Norwich Main Substation extension

National Grid Electricity Transmission

The electricity transmission network transports electricity in bulk around the country, from wind farms, power stations and other sources of generation, or from interconnectors that are connected to the network, and takes it on to the regional distribution companies or large electricity users.

In England and Wales the electricity transmission network operates at high voltage – 400,000 volts (400 kV) or 275,000 volts (275 kV) – and is owned and maintained by National Grid Electricity Transmission.

At regional substations, the voltage is stepped down and electricity is carried from there to individual homes and businesses by the lower voltage regional electricity distribution networks. Those are owned and operated by separate companies.





Norwich Main Substation extension

Why we need to extend Norwich Main Substation

To connect the Hornsea Project Three offshore wind farm, the Equinor Sheringham Shoal and Dudgeon wind farm extensions we need to extend the existing Norwich Main substation to both the east and the west.

Our Norwich Main substation has been in service for around 50 years, and as demand on the electricity network is increasing, we need to extend the site and install more equipment to increase capacity. The extension to the west would need planning permission and would be approximately 5 hectares in size and include equipment similar to the existing substation.

This work will support the Government's commitment to reach net zero greenhouse gas emissions by 2050 and the ambition to connect 50 GW of offshore wind by 2030 – enough to power every home in the country.

The extension to the east will be built under Permitted Development rights.

The extensions would also make space for future connections.



Visulisation showing the proposed substation extension



Norwich Main Substation extension

Our proposals

The equipment within the proposed extension would be similar to that contained within the existing substation.





Construction traffic would use the existing construction road from Mangreen Lane to access the site. This road will need to be lengthened in two parts.

Firstly, we will build a new section of road under Permitted Development rights, which is shown in a **purple** colour. This will be within the boundary of the site. The second section of new road is shown in a **pink** colour. As this is outside the site boundary, this will be included in our planning application to South Norfolk Council. We are proposing to landscape and add new planting around the extension to help mitigate any potential visual impact.

We will also provide a minimum of 10% biodiversity net gain.

We expect to provide landscaping and some biodiversity net gain within the green areas shown. Some biodiversity net gain may be delivered off-site.

We need to carry out further work before we confirm the exact locations of landscaping, planting and biodiversity net gain. We will provide more information when we submit our planning application to South Norfolk Council in early 2024.

Norwich Main Substation extension

Grid in the community

Opportunities for young people

As a nation, we're working towards the goal of net zero carbon by 2050. At National Grid, we're committed to helping Britain reach this target by building a cleaner, greener energy system. But we can't do this alone. We're looking for people who are brimming with enthusiasm and bursting with ideas to help us build and run a cleaner energy system.

Grid for Good is our flagship programme that helps increase access to training and employment opportunities for young people.

We support students with career coaching and masterclasses. We've reached over 300 students from four schools across Norfolk, Suffolk, and Essex already this year, with more activities to come.



Find out more about careers, apprenticeships and student placement with National Grid

Net Zero Norwich – Our Beryl Bike Partnership

We have partnered with Beryl, the UK's leading micro mobility provider, to support the bike, e-bike and e-scooter sharing scheme in Norwich. The collaboration will help to reduce traffic congestion and carbon emissions, improving mental and physical health and air quality in the city and beyond.





Norwich Main Substation extension

Have your say

We want to hear the views of the local people. Knowing what matters to you, matters to us, so please get in touch and provide your feedback.

The feedback received during this consultation will be considered as we develop our plans for the Norwich Main substation extension before we submit our planning application to South Norfolk Council.

• Sending a completed paper copy of the feedback form or a letter to Freepost **NORWICH MAIN SUBSTATION** (no stamp or further address needed)

How do I respond to the consultation?

Please provide your feedback by Friday 8 **December.** You can do this by:



Completing our online feedback form at nationalgrid.com/ norwichsubstation

- Emailing your comments to norwichmain@nationalgrid.com
- Calling our community relations line on **0800 0463 857** (lines are open Monday to Friday, 9am to 5:30pm)

Please get in touch if you have any questions on our proposed substation works.

