

London Power Tunnels

Bengeworth Road substation information session

20 January 2021

nationalgrid



Housekeeping

Please write any questions in the Q&A function throughout the presentation. We will endeavour to answer these when we come to the Q&A.

Please note that you are also able to ask questions anonymously via the Q&A function on Zoom.

You can also ask your question by using the raise your hand function and we can bring you into the conversation – please do this during the Q&A session.

Feel free to use the chat function to make any general comments.

We will be recording the session to ensure we capture all the feedback and your comments. We will send through a copy of the minutes post-event.



01

Introductions

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Meet the team

Gareth Burden, Project Director, National Grid

Sam Chesman, Project Manager, National Grid

Darren Kempson, Senior Land Officer, National Grid

Sarah Harris, Regional External Affairs Manager, National Grid

Farhan Nomani, Project Manager, UK Power Networks

Joe Cawley, Director, Grayling

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National Grid

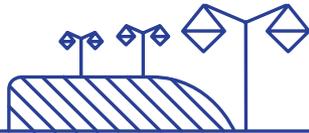
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What we do

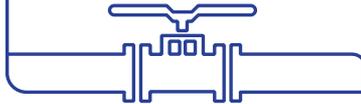
4,481

miles of overhead lines in
England and Wales



1,391

miles of underground
cables in England and
Scotland



£4.8bn

invested globally in
our assets per year

£



Over 23,000

employees worldwide

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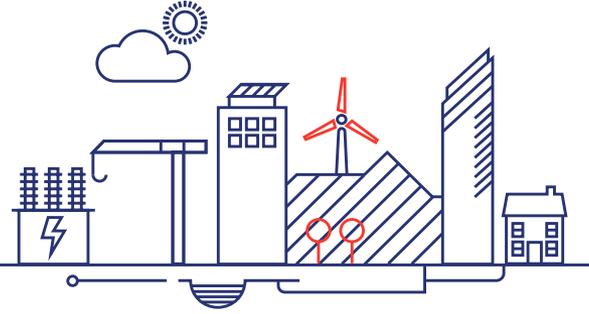
About LPT



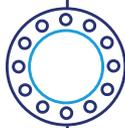
London Power Tunnels

Capable of transmitting enough electricity to power approximately

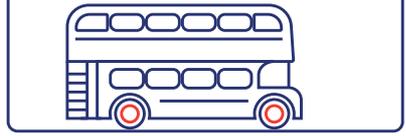
500,000 kettles



An investment of more than
£1 billion
In the capital



Tunnel length
32.5km
Passing through 7
London boroughs



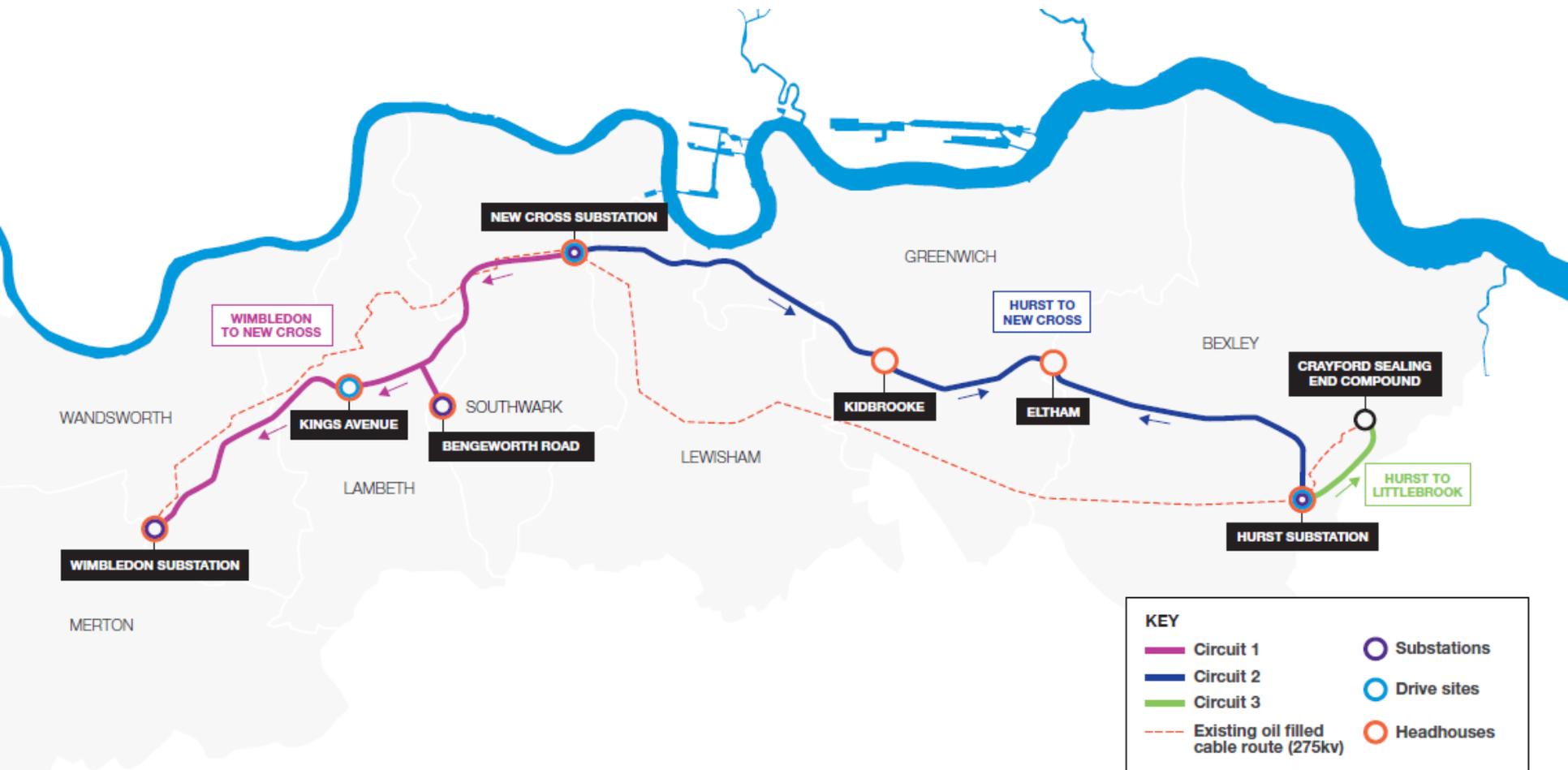
Average tunnel diameter
3 metres

Average tunnel depth
30m deep
(Length of 3 London buses)

95%
Of total project waste will be
diverted away from landfill



Re-wiring South London and connecting the Capital



Arrows indicate direction of tunnel digging

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Bengeworth Road

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Needs case

We have a legal obligation to connect companies like UK Power Networks to our network and to achieve this we need to build a shaft, substation and a head house at Bengeworth Road to connect to the main London Power Tunnels (LPT) route.

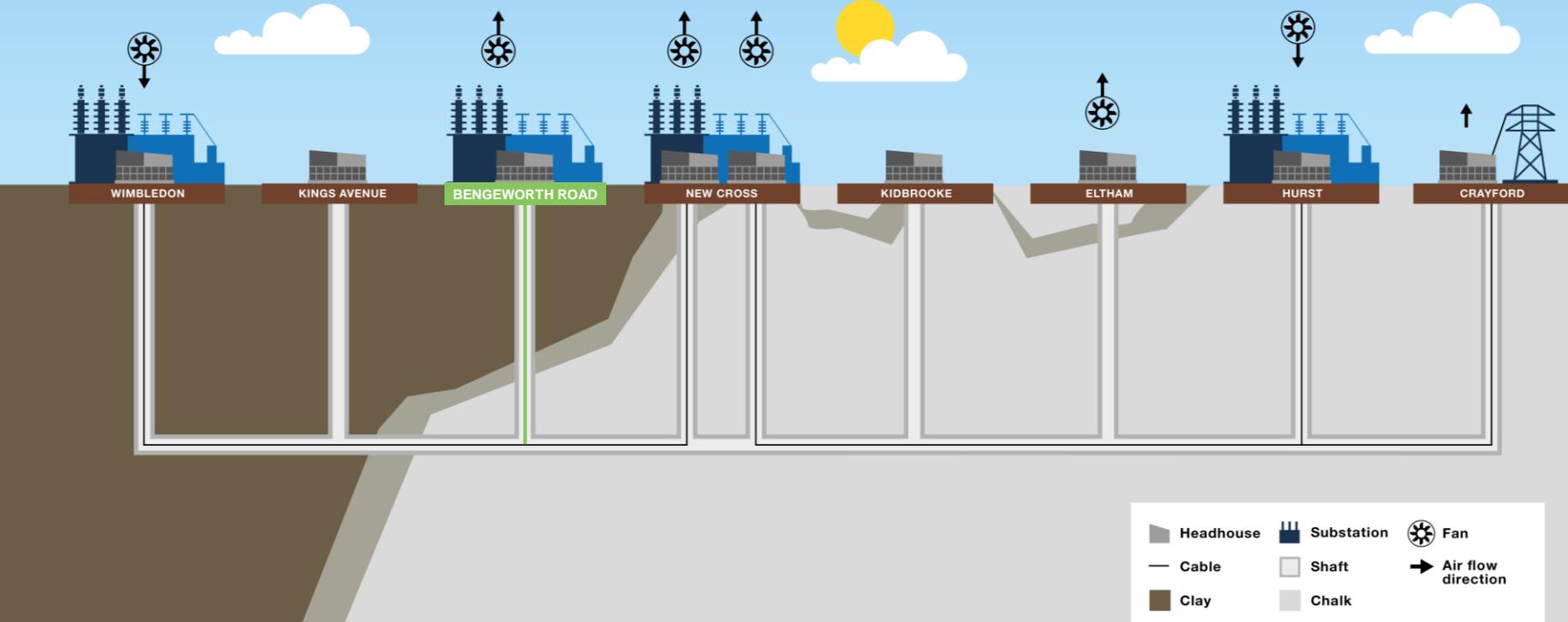
We are doing this work now to minimize overall disruption, UKPN will not need to excavate the roads in the local area to work on their cables, which currently run beneath the road network.

All works are essential to help meet electricity demand in Central and South London.

We plan to build the substations, head house and associated works under permitted development rights.



Bengeworth Road



Current use of the site

Bengeworth Road is an existing UK Power Networks site which serves two main purposes for the community:

- It is an active substation, with an array of high voltage equipment
- It serves almost 10,000 customers in the South London area.

The site is also used for UK Power Network's operations staff who attend emergencies and faults in the South London area.

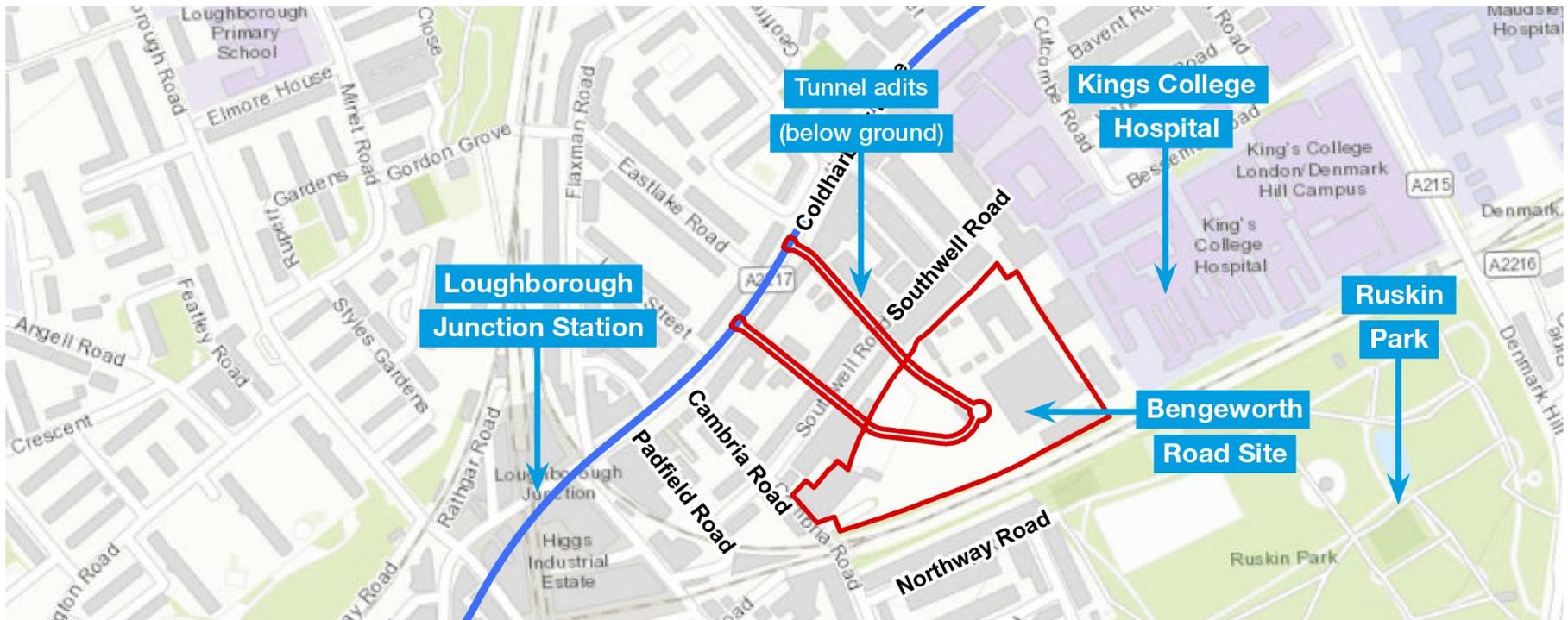
It enables engineers to work with the correct materials available at hand to ensure as little energy disruption to customers as possible.



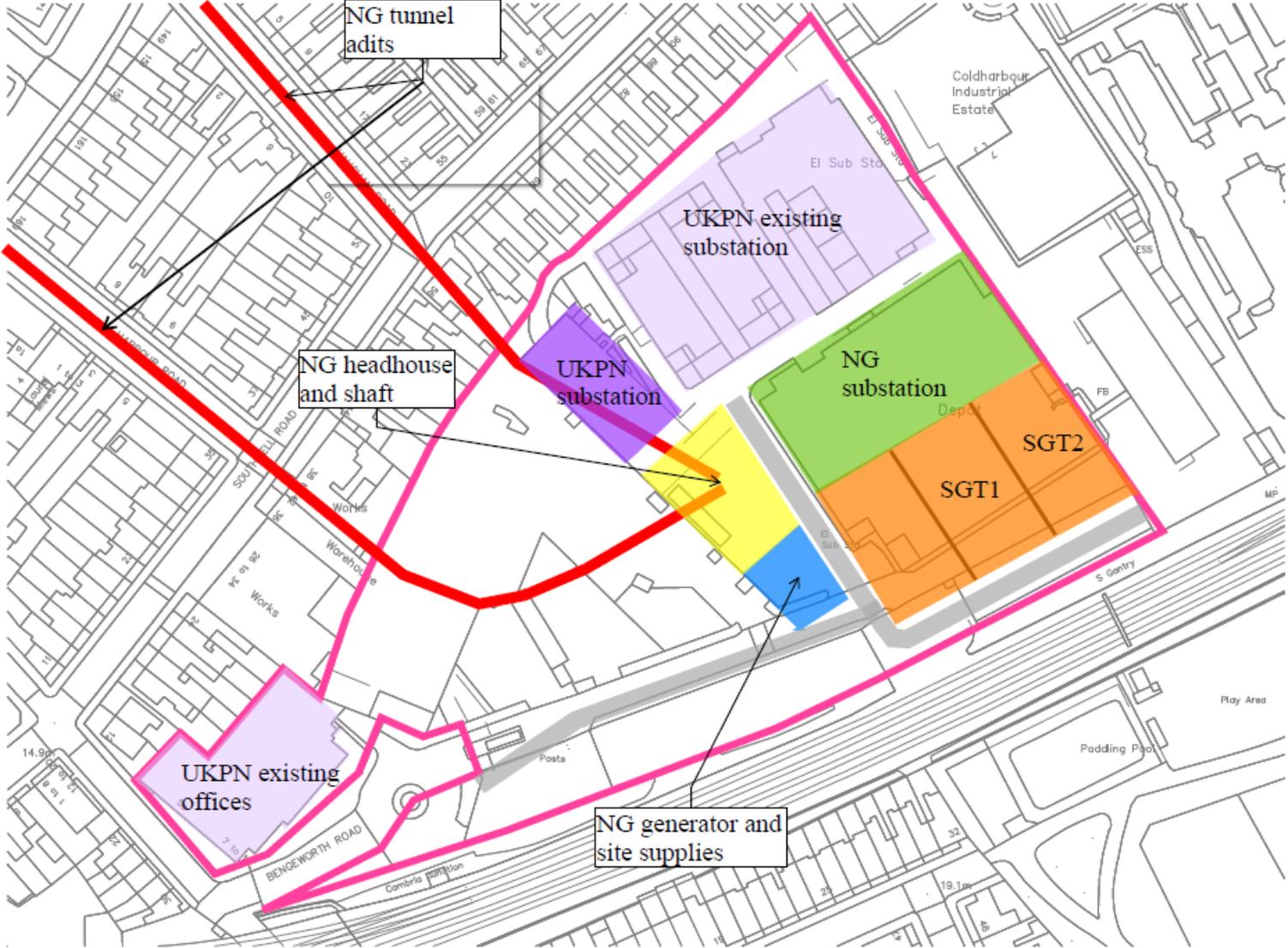
The site

The location of the proposed over ground works is within existing UK Power Networks site (Bengeworth Road substation)

The underground works extend from Bengeworth Road substation to Coldharbour Lane



Proposed site layout



Project details

The above ground permanent building will comprise a headhouse and two substation buildings

Shafts and headhouses are required at key points along the route of the tunnel. A tunnel boring machine will travel between these points as it progresses along the route.

A headhouse is a building which covers a shaft. Shafts and headhouses are required for the following reasons:

- Health and Safety – to protect our workforce and create safe access point for future maintenance
- Ventilation – ventilation equipment, in the form of fans, will be required at some sites to cool the cables and regulate the temperature inside the tunnels.

The headhouses are designed in order to minimise their visual impact on the local area.



Project details

The headhouse would reach a maximum height of approximately 10m

Both substation buildings will have a maximum height of 15m

The exterior of the proposed permanent buildings would be developed at the detailed design stage

The design and external appearance of the buildings is being agreed with the London Borough of Lambeth – in recent weeks we have been discussing with them the reduction in height of the building from 15m to 11m, so it is more in-keeping with the surrounding homes.



Example of substation and headhouse at Pratt Street, St Pancras

National Grid substation - Wimbledon



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Traffic and construction

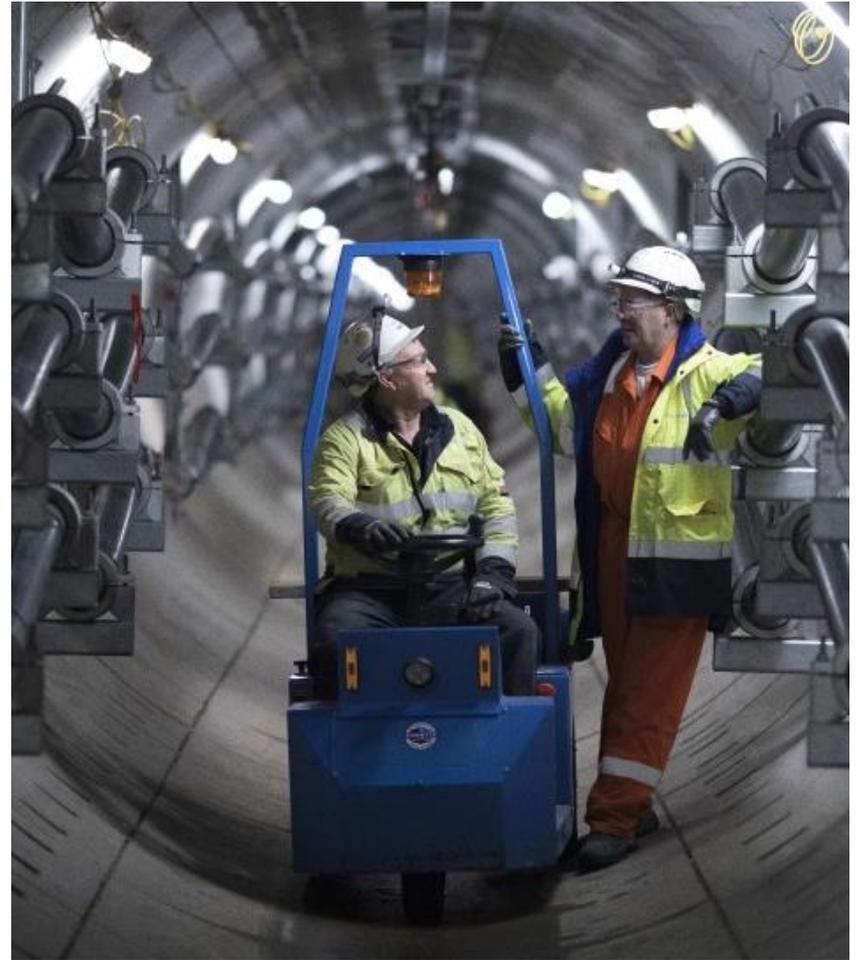
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Key facts

Working hours: 24-hour working, seven days a week, will be required while we build the shaft and carry out tunnelling works. During the night, our works will largely take place below ground. For works above ground, our usual working hours will be Monday to Friday 8am to 6pm and Saturday 8am to 1pm.

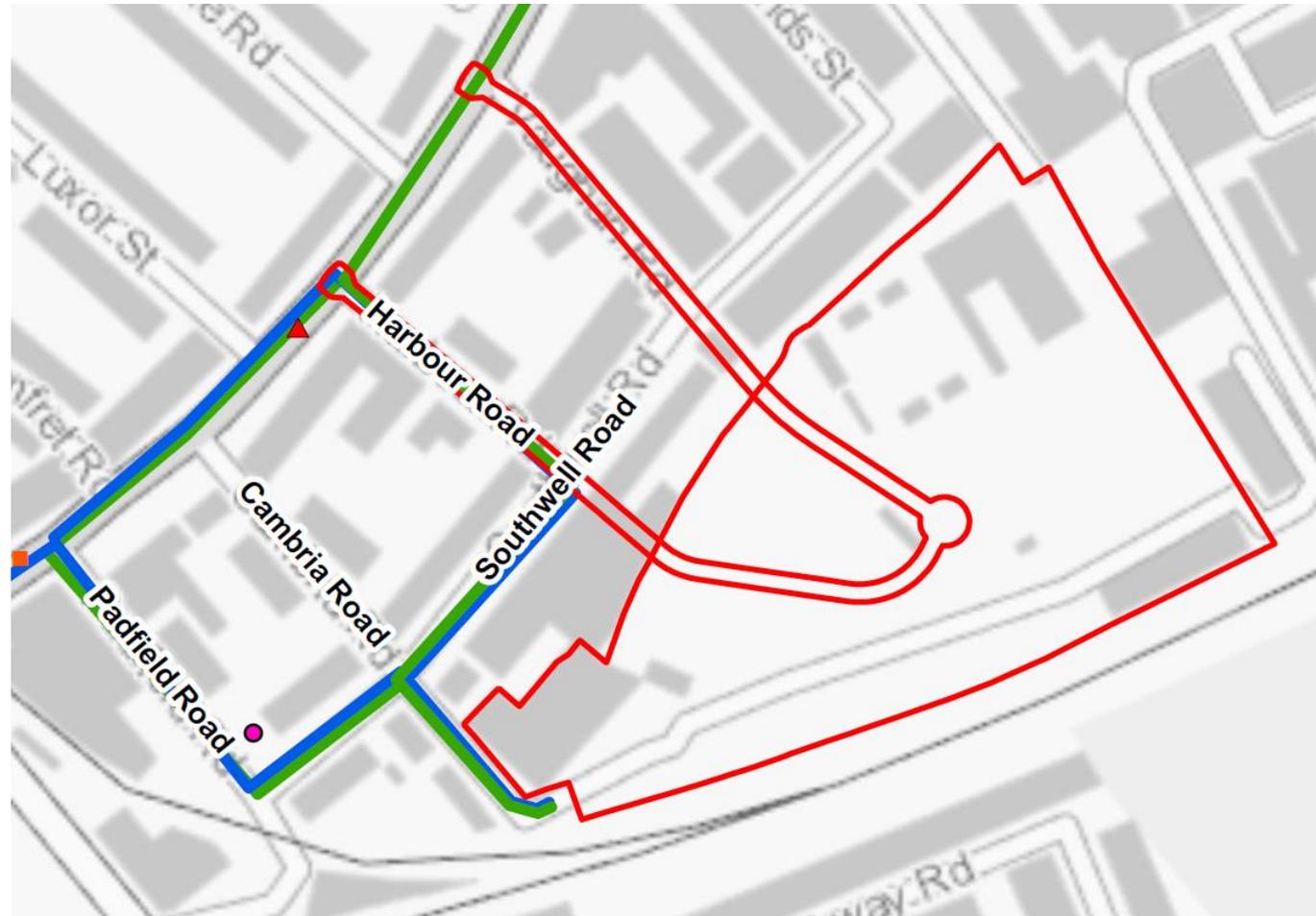
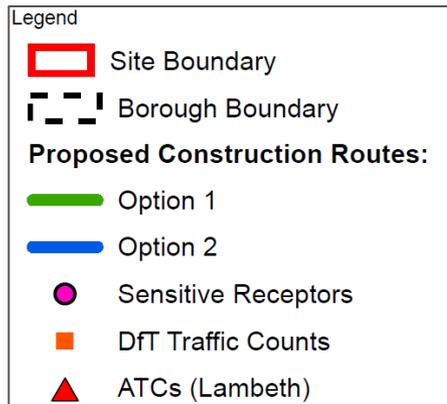
Traffic movements: Whilst at peak we could have up to 120 movements (60 vehicles) a day, we anticipate that the average over the course of the peak period will be closer to 80 (40 vehicles) movements.



Proposed access routes

We currently have two proposed access routes. The current application plans for access to the site is via Padfield road and the proposed egress is via Harbour Road.

We are working closely with the London Borough of Lambeth to understand local traffic and ensure the most appropriate route is chosen.



How we will look after you

We are committed to carrying out our essential works with minimal impact on the local community and environment. We will do the following:

- All of our vehicles will comply with the latest emissions standards
- Where we need to use lighting for night works, we will ensure this doesn't impact local homes
- Use hoarding around the site to improve its visual impact
- Use a temporary noise barrier to enclose the immediate work area
- Keep residents fully up to date on our activities particularly where they will be disruptive.



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Timeline



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- **March – June 2020: Initial survey work took place**
- **August – September 2020: Ground investigation works took place**
- **Early 2021: Site set up begins**
- **Second half of 2021: Tunnelling begins**
- **2022: Expected completion of the tunnel and starting the headhouse construction**
- **2022: Construction of NG substation and UKPN substation**
- **2025: Expected completion of works**

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Community engagement

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Engaging with the community

National Grid's Community Relations (CR) team has been keeping people who live and work near the site, as well as stakeholders, informed about the works. The following CR activity has taken place:



Regular updates to site ward councillors and the local MP via email and phone calls.



Letter drop to 1,363 residential properties and businesses around the site informing them of:

- Borehole works (August)
- Information update and invitation to our first set of public engagement events (these took place on 7th December 2020)
- Letter via Royal Mail in January 2021 with a further update and information about this evening's event
- Outreach to Loughborough Junction Action Group, Friends of Ruskin Park and Lilford Area Residents Association.



All information is also on our project website, which is updated regularly (www.londonpowertunnels.co.uk).

Formation of a Community Liaison Group



A Community Liaison Group (CLG) can help to coordinate meetings and ensure we can have an open dialogue about the works and your concerns.



If you are interested in being part of a Bengeworth Road CLG, please contact us on:

- 0800 783 2855 (lines open 9am to 5pm, Monday to Friday)
- E-mail: nationalgrid@londonpowertunnels.co.uk

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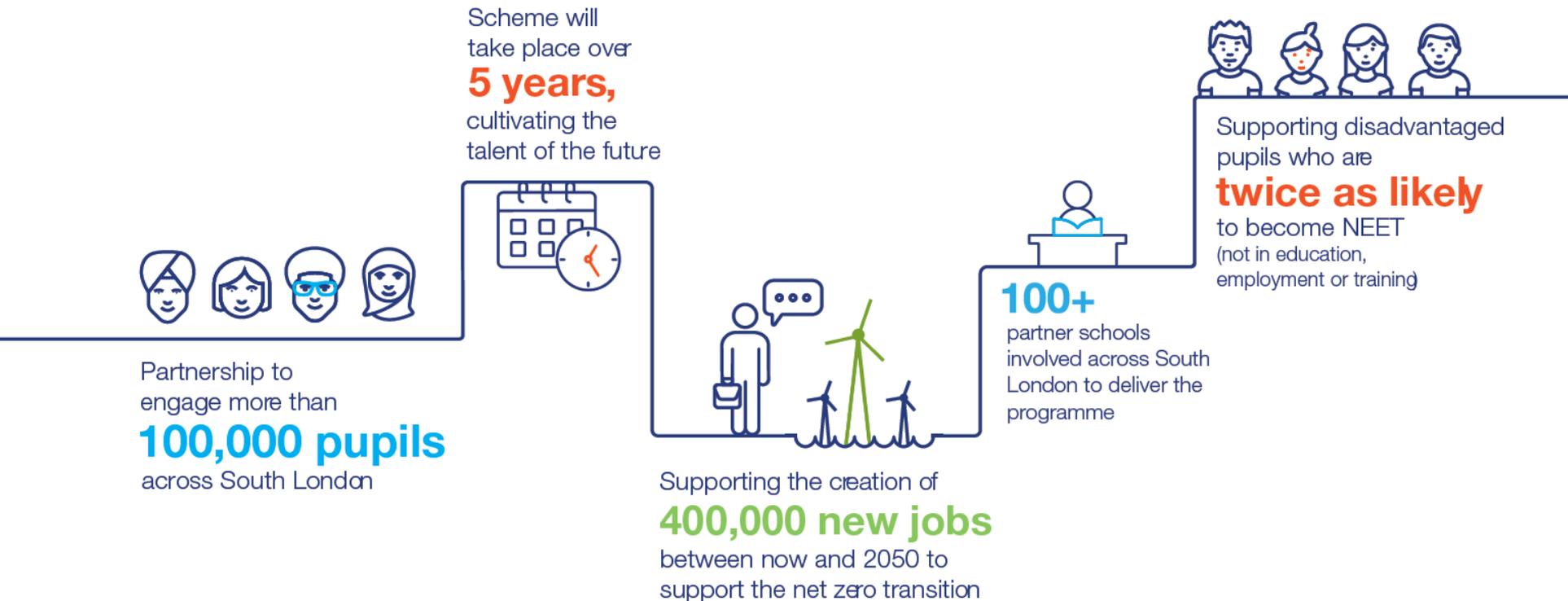
National Grid in the community

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Net zero workforce

We have formed a partnership with social enterprise MyKindaFuture (MKF), geared specifically towards young people and career development.



Community Grant Fund

Our Community Grant Programme is aimed at community organisations and charities in areas where National Grid is impacting local people through our operations. We fund projects run by charities and community groups that meet local community needs by providing a range of social, economic and environmental benefits.

If your project meets our criteria you can apply for a grant of up to **£20,000**.

For more information, visit www.nationalgrid.com/responsibility/community/community-grant-programme



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Questions



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