FENWICK SOLAR FARM

Fenwick Solar Farm
EN010152

Consultation Report

Appendix L1: Statutory Consultation booklet

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

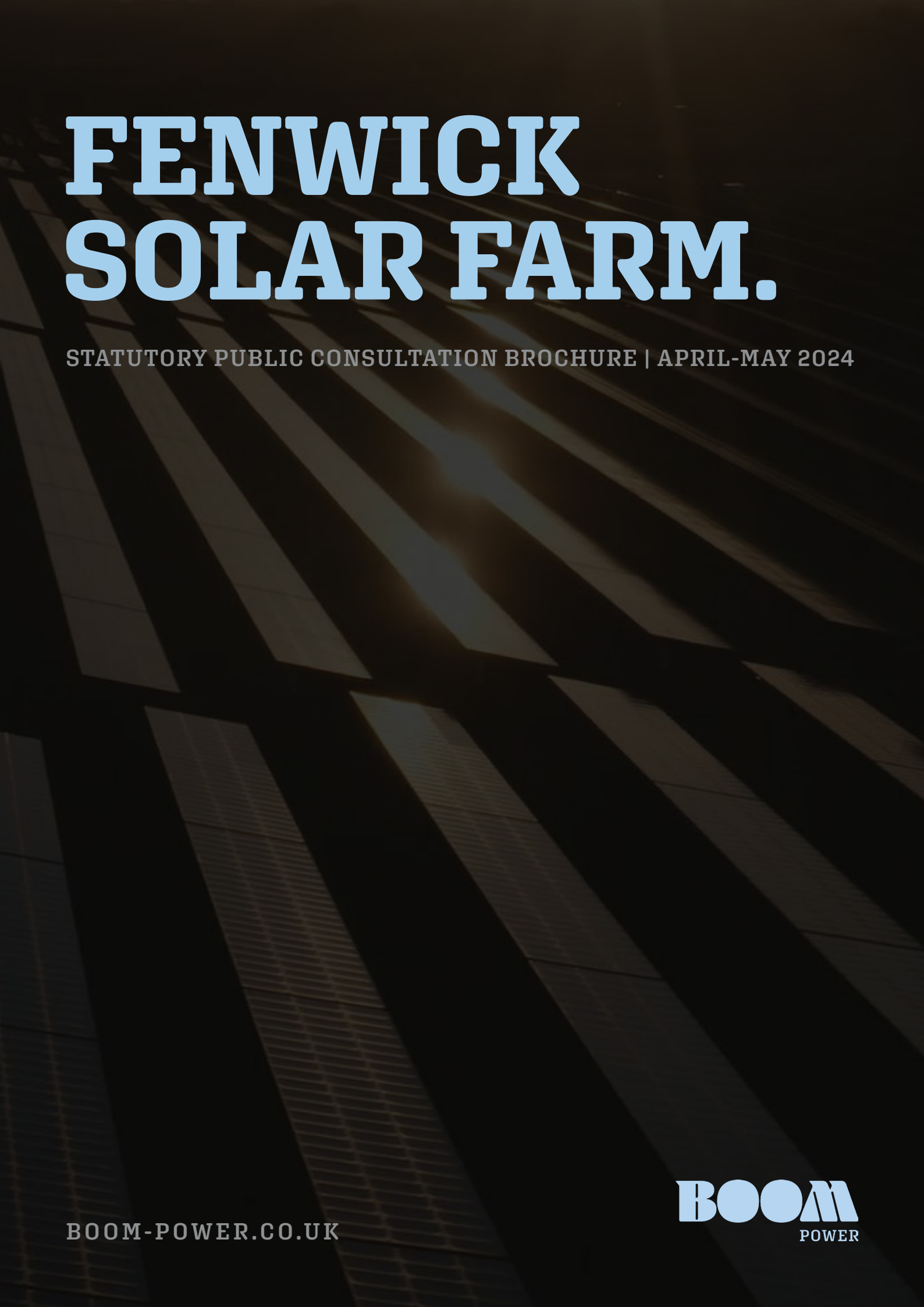
Revision Number	Date	Details
00	October 2024	DCO application

Prepared for:
Fenwick Solar Project Limited

Prepared by:
AECOM Limited

FENWICK SOLAR FARM.

STATUTORY PUBLIC CONSULTATION BROCHURE | APRIL-MAY 2024



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BOOM POWER

BUILD
OWN
OPERATE
MAINTAIN.

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). This brochure provides an overview of the Scheme and the equipment that will be required, details about our preliminary environmental information and information on how to take part in our ongoing statutory consultation.

The Scheme will generate low carbon electricity from solar photovoltaic (PV) panels on land to the east of Fenwick, in the north of the City of Doncaster borough near the town of Askern and the smaller villages of Moss, Topham and Sykehouse. 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 (NETS). Work is ongoing to determine how the Scheme will connect to the existing National Grid Thorpe Marsh Substation, whether via underground cables or by connecting directly to an overhead line that passes across the east of the Solar PV Site.

The Scheme will deliver enough carbon-free electricity to power approximately 75,000 homes, which is important at a time of increased energy insecurity, and will also contribute to the UK government's target of reaching a net-zero carbon electricity grid by 2035 and an overall net-zero carbon economy by 2050.

Our proposals to generate more renewable power in the UK 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.

As the solar farm will generate over 50 megawatts (MW) of electricity, the Scheme is classed as a Nationally Significant Infrastructure Project (NSIP), and therefore requires consent by way of a Development Consent Order (DCO) for it to be constructed, operated, and decommissioned. This is granted by the Secretary of State for Energy Security and Net Zero.

We introduced our initial proposals during a non-statutory consultation held from 27 June to 24 July 2023.

We are holding a second consultation, also known as a statutory consultation, from **18 April to 11.59pm on 31 May 2024.** This brochure explains more about the proposal, the statutory consultation, how the DCO process works, and most importantly how you can have your say.

WHY ARE WE CONSULTING?

Boom Power strives to achieve meaningful engagement with local communities and we want to hear your thoughts and ideas for our Scheme. Consultation is an opportunity for both the developer and the community to share information and feedback on a proposed development.

We have prepared a Statement of Community Consultation (SoCC) which explains how we will carry out 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 plans for this consultation.

We held a non-statutory consultation during June and July 2023 as the first step in the consultation process. We presented our initial proposals and sought the views of the community and stakeholders, which has helped us to develop our proposals and designs. The plans presented in this brochure incorporate suggestions and ideas submitted in response to our first consultation.

We are now launching a statutory consultation as required by the Planning Act 2008, which allows us to present more detailed plans of how the Scheme will be constructed and operated.

We want to hear from the local community, groups, businesses, and 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.

Following this consultation, we will prepare a Consultation Report. This report will form part of our DCO application and will explain how we considered and responded to your feedback.

WHO ARE BOOM POWER?

Boom Power is a British company. All of our solar farms are funded using private capital, with no government subsidies or other public money being used. Our team have a long track record of building, developing and operating solar farms, particularly in the UK and in Australia. To find out more about our past projects, visit our website at: **www.boom-power.co.uk**

CONSULTATION.

ENERGY REVOLUTION.

HOW TO FIND OUT MORE

In this brochure we describe our proposal for the Scheme, its location and design, any likely significant environmental effects arising from the Scheme and proposed mitigation of the identified effects, as well as how you can have your say.

All the information in this brochure and all other consultation materials listed below are available to read on our website at: **www.boom-power.co.uk/fenwick**

To view the accessible version of this information on our website, look for the logo, which is at the bottom-right hand side of the screen, and select the accessibility features you need.

CONSULTATION EVENTS

We are holding three consultation events at venues across the local area. These are drop-in sessions where you can view information and plans, meet members of the project team and ask any questions you have about the Scheme. Consultation feedback forms will be available to complete at the events or take away and return to us by freepost, or you can email your answers to the project email address. The consultation events will be held at:

DATE AND TIME	LOCATION
Friday 26 April 2024 2pm - 7pm	Alexander House (Askern Town Hall), High Street, Askern, Doncaster, DN6 0AB
Saturday 27 April 2024 10am - 3pm	Moss & Fenwick Village Hall, Fenwick Common Lane, Doncaster, DN6 0HG
Monday 29 April 2024 2pm - 7pm	Sykehouse Village Hall, Off Broad Lane, Sykehouse, Goole, DN14 9AS

Where any public consultation event is cancelled or rearranged for any reason, as much notice as practicable will be given. In the event of a booked venue becoming unavailable, or other unforeseen circumstances meaning the consultation events must be cancelled and/or rearranged, we will inform people as early as possible of the cancellation and, where possible, give details of a substitute event via the Scheme's website, on social media and notify parish councils requesting that they provide this information to residents via existing channels.

ONLINE DROP-IN Q&A SESSION

We understand that not everyone is able to come to an event in person. To give everyone the opportunity to ask questions of our project team, we are also holding an online drop-in question and answer session.

DATE AND TIME	HOW TO JOIN
Wednesday 8 May 2024 7pm - 8pm	A link to the session will be posted on the project website: www.boom-power.co.uk/fenwick

CONSULTATION MATERIALS

In addition to this consultation brochure, a range of documents have been produced for the consultation which explain more about our proposals and can be found on our website:

- Consultation feedback form – where you can share your comments on the proposals
- Plans of the proposed solar farm and cable route
- Statement of Community Consultation (SoCC) – sets out how and when we will consult with stakeholders
- Non-statutory consultation report – summarises the results of the consultation carried out during June - July 2023
- Preliminary Environmental Information Report (PEIR) – details the results of environmental surveys to date, and provides the preliminary assessment of the potential impacts of the solar farm and how we propose to avoid or reduce these effects
- Non-Technical Summary of the PEIR – provides a summary of the environmental assessment findings

All of these are available for inspection for free from our website at: **www.boom-power.co.uk/fenwick**

DOCUMENT INSPECTION VENUES

Copies of the consultation documents are available to view throughout the consultation period at the document inspection venues listed to the right. Please note that opening times of these venues may be subject to change. Please check with the venue before attending.

Consultation materials are available in the following formats at the Document Inspection venues:

HARD COPIES:

- Consultation brochure
- Feedback form
- Plans of the proposed solar farm and cable route (reference copy only - cannot be taken away)
- Statement of Community Consultation (SoCC) (reference copy only - cannot be taken away)
- Non-statutory consultation report (reference copy only - cannot be taken away)
- Non-Technical Summary of the Preliminary Environmental Information Report (PEIR) (reference copy only - cannot be taken away)

USB COPIES:

A number of preloaded USBs containing the SoCC as well as consultation materials forming part of the statutory consultation (including the PEIR) will also be made available at these venues free of charge, with consultees able to take these USBs home. Documents can also be inspected on computers at the library document inspection venues, either by using the USBs available or online via our website. Please check in advance with the library in case of any costs associated with internet access. Computers to inspect the documents are not available at The Baxter Arms or The Old George Inn.

In the event of a document inspection venue becoming unavailable, or other unforeseen circumstances meaning the venue cannot open, we will publish alternative ways to inspect the documents on our website.

DELIVERY OF HARD-COPY MATERIALS:

Copies of hard copy consultation materials and USBs can be made available on request. Requests will be considered on a case-by-case basis and may incur a reasonable copying charge. Please contact us using the details provided at the back of this brochure.

DOCUMENT INSPECTION VENUE	**OPENING HOURS** (correct at the time of publication)	
Askern Community Library Station Road, Askern, Doncaster, DN6 0LA	Monday Tuesday Wednesday Thursday Friday Saturday Sunday	10.00am to 1.00pm 10.00am to 1.00pm 10.00am to 1.00pm 10.00am to 1.00pm 10.00am to 1.00pm 10.00am to 1.00pm Closed
Snaith Library 27 Market Place, Snaith, Goole, DN14 9HE	Monday Tuesday Wednesday Thursday Friday Saturday Sunday	Closed 2.00pm to 6.00pm Closed 10.00am to 4.00pm Closed 10.00am to 12.00pm Closed
Thorne Library The Vermuyden Centre, Field Side, Thorne, Doncaster, DN8 4BQ	Monday Tuesday Wednesday Thursday Friday Saturday Sunday	8.40am to 1.00pm and 1.30pm to 5.00pm 8.40am to 1.00pm and 1.30pm to 5.00pm 8.40am to 1.00pm and 1.30pm to 5.00pm 8.40am to 1.00pm and 1.30pm to 5.00pm 8.40am to 1.00pm and 1.30pm to 5.00pm 8.40am to 1.00pm and 1.30pm to 5.00pm 8.40am to 1.00pm and 1.30pm to 5.00pm
Edenthorpe Community Library Communal Hall, Bardon Road, Edenthorpe, Doncaster, DN3 2ND	Monday Tuesday Wednesday Thursday Friday Saturday Sunday	2.00pm to 5.00pm Closed 9.30am to 12.30pm Closed 2.00pm to 5.00pm 10.00am to 12.00pm Closed
The Baxter Arms Fenwick, Fenwick Lane, Doncaster, DN6 0HA	Monday Tuesday Wednesday Thursday Friday Saturday Sunday	4.00pm to 11.00pm 4.00pm to 11.00pm 4.00pm to 11.00pm 12.00pm to 11.00pm 12.00pm to 11.00pm 12.00pm to 11.00pm 12.00pm to 11.00pm
The Old George Inn Broad Lane, Sykehouse, DN14 9AU	Monday Tuesday Wednesday Thursday Friday Saturday Sunday	9.30am to late (approx 10.00pm) 9.30am to late (approx 10.00pm) 9.30am to late (approx 10.00pm) 9.30am to late (approx 10.00pm) 9.30am to late (approx 10.00pm) 9.30am to late (approx 10.00pm) 9.30am to late (approx 10.00pm)

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.

PROPOSAL.

FOR A GREENER TOMORROW.

LOCATION

The boundary shown on the proposed site map (pages 16 - 27) illustrates all the land that may form the Scheme – a proposed land area of 536 hectares (ha) for the total scheme (421 for Solar PV Site and 115 for Grid Connection Corridor).

Not all land within the boundary (shown on pages 16 - 27) will be developed. Some will be set aside as buffer zones from the field's edge to the nearest panels. Some areas will be set aside for environmental mitigation, including planting and creation of wildlife habitats. Existing public rights of way in these fields will be preserved, but with some temporary diversions put in place in certain areas.

There will be spaces of at least fifteen metres between the centre of the paths and the solar farm fences. Solar panels will be located a further five metres from the fence into the fields. Existing trees and hedgerows will provide visual screening and maintain ecological habitats. This will be further improved by allowing hedgerows to grow taller and closing any gaps between hedgerows to aid screen, and also by planting new hedgerows, shrubs and trees.

THE SOLAR FARM

Solar PV panels would be mounted on fixed metal mounting structures arranged in rows facing south. Fixed south facing systems are the most commonly seen layout for utility scale solar PV facilities in the UK to date.

A maximum of 28 field stations will be distributed around the solar farm amongst the panels and will all be at a distance of at least 250 m from residential properties. These will contain electrical equipment such as inverters, switchgear and a transformer typically housed in shipping containers and externally finished in keeping with the surroundings. There will be up to four such units per field station.

Battery Energy Storage Systems (BESS) will be used at the solar farm to allow any excess generated electricity to be stored, exported and imported to NETS when demand is high. The batteries, likely housed within shipping container-style units, will be located within the BESS Area at a distance greater than 500 m from residential properties and greater than 80 m from Public Rights of Way to reduce visibility.

The field stations and the BESS will connect via underground cables to the On-Site Substation. The maximum height of the On-Site Substation structures will be 13 m, although most equipment will be at a lower level than this. It will also contain a control building which will be approximately 20 m in length, 20 m width and 6 m height, and will also contain welfare facilities.

The On-Site Substation will connect via underground cable to the existing National Grid Thorpe Marsh Substation, if that is the option used for our grid connection. Another option being currently explored is to connect the On-Site Substation to existing overhead power lines within the Solar PV Site.

More detail regarding the components of the solar farm is provided on page 11.

LANDSCAPE

We will seek to minimise the removal of trees and hedgerows for cable connections, security fencing or access requirements across the different landholdings as far as reasonably practicable. Following construction, a programme of site reinstatement and habitat creation and enhancement would take place. We will plant additional trees and hedgerows to enhance the screening of the solar farm from view and improve local habitats.

Stock proof mesh fencing will be erected around the solar PV areas at a height of up to 2.2 m. There will be a minimum of a 5 m buffer between the field boundary and the fence line. The solar PV panels will be sited at least a further 5 m inside the fence line.

CONSTRUCTION

Construction and deliveries will be governed by a construction traffic management plan and agreed with the local authority prior to any work starting.

The core construction working hours are defined as:

- Monday to Friday from 07.00 to 19.00 (daylight hours permitting);
- Saturday from 07.00 to 13.00 (daylight hours permitting); and
- No Sunday or Bank Holiday working unless crucial to construction (for example for Horizontal Directional Drilling (HDD) which must be a continuous activity) or in an emergency.

Emergency working may extend beyond the timescales quoted above.

Working hours would be shortened if working would necessitate artificial lighting and, therefore, the working day would be shorter in the months with reduced daylight hours. It is not possible to avoid working over winter due to the length of the construction programme. However, cabling and groundworks would be prioritised during the drier summer months where practicable.

As an exceptional activity, Horizontal Directional Drilling (HDD) may require 24-hour working, for example to cross the Thorpe Marsh Drain flood defence crossing. 24-hour working is to be agreed in advance with the relevant Local Planning Authority (City of Doncaster Council).

Noisy work near residential properties, such as use of power tools, would be limited to between 08.00 and 18.00 from Monday to Friday and 08.00 to 13.00 on Saturdays.

Additionally, quiet non-intrusive works using electric hand tools only, such as the installation of Solar PV Panels may take place over longer periods during the summer and other quiet non-intrusive works such as electrical testing, commissioning and inspection may take place over longer periods throughout the year.

IN A SNAPSHOT.

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

PROPOSED SITE MAP.

Figure 1 of 6
Indicative layout for purposes of forming the Preliminary Environmental Information Report (PEIR).

LEGEND

- Site Boundary
- Watercourse
- High Pressure Fuel Pipeline
- Existing Overhead Line (OHL)

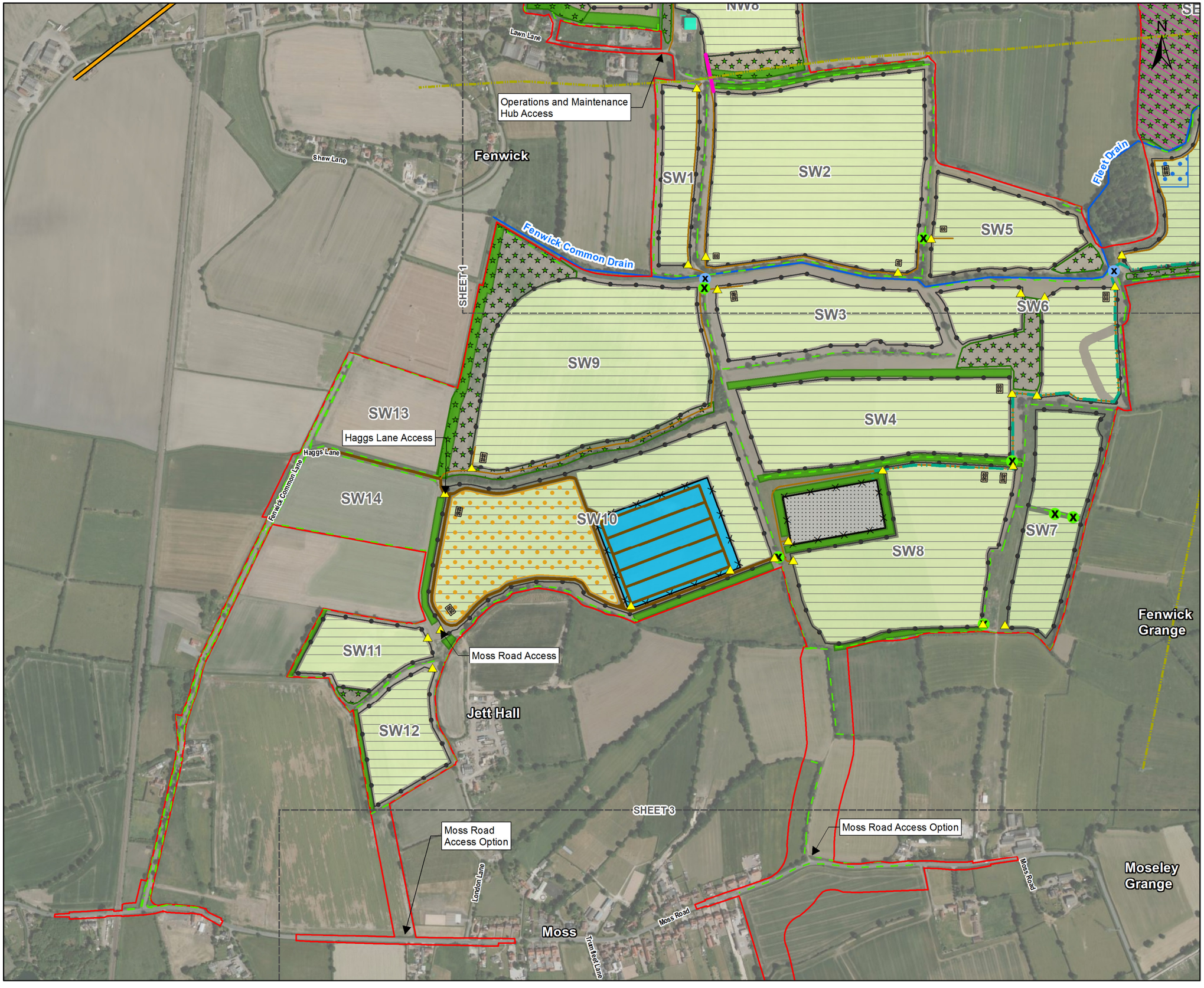
Scheme Element

- Perimeter Fencing
- Internal Access
- Horizontal Directional Drilling (HDD) Location
- Grid Connection Line Drop
- Existing Hedgerow to be Gapped Up
- Proposed Access Gate
- Watercourse Crossing
- Hedge Removal
- Field Station
- Operations & Maintenance Hub
- Indicative Location of Temporary Construction Compound
- Solar PV Panels (Land Beneath and Surrounding Panels to be Grassed)
- Proposed Screening Area
- Grid Connection Line Drop Compound
- Ecology Mitigation Area
- Heritage Buffer Area

NOTES

PROPOSED SITE MAP.

Figure 2 of 6
Indicative layout for purposes of forming the Preliminary Environmental Information Report (PEIR).



LEGEND

- Site Boundary
- Watercourse
- High Pressure Fuel Pipeline
- Existing Overhead Line (OHL)

Scheme Element

- Perimeter Fencing
- Pallisade Fencing
- Internal Access
- Internal Fire Service Access
- Horizontal Directional Drilling (HDD) Location
- Grid Connection Line Drop
- Existing Hedgerow to be Gapped Up
- Proposed Access Gate
- Watercourse Crossing
- Hedge Removal
- Field Station
- Operations & Maintenance Hub
- Main Construction Compound
- Indicative Location of Temporary Construction Compound
- BESS Area
- Grid Connection Substation
- Solar PV Panels (Land Beneath and Surrounding Panels to be Grassed)
- Proposed Screening Area
- Ecology Mitigation Area
- Heritage Buffer Area

NOTES

PROPOSED SITE MAP.

Figure 3 of 6
Indicative layout for purposes of forming the Preliminary Environmental Information Report (PEIR).

LEGEND

- Site Boundary

Scheme Element

- Horizontal Directional Drilling (HDD) Location
- Existing Hedgerow to be Gapped Up
- Indicative Location of Temporary Construction Compound
- Proposed Screening Area

NOTES

PROPOSED SITE MAP.

Figure 4 of 6
Indicative layout for purposes of forming the Preliminary Environmental Information Report (PEIR).

LEGEND

- Site Boundary
- Watercourse

Scheme Element

- Horizontal Directional Drilling (HDD) Location
- Existing Hedgerow to be Gapped Up
- Indicative Location of Temporary Construction Compound

NOTES

PROPOSED SITE MAP.

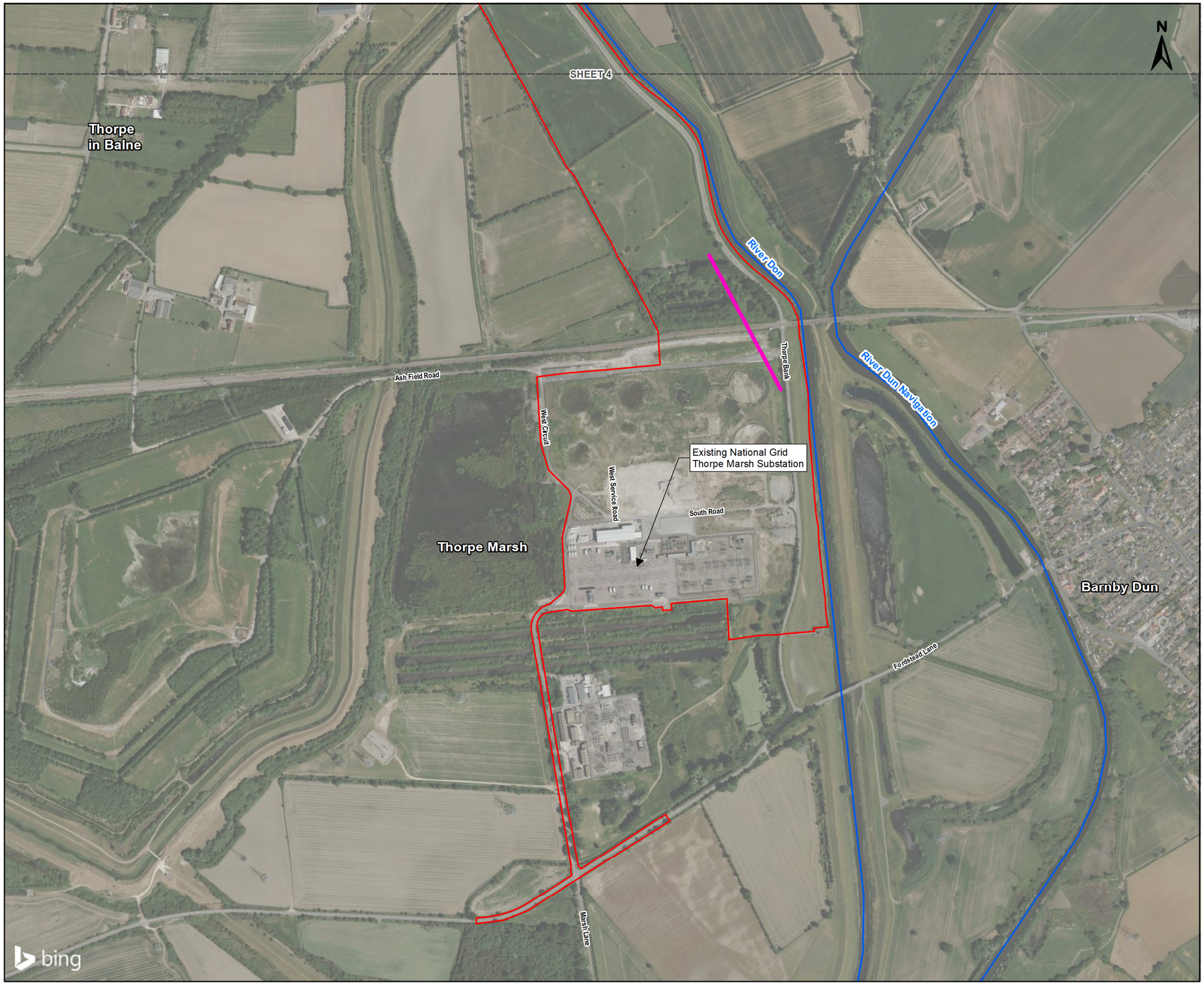


Figure 5 of 6
Indicative layout for purposes of forming the Preliminary Environmental Information Report (PEIR).

LEGEND

- Site Boundary
- Watercourse

Scheme Element

- Horizontal Directional Drilling (HDD) Location

NOTES

PROPOSED SITE MAP.

Figure 6 of 6
Indicative layout for purposes of forming the Preliminary Environmental Information Report (PEIR).

LEGEND

Site Boundary

NOTES

SCHEME DESIGN EVOLUTION.

Following our non-consultation in June and July 2023 we have further developed and refined our proposals to take account of feedback received at the consultation, ongoing environmental surveys, and discussions with and stakeholders.

The changes are described in the 'Changes following non-statutory consultation' section of this consultation brochure and include:

- Additional land has been incorporated into the proposed Solar PV Site in order to provide additional flexibility and to accommodate additional areas for environmental mitigation;
- Refinement of the Grid Connection Corridor to a much narrower route;
- Confirmation that the scheme will use fixed south facing solar PV panels and not fixed east-west facing panels which require a far greater ground cover ratio or tracking panels which could be taller and require increased land space; and
- Refinement of the proposals for BESS so that they would be located in a single area within the Solar PV Site and greater than 500 m from any residential property.

The design of the project will continue to be developed and refined following this statutory consultation. The ongoing design process will be guided by the vision and series of design principles that are set out to the right (page 29). The objective of the design work will be to deliver the scheme in such a way that the vision and design principles are achieved.

We have also extended the red line boundary of the scheme to include the High Street and Station Road junction in Askern. This is to allow construction vehicles access to the Solar PV Site via the A19, Station Road and Moss Road, as vehicles will need to navigate the signalised junction in Askern.

VISION

The Scheme will be a responsible neighbour that is situated sensitively within its surroundings, seeking to maximise biodiversity whilst mitigating environmental impact. The project will help to meet the urgent need for a secure, affordable and decarbonised UK electricity system by providing reliable, low-cost energy, contributing significantly to energy production and addressing the causes of climate change.

DESIGN PRINCIPLES

CLIMATE

- Efficiently generate a large amount of renewable energy for supply to the National Electricity Transmission System, maximising use of the available grid connection capacity, and contribute towards the UK meeting its net zero targets.
- Minimise embodied carbon by selecting low-carbon materials where practicable, utilising efficient designs and implementing sustainable practices throughout construction, operation and maintenance and decommissioning.
- Ensure the Scheme is designed to be resilient to future climate change.

PEOPLE

- Demonstrate considerate neighbourly conduct during the construction, operational and decommissioning phases of the Scheme.
- Embrace open and transparent interactions with nearby communities, stakeholders, and residents, leveraging their local insights to mitigate and enhance the Scheme.
- Maintain existing levels of public right of way connectivity through and across the site and enhance routes within the Order limits, where practicable.

PLACE

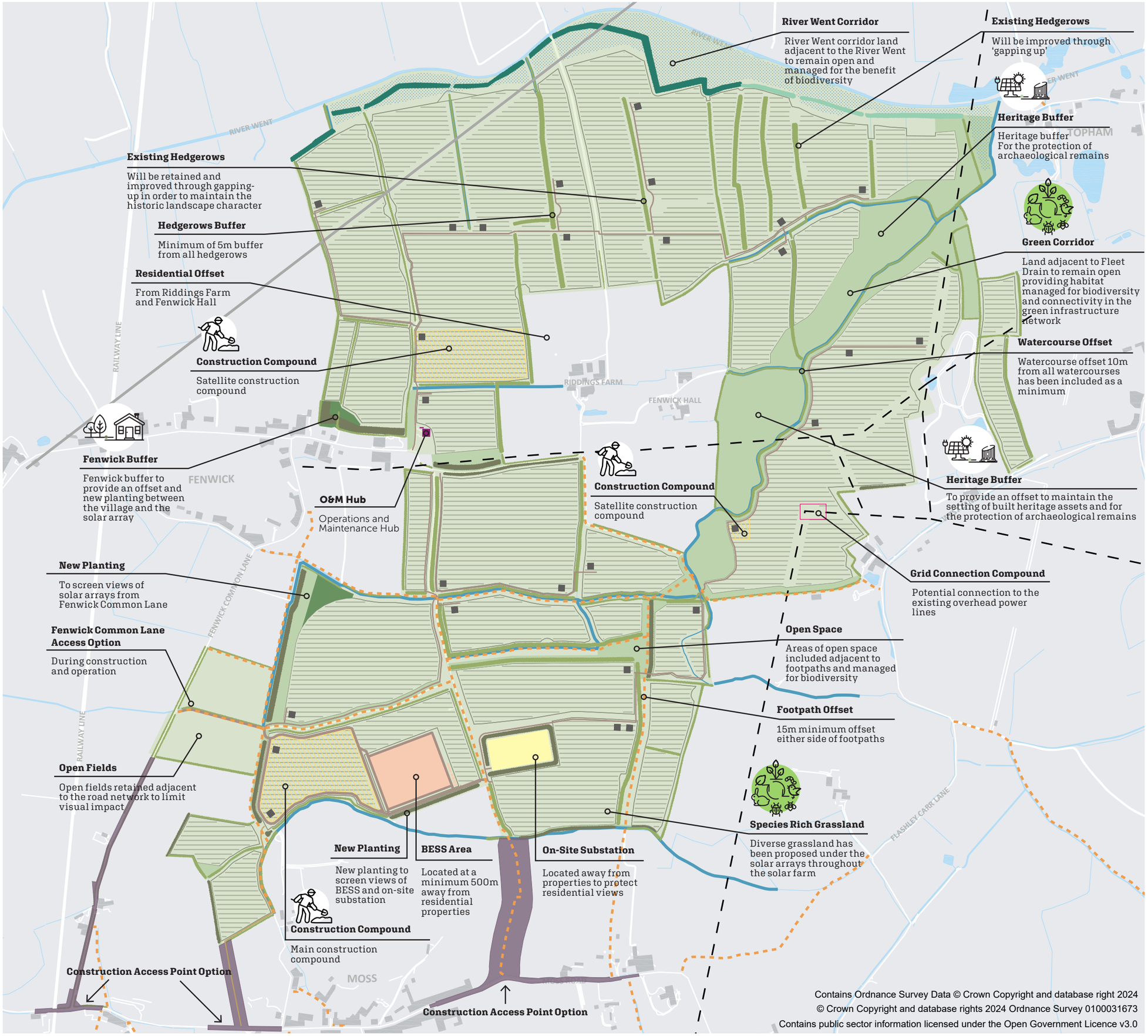
- Seek to establish spaces that can serve for energy generation, biodiversity improvement, water and flood control, and green infrastructure.
- Seek to safeguard the water environment and be resilient from flooding both now and in the future.
- Site the Scheme sensitively in the landscape, respecting the distinctive and unique character of settlements adjacent to the site and the surrounding countryside and exploring reasonable opportunities to mitigate visual impacts.
- Develop the Scheme sensitively with regard to cultural heritage assets and their settings.

VALUE

- Acknowledge the ever-changing and progressing state of technology and strive to use current and advanced options to optimise efficiency.
- Seek opportunities for local communities and businesses to benefit economically through promoting employment opportunities locally and opportunities for local business to tender to supply services in delivery of the Scheme.

INDICATIVE MASTERPLAN.

This indicative masterplan is for the purposes of statutory consultation. This masterplan is subject to change following the feedback received, further environmental assessment and design development.



KEY

- Residential areas
- River/Lakes
- Railway line

PROPOSED MITIGATION / ENHANCEMENT

- Proposed field stations
- Proposed O&M Hub
- Proposed hedgerow/vegetated boundary
- Proposed gapping up of existing hedgerow / hedgerow trees
- Proposed vegetated boundary with a structure hierarchy of wet-loving trees and scrub
- Proposed gapping up of existing hedgerow/ hedgerow trees with of wet-loving species (Ensuring no under-planting of ancient or veteran trees)
- Proposed species-rich native grassland mix
- Proposed Grassland
- Proposed scrub
- Proposed temporary construction compounds
- Proposed BESS
- Proposed solar panels
- Proposed substation
- Proposed potential grid connection compound
- Access Option

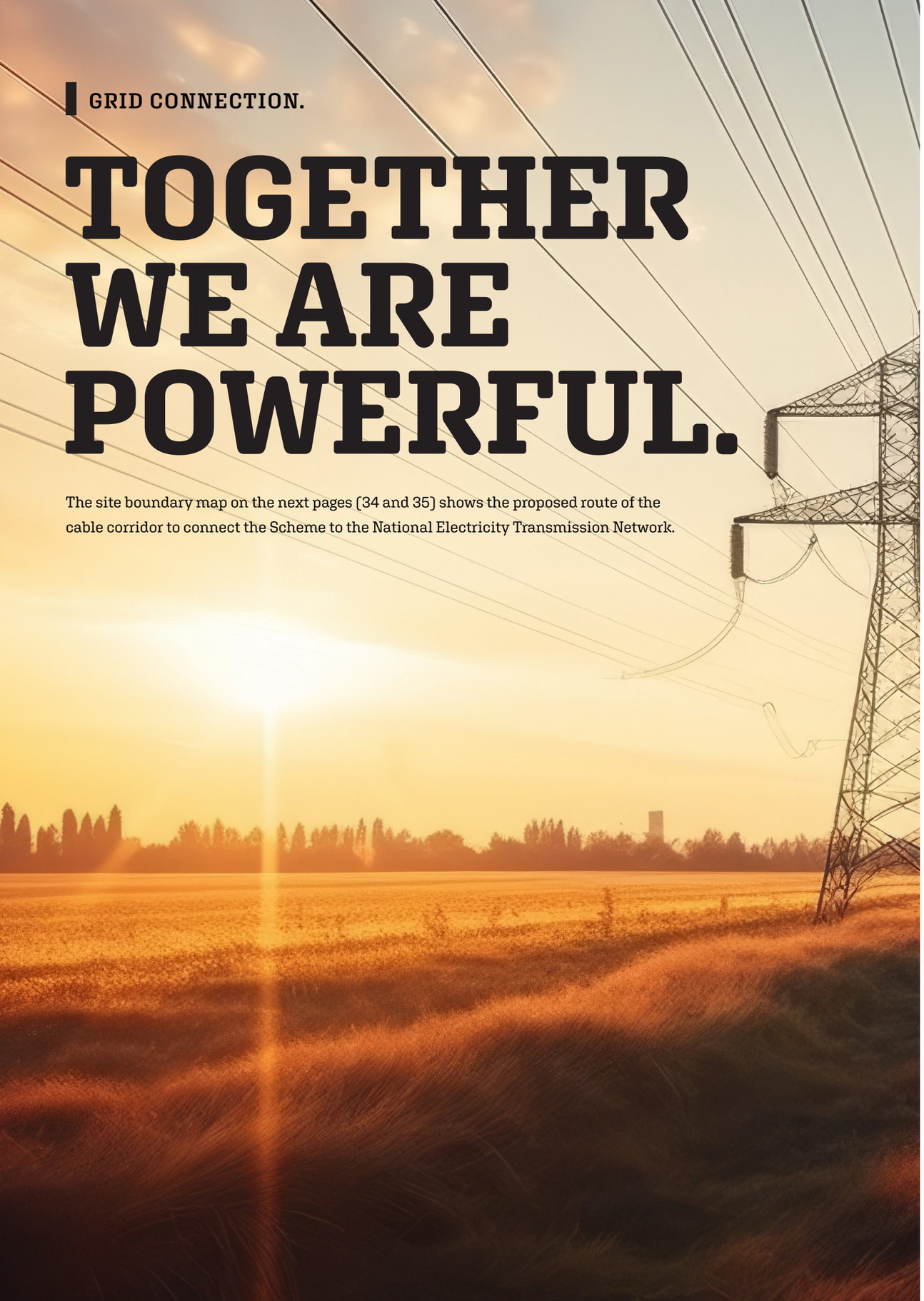
EXISTING INFRASTRUCTURE / FEATURES

- PRoW
- Drains
- Overhead Power Lines
- Conserve and enhance the existing open riparian mosaic

GRID CONNECTION.

TOGETHER WE ARE POWERFUL.

The site boundary map on the next pages (34 and 35) shows the proposed route of the cable corridor to connect the Scheme to the National Electricity Transmission Network.



GRID CONNECTION CORRIDOR

When you turn on an electrical device at home, it isn't possible to say where that electricity has come from as the transmission networks are all interlinked. To get the electricity generated at the solar farm to homes and businesses, we need to connect to the National Electricity Transmission Network (NETS) which supplies electricity to where the demand is required, locally or nationally.

The solar farm will connect to the existing National Grid substation at Thorpe Marsh where it joins the NETS. Work is ongoing to determine how the Scheme will connect to Thorpe Marsh Substation, whether via underground cables or by connecting directly to an overhead line that passes across the east of the Solar PV Site.

CONNECTING TO NETS VIA UNDERGROUND CABLES

The Grid Connection Corridor now being proposed has been designed to take a direct route whilst following existing features such as roads and avoiding sensitive receptors as far as practicable, such as habitat designations, residential and commercial properties, heritage assets and a large number of land interests. We'll be refining it further ahead of our DCO Application submission based on the outcomes of ongoing studies and surveys, as well as feedback from this consultation. The cable route inside the corridor will follow field edges as far as practicable to minimise disturbance to agricultural land, or cables will be run in the roadside.

The smaller cables between the field stations and the On-Site Substation will be buried up to 1.4 m deep, in a trench that will be of varying widths depending upon how many circuits are contained in it, typically starting at 0.8 m wide. The Grid Connection cables, which will go from the On-Site Substation to the National Grid substation at Thorpe Marsh, will be approximately 1.2 - 1.4 m deep, depending on other utilities in the area, and in a trench approximately 0.7 m wide. This depth means that normal agricultural activity can take place on the land above the cable.

Horizontal directional drilling will be used to place cable ducts under the Engine Dike, Thorpe Marsh Drain and the Carcroft Junction to Stainforth Junction Railway Line so that the cable can pass under these without any need for overhead pylons.

GRID CONNECTION LINE DROP

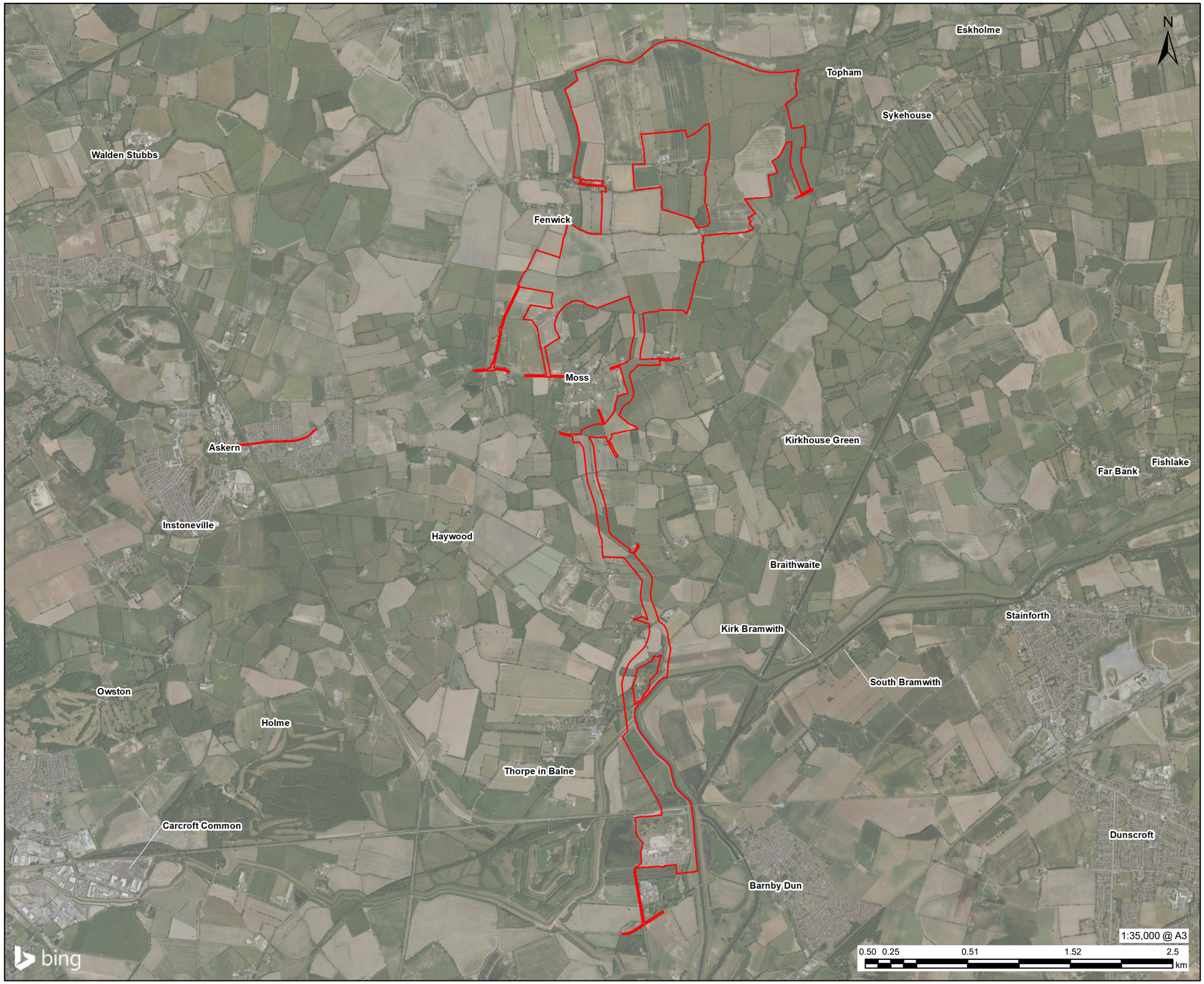
We're also exploring the possibility of connecting the On-Site Substation to the National Grid via a line drop from existing overhead power lines running north-south across the east of the Solar PV Site. The On-Site Substation would be at the same location but would also include a cable connection to 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.

WHAT IS HORIZONTAL DIRECTIONAL DRILLING?

First used in the 1920s, this is a method of installing cables underground. This is used routinely in construction to avoid features such as rivers, busy roads or buried infrastructure. We will use this method for installing the cables that are needed to pass under the rivers, railway and some roads. A drill will go into the earth and bend the line it takes so that it passes completely under an obstacle, such as a river, and come out the other side. A duct is then installed which will be used for the cables.

SITE BOUNDARY PLAN.



LEGEND

Site Boundary

NOTES

CONSTRUCTION AND OPERATION.

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 solar 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 solar 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 solar 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 solar PV panels and will flow into the National Grid or be stored in the BESS.

HOW WILL EVERYTHING BE TRANSPORTED DURING CONSTRUCTION?

Heavy Goods Vehicles (HGVs) will bring most construction materials to the Solar PV, 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) 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. Different stages of construction will need different numbers of HGV deliveries. The routes to be used and timings for deliveries and staff will be set out in a Construction Traffic Management Plan. The Framework Construction Traffic Management Plan will be submitted with the DCO application. A road condition survey will be carried out on local roads identified ahead of construction starting. Where necessary, these roads will be repaired to the same or better standard once the solar farm is complete. Where new passing places are installed so that existing traffic can continue to move clearly, they will be left in place for the long-term benefit of the community. You can find out more about construction and operational traffic in the PEIR Volume I Chapter 13: Transport and Access.

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?

No Public Rights of Way (PRoW) will be permanently closed up as a result of our works on the Scheme. The footpath Public Right of Way Sykehouse 29, which runs immediately south of Bunfold Shaw, will however 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 PRoW may be slightly altered for a short time while we install cables across these paths, however no PRoW will be permanently closed.

WHAT ONGOING MAINTENANCE WILL BE NEEDED?

Once the solar farm is constructed and fully commissioned, the operational phase will begin. The design life of the Scheme is 40 years from the final commissioning, and is currently anticipated to be 2030 to 2070. In general, operation and maintenance of the solar farm will involve vegetation management, regular inspection of the fences, and monitoring of the operational equipment to ensure the continued effective operation of the Scheme. CCTV will be mounted inside of the perimeter fences on separate poles, which will face along the fence and inwards only. In the UK climate, Solar PV Panels are largely self-cleaning. Some sites can operate without the need to be cleaned, whereas some sites require cleaning every two years. Where additional cleaning is needed this will be done with a large water brush, similar to the kind found in many car washes, mounted on a tractor.

DIVERSIFY FARMING.

DECOMMISSIONING PROCESS

At the end of the solar farm's life, equipment will be removed and the fields can return to their original use, such as agriculture. The solar PV panels will be recycled, and the mounting poles pulled out of the ground, returning the land to the same state as it is currently. The land will retain greenfield status which will protect it from other forms of development.

None of us know what the need for electricity will be in the future, or how much of this will need to come from solar or other low-carbon sources. It is also impossible to say if the same planning processes will be in place. However, under the current planning legislation, if anyone wants to build a new solar farm on the same land, a new application will need to be submitted.

The future of the On-site Substation, including associated control and metering buildings and export cables, will be assessed at the time of decommissioning. It is common practice for such infrastructure to be retained and used for another purpose after the development they were originally installed to support is decommissioned. Therefore, it is possible that the On-site Substation and Grid Connection Cables may remain in place/operational after decommissioning of the Scheme. This cannot be confirmed at this time and will depend upon demand closer to the decommissioning date.

A Framework Decommissioning Environmental Management Plan (DEMP) will be prepared and agreed with the local planning authority before the decommission process begins.

We estimate that the decommissioning period will take between 12 and 24 months.

BENEFITS

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. Sheep grazing can help to diversify farming in the area, adding an additional income stream for farmers.

Compared to arable farming, solar farms can result in 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 can fast become a haven for wildlife.

The construction of the solar farm will present opportunities for local employment and will indirectly support local businesses such as shops, petrol stations and hotels.

We want local people to share in the benefits that the solar farm can bring. The electricity generated will transfer directly into the National Grid, so cannot be used to directly reduce bills for local people. However, a proportion of the expected money made by the solar farm will be invested into the local community. The project will also generate substantial business rates for Doncaster City Council, providing a significant source of income for the council to redistribute as it sees fit for the benefit of the local community.

We are exploring the use of a community benefit fund, and our aim would be to work with local organisations that will best spend the money to support the community. You can help identify potential recipients for this by letting us know of local causes and organisations as part of your response to this consultation.

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.

Key topics where we identified the potential for significant effects, and mitigation measures are shown in the table to the right. You can find more information on the environmental impacts and proposed mitigations in the Non-Technical Summary or the specific chapters of the PEIR.

TOPIC	PROPOSED MEASURES TO REDUCE EFFECT
Climate change PEIR Volume I Chapter 6: Climate Change	The overall impact of the solar farm is expected to be significantly beneficial as it will produce low-carbon electricity, helping the UK achieve its target of net zero by 2050 by removing dependency on gas fired power stations. Greenhouse gas emissions resulting from constructing the solar farm due to material mining, energy and fuel use, and transport, are small compared to the benefits the solar farm will bring. Future climate conditions will be taken into account when developing the detailed design of the solar farm.
Landscape and Visual Amenity PEIR Volume I Chapter 10: Landscape and Visual Amenity	One of the design aims is to sensitively integrate the solar farm into the local landscape. New structural vegetation will be planted to reinforce and complement the existing network of hedgerows and trees across the Site. This will help to screen solar PV panels, BESS and electrical equipment from view, as well as enhance wildlife connections across the Site. PV panels and other elements of the solar farm, including the BESS, will be set back from properties and Public Rights of Way, and screened using vegetation where possible. During the construction period and the first few years of operation, planting proposed as part of the scheme would be yet to be fully established, meaning some receptors may be visible. Where receptors are screened by proposed planting the visual effects of the Scheme would decrease over time as most views become filtered and eventually screened by vegetation. Glint and glare will be minimised by using anti-reflective coating on the solar PV panels. Together with the screening planting, glint and glare impacts have been considered and mitigated where necessary.
Agricultural land PEIR Volume I Chapter 12: Socio-Economics and Land Use	The site for the solar farm has been selected and designed to minimise the impacts on Best and Most Versatile (BMV) agricultural land; and research and field surveys confirm that the majority of the land is non-BMV. The soil beneath the solar panels does not need to be lifted to install the panels so the soil profile will not be disturbed. The physical footprint of the solar farm components which require foundations or hard-standing, such as field stations, on-site substations and access tracks, makes up a small proportion of the solar farm area, which means the soil disturbance will be minimal. The change from arable agriculture to grassland is temporary as the land can be returned to arable farming upon decommissioning of the solar farm. The temporary shift from arable to grassland is predicted to result in positive changes to soil structure and soil carbon content. The change of agricultural land into wildlife habitat is likely to lead to significant benefits to ecology. The land within cable corridors will be reinstated after construction and will remain available for normal agricultural use.

TOPIC	PROPOSED MEASURES TO REDUCE EFFECT
Traffic, access to open space and active travel PEIR Volume I Chapter 13: Transport and Access, PEIR Volume 1	The main impact on traffic and transport is likely to be from staff vehicles and HGVs during construction. The movement of construction traffic can also reduce pedestrian amenity and deter the local residents from active travel. To address this, the routes to be used and timings for deliveries and staff will be defined in a Construction Traffic Management Plan (CTMP) before construction begins, and all construction staff will adhere to this. The Public Right of Way network will remain largely unaffected during construction. We will however, require one permanent Public Rights of Way diversion (Sykehouse 29). The permanent diversion will follow the path that we understand residents typically use, as gathered from previous consultation of the public, and engagement with the council. As the operational solar farm requires little maintenance there will be limited traffic during operation.
Noise and vibration PEIR Volume I Chapter 11: Noise and Vibration, PEIR Volume 2	Measures laid out within the Construction Environmental Management Plan like careful positioning of noisy machinery away from residential properties, regular noise monitoring, notifying local residents of any noisy works and adhering to the agreed working hours will help reduce the noise effects on the local residents during construction. Noise modelling results suggest that the operational solar farm will not significantly change the noise baseline for the local residential receptors. This is achieved by locating the electrical equipment such as the on-site substations, BESS and field stations away from receptors.
Ecology PEIR Volume I Chapter 8: Ecology	The design of the Scheme avoids all sites statutorily designated for their biodiversity value and avoids, or seeks to minimise, impacts on sites that are non-statutorily designated for their biodiversity value. Measures embedded within the Scheme design ensure that designated sites are not adversely impacted during construction, operation or decommissioning e.g. through site construction routes away from designated sites, incorporating suitable buffer zones and erection of temporary construction fencing to avoid incursion into exclusion zones. Furthermore, an Ecological Clerk of Works (ECoW) will oversee works, as necessary, to ensure embedded mitigation measures are implemented. The Scheme has also been designed to avoid key nature conservation and ecological features present within or adjacent to the Site. A number of buffers from key ecological features will be adhered to, and these can be read in further detail in Chapter 9 of the PEIR. Additionally, a Framework CEMP (included as PEIR Volume I Appendix 2-1: Construction Environmental Management Plan) outlines the good practice measures that will be implemented during construction of the Scheme to mitigate construction-related effects on biodiversity associated with dust deposition, air pollution, pollution incidents, water quality, light, noise and vibration.

TOPIC	PROPOSED MEASURES TO REDUCE EFFECT
Water environment PEIR Volume I Chapter 9: Water Environment	We have assessed the likely significant effects of the Scheme on the water environment. The water environment includes surface water bodies (e.g. rivers and streams), groundwater bodies, as well as flood risk and drainage. Embedded mitigation in the design, the implementation of good practice during construction, and the implementation of a Surface Water Drainage Strategy to minimise flood risk will be implemented to minimise adverse effect on the water environment. The Surface Water Drainage Strategy, which is set out in PEIR Volume I Chapter 9: Water Environment, has been developed to mimic natural drainage as far as practicable using Sustainable Drainage Systems, and to provide a number of other benefits to ecological habitat creation. The design of the Scheme will take account of the flood risk in the area. The majority of the south and west areas of the Solar PV Site are located within Flood Zone 1 (low risk). The north and east areas of the Solar PV Sire are located within Flood Zone 2 (medium risk) and Flood Zone 3 (high risk). The areas of the site shown to be at high risk flooding benefit from the presence of flood defences. The heights of solar PV panels and equipment foundations, including the BESS, will be enough to avoid them being affected by flooding. The Scheme will not increase flood risk outside of the site. Through the use of embedded mitigation, there would be no significant effects on the water environment from the Scheme.
Cultural heritage PEIR Volume I Chapter 7: Cultural Heritage	The location and the layout of the solar farm minimises impacts on designated cultural heritage assets and their settings, such as scheduled monuments, listed buildings and conservation areas, and on non-designated assets, such as historic buildings and landscape, and archaeological remains. Archaeological surveys are ongoing. The results of field surveys will identify the location of buried archaeological remains and allow the solar farm to be designed around them. Where avoiding archaeology is not practicable, appropriate archaeological mitigation, such as excavation, will be undertaken to ensure remains are fully understood and recorded.

As a result of the above mitigation measures 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 from our website at: **www.boom-power.co.uk/fenwick**

LOCATION.

HARVESTING ENERGY IN BALANCE WITH NATURE.

WHY HERE?

There are many factors which make this site suitable for a solar farm.

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.

Further explanation of the reasons for choosing this location are provided in PEIR Volume I Chapter 3:Alternatives and Design Evolution.

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.

DEVELOPMENT CONSENT ORDER (DCO).

SHAPING THE FUTURE.

THE DCO PROCESS

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.

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 the feedback form. You can post it to FREEPOST FENWICK SOLAR FARM or bring it to one of our consultation events, where our project team will collect your feedback.

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 at the back of this brochure.

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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