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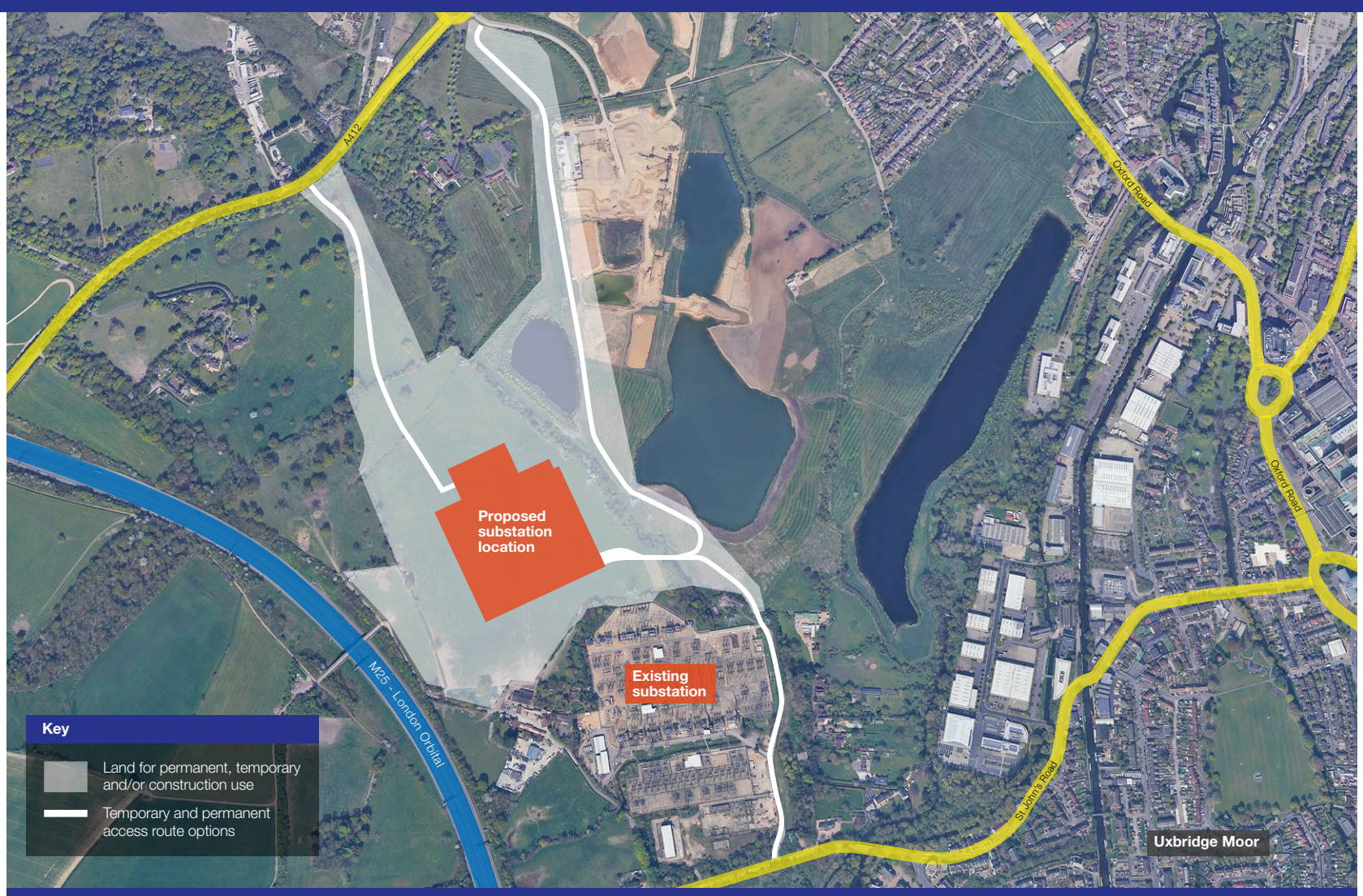
Welcome to our event



Proposed substation location

We are developing plans to build a new electricity substation ('Uxbridge Moor') on land bordering our existing substation in Iver.

Electrical substations convert electricity into different voltages so it can be transmitted throughout the country to local homes and businesses. They play a vital part in effectively transmitting electricity through our national system.

During this consultation we are inviting the local community to get involved. Your views will help shape our plans and the positive legacy we plan to leave for the community.

Who will use the power?

The customers we are connecting at Uxbridge Moor are new data centres and an independent Distribution Network Operator (DNO). DNOs are companies who distribute energy to local homes and businesses around the UK.

Fulfilling our duty to provide power – why do we need to build a new substation?

- Uxbridge Moor substation is needed to connect several new customers to our transmission network to meet a significant increase in electricity demand to the west of London.
- Our existing substation in the Iver area does not have the capacity for these new connections.
- As a regulated business, we have a legal obligation to connect customers to our network when a connection is requested.
- Our proposed Uxbridge Moor substation will help businesses grow and support the online networks that we all rely on every day.

What are data centres and why do we need them?

Data centres are buildings dedicated to housing computers and digital storage. Data centres are an essential and integral part of supporting the online networks we rely on in the modern world.

Many everyday services you use from email and the internet, to file sharing and cloud storage, all rely on data centres. The locations of these centres have an impact on the quality of service they provide and this is why they need to be located as close as possible to the area of demand.

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Benefits of the new substation

Leaving a positive legacy for the community

As well as meeting the needs of the customers we are connecting, the new substation is a key part of our nation-wide upgrade of the grid network to meet future demand.

However, we understand the concerns of the local community and are committed to leaving a positive legacy.

How do we aim to achieve this?

We believe businesses have a duty to contribute to society and the communities they serve and we look to support communities impacted by our vital infrastructure in a variety of ways.

For communities affected by construction works we run a Community Grant Programme aimed at community organisations and charities.

This supports groups and initiatives across a range of areas, from those that provide social, economic and educational benefits, to environmental and conservation projects.

Communities impacted by construction work, such as the proposals at Uxbridge Moor, can apply for grants of up to £20,000. More details on how to apply are available on our website at **nationalgrid.com/responsibility/community/community-grant-programme**, or please speak to a member of our team at a consultation event or via the contact details below.

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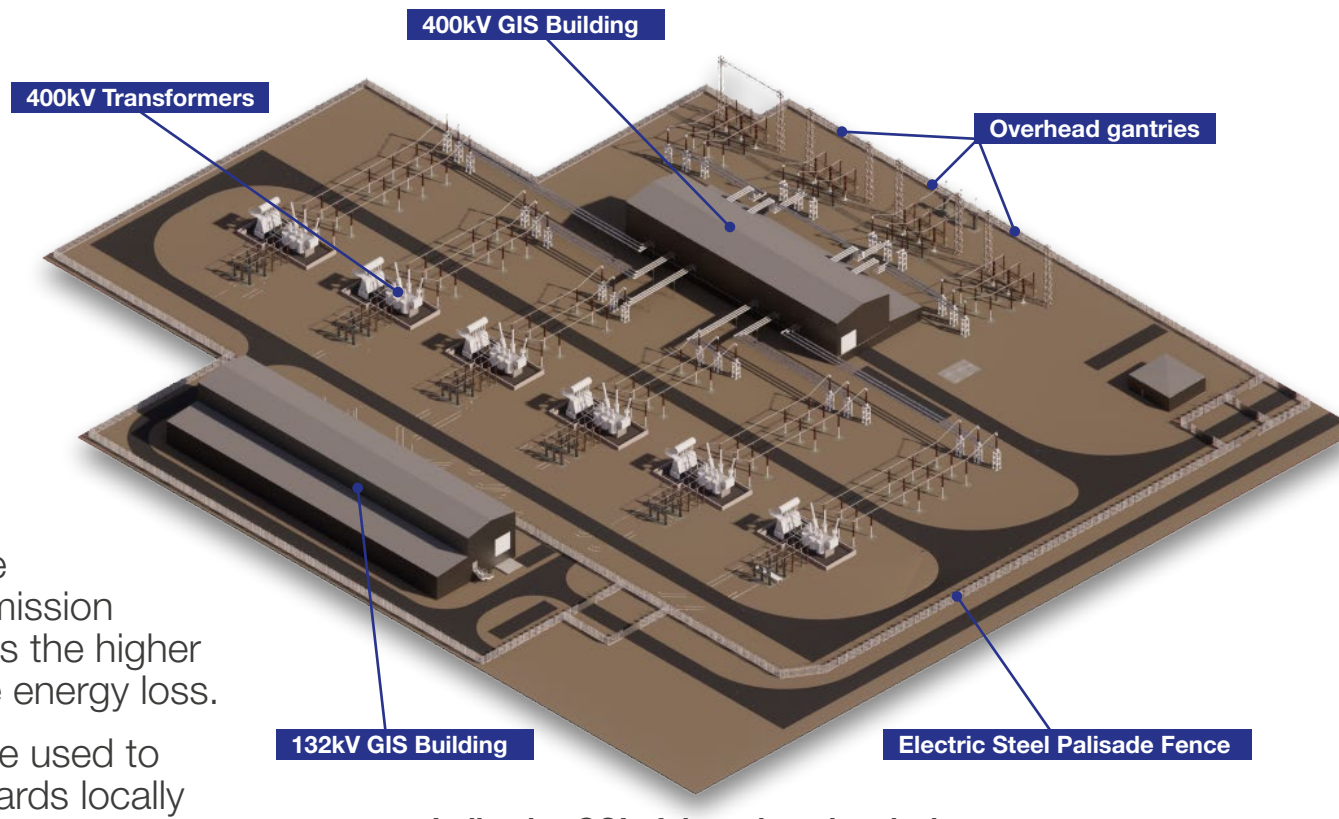
The design of the substation

The proposed Uxbridge Moor substation site will comprise two substations within its footprint: one 400 kilovolt (kV) substation, and one 132kV substation:

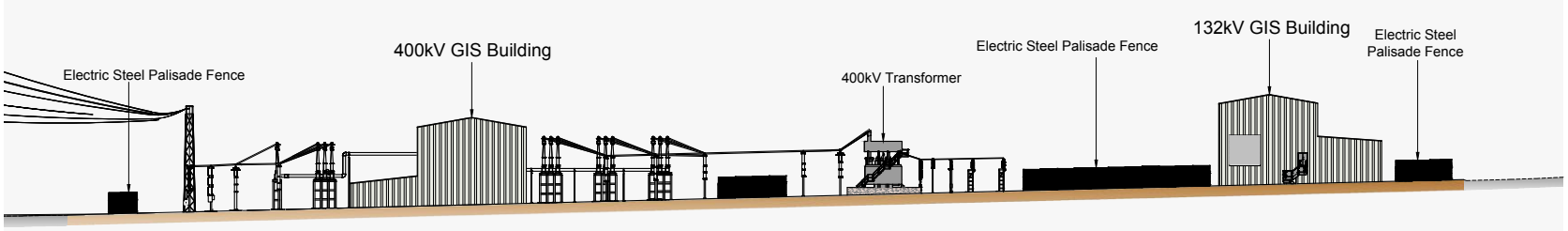
- 400kV is the highest voltage used for electricity transmission across the UK. It is used for transmission over longer distances as the higher voltage helps to reduce energy loss.
- 132kV is a lower voltage used to transmit electricity onwards locally from the site to homes and businesses.



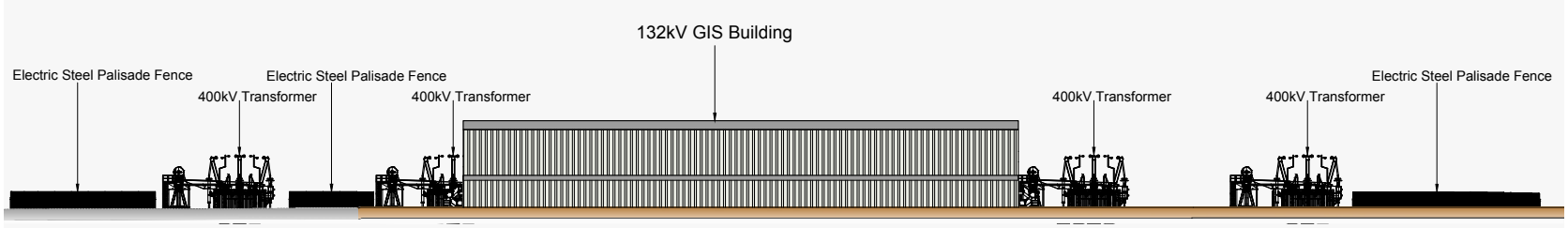
Indicative CGI of the substation design

We are proposing a 'Gas Insulated Substation' (GIS) design for the Uxbridge Moor site. This advanced technology will allow us to reduce the footprint of the proposed site by over 60% compared to a traditional substation design, minimising our impact on the local area and the environment.

As the new substation will need to be connected to the existing overhead line network in the area, associated work will take place to remove an existing pylon by the site and add two nearby in its place. This work will be a separate project and does not form part of this planning application.



Sectional view of the site from the north



Sectional view of the site from the west (both GIS buildings are 15 metres in height)

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Minimising the potential impact of a new substation

Traffic and access

We recognise that our construction traffic may have an impact locally, and we will have a comprehensive traffic management plan in place to minimise this where possible. Surveys are being carried out, and full details will be submitted and available to view as part of the planning application.

We are considering a number of possible access routes to the site (please see the site plan to the right):

- joining Denham Road and the A412 at the roundabout, with traffic going north to the M40 (shown in white).
- joining the A412 further down, with traffic going north to the M40 (shown in orange).
- extending the access route for the existing substation, connecting to the A4007 (shown in magenta).

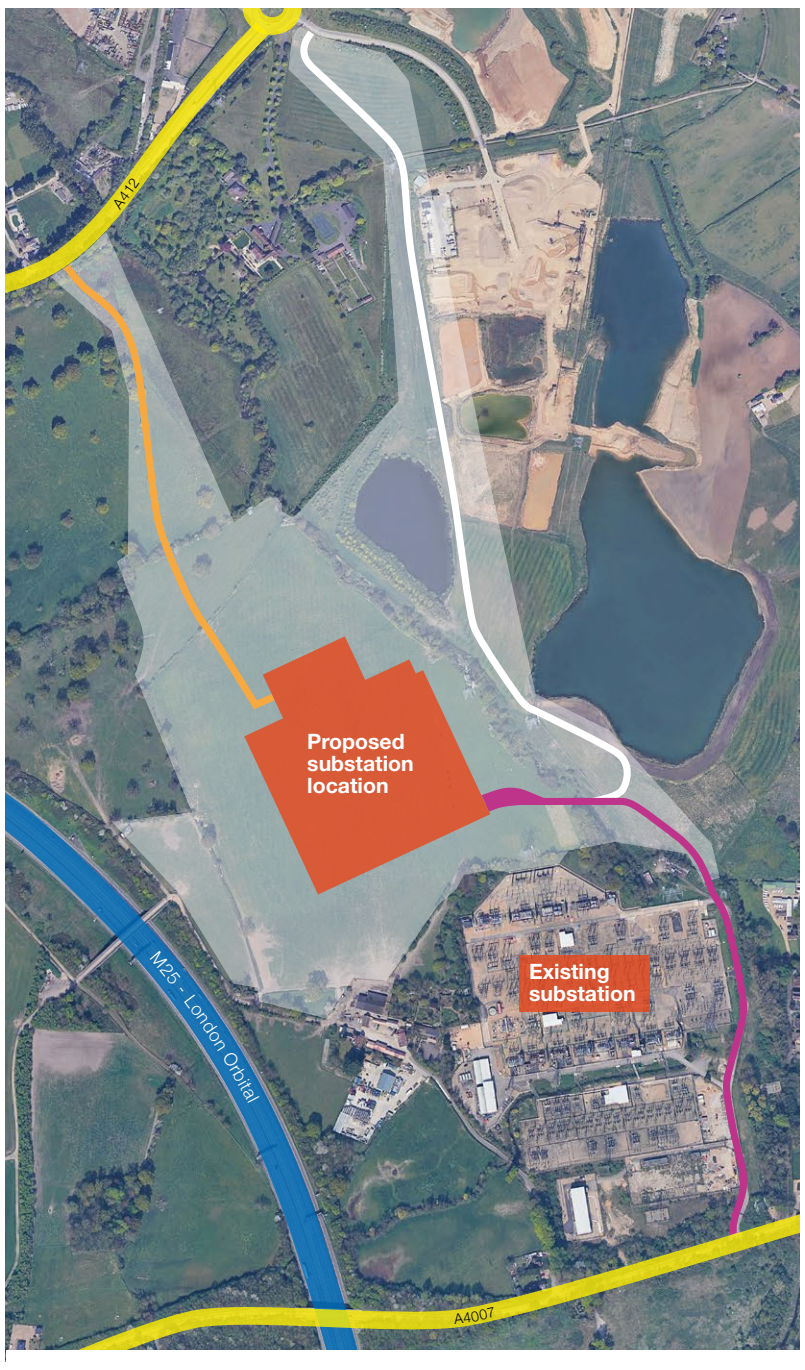
Access through Mansfield Farm may also be needed temporarily for initial site set up.

Green Belt, landscape and visual impacts

We are completing a landscape and visual appraisal of the scheme which will inform a landscape strategy. This aims to minimise any visual impact on the local landscape.

We are also carrying out heritage and flood risk assessments. All these reports and plans will be available to review in full when submitted with the planning application.

We have developed our plans to ensure we can reduce our impact on the local Green Belt where possible. The new substation has been located close to the existing substation to help reduce its visibility. The site is also naturally screened by greenery, the M25, and the quarry. Using 'Gas Insulated Substation' (GIS) technology will reduce the footprint of the proposed site by over 60%, further minimising our impact on the surrounding environment.



Impact on the environment

We are committed to delivering at least 10% biodiversity net gain on all our construction projects. We are currently exploring ways we will achieve this and welcome your feedback.

Noise levels and air quality

Measures will be put in place to limit any noise and emissions from the site during construction and through to operation. We are currently carrying out surveys into potential impacts and mitigation, and noise and air quality assessments will be submitted as part of the planning application.

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About National Grid Electricity Transmission

National Grid Electricity Transmission is working to build a cleaner, fairer and more affordable energy system that serves everyone, powering the future of our homes, transport and industry.

National Grid Electricity Transmission sits at the heart of Britain's energy system, connecting millions of people and businesses to the energy they use every day. We bring energy to life – in the heat, light and power we bring to our customers' homes and businesses; in the way that we support our communities and help them to grow; and in the way we show up in the world.

It is our vision to be at the heart of a clean, fair and affordable energy future.

Within the National Grid Group there are four distinctly separate legal entities, each with their individual responsibilities. It is National Grid Electricity Transmission that is developing plans for the new substation at Uxbridge Moor.

nationalgrid Group PLC

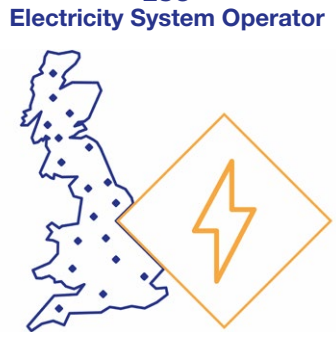
National Grid Electricity Transmission

Owns and manages the high voltage electricity transmission system in England and Wales

National Grid Electricity Distribution

Own and operate the electricity distribution networks for the Midlands, the South West of England and South Wales, with 8m customer connections serving a population of over 18m people

ESO Electricity System Operator



The ESO is legally separate from the rest of National Grid and ensures that Great Britain has the essential energy it needs by making sure supply meets demand every second of every day

National Grid Ventures

Operates a mix of energy assets and businesses to help accelerate the development of our clean energy future (such as undersea interconnectors that allow the UK to share energy with other European countries)

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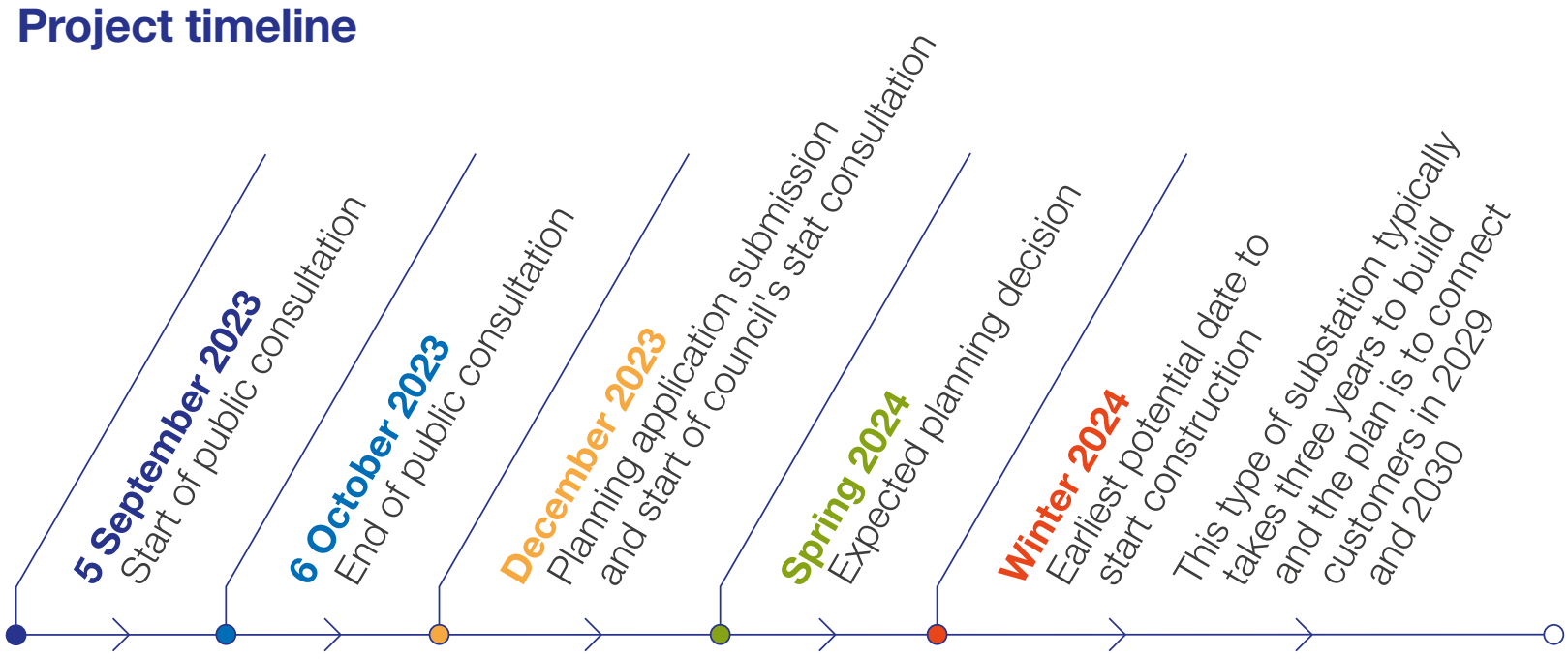
Feedback and next steps

Project timeline



Have your say

We welcome your views on our plans for the new substation. You can submit feedback in a variety of ways:

- via the online feedback form on our website
- by completing a hard copy form at today's event and returning it to us in person or posting it to **Freepost RTBU-HAYY-LCUX, 7 Bayley Street, London WC1B 3HB** (no stamp needed)
- by emailing **nationalgrid@uxbridgemoor.co.uk**
- by calling **0800 915 2494** (between 9am and 6pm, Monday to Friday)
- by meeting our team in person or virtually at one of our consultation events:
  - **Thursday 14 Sept 2023** 1:30pm–6:30pm, Jubilee Pavilion, Ivers Parish Council, 45b High Street, Iver, SL0 9ND
  - **Saturday 16 Sept 2023** 11:30am–4:30pm, Iver Heath Village Hall, St. Margaret's Close, Iver, SL0 0DA
  - **Tuesday 19 Sept 2023** 5:00pm–6.00pm, this will take place via Zoom. Please email us if you would like to register for this event.

Should you have any questions, please do get in touch with our community relations team - Thomas, Jemima and Cian - who are available via the contact details above.

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