FENWICK SOLAR FARM

Fenwick Solar Farm
EN010152

Consultation Report

Appendix L5: Consultation event boards

Document Reference: EN010152/APP/5.2

Regulation 5(2)(a)

Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009

October 2024
Revision Number: 00

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Revision History

Revision Number	Date	Details
00	October 2024	DCO application

Prepared for:
Fenwick Solar Project Limited

Prepared by:
AECOM Limited

ONE PLANET. ONE CHANCE.

Fenwick Solar Project Limited (a Boom Power company) is proposing a new solar farm with energy storage facilities at Fenwick (the Scheme). The Scheme will cover a total land area of 536 hectares (421 for solar PV and 115 for Grid Connection Corridor) and will generate low carbon electricity. Solar Photovoltaic (PV) modules will generate the electricity and a Battery Energy Storage System (BESS) will be installed allowing the storage, export and import of electricity to/from the National Electricity Transmission System when it is most needed.

Work is ongoing to assess how the site will connect to the existing National Grid Thorpe Marsh Substation, whether via underground cables or by connecting directly to an overhead line that crosses the east of the site.

The Scheme will generate more renewable power in the UK and will make a significant contribution towards the UK meeting its net zero targets and will deliver against Doncaster City Council's priorities around tackling climate change and generating more electricity from renewable sources.

WHY ARE WE CONSULTING?

We want to hear from the local community, groups, businesses, and our statutory stakeholders. We will consider your thoughts and ideas, and where practicable, incorporate them into the final design.

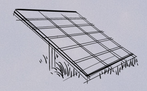
Your input is important to us, and all responses received during the consultation period will be considered.

We have prepared a Statement of Community Consultation (SoCC) which explains how we will conduct this consultation, including details of how we will ensure that the consultation is fair, transparent and inclusive. We consulted with the host Local Authority, City of Doncaster Council, on our SoCC. The authority's comments have helped shape our consultation approach.

CONSULTATION IS OPEN UNTIL 31 MAY 2024.

Please respond before the consultation closes to share your thoughts on our proposals for Fenwick Solar Farm. You can share your feedback by completing a feedback form, which can be found after the final board in this room or on our website. Our contact details are shown below.

BOOM-POWER.CO.UK/FENWICK | FENWICK.ENQUIRIES@BOOM-POWER.CO.UK | FREEPOST FENWICK SOLAR FARM



536 HECTARES OF LAND

75,000 HOMES POWERED

ADDITIONAL TREES & HEDGEROWS PLANTED

CREATION OF WILDLIFE HABITATS

2050 NET ZERO TARGET

PUBLIC RIGHTS OF WAY PRESERVED

BOOM POWER

WHO ARE BOOM POWER?

WE SHAPE THE FUTURE BY SUSTAINABLY HARVESTING ENERGY IN BALANCE WITH NATURE.

BUILD.

Our team of experts have led to our successful construction legacy by actively seeking and adopting the latest technologies to deliver pioneering, first-of-a-kind projects on a global scale.

OWN.

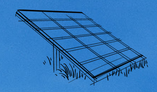
Specialising in non-subsidised renewable infrastructure projects we hold strong partnerships with local communities, clients and investors to jointly reduce our global carbon footprint.

OPERATE.

Our operational projects produce clean energy which contributes towards a sustainable economy and aids in the repair of our planet through our biodiversity net gain approach.

MAINTAIN.

Our dedicated team monitor all components post-operation to ensure our projects continuously reach their optimum level of performance to provide the grid with greater stability.



+700

MEGAWATTS CONSTRUCTED

+850

MEGAWATTS DEVELOPED

45,000,000

TREES OFFSET PER YEAR

450,000

AVERAGE HOMES POWERED PER YEAR

950,000

TONNES OF CO_2e PREVENTED PER YEAR

2050

NET ZERO TARGET

Note: All statistics are based upon legacy projects within both the UK & Australia.

COMPONENTS OF A SOLAR FARM.

HARNESSING THE SUN.

SOLAR PHOTOVOLTAIC (PV) PANELS

Solar PV panels are made up of multiple PV cells which convert sunlight into Direct Current (DC) electricity. Fixed south facing panels are proposed at the Scheme.

INVERTERS

Inverters are used to convert the DC electricity generated from the solar PV panels into Alternating Current (AC) – the type of electricity we use in our homes. AC is used for the transmission and distribution networks across the UK.

TRANSFORMERS

Transformers change the voltage of the electricity generated which makes it more efficient to move over longer distances. The transformers ensure that the voltage of the energy generated is matched to the voltage of the National Grid for transmission and distribution around the UK.

SWITCHGEAR

The switchgear allows the electrical components to be de-energised and isolated automatically by the protection systems or operated manually to allow for safe routine maintenance.

BATTERIES

Battery Energy Storage Systems (BESS) are an industry standard system for storing excess electricity generated by the solar farm or available in the grid. Stored electricity can be released to meet peak energy demands. BESS components are typically housed in shipping container-style units.

FIELD STATIONS

Equipment such as inverters, transformers and switchgear, typically housed in standard shipping containers, will be grouped together within areas called field stations.

ON-SITE SUBSTATIONS

Substations are used to safely collect, transform and transmit the energy exported from the site to the National Electricity Transmission System (NETS).

NATIONAL ELECTRICITY TRANSMISSION SYSTEM

The NETS is the official term for the National Grid. NETS is used for the transmission of electricity from one generating station to a substation or to another generating station or between substations or to or from any interconnector.

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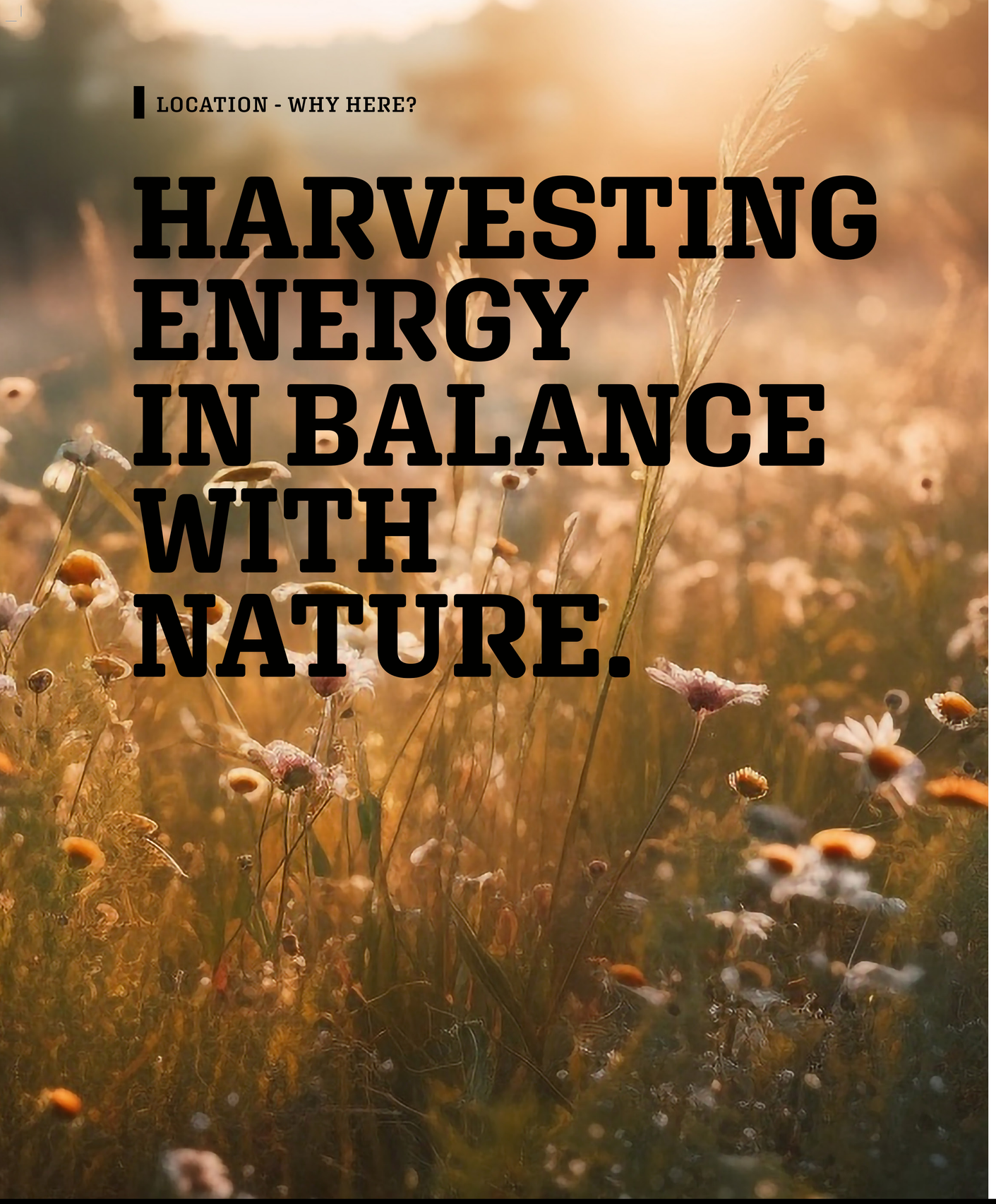
HARVESTING ENERGY IN BALANCE WITH NATURE.



SUNLIGHT AND TOPOGRAPHY

The Doncaster and Yorkshire area climate provides a suitable area for solar development. It provides good levels of sunshine along with days that are cool and clear, maximising the efficiency of the solar modules.

The land at Fenwick is flat - ideal conditions for the installation of solar PV panels as this allows for reduced technical complexity during construction, with the added benefit of existing hedgerows supplying much of the visual screening. Flat land also limits the shading between solar PV panels.

PROXIMITY OF A SITE TO DWELLINGS

The Scheme is situated in a rural area. Our design will work to place the PV modules and BESS where they are less visible from nearby homes and use hedgerows and other natural barriers to provide screening. We are committed to designing the Scheme sensitively to limit the impact to local residents.

AGRICULTURE LAND CLASSIFICATION AND LAND TYPE

Available data indicates that the land at Fenwick is lower grade agricultural land, enabling the Scheme to minimise impacts on ‘best and most versatile’ agricultural land.

ACCESSIBILITY

The Fenwick site is sufficiently served by road to enable the components of the solar farm to be delivered to the Site.

GRID CONNECTION

The site is in sufficient proximity to the existing National Grid Thorpe Marsh Substation, approximately 6 km south, which is where the electricity generated by the Site will feed into the National Electricity Transmission System (NETS). The National Grid is well developed in the area and has capacity for new energy generation facilities.

DIVERSIFYING FARMING

We recognise that the solar farm will be located on agricultural land. We are exploring the option of farming sheep in the fields beneath the panels. Sheep grazing on solar farms has been successful elsewhere in the UK and has been shown to have benefits for soil health and natural biodiversity. Sheep can move safely between and under the panels and can use them to rest in the shade or shelter from rain. The grass beneath solar panels also grows well enough to contain all the nutrients that the sheep need from grazing on it. Should consent be granted, grazing by sheep will be explored, noting that there are no known landowner restrictive covenants or other reasons that would prevent such use.

DEVELOPMENT CONSENT ORDER (DCO) PROCESS.

SHAPING THE FUTURE.

As the electricity generating capacity of the Scheme is greater than 50 MW, it is classified as an NSIP. NSIPs are large infrastructure developments which are considered important to the entire country and require consent by way of a DCO for them to be built.

Unlike local planning applications, which are considered by local authorities, DCO applications are made to the Secretary of State and handled by the Planning Inspectorate. In the case of a solar farm, the final decision on a DCO application is made by the Secretary of State for Energy Security and Net Zero. The post-submission timeline is shown to the right.

Local Authorities are among the many bodies invited to respond to the consultation on the DCO application, along with environmental and heritage bodies and the local community and stakeholders. Feedback from this consultation will be documented in the Consultation Report, along with details on how we have had regard to that feedback, which will be submitted with our DCO application.

We plan to submit our DCO application later in 2024, following consideration of all responses to this consultation. Once the application has been submitted the Planning Inspectorate have 28 days to decide if the application meets the standards required to be accepted for examination. The Planning Inspectorate will then appoint an Examining Authority, and the Pre-examination period takes place to enable all parties to plan and prepare for the examination.

The examination will take a maximum of six months. The Planning Inspectorate will then have three months to prepare a recommendation to the Secretary of State who then has a further three months to make the decision on whether to grant or refuse the DCO.

If our DCO application is accepted for examination, you can register directly with the Planning Inspectorate to become an Interested Party. During examination the Planning Inspectorate will keep Interested Parties informed about the progress of our application, and how they can get involved in the examination.

More information this is available at the Planning Inspectorate's website at: **www.infrastructure.planninginspectorate.gov.uk/application-process/the-process/**

28 Days

ACCEPTANCE

Planning Inspectorate appointed on behalf of the Secretary of State to consider whether or not the application meets the standards required to be accepted for examination.

3-4 Months (variable)

PRE-EXAMINATION

The public will be able to register to become an Interested Party by making a Relevant Representation. The Planning Inspectorate will also appoint an Examining Authority who will invite all Interested Parties to attend a Preliminary Meeting.

6 Months

EXAMINATION

The Examining Authority has up to six months to carry out the examination. During this stage Interested Parties who have registered are invited to provide more details of their views in writing or as part of public hearings that may be held.

3 Months

RECOMMENDATION

Examining Authority to prepare recommendation to the Secretary of State.

3 Months

DECISION

Secretary of State to decide if DCO application is granted or refused.

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BENEFITS.

DIVERSIFY FARMING.

LOCAL COMMUNITY

- There will be local employment opportunities through the construction phase of the solar farm, and we are committed to using local businesses where practicable.
- The land will become eligible for business rates thus providing a greater income to the council to spend in the area.
- We want local people to share in the benefits that the solar farm can bring. We are exploring the use of a community benefit package. Money would be set aside for a project or projects that make a positive difference to the local community. We are asking, as part of the consultation feedback form, to help identify the type of projects the community would like to see included.

RENEWABLE ENERGY & THE ENVIRONMENT

- The Scheme will deliver enough carbon-free electricity to power approximately 75,000 homes.
- Compared to arable farming, solar farms can support a biodiversity net gain by providing an overall increase in natural habitat and ecological features. Whilst there is an initial change to the countryside, the operational solar farm has the potential to become a haven for wildlife.

ENERGY SECURITY FOR THE LONG TERM

- A record rise in global energy prices in 2021-2022 has led to an unavoidable increase in the cost of living in the UK, as we use gas both to generate electricity, and to heat the majority of our 28 million homes. Accelerating the transition away from oil and gas depends critically on how quickly we can roll out new renewables, creating around 480,000 clean jobs by the end of the decade and building a British power system that is much more self-sufficient.
- Power generation in the UK is undergoing a major change. The Government has committed to achieving net zero carbon emissions by 2050 and to decarbonising the electricity system by 2035. This will require large amounts of renewable electricity generation infrastructure to be delivered in the UK, including 70 GW solar generation capacity by 2035 – the equivalent to a five-fold increase on existing solar generation.
- Boom Power has secured a connection agreement to export electricity into the National Electricity Transmission System at the National Grid Thorpe Marsh substation. The project will make a significant contribution to providing the renewable electricity generation capacity that the country urgently needs to develop.

FUTURE LAND USE

- The Development Consent Order (DCO) would require the Scheme to be decommissioned at the end of its operational life. The land will be returned to the landowner in a condition fit for its original purpose. The design life of the Scheme is 40 years from the final commissioning, and is currently anticipated to be 2030 to 2070 subject to DCO consent.
- Arable farming won't be possible once the solar farm is in operation, however, we are exploring an option to use the land under the solar panels for sheep grazing and have designed the solar farm to make this possible.

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YOU SAID. WE DID.

NON-STATUTORY CONSULTATION RESPONSES

In June and July 2023 we introduced our Scheme and asked for feedback from local residents, businesses and stakeholders as part of our non-statutory consultation, which consisted of:

- 4 weeks from Tuesday 27 June on Monday 24 July 2023
- 25 consultation responses received
- 80 attendees across two in person events and two webinars
- 568 hits on the project website between 27 June – 19 July 2023
- Around 1,200 brochures delivered

Members of the local community were generous with their time, sharing detailed feedback on our initial proposals. We have taken this feedback and used it to help refine and develop our proposals, as evidenced in the table on the right.

All comments provided in the non-statutory consultation responses were taken into consideration in the process of updating our design further.

You can read more about the non-statutory consultation in our Non-statutory consultation report, which is available online at our project website (**www.boom-power.co.uk/fenwick**), at document inspection venues or by requesting a hard copy using the contact details at the back of this document.

We are committed to being a good neighbour, therefore our proposed design aims to minimise the impact on the landscape, wildlife, the local community and all who enjoy this beautiful corner of Yorkshire.

YOU SAID	WE DID
Solar PV Site: Has the site of the solar farm been finalised?	Additional land to the south-west and south-east of the EIA Scoping Layout has been incorporated into the Solar PV Site following non-statutory consultation and discussions with landowners in the vicinity of the Solar PV Site. This additional land provides flexibility for designing the solar PV arrangement and for providing potential mitigation areas that may be needed due to feedback from the ongoing environmental surveys.
Grid Connection Corridor: Has the corridor been finalised?	The Grid Connection Corridor has since been refined to an approximately 100 m typical width corridor based on desk-based environmental information, engineering and construction requirements, and land constraints. It incorporates a number of wider areas, for example, to allow additional working area for HDD and temporary construction compounds, or to avoid sensitive receptors such as habitat designations, residential and commercial properties, and cultural heritage assets.
Public Rights of Way: Can you provide assurances that footpaths and bridleways will be maintained or improved?	Based on feedback received at non-statutory consultation, we have developed further our steps taken to ensure access to existing Public Rights of Way will be maintained. To enable this, we will require one permanent Public Rights of Way diversion (Sykehouse 29). The diversion will run approximately 50 m south of the existing Public Right of Way, through the same field during the construction and operation and maintenance phases. The permanent diversion will follow the path that we understand residents typically use. Previous consultation carried out with local residents, as well as engagement carried out with the council, confirmed that most users of the PRoW do not currently follow the existing mapped route, and instead follow the route which is designed as the permanent diversion for the Scheme.
Traffic and Transport: How will increased traffic in a rural area be mitigated? Multiple issues around congestion, noise, pollution and unsuitable roads should be considered.	Construction traffic will not pass through the village of Fenwick. We may still need to use the southern half of Fenwick Common Lane during the construction phase of the project. Please see PEIR Volume I Chapter 13: Transport and Access for a full breakdown of the steps we're taking to minimise the impacts of traffic and transport on local communities during the construction of the Scheme.
Equipment and noise levels: Will construction result in an increase to noise levels in the local area?	Some of the equipment used during construction will result in a temporary increase to noise levels in the local area. Where practicable, we've changed the planned location of this equipment to further minimise impacts on local residents. For further information on how we have considered the impacts of noise levels on local communities, please see PEIR Volume I Chapter 11: Noise and Vibration.
Positioning of solar panels: What position will the solar panels be facing?	We have decided to use fixed south-facing solar panels in the updated proposal for the Scheme. These panels are generally lower in height than Tracker Systems and have a smaller Ground Cover Ratio than East/West designs.

ENVIRONMENT.

NET ZERO BY 2050.

ENVIRONMENTAL IMPACT AND MITIGATION

Environmental Impact Assessment (EIA) is a process to systematically analyse the likely significant environmental effects of the Scheme and develop effective mitigation measures.

Our preliminary findings and mitigation proposals are detailed in the Preliminary Environmental Information Report (PEIR) which forms part of this statutory consultation.

Solar power generation significantly reduces greenhouse gas emissions, with emissions approximately 95% lower than those from traditional natural gas power stations, constituting the majority of the UK's national grid carbon intensity. Research indicates that over the project's lifespan (40 years), the project will achieve an estimated reduction of 7 million tonnes of CO2 equivalent (tCO2e) by displacing gas fossil fuel power generation.

This signifies that the projects carbon payback period for emissions released during construction and decommissioning will be less than two years. Hence, indicating that the project's contribution will be pivotal in decarbonising the UK's national grid, supporting the UK Government's transition to a net zero economy.

PRELIMINARY ENVIRONMENTAL INFORMATION REPORT (PEIR)

The PEIR assesses a wide range of topics. For some key topics, we identified the potential for significant effects as well as mitigation measures. These were:

- Climate change – to find out more, see page 41 of the brochure or PEIR Volume 1, Chapter 6: Climate Change
- Landscape and visual amenity – to find out more, see page 41 of the brochure or PEIR Volume 1, Chapter 10: Landscape and Visual Amenity
- Agricultural land – to find out more, see page 41 of the brochure or PEIR Volume 1, Chapter 12: Socio-economics and Land Use
- Traffic, access to open space and active travel – to find out more, see page 42 of the brochure or PEIR Volume 1, Chapter 13: Transport and Access
- Noise and vibration – to find out more, see page 42 of the brochure or PEIR Volume 1, Chapter 11: Noise and Vibration
- Ecology – to find out more, see page 42 of the brochure or PEIR Volume 1, Chapter 8: Ecology
- Water environment – to find out more, see page 43 of the brochure or PEIR Volume 1, Chapter 9: Water Environment
- Cultural heritage – to find out more, see page 43 of the brochure or PEIR Volume 1, Chapter 7: Cultural Heritage

FIND OUT MORE
If you have questions on any of these topics, please talk to the team at today's event who will be happy to provide more information.

As a result of the mitigation measures we have identified being applied, **no significant effects are anticipated in the areas outlined above.**

Further information on all the environmental impacts and proposed mitigations can be found in the PEIR, available at today's event or on our website at: **www.boom-power.co.uk/fenwick**

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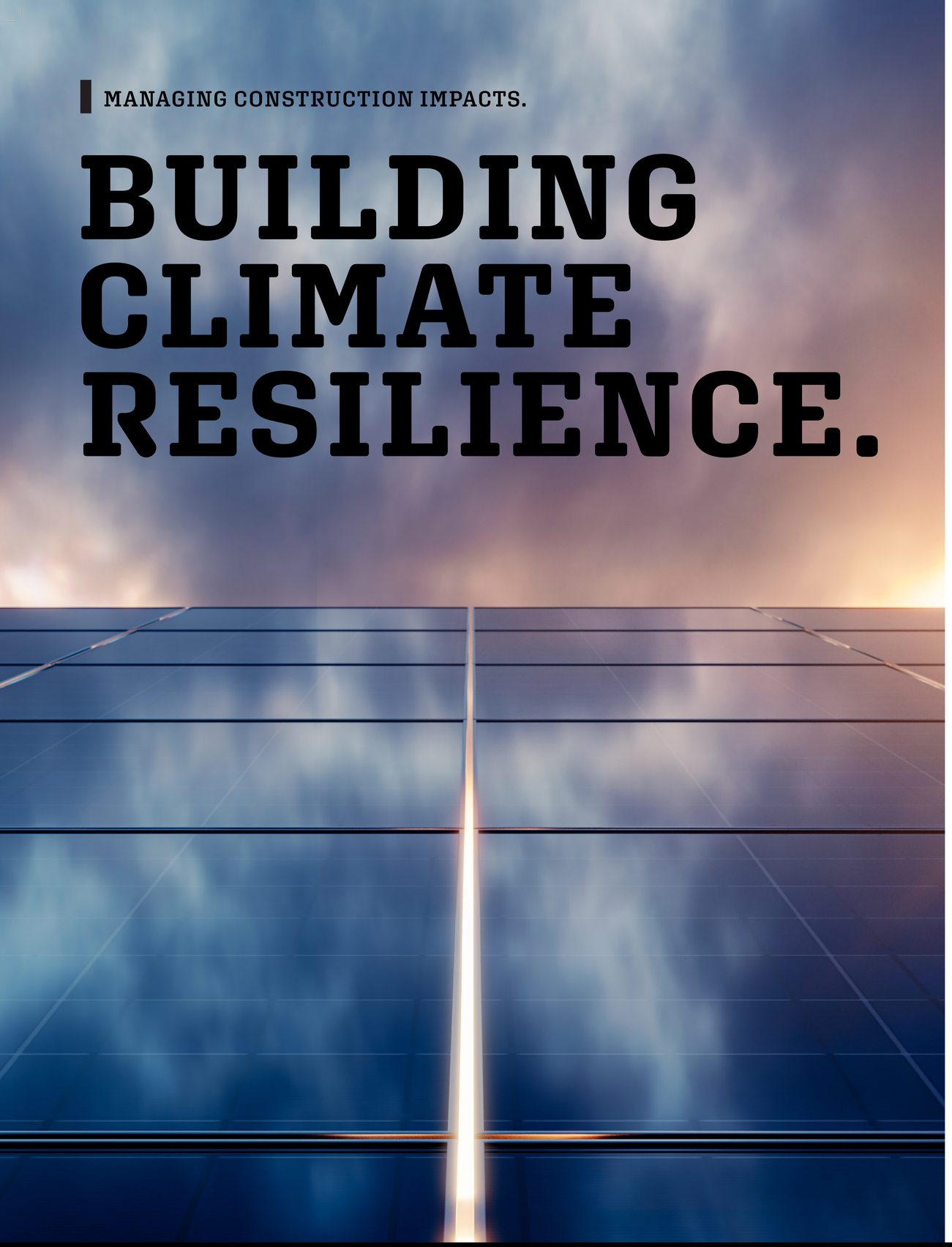

MANAGING CONSTRUCTION IMPACTS.

BUILDING CLIMATE RESILIENCE.

HOW WILL THE SOLAR FARM BE BUILT?

Most of the construction work will consist of putting up a simple metal frame to which the PV panels will be attached. A site will be first fenced off, then metal poles will be driven into the ground using a post driver. The metal frame will be attached to the poles, and the PV panels will be attached to the frame. Inverters could then be mounted to the frame to create the electrical connection to the cables, or they could be centrally located within the field stations.

Separately to the installation of the PV panels, we will install the cables, field stations, BESS and the On-Site Substation. Once these are all connected, electricity will be generated by the PV panels and will flow into the National Grid or be stored in the BESS. We're also exploring the possibility of connecting the On-Site Substation to the National Grid via a line drop from existing overhead power lines running north-south across the east of the Solar PV. The On-Site Substation would be at the same location but would also include a cable connection to the existing overhead lines. This option would comprise of below ground cables connecting the On-Site Substation to a new Cable Sealing End Compound at the base of an existing on-site 400 kV overhead line tower. The tower would likely require modification to allow the associated infrastructure to connect by this method.

HOW WILL EVERYTHING BE TRANSPORTED TO THE SITE DURING CONSTRUCTION?

Heavy Goods Vehicles (HGVs) will bring most construction materials to the Solar PV Site, with tractors and trailers used to bring materials to the Grid Connection Corridor construction compounds. All HGVs will travel via the A19, then along Moss Road before accessing the Solar PV construction compound.

- There will be a maximum of five Abnormal Indivisible Loads (AILs) used for delivery of the substation transformers.
- From the compounds, tractors and trailers will be used to cross fields rather than roads to distribute these materials to their specific site.
- The routes to be used and timings for deliveries and staff will be set out in a Construction Traffic Management Plan, and all construction staff will adhere to this. The Framework Construction Traffic Management Plan will be submitted with the DCO application.

HOW LONG WILL THE SOLAR FARM TAKE TO BUILD?

We anticipate that construction of the Grid Connection Cables will last for around 12 months, and the Solar PV Site (including on-site substation and BESS) will take approximately 24 months. The construction will be phased across the site, so we will not work in all areas at once during this period.

WILL PUBLIC RIGHTS OF WAY BE AFFECTED?

Public Right of Way (PRoW) Sykehouse 29, which runs immediately south of Bunfold Shaw, will be permanently diverted. The diversion will run approximately 50 m south of the existing PRoW, through the same field during the construction and operation and maintenance phases. The permanent diversion will follow the path that we understand residents typically use. Consultation carried out with local residents during the previous round of consultation, as well as engagement carried out with the council, confirmed that most users of the PRoW do not currently follow the existing mapped route, and instead follow the route which is designed as the permanent diversion for the Scheme.

The routes of some Public Rights of Way may be slightly altered for a short time while we install cables across these paths, however no PRoWs will be permanently closed up.

For more information, please see our Brochure in the Construction and Operations chapter.

NEXT STEPS & HAVE YOUR SAY.

YOUR OPINION MATTERS.

Your opinion matters, and every response to this consultation will be considered, evaluated, and used to develop our final design. The consultation report will be published on our website and submitted as part of our Application for a Development Consent Order later in the year.

You can share your thoughts by completing a feedback form. These forms can be found after the final consultation board. You can deposit your form at the feedback station, or freepost it to FREEPOST FENWICK SOLAR FARM.

To complete the feedback form online, scan the below QR code with your phone camera and follow the link to the project website. Alternatively, email your view to us at the address shown below.

HOW TO CONTACT US

The consultation closes at **11:59pm on 31 May 2024.** All responses received before this will be considered and summarised in our consultation report. Responses received after this time may not be considered.

If you have any questions or would like to request copies of information (including in accessible formats if needed) please contact us using the details provided. Please note that phone lines will be open between 9am and 5pm Monday to Friday.

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