

## What is on site at Chilling Lane at present?



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The facility at Chilling Lane has been part of the nation's high voltage network for over 40 years. Currently it's used to connect the electricity cables that run under Southampton Water to the existing pylons that run north-south to a substation near Lovedean.

We need to install new equipment at Chilling so that the power from IFA2 can be fed into the national grid. The changes will all take place within the boundary of our existing land ownership shown by the red line on the map.

### There will be two main teams working on the project in the area.

**National Grid Electricity Transmission (NGET)** will be responsible for building the new substation which will connect the IFA2 cables to the existing National Grid transmission system.

**National Grid IFA2 Ltd** is responsible for laying the underground cables connecting IFA2 to the substation near Chilling.

We are working together to minimise disruption to the local community.

If you have any questions please get in touch  
**0800 019 2054 / [nationalgrid@chillinglane.com](mailto:nationalgrid@chillinglane.com)**

## What is IFA2?

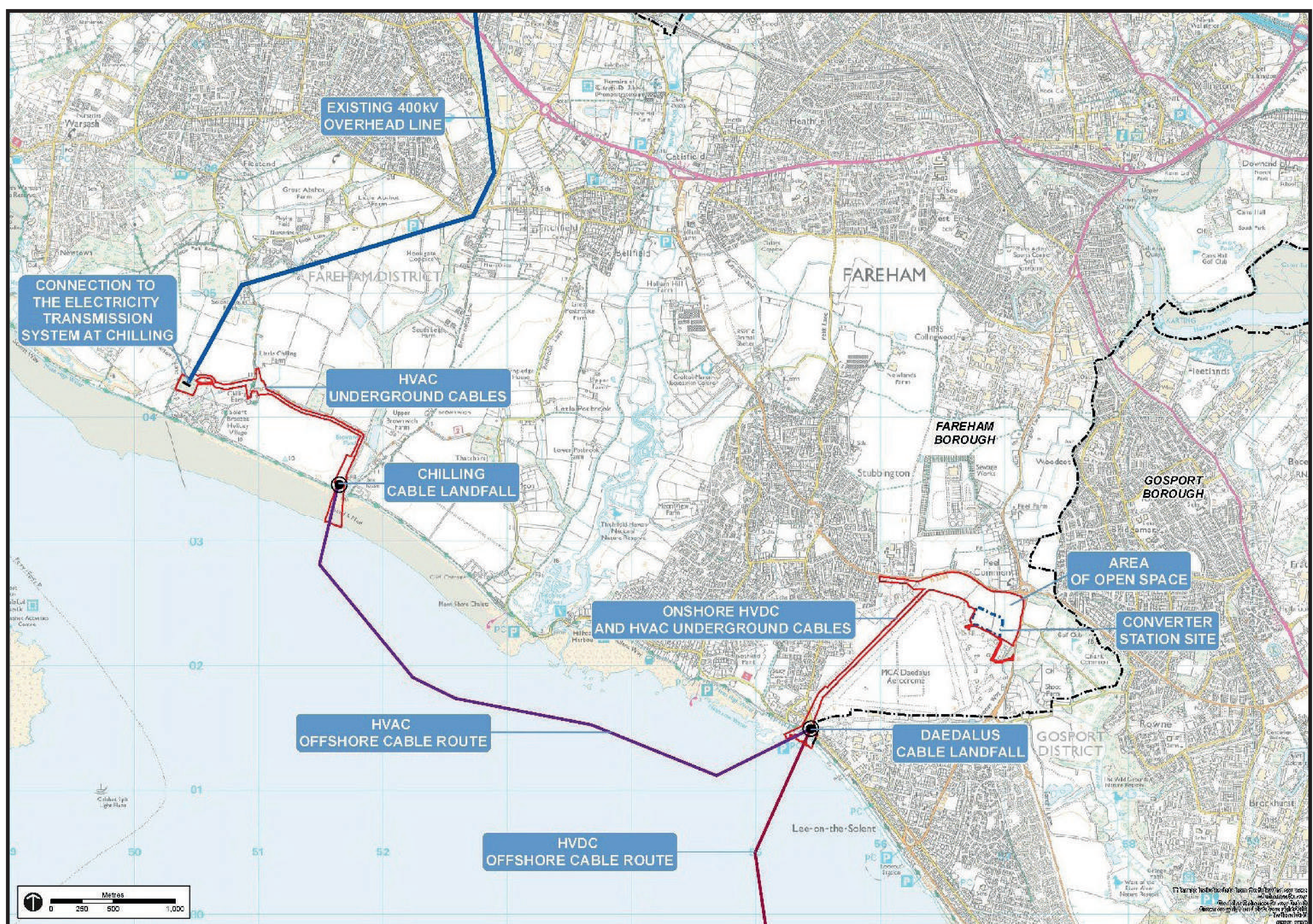
Interconnexion France-Angleterre 2 (IFA2) is a high voltage direct current (HVDC) electrical interconnector linking the British electricity network at Chilling, Hampshire with the French electricity network at Tourbe, Normandy.

It will be capable of exporting or importing 1000MW of power between the UK and France, enough to power up to 1 million homes.

The interconnector will play an important role in reducing the cost of electricity for homes and businesses, providing opportunities for shared use of more diverse sources of generation, and increasing security of electricity supplies.

We have been developing our proposals for IFA2 since 2012. We're beginning construction after the decision by Fareham Borough Council to grant full planning permission.

As part of the IFA2 project, we will build a new converter station located to the north east of Solent Airport, Daedalus and connect it to the substation at the Chilling Lane site via underground and subsea cables.



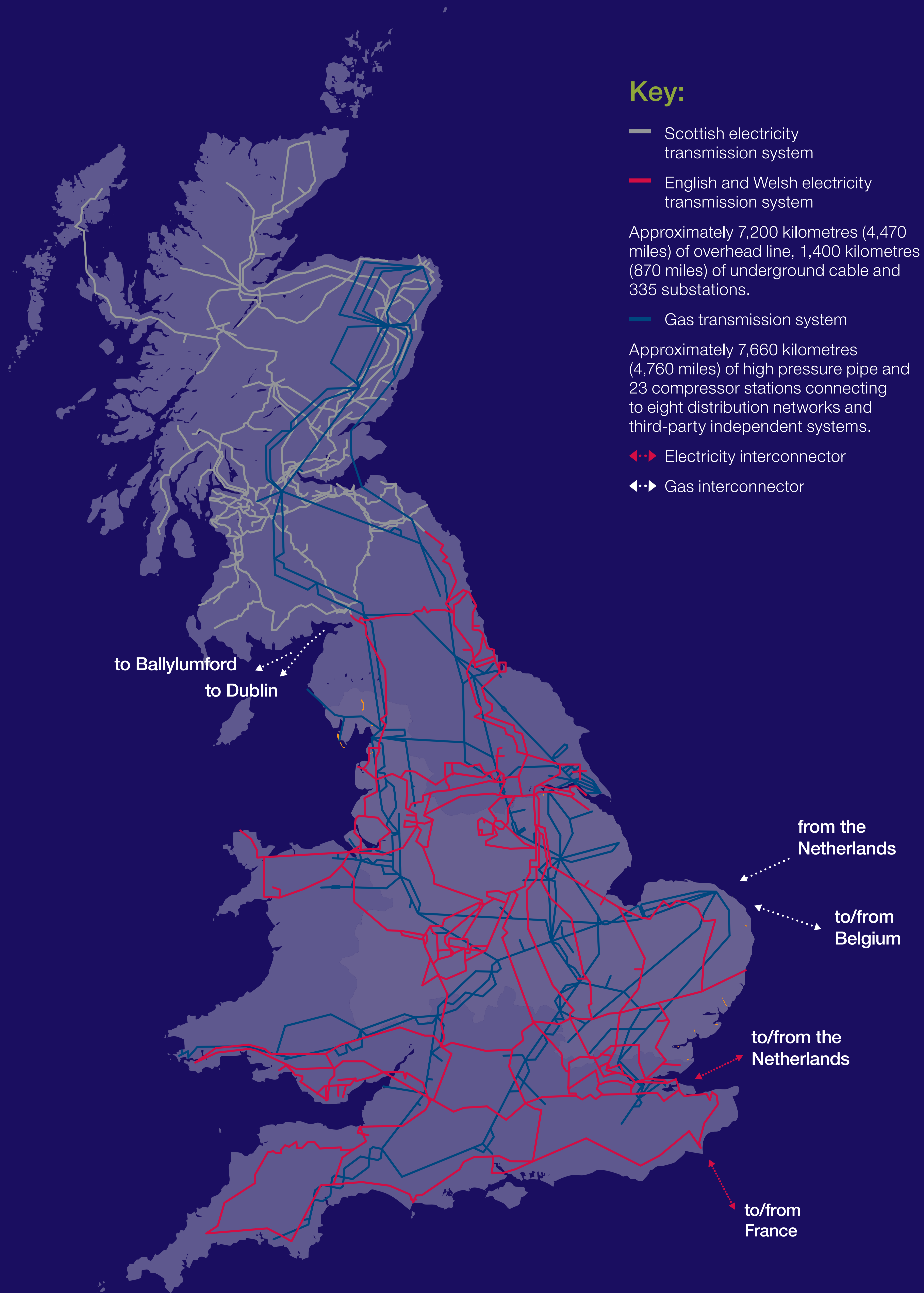
### Contact us:

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**W:** [www.nationalgrid.com/chillinglane](http://www.nationalgrid.com/chillinglane)

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## About National Grid



**We make sure gas and electricity are transported safely and efficiently from where they are produced to where they are consumed.**

We seek to make sure that supply and demand are balanced in real-time and we facilitate the connection of assets to the transmission system.

We are one of the world's largest investor-owned utilities, focused on transmission activities in electricity and gas. We play a vital role in connecting millions of people to the energy they use - safely, reliably and efficiently.

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## Plans



We'll build an outdoor Gas Insulated Switchgear (GIS) substation within the boundaries of the existing site. Though larger, the GIS substation's electrical equipment is similar to the current facilities. We've agreed the external design and appearance of the operational control buildings with the Local Planning Authority (LPA) to minimise any visual impact from the site.

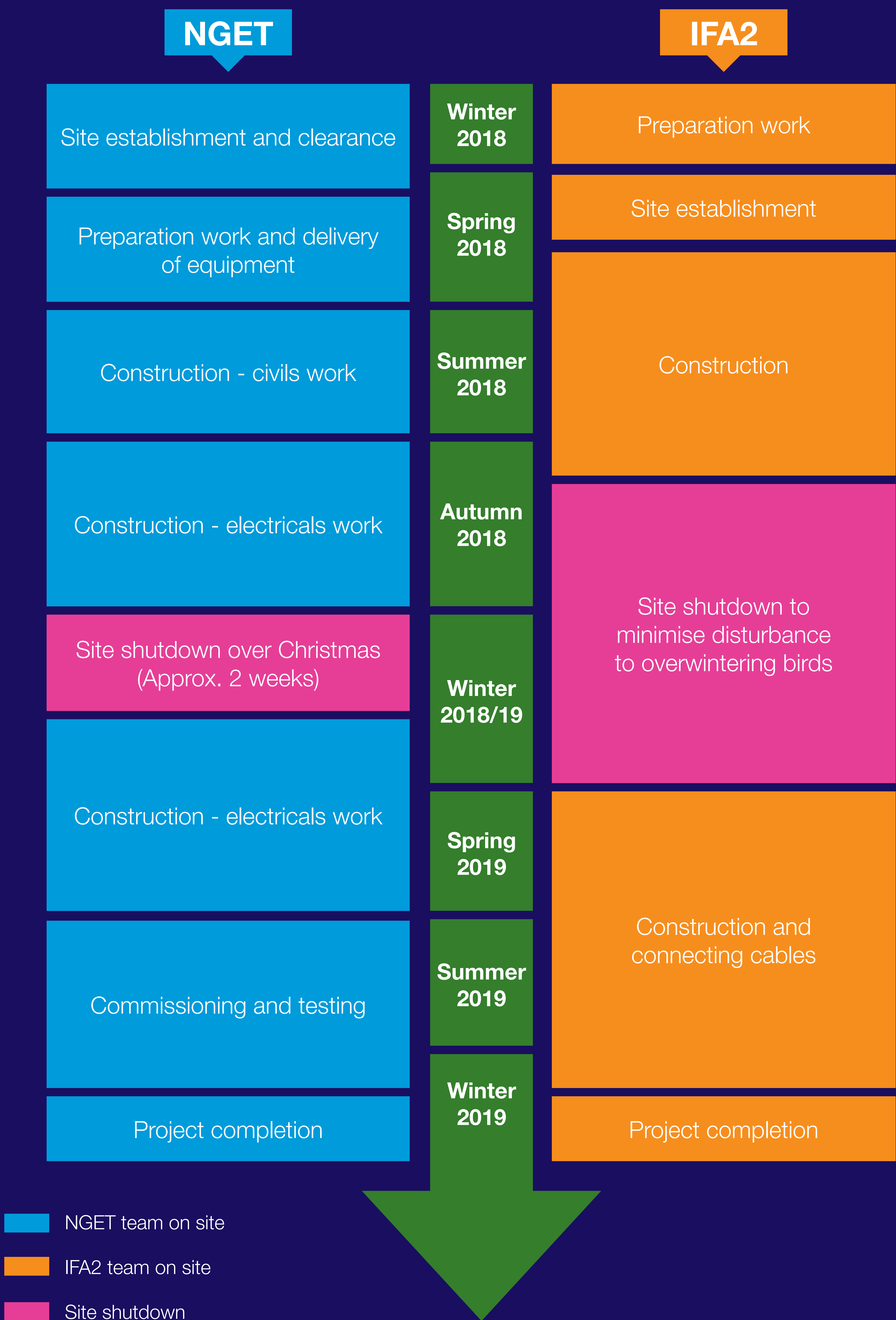
The height of all new equipment installed at the site will be lower than the existing overhead line gantries (a steel frame to hold connecting wires from pylon to substation).

Under normal operation there will be no noise and no regular traffic to site. Occasionally we'll have to attend the site for routine maintenance but this shouldn't have any impact on local residents.

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## Construction timeline

Works at Chilling Lane began in January 2018 and will be finished by November 2019. During this time both NGET and National Grid IFA2 Ltd will construct all the infrastructure and cables required to connect the interconnector to the national grid.

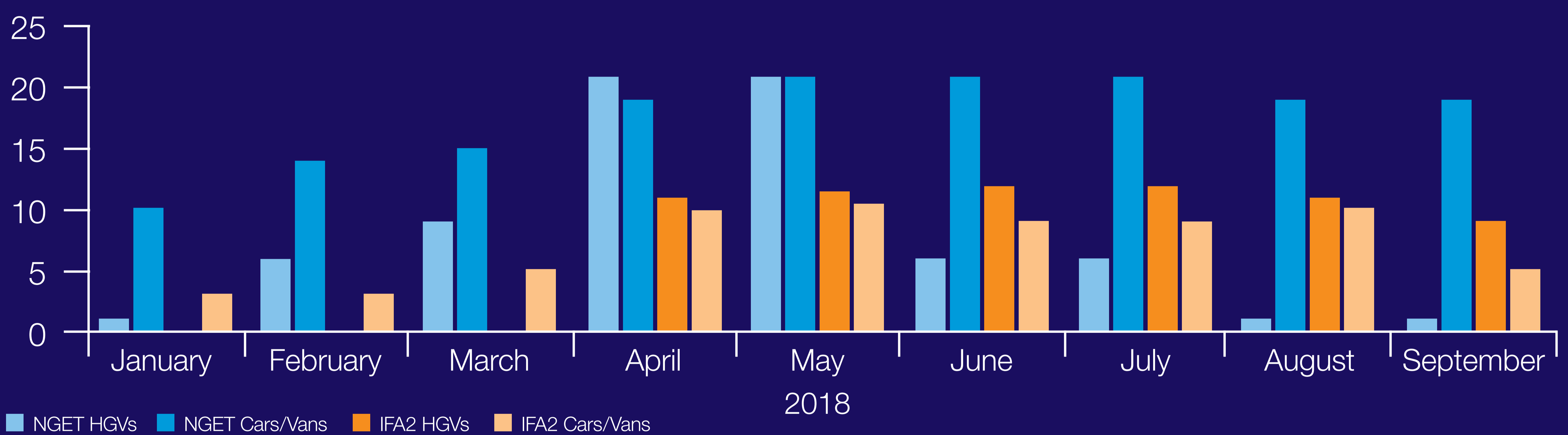
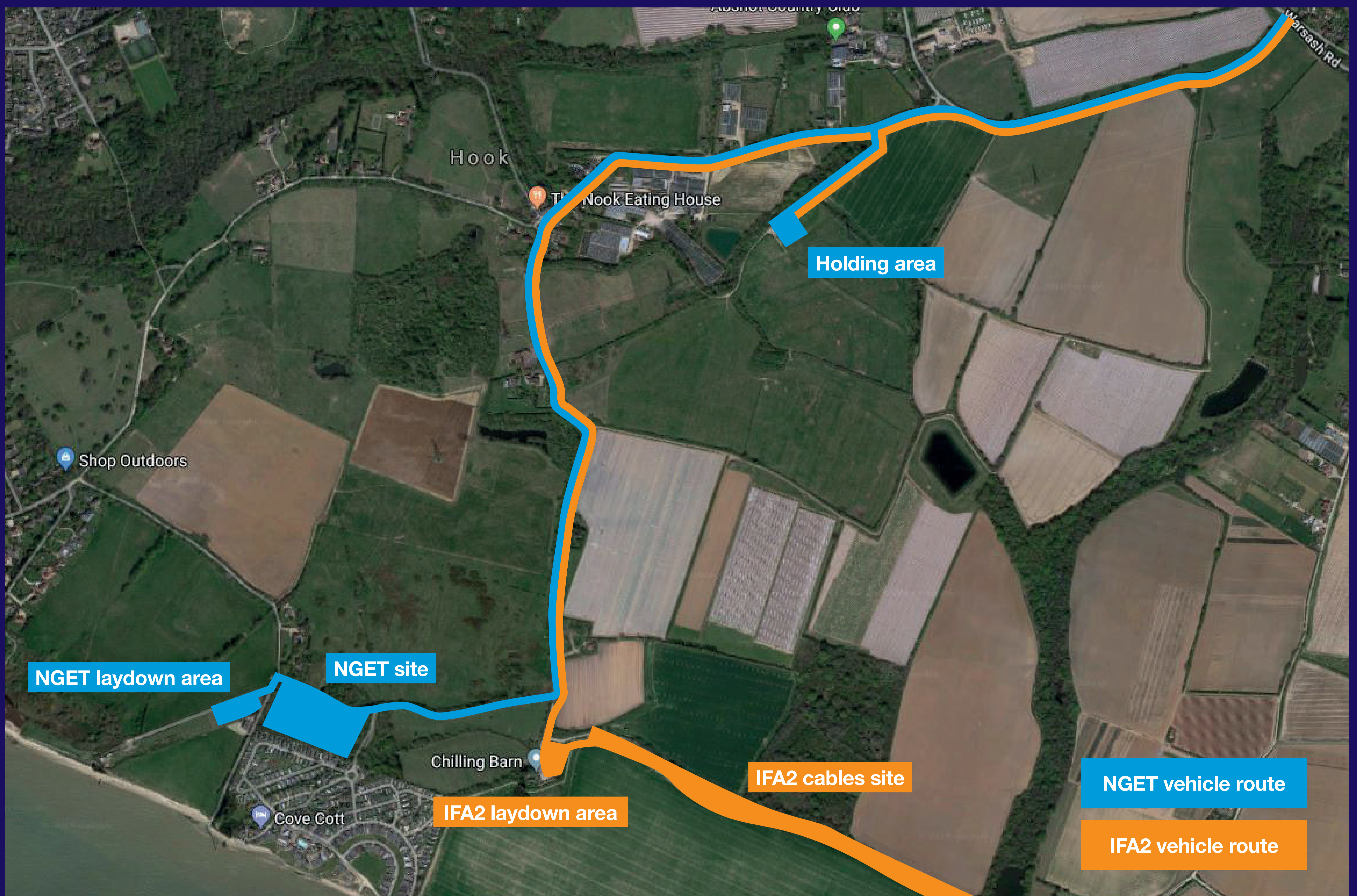


If there are any major changes to the above timetable, we will write in advance to let you know.

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## Construction traffic

National Grid IFA2 and NGET have been working together to minimise disruption on the local roads. The majority of our traffic movements will take place outside peak times to minimise the impact on local residents.



The above graph shows the average number of vehicles coming into and out of the site daily during the first 9 months of activity.

- Cars/Vans are domestic cars and vehicles up to transit vans.
- 75% of NGET HGVs will be up to 10m in length and 30T in weight and 25% will be up to 12m in length and 40T in weight.

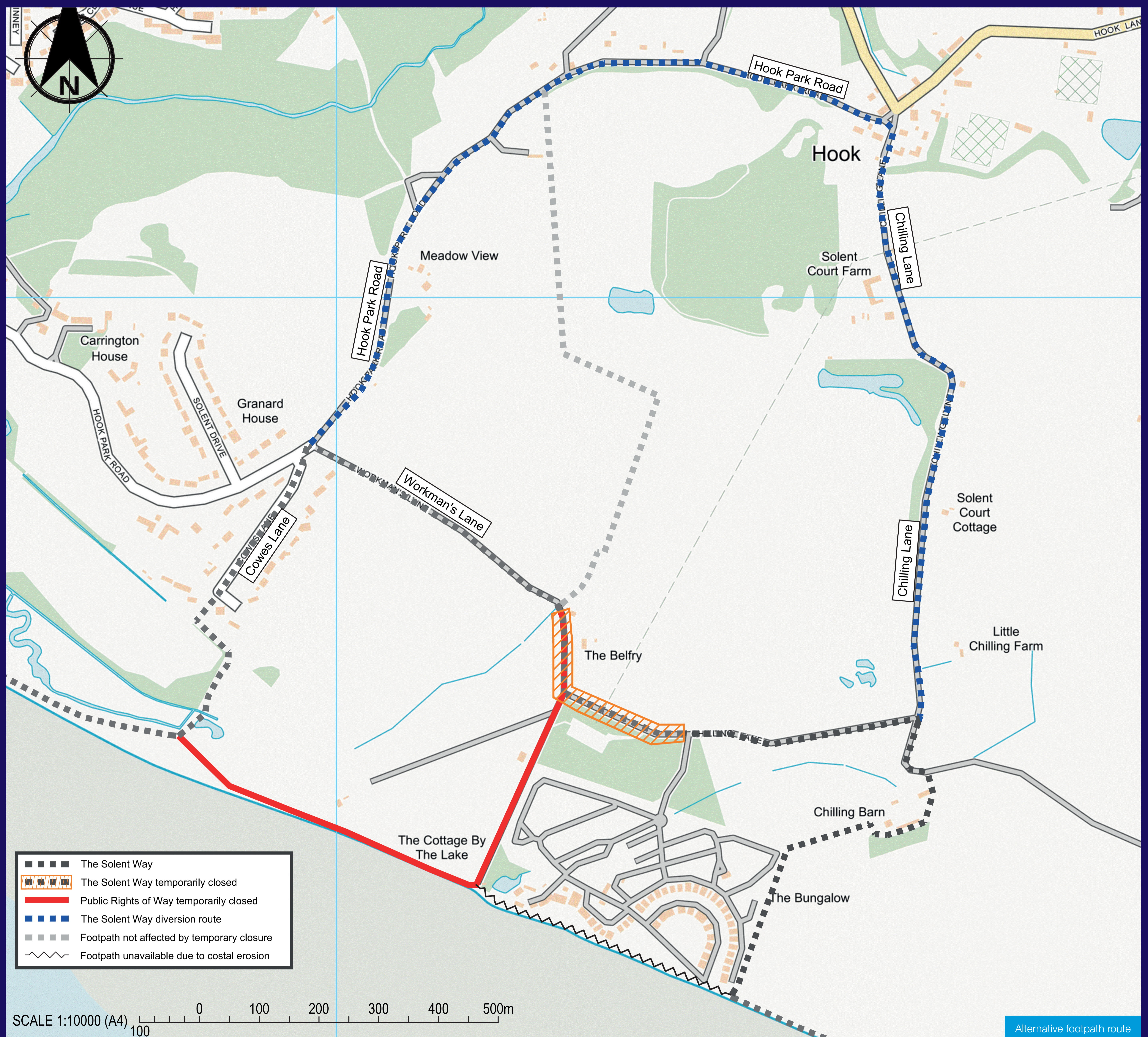
NGET civils work will finish in autumn 2018. Levels of traffic movement for the electricals work that follows will be much lower.

During peak construction period, NGET team will use the holding area. This is so we can:

- Combine equipment onto fewer vehicles, reducing the traffic travelling on Chilling Lane
- Have space for HGVs to wait while we make sure the road to the Chilling site is clear for them to travel.

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## Footpath diversion



### Temporary Footpath Closure

To make sure pedestrians can still get around safely we have applied to Hampshire County Council for a temporary footpath diversion between Workman's Lane and Chilling Lane.

Throughout construction, access to a short stretch of the Solent Way, shown in orange on the diagram, will be closed, as traffic will use this route for access to the site and the site welfare area, off Workman's Lane. As this section of lane is a narrow single track lane, a footpath closure and diversion will be put in place. An alternative signed route for the Solent Way has been agreed with Hampshire County Council, and is shown above. This diversion will be in place for the duration of the construction works.

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## Caring for the environment



We are passionate about operating our business in an environmentally responsible way and making sure sustainability shapes our thinking and decision-making.

We want to make sure that our environmental impacts are minimised, that we make the most of the land we own and that any permanent habitat loss as a result of construction is mitigated.

### Vegetation

Although we need to remove some vegetation to carry out construction, we have already prepared a replanting scheme to replace hedgerows and trees once work is complete. This will improve habitats as well as contributing to visual screening for local residents.

### Brent Geese

Our welfare site, west of Workman's Lane, is close to the winter feeding area for Brent Geese, a protected species. We'll build an acoustic barrier fence around the site to minimise disturbance.

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## Cable installation methods

We will use different techniques to install the cables in different locations. These are selected based on analysis of local geology, ecology and engineering requirements.

At the Chilling landfall, we will use horizontal directional drilling (HDD) to bring the cables onshore. This involves drilling underground and installing a series of ducts for the cables to be pulled through afterwards. This avoids disturbance of the protected nearshore areas.

In other places, we will use a ducted solution. This involves digging a trench to install ducts and then reinstating the ground. We will then pull the cables through these ducts and complete necessary jointing works. A joint bay is a point at which two cables are connected together – the ground is reinstated and the bay is no longer visible.

For road crossings we will also use an open cut ducted technique. This involves closing the road for a short period to cut through it and install a duct. The road surface is reinstated immediately afterwards.

Images showing examples of the cable installation methods can be viewed as part of a presentation shown on the screen.

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