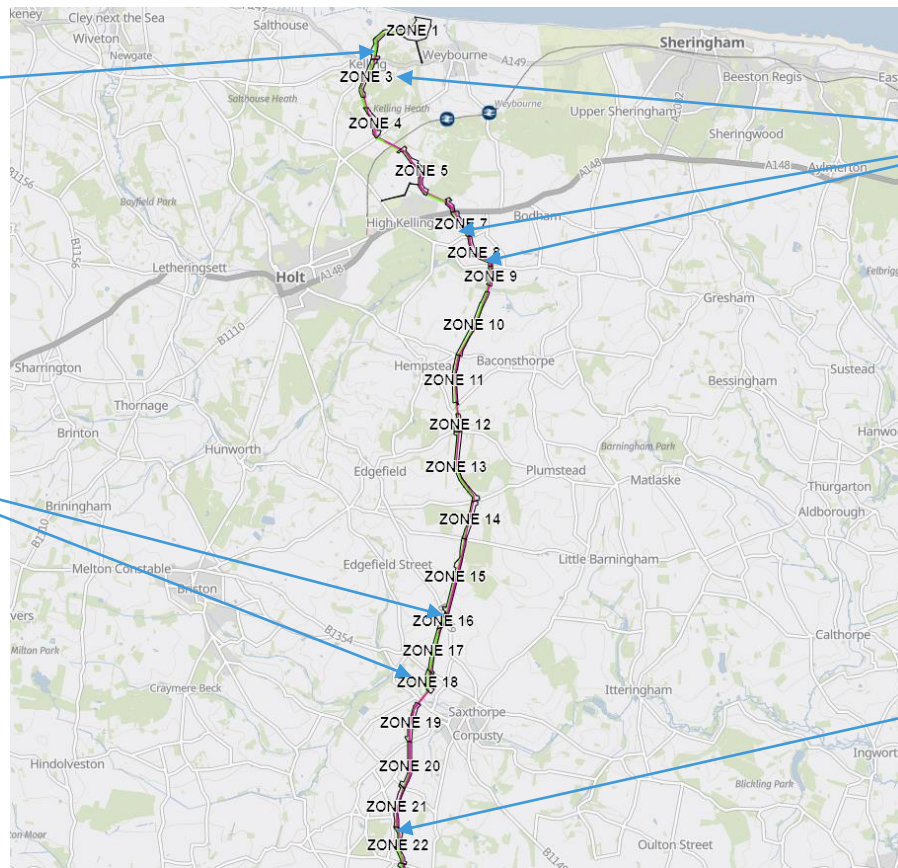
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Joint bay construction

Reinstatement

Joint bay construction

Horizontal directional drill – simple (small scale)



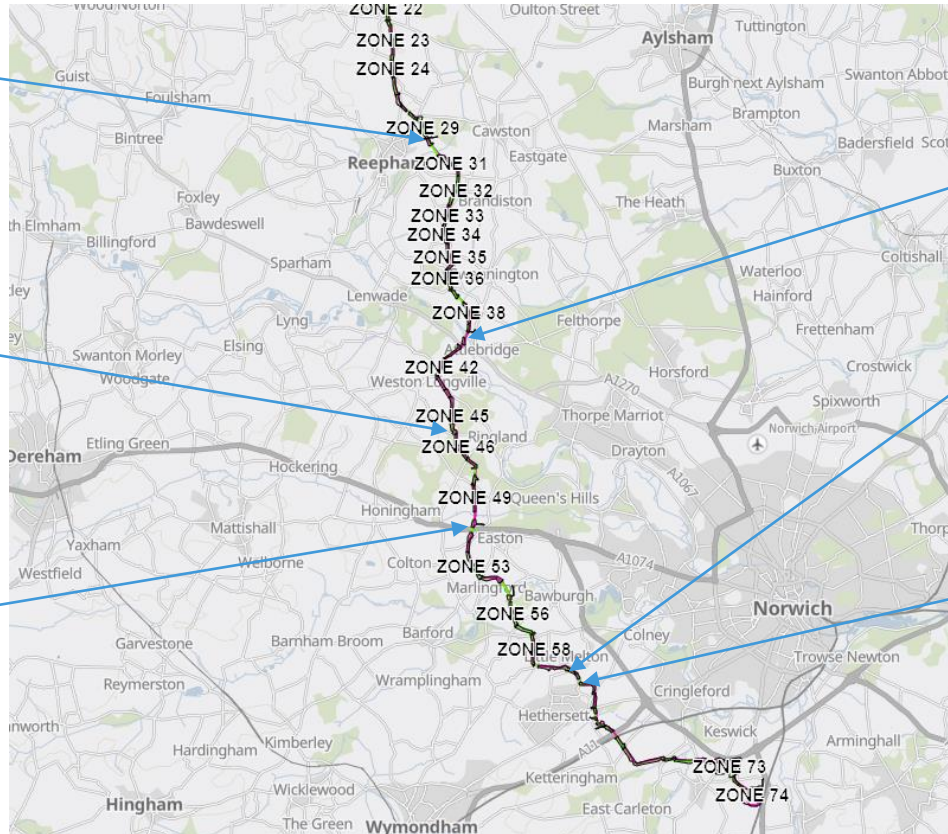
Broadland/ South Norfolk construction activities w/c 02 September 2024

The map provided below sets out the activities that were undertaken w/c 02 September 2024 along the onshore cable route from Heydon, Broadland through to Swardeston, South Norfolk.

Horizontal directional drill – complex (large scale)

Ducting

Horizontal directional drill – complex (large scale)



Haul road construction

Earthworks

Haul road construction

Broadland/ South Norfolk construction w/c 09 September 2024

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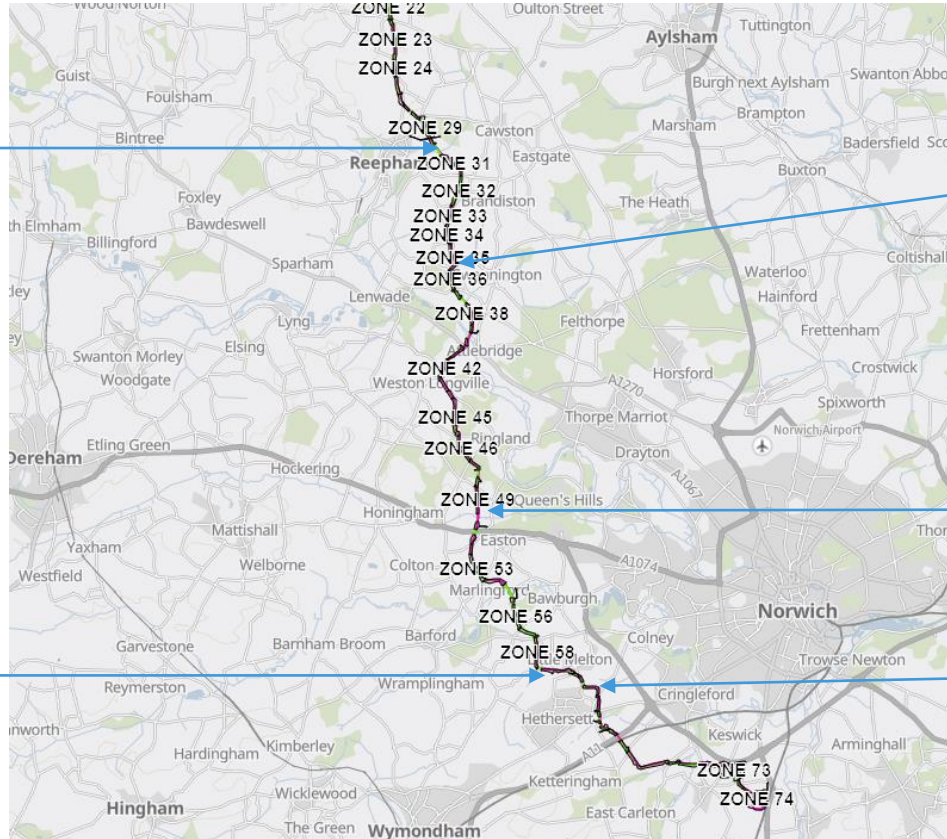
Horizontal
Directional
Drill –
complex
(large scale)

Haul road
construction

Horizontal
Directional Drill –
complex (large scale)

Haul road
construction

Earthworks



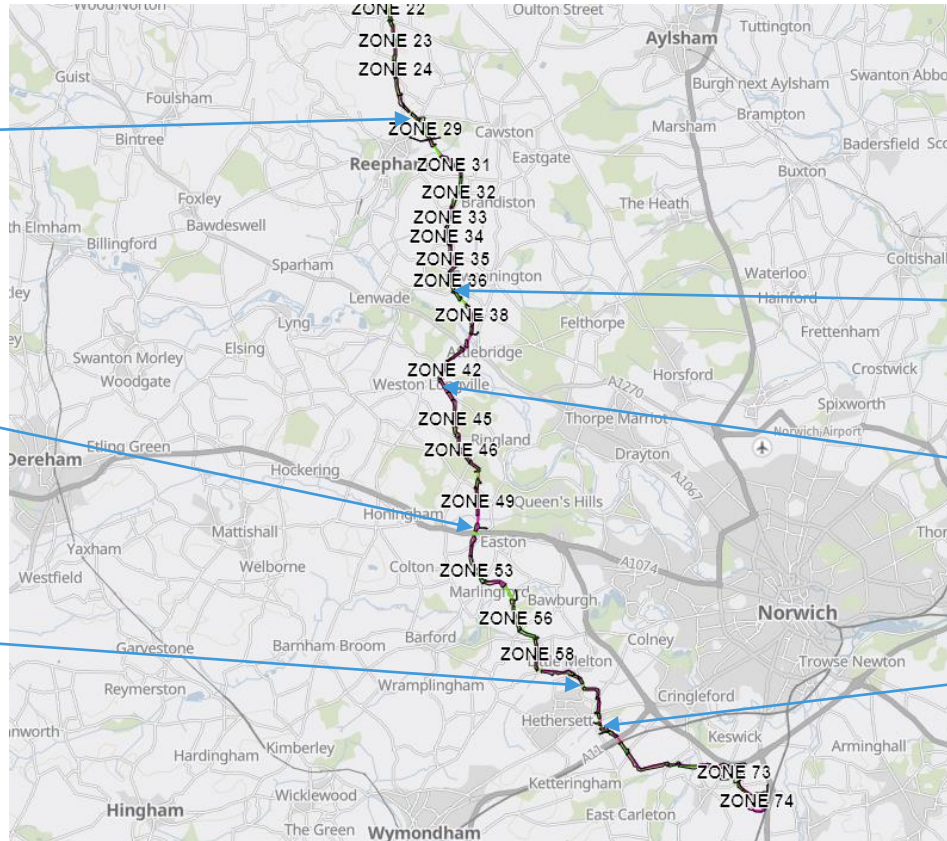
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Horizontal directional drill – complex (large scale)

Earthworks



Haul road construction

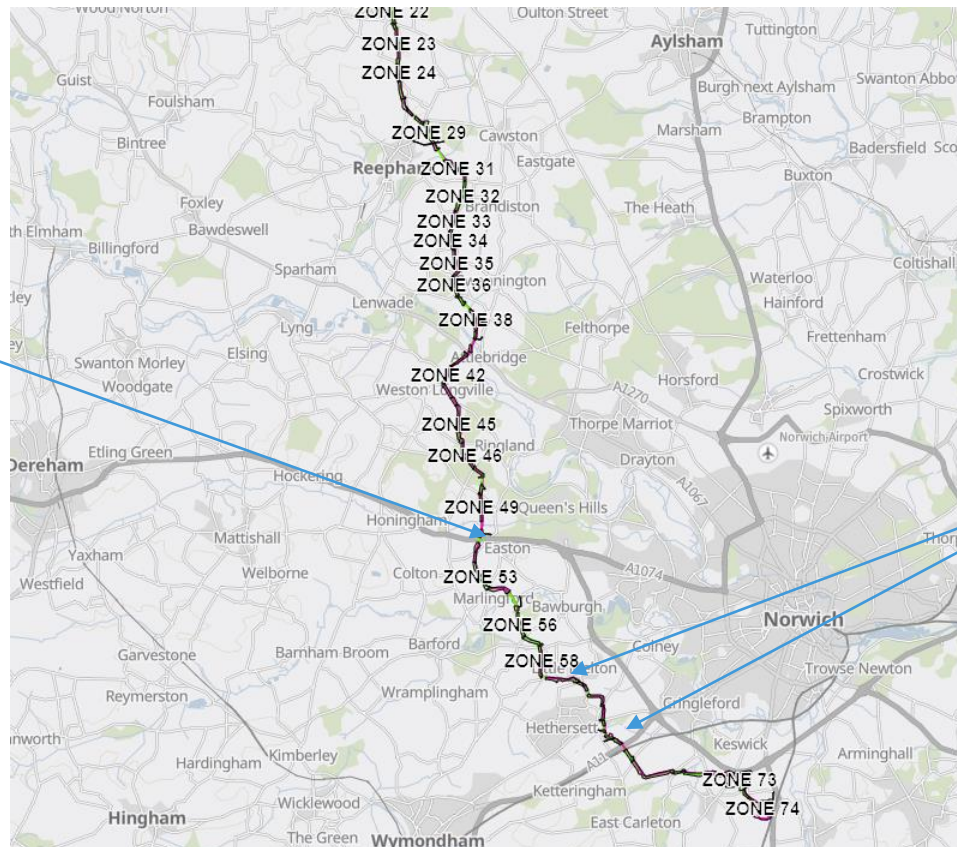
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Horizontal directional drill – complex (large scale)



Haul road construction

Overall project progress to date - part one

Since commencing construction on Hornsea 3 in March 2023, we have undertaken the following works:

Reinstatement

- Completed 3 zones

Access Points

- Completed all required access points.

Pre-construction Drainage

- Completed 67 zones out of 72 zones.

Post construction drainage –

Completed in zone 10, 9, 3

Earthworks

- Stripped 65 zones.

Haul Roads

- Stoned up 62 zones, allowing the Haul Roads to become operational.



Overall project progress to date - part two

Ducting

- Completed 37 zones out of 74

Horizontal Directional Drills (HDDs)

- Complex (large scale) HDDs: 12 completed along the route.
- Simple (smaller scale) HDDs: 22 completed along the route.

Joint bays

- Completed eight joint bays.



Glossary

Access points (bell mouths)

To access each land plot for our 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 any proposed disruption through Advance Work Notices (AWNs). As with all work on the highway, some short-term disruption may occur where a road closure or lane-closure is required.

Since works started in June 2022 we have sent out over 150 AWNs regarding any road or lane closure along the route.

Cable Pulling

Cable pulling is the process by which we pull the 400kv cables through the pre-installed ducts.

Drainage

Pre-construction drainage is installed where necessary to keep the soils draining effectively during our trenching works. Post-construction drainage will then be installed to help the land return to its former use.

Ducting

Duct installation works consist of trench excavations where ducting will be laid. The ducting acts as a protective casing through which the cabling will be pulled later in the project. Upon completion of installing the ducting, the trench will be reinstated with subsoil.

A specialist insulating material is used to surround the ducting, to help reduce the risk of the cables overheating.

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

Glossary

Earthworks / Topsoil Strip

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

Excavators will scrape back the topsoil, which will then be piled at the side of the working area, to form a topsoil bund. This prevents the topsoil becoming damaged by working equipment. Topsoil and subsoil will be stored separately on a field-by-field basis.

These topsoil bunds are then seeded with an approved seed mix to reduce the risk of surface water run-off and soil erosion.

Haul Roads

A temporary haul road is constructed along the cable route to protect the subsoil from damage and create a safe, designated route for our construction traffic.

It's also important that the aggregate that we lay for the haul road is kept separate from the area of land we have just excavated. A separation membrane helps ensure this. Heavy Goods Vehicle (HGV) tipper wagons will be required to deliver the stone to site.

Horizontal Directional Drills

Horizontal directional drills (HDDs), 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 HDDs on Hornsea 3, located under roads, woodland, rivers and rail links, reducing the effects that open-trench construction methods would create and therefore minimising disruption.

Glossary

Joint Bays

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, depending on the length of the cable, road access, topography, soil type, rivers, roads, and other physical land constraints.

Jointing

Jointing is the process by which we connect the individual sections of cables together to form a complete circuit. This process is completed within our joint bays, where specialist teams of welders connect the ends of the cables. Before jointing can commence, small compounds need to be erected at the joint bays.

Reinstatement

Reinstatement is returning land back to its original state and function. This is done by removing the Haul roads, soil is put back over the cable, access points are removed and then finally the hedgerows are replanted.

We appreciate that the works we undertake are instructive , we work closely with our Principal Contractor to ensure that the correct processes are in place to ensure that soli fatality and structure that Preservation and control of the topsoil during the construction process to ensure that once works have finished, we're able to restore the land to how it was before.

Zones

The cable route is broken down into zones. There are a total of 72 zones along the onshore cable corridor route, all going through North Norfolk, Broadland and South Norfolk.

Engagement

Advance Work Notices (AWNs)

In line with our community engagement framework and commitment to inform communities about potentially disruptive works, the Hornsea 3 Community Relations Team has produced and distributed a total of **160 AWNs** since June 2022 to residents, businesses, and Parish Councils along the cable route.

Newsletters

Hornsea 3 publishes quarterly newsletters to provide stakeholders with an update on the progress of our Project. You can access all of our newsletters published so far by visiting [our website](#). To sign up to receive our quarterly newsletters straight to your inbox email: community@hornsea3.co.uk.

Community Benefit Fund

Our Hornsea 3 Community Fund has officially launched in the North Norfolk and East Anglia region. This initiative commits **£7 million** over a period of at least 10 years, demonstrating our dedication and commitment to effecting positive change in this region.

The new Hornsea 3 Community Fund is being independently administered by GrantScope, an independent grant-making charity. You can find more details on the fund, the eligibility criteria, funding zone map, and more, on GrantScope's webpage [Hornsea 3 Community Fund – Grantscope](#).

The first round of the CBF has been granted. To find out who was successful please see the link below.

[Hornsea 3 Community Benefit Fund Announces First Awards - Grantscope Grantscope](#)

Events and Meetings

In line with our community engagement framework to proactively engage with communities, the Hornsea 3 Community Relations Team has attended **74** community events and meetings with local stakeholders since our works commenced.

How to get in touch

Project enquiries

Community Liaison Officers

Telephone: 0800 158 2354

Email: community@hornsea3.co.uk

Community Relations Team

We aim to provide a full response to all enquiries within 10 working days.

Let's create a world
that runs entirely on
green energy

