

Hinkley Connection Project

Project update

Welcome to the autumn update

Thank you for your continued interest in the Hinkley Connection Project.

We made the most of the good weather over the Summer and in this update are delighted to share news of a number of milestones. We've completed the Mendips haul road between the A38 and A368 and finished our first stage of works on the existing network at Avonmouth. We've also started to install our first permanent structures in the form of foundations for the world's first T-pylons, which will be constructed between Bridgwater and Loxton next year. For a full report on our progress along the route, see page 3.

Our progress on the construction side goes hand-in-hand with our commitment to mitigate and balance the impact of our works and leave a lasting legacy for local communities. I'm proud that we have supported 24 local community projects to date and, as children have returned to the classroom, to launch our education grants for the academic year. We have written to all local schools encouraging them to apply.

Keeping workers and the communities we work in safe during the ongoing pandemic is our top priority. Please be assured that our staff are keeping to strict site protocols and we continue to track

and respond to government Covid guidelines.

Stay safe and well

James Goode
Project director



Schools offered £500 towards STEM equipment

The 2020/21 round of our school funding programme is now open! Every state funded primary and secondary school in the six local authority areas affected by the Hinkley is eligible to apply for a £500 or £1250 (for secondary schools) grant for STEM equipment during every year of the project.

The funding, from the National Grid Hinkley Education Fund, is for the

purchase of science, technology, engineering and mathematics resources to support the teaching of these core subjects. A grant is available to all schools each year of the project.

Since 2018, we have supported 538 schools with a funding total of £354,000. Over 131,018 children have benefited, including 24,940 disadvantaged pupils.

The Redstart Primary School, in Chard, used one of their £500 grants to purchase six advanced programmable robots.

We've written to all eligible schools with the details. Do encourage your school to apply at: <https://hinkleyconnection.co.uk/education/>



Children from Redstart Primary school explore programming

nationalgrid

Hinkley Connection Project

Mendips haul road completed

Early August saw the installation of the bridge crossing the River Axe - the last piece of the jigsaw to complete the 8.5km Mendips cables temporary haul road.

Now in place, the majority of construction traffic will come in directly from the M5 at the A38 entrance, greatly reducing the number of HGVs travelling through local villages including Lower Weare, Cross, Churchill and Sandford.

James Goode Hinkley Connection Project Director said, "This is a major milestone for the Hinkley Connection Project. The temporary haul road is a vital part of our measures to mitigate the impact of our works on local

communities by reducing the number of construction vehicles using local roads. It's great to see it completed and in use in this section."

More about how we built the haul road can be seen on page 6.



A birds eye view of our haul road near Webbington

Delivering our new Supergrid transformer to Taunton Substation

An electricity transformer, measuring 9m x 5m and 5m high – the height of a two story building – has been delivered to Dunball Wharf near Bridgwater and continued its journey via the country lanes of Somerset to the National Grid substation in Taunton.

In a first for National Grid, working in partnership with haulage contractors, Mammoet, the 178-tonne transformer arrived via a barge to Dunball Wharf, with specialist lifting equipment enabling the transformer to be delivered through the narrow wharf.



Local lanes were closed to traffic to allow the transformer to pass through safely

The transformer was delivered on a specialist vehicle, 50 metres long which travelled at approximately 5 miles per hour.

As the roads between the M5 and the substation are very narrow, the project team needed to coordinate a closure for a short time for this final leg of the journey.

National Grid project engineer Michele Nolan said: "Millions of people rely on us to supply their electricity without interruption, day in, day out so it's important that we keep our substations and the equipment in them working efficiently."

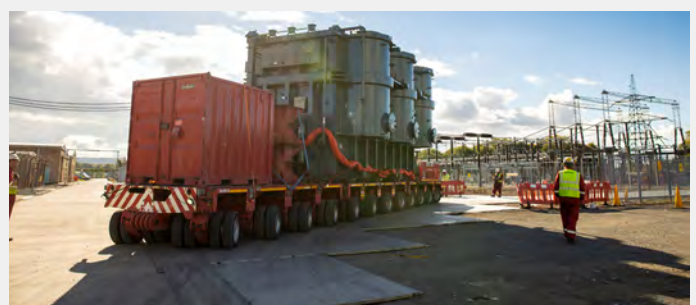
It's a first for National Grid to deliver such a big piece of essential equipment via a small, privately-owned wharf but we've been planning this for months to ensure we can continue to deliver power reliably to the local area."



Staff and police accompany the transformer on its slow journey

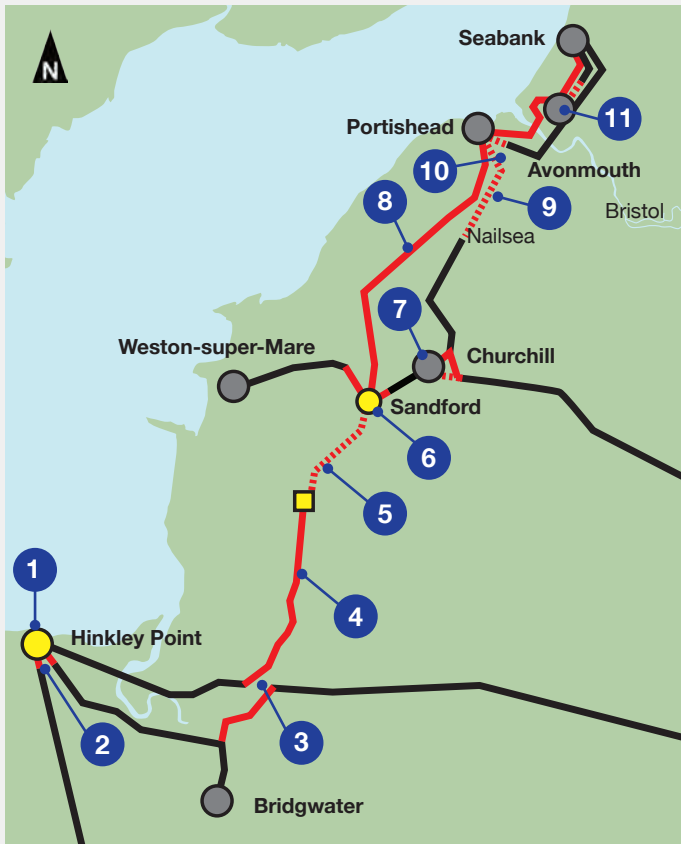
Transformers step up or step down the voltage of electricity between different circuits and play a vital role in helping ensure the UK continues to enjoy safe and reliable electricity supplies. This new supergrid transformer will support the connection of low carbon energy in the South West. It will reinforce electricity supplies to the local area, enabling National Grid to remove pylons and lines on the existing 132kV network to make room for the new Hinkley Connection.

The journey and route were carefully planned with Avon and Somerset Police and Highways England to minimise disruption to the public and road users.



The Supergrid transformer arrives at its final destination

Along the route



1 Shurton substation

Linxon, our principal contractor, continues to make good progress with the new substation to connect EDF Energy's new power station to the grid.

We're on target for when EDF Energy starts testing their equipment. The new nuclear power station will generate enough low-carbon electricity for around six million homes.



Work is progressing well at Shurton substation

2 Modifying the pylons to connect into Shurton substation

Over the next six months, we will continue to survey the land and ecology near the existing overhead lines.

In the Hinkley Point area, we will remove some existing pylons and build new ones to connect into the new Shurton substation.

The new T-pylons will connect into the existing overhead line on Horsey Level.

3 Surveys continue on Horsey Level

We're carrying out ecology and other surveys on Horsey Level, near Bridgwater. This is where we will connect the new T-pylons into the existing overhead line.

4 First permanent structures built for T-pylons

We've started to build foundations for the new pylons between Bridgwater and Loxton. The work involves driving concrete and steel piles into the ground. It will take up to 12 months to complete the foundations for all the pylons.

Nearby residents may hear noise and feel vibrations when we are carrying out this work. This will depend on how close they are to the site and the ground conditions and wind direction.

To reduce disruption to communities, we will not carry out any piling over the weekends and we will limit piling to between the hours of 8am and 5pm.

We're working closely with our contractor, Balfour Beatty, to reduce noise and vibration as best we can. The hydraulic impact hammer is the most silenced hammer on the market and the piling rig has been designed to minimise the amount of noise and vibrations generated during the work.

We have allowed up to five days' work for each location, but we expect the piling at each site to be finished within for 2 – 3 days.

Visit <https://hinkleyconnection.co.uk/t-pylons/> to view a monthly schedule of where we're carrying out this work.



Balfour Beatty's piling rig

We're making good progress with building the temporary haul road along the route of the pylons. The haul road will help to reduce the amount of construction and other project traffic on local roads.

We've completed several road accesses, including the main access south from the A38 at Tarnock and also completed many of the crossing points where the haul road meets existing country lanes.

When we are working on public roads, we need to put up traffic lights or close narrow roads to keep everyone safe. We recognise this causes delays to journeys and we're sorry for the inconvenience. We're working closely with our contractor, Balfour Beatty, to reduce disruption as best we can and to complete the roadworks as quickly as possible.

The table below shows where we still need to carry out roadworks and provisional dates. We've written to local residents and are keeping parish councils updated.

Location	Parish	Scheduled dates	More information
Northwick Road	Mark	26 October to 30 November	Road closure
Woolavington Road	Woolavington	November to December	Traffic lights
Pill Road	Rooks Bridge	1 December to 18 December	Road closure
B3141 The Causeway	Woolavington	1 December to 19 December	Traffic lights
B3141 The Causeway	Woolavington	4 January to 31 January 2021	Traffic lights

Please note these dates may change at short notice.

More information, including details on locations and timings for our roadworks, can be found on our project website <https://hinkleyconnection.co.uk/t-pylons-roadworks-and-traffic-management/> or by calling our community relations team on **0800 377 7347**. You can also sign up for updates.

5 Work starts at Loxton cable sealing end (CSE) compound

We've started the earthworks and building the foundations for the CSE compound. This is where the overhead lines from Bridgwater will connect into the new underground cables across the Mendips.

6 Mendips cables plough ahead

Balfour Beatty is installing cable ducts and joint bays along the 8.5km underground cable route from the cable sealing end compound at Loxton to Sandford substation.

For the majority of the route, we are digging trenches. In sensitive areas, including under the main waterways, we are using horizontal directional drilling (HDD) to push the ducts through the ground.

Once the ducts are all in place, we will pull the electricity cables through in sections and join them together at the joint bay locations.



Three cable ducts are laid in each trench

7 Sandford substation build continues

Our contractor, Siemens, is making good progress. They are continuing with the earthworks, installing drainage and building the foundations for the new substation buildings. To help screen the substation, our contractors have planted 32 trees, 271 woodland structure plants and hydroseeded around 7,400 m² of land around the development.

The next step is to erect the steel frame and cladding for the 132,000 volt substation control building.

8 Altering the existing network near Sandford

We're getting ready to take down 1.5 km of Western Power Distribution's (WPD) existing overhead that runs north-west from Sandford towards Puxton and make other alterations to its network to connect into the new substation at Sandford.

Work is due to start in April 2021 and will include:

- Building a temporary access and haul road
- Building a new 132,000 volt connection from Sandford substation to the existing overhead line that goes to Weston-super-Mare. It will be made up of 700m of underground cable and nine new lattice pylons
- Removing pylons to the south and north of the substation
- Building a short section of new overhead line using wooden poles to the south of the substation.

We're making these changes to maintain local electricity supplies.

9 Preparations start for new overhead line from Sandford to Seabank

We're preparing to build the new overhead line from Sandford to Seabank substation, using a mix of steel lattice pylons and T-pylons. Together with Balfour Beatty, we're carrying out surveys and finalising the designs and programme.



We will use T-pylons for most of the route

Over the next few months, we will carry out ecological mitigation, clear vegetation and some hedgerows, and erect stock fencing along the route in preparation for start of construction next year.

Our first construction work will be building temporary road accesses and haul roads. We'll write to residents before any construction work starts.

10 Installing underground cables between Nailsea and Portishead

Work continues in the west end of Nailsea. Our contractor, Murphy, is currently working along Hanham Way to lay the last section of cable ducts. To manage traffic and to keep everyone safe we've had to close the road.

To avoid a further road closure and minimise disruption for residents, we've coordinated our work in Hanham Way with Bristol Water. They need to divert and reinforce an existing water main. Their work is taking place alongside ours under the same road closure. We expect both sets of work to be finished by the end of December 2020.

We know our work is causing disruption to residents and we are sorry about this. We're working with Murphy and Bristol Water to complete these works and reopen the road as soon as possible.

Elsewhere along the cable route, we've almost completed laying cable ducts across the rural sections and into the existing substation at Portishead.

We've started to remove some section of haul road and accesses that are no longer needed and are reinstating the land.

When all the cables are installed and operational, we'll take down two lines of pylons, owned by WPD that run close to homes in the west end of Nailsea. The first line between Nailsea and Portishead will start to come down in August 2021. The second line will be removed in 2023.



In Nailsea, we're working very close to peoples' homes

11 Major milestone complete at Avonmouth

Working with WPD, we've completed the first stage of our work in Avonmouth.

We've made some changes inside the substation and taken down seven pylons to the north – including those which crossed the M49 and replaced them with underground cables.

We've removed the construction compound near St Anthony's Park and part of the haul road and reinstated the land back to its original condition. We've kept the temporary access from Avonmouth Way and a section of the haul road as we will need to use them again next year for building new pylons.

Crossing the Mendips – a major milestone for the project

In September we completed the 8.5km temporary haul road across the Mendips from the A38 at Tarnock to the A368 near Sandford. The haul road follows the route of the underground cables. It will help keep construction traffic off local roads.

The carriageway crosses numerous rhines and waterways, including the River Yeo, and three roads. It has taken nearly 18 months to build and the work followed many years of ecological, archeological and topographical surveys and planning.

When all our work in the Mendips is complete, and the new underground cables tested and existing pylons taken down, we will remove the haul road and road accesses.

We will carry out landscaping, replacement planting and reinstatement. We'll replace any trees and hedgerows at a ratio of 4 to 1 and, wherever possible, we'll replant in the same location.



Here's how we constructed the Mendips haul road – step by step

1. We fenced off the area where any work will take place to keep animals and people and livestock safe.

2. We built the main road accesses off the A38 and A368, and road crossing points along the route.



3. We stripped the topsoil, compacted and tested the base and installed a separation membrane. This reduced the amount of stone needed.



4. We laid crushed aggregates in layers and compacted it with rollers.



5. In sections where there will be the most traffic – such as access and road crossings – we covered the surface with Tarmac and installed kerbs and road markings.

6. We installed culverts across rhines and smaller waterways. Before starting, we checked each area carefully for any animals such as voles and fish. When we were sure there weren't any, the area was dewatered and any water flow was temporarily pumped. We then installed a rectangular concrete culvert or plastic pipe to allow water to flow under the haul road.



7. We built temporary bridges over the larger waterways. One of the biggest bridges is close to the M5 and crosses the River Axe. This is a 90-tonne Callender-Hamilton bridge.

8. The construction work was continually monitored to minimise any impact on the environment. Bat flyways and other mitigations measures were installed.

Community matters

Bowled over by Community Grant award

Since 2018, we have awarded £391,765 in grants to 24 local groups from the National Grid Community Grant Scheme, including sports associations, local guides and scouts and the Mendip Hills AONB.

In the latest funding round, Mark Cricket Club, was delighted to have been awarded a grant of £20,000 which it will use to start developing the club's new ground and pavilion.

Chairman, Tim Moxey said: *"We're delighted that National Grid has recognised the Club's contribution to the local community in this way. We'll now be able to press on with our plans to broaden the range of cricketing opportunities available to the local community and the surrounding villages."*

The Community Grant scheme is one of the ways we are supporting the communities and local people most impacted by our operations and site activities. Projects can be awarded up to £20,000.



Mark Cricket Club will use the grant to improve their ground and pavilion

If you know of a community initiative that might benefit, point them to <http://betl.nationalgrid.co.uk> for details on how to apply.

More supplies for Somewhere to Go

Balfour Beatty and National Grid staff based at the main construction site at Tarnock have sent a second delivery of food and toiletries to local charity, Somewhere to Go. The charity which runs a day care centre for rough sleepers in Weston-super-Mare offering food, support, and advice.

Julie Shannon, Day Manager at Somewhere to Go said: *"Thank you to everyone who donated. This will make a real difference. It has been particularly difficult for the rough sleepers over recent months and we really appreciate your continued support."*

Balfour Beatty's office manager, Kelle Hebron said: *"The charity does a fantastic job and we wanted to continue our support. This collection was something we could all contribute to during these difficult times."*



Balfour Beatty's office manager, Kelle Hebron (right) hands over the latest collection to Julie Shannon, Day Manager at Somewhere to Go

Talking shop with St Monica's Trust

Staff from contractors BAM Nuttall, working on the new substation at Sandford, have been busy helping the St Monica's Trust make more use of its community shop.

The Trust runs the local retirement community at Sandford Station and the shop is run by the residents for the benefit of the community. BAM Foreman, Frazer Hodgkins, took charge of the shop fitting works to close off an existing door and create a wheelchair friendly access in a more suitable location.

Future plans include building a coffee bar and refurbishment of an old telephone box for use as an information point.



Frazer Hodgkins, hard at work putting the finishing touches to the carpentry

Contact us

For further information please contact our Community Relations Team

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www.hinkleyconnection.co.uk

0800 377 7347 (24 hour)
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