

# Welcome

## Introduction

Welcome and thank you for attending our consultation event today. We are developing proposals for Tillbridge Solar - a new solar and energy storage scheme (the "Scheme") within Lincolnshire.

## Our statutory consultation

We have been carrying out detailed assessments on land to the east and south east of Gainsborough and to the north of Lincoln, which helped us determine the most suitable location for the Scheme.

After continuing this work and introducing our emerging proposals in 2022, through a series of collaboration workshops, we are now inviting you to take part in our statutory consultation from **Tuesday 30 May** to **Tuesday 11 July 2023**.

We encourage you to read the information on display today alongside our project information booklet. You can then provide your thoughts by completing a feedback questionnaire – in hard copy or online.

It's important that you respond by 23.59 on **Tuesday 11 July 2023**. Responses received after this time may not be considered.

Our team is here today to answer any questions you have about the Scheme. Please share your views with us – so we can develop the proposals with you in mind.

## Key statistics



The Scheme would comprise an area of approximately 1,400 hectares (ha) of predominantly agricultural land, with approximately 900 ha being considered for the solar PV panels and associated infrastructure and approximately 500 ha being considered for environmental mitigation and enhancement.



The Scheme would connect to the national grid at Cottam substation via underground electricity cables, approximately 16 km in length.



We are anticipating that the Scheme would be fully operational from 2027, and would be generating clean energy for approximately 40 to 60 years.



The Scheme would have a generation capacity exceeding 50MW, providing enough clean energy to power approximately 300,000 UK homes.



The Scheme would make a critical and meaningful contribution to achieving net zero carbon emissions and UK energy security through the development of a clean supply of electricity. The Scheme would support the UK government's target to increase solar capacity five-fold to around 70 gigawatts (GW) by 2035.



# About us

## Who we are and our vision

Tillbridge Solar Limited is a joint venture partnership between Tribus Clean Energy Ltd and Canadian Solar, who are both experienced developers of renewable energy projects. They are being supported by a team of technical specialists.



### Tribus Clean Energy

Tribus Clean Energy Limited specialises in the development of renewable energy projects and has a UK solar PV development pipeline of over 1.5 gigawatts (GW) and a pipeline of more than three gigawatt hours (GWh) of Battery and Energy Storage Systems (BESS).



### Canadian Solar

Canadian Solar is a leading manufacturer of solar PV modules and provider of solar energy solutions, with a UK solar development pipeline of over 2GW and more than 4GWh of BESS.



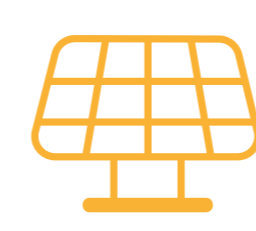
### Tillbridge Solar Limited


Both developers are using their experience from developing similar size projects in the UK to help bring forward our plans for Tillbridge Solar.

## Our vision

Our vision for Tillbridge Solar is to deliver cleaner, greener, and lower-cost energy, while also enhancing the local environment and ensuring we are a responsible developer.

Our objectives for Tillbridge Solar are to:

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Build a solar farm that will contribute to the UK's zero-carbon future and support Lincolnshire's transition to Net Zero.
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Provide equivalent energy needs for around 300,000 households with low-cost energy, generated in the UK at a time of great uncertainty within the energy market.
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Develop a Scheme in a responsible and considerate way. Increase biodiversity and enhance existing ecology to achieve Biodiversity Net Gain and maximise opportunities to create new habitats for wildlife.
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Ensure the local landscape is central to the Scheme's design.
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Provide opportunities for local communities and the local economy.

# Evolution of scheme design

## The Scheme comprises two distinct sections:

- 'the Principal Site' – where ground-mounted solar PV panels, electrical substations and energy storage facilities would be installed. Located on land to the south of Harpswell Lane (A631), to the west of Middle Street (B1398) and largely to the north of Kexby Road and to the east of Springthorpe; and
- 'the Cable Route Corridor' – the underground electrical infrastructure required to connect the Principal Site to the national transmission system.

## Our early-stage engagement resulted in the following key changes to the Principal Site Boundary:

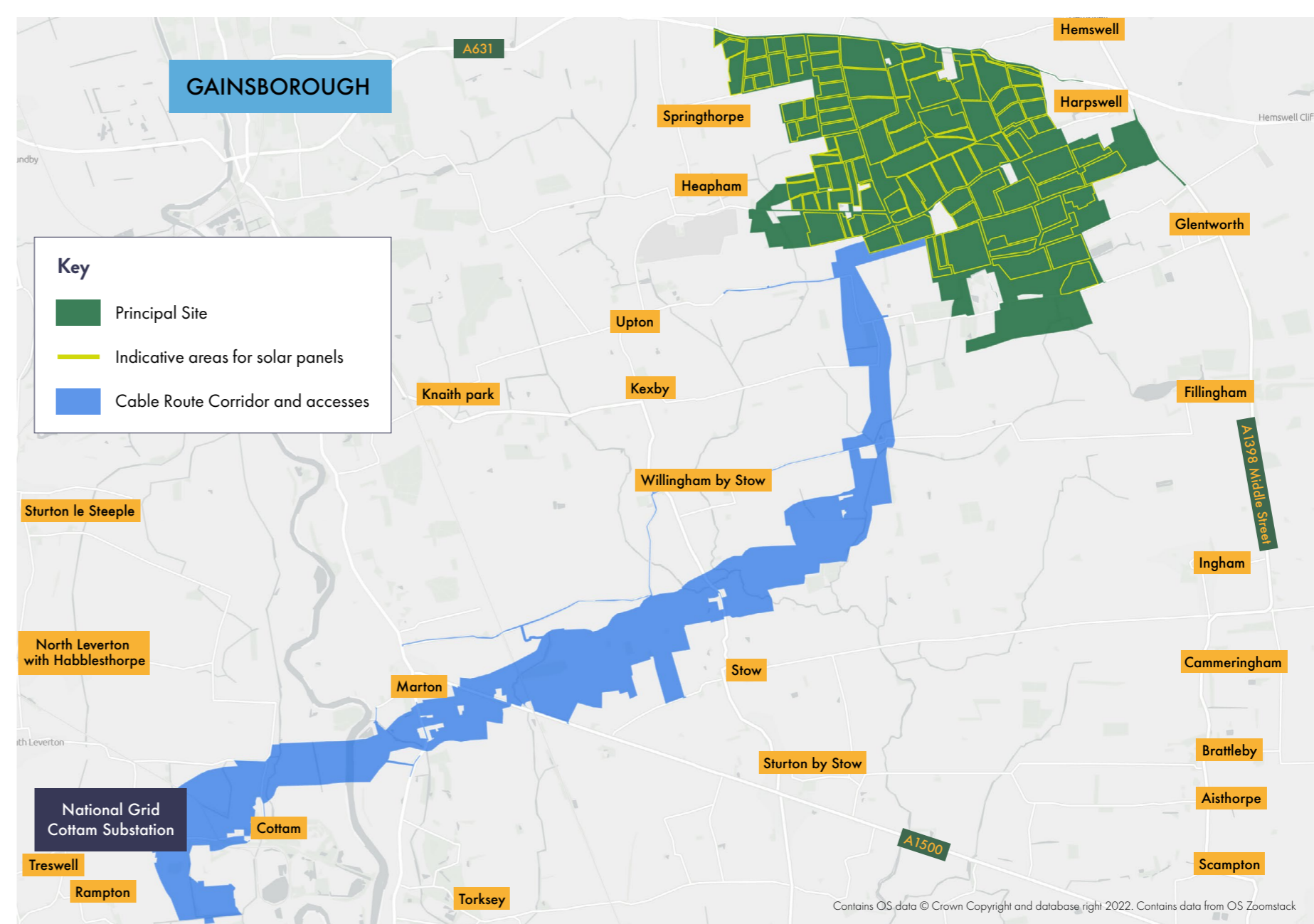
- Land to the west of Springthorpe removed due to concerns raised by local landowners and ecological advice.
- Land to the east of Springthorpe removed as a result of ongoing engagement with local stakeholders and to have regard to the proximity of a byway and temporary permissive bridleway.
- Scheme pulled in from the east away from Middle Street (The Cliff) to have regard to views and the setting of Glentworth.
- Scheme pulled in from the south to have regard to the setting of Fillingham and Middle Street (The Cliff).

## Ongoing design work has also helped evolve the design of the Principal Site in the following ways:

- Reduction in a total site area from approximately 1,700 hectares to 1,400 hectares.
- Provision of buffers and offsets from ponds, hedgerows and woodland.
- New semi-improved grassland under the panels.
- Screening and planting design to reduce landscape and visual impacts.
- Scheme pulled back from Harpswell Hall, a Scheduled Ancient Monument.
- Use of solar panels that are mounted on a single axis tracker and 'track' east to west during the daytime to maximise the amount of sunlight that hits the solar panels and energy generated.

## The Cable Route Corridor, has also undergone further refinement, including:

- An alternative Cable Route Corridor that directed the route to the north of Willingham-by-Stow was removed as an option with the focus on land to the south of Willingham-by-Stow, maximising the opportunity for the sharing of the corridor with other developers.
- Torksey viaduct was considered as a means for the cable to cross the River Trent; but was discounted due to impact upon the heritage asset.
- Further assessments to refine the Cable Route Corridor so that it would have the least environmental impacts.
- Data shared with other developers to maximise collaboration, the progression of a shared corridor with cables running parallel to each other and to minimise environmental impacts.



Location of the Principal Site and Cable Route Corridor



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# Principal Site main infrastructure

The Scheme would include the following elements.

Criteria	Consideration
<b>Solar Photovoltaic (PV) panels</b>	Panels convert sunlight into electrical current. Each panel would be a maximum of 3.5m above ground level and would be mounted on structures.
<b>Inverters, transformers and switchgear (solar station)</b>	This infrastructure is required to convert the electricity ready for export to the National Grid.
<b>Battery and Energy Storage Solution (BESS)</b>	BESS would be distributed throughout the Principal Site sitting alongside the solar station.
<b>Electrical substations</b>	Two substations would be located within the Principal Site.
<b>Solar Farm Control Centre</b>	This would be a single building used to operate and maintain the solar energy farm once operational.
<b>Equipment storage</b>	The Scheme would require space for the storage of parts and equipment either as open storage or within a building.
<b>Underground cabling within the Principal Site</b>	Underground cables would need to be built on-site to connect the solar panels, BESS and other infrastructure to the transformers and to the on-site sub-stations.
<b>Temporary infrastructure</b>	We would need temporary parking and construction compounds for the duration of the construction period within the Principal Site.
<b>Fencing and security</b>	A security fence would enclose the operational areas of the site. The fence is likely to be a deer fence. A pole mounted closed circuit television (CCTV) system would be installed around the perimeter of the site, and would face towards the solar farm and away from any land outside of the site.

Illustrative example of the Scheme (not to scale)



## The sun

Harnessing the sunlight as the earth's primary source of energy.

### 1. Solar panels

Convert the sun's energy into DC electrical power.

### 2. BESS

Battery and energy storage will have a direct relationship with the solar PV panels and it will support the operation of this by storing electricity produced during times of peak capacity until it needs to be released.

### 3. Inverters, transformers and switchgear

Infrastructure is needed to convert power generated by the PV panels and step up the voltage within the Principal Site to allow onward transmission to the national grid.

### 4. Substations

Consisting of equipment to facilitate the export/import of electricity from/to the Principal Site to/from the national grid.

### 5. Connection to the national grid

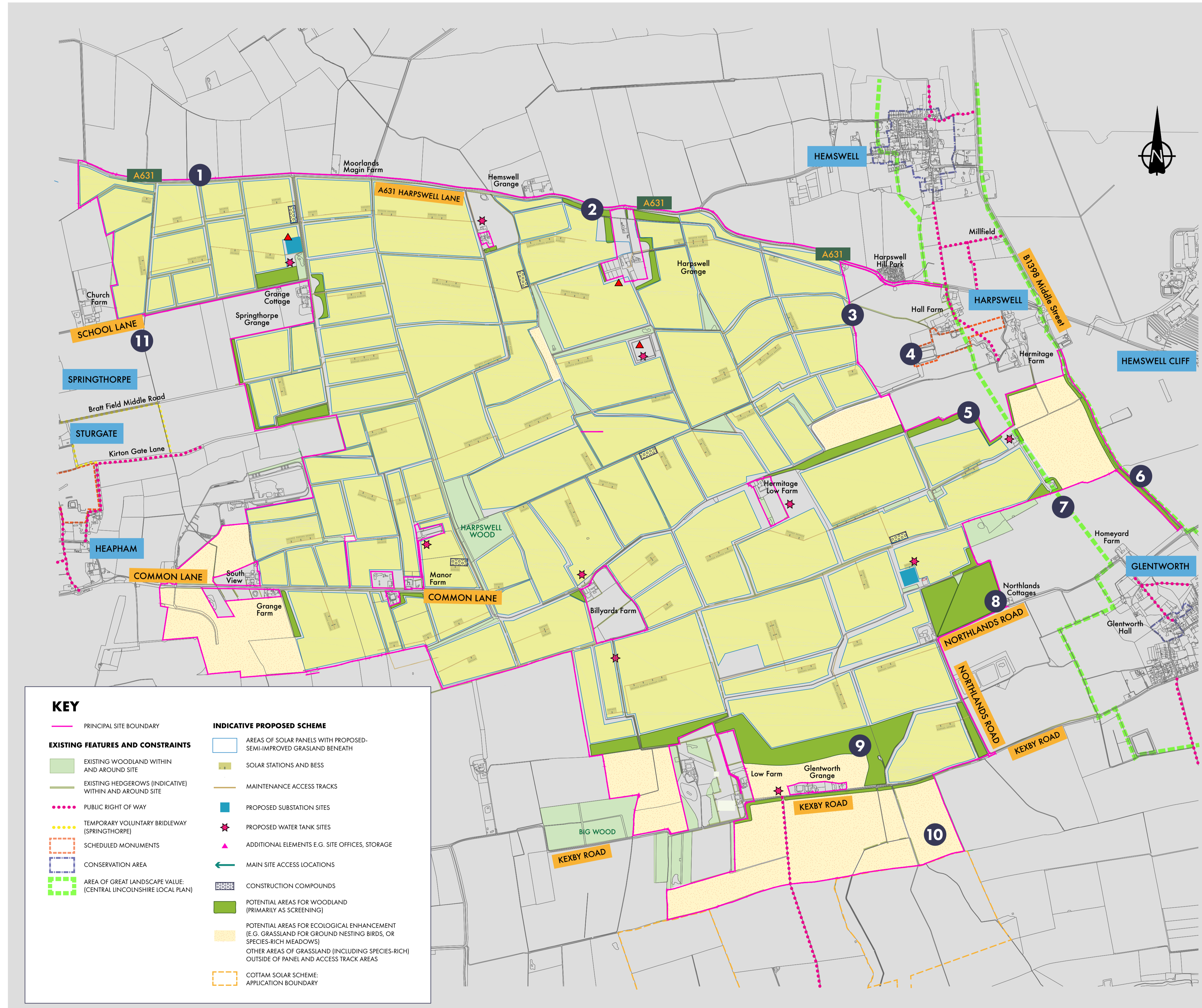
Electricity is exported from the on-site substation to the national grid via underground 400 kV cables. Cabling is also required within the Principal Site.

### 6. Output of power to the network

Power is transmitted to the network by the local network operator via the national grid.

### 7. Our homes

# Indicative masterplan



## The Scheme

- 1 New and enhanced hedgerows along A631, allowed to grow taller as screening and for wildlife value
- 2 Woodland belts to limit views from the A631 and create new wildlife corridors
- 3 Potential for enhanced planting to provide increased screening along eastern boundary near Harpswell
- 4 Scheme set back from Hall Farm (including Scheduled Monument) and open space/permissive paths
- 5 Screening along northern boundary to limit views from Harpswell
- 6 Narrow band of planting along Middle Street to provide continuous wildlife corridor and limit views nearest to the site
- 7 Solar infrastructure set back from Lincoln Cliff
- 8 Woodland as screening and new habitat area north of Northlands Road
- 9 Woodland as screening to limit views from properties along Kexby Road, with additional set-back of grassland habitats to help mitigate loss of longer-range views
- 10 Buffer to proposed Cottam solar scheme: scope for new habitats, including damp grasslands within flood zone
- 11 Set-back of scheme from Springthorpe and recreational routes east of Sturgate



# Construction, operation and decommissioning

Should the Scheme be granted development consent, construction could start in autumn 2025. It is currently anticipated that the Scheme would commence commercial operation from winter 2027.

## Construction

We are anticipating construction would take place in one continuous phase, which would last for approximately 24 months.

At the peak of construction, up to 1,250 staff per day would be required to complete work related to the Principal Site. This number would be less at other times of the construction phase.

Working days would be one 12-hour shift, with working hours onsite from 7am until 7pm Monday to Friday and from 7am to 1pm on Saturday.

We will be preparing a Construction Traffic Management Plan (CTMP) which would manage the impacts of construction traffic associated with the Scheme. An outline version of this document will be available as part of our final DCO application.

For the Principal Site, it is anticipated that construction access would include four access points. Three would be located along the A631 and one would be located on the B1398 Middle Street.

## Construction of the Cable Route Corridor

The cable would be laid in open-cut trenches before ground is backfilled and reinstated back to its previous condition. We would need some parts of the cable to be installed using trenchless methods, such as horizontal directional drilling, to lay the cable under the River Trent, roads and railways.

## Operation

During the operational phase, activity within the Scheme would be minimal. It would include vegetation management, equipment maintenance and servicing, replacement of any components that fail, solar PV panel cleaning and monitoring.

## Decommissioning and Land Reinstatement

The Scheme is expected to generate clean energy for approximately 40 to 60 years, with decommissioning expected to commence thereafter.

Decommissioning of all Scheme infrastructure would take place over a 12 to 24 month period, with all solar PV panels, mounting structures, foundations, inverters and transformers removed, recycled or disposed of in accordance with good practice. It is to be determined whether the 400kV cable would remain in situ or removed as part of decommissioning. The future of the substation and control building would be agreed with the relevant Local Planning Authority prior to commencement of decommissioning.

The drainage of the land within the Scheme would be checked and grass seeded after decommissioning. Should any agricultural drains be altered or removed, they would be restored such that agricultural activities could continue after decommissioning of the Scheme.

Areas of habitat and biodiversity mitigation and enhancement delivered as part of the Scheme would remain up until the land is returned to the previous landowners.

Following this, the landowners would choose how the land is to be used and managed.



# Collaborative working

Given the proximity of our Scheme to Island Green Power's Cottam and West Burton solar projects and Low Carbon's Gate Burton Energy Park, we have been refining our plans to identify opportunities for collaborative working in regard to connection to National Grid's Cottam substation.

This collaboration has included building an understanding of the extent of the respective Cable Route Corridors associated with each scheme and how these might be able to sit alongside each other, ensuring that all routes can be brought forward to minimise land take and environmental impacts, including disruption during the construction phase.

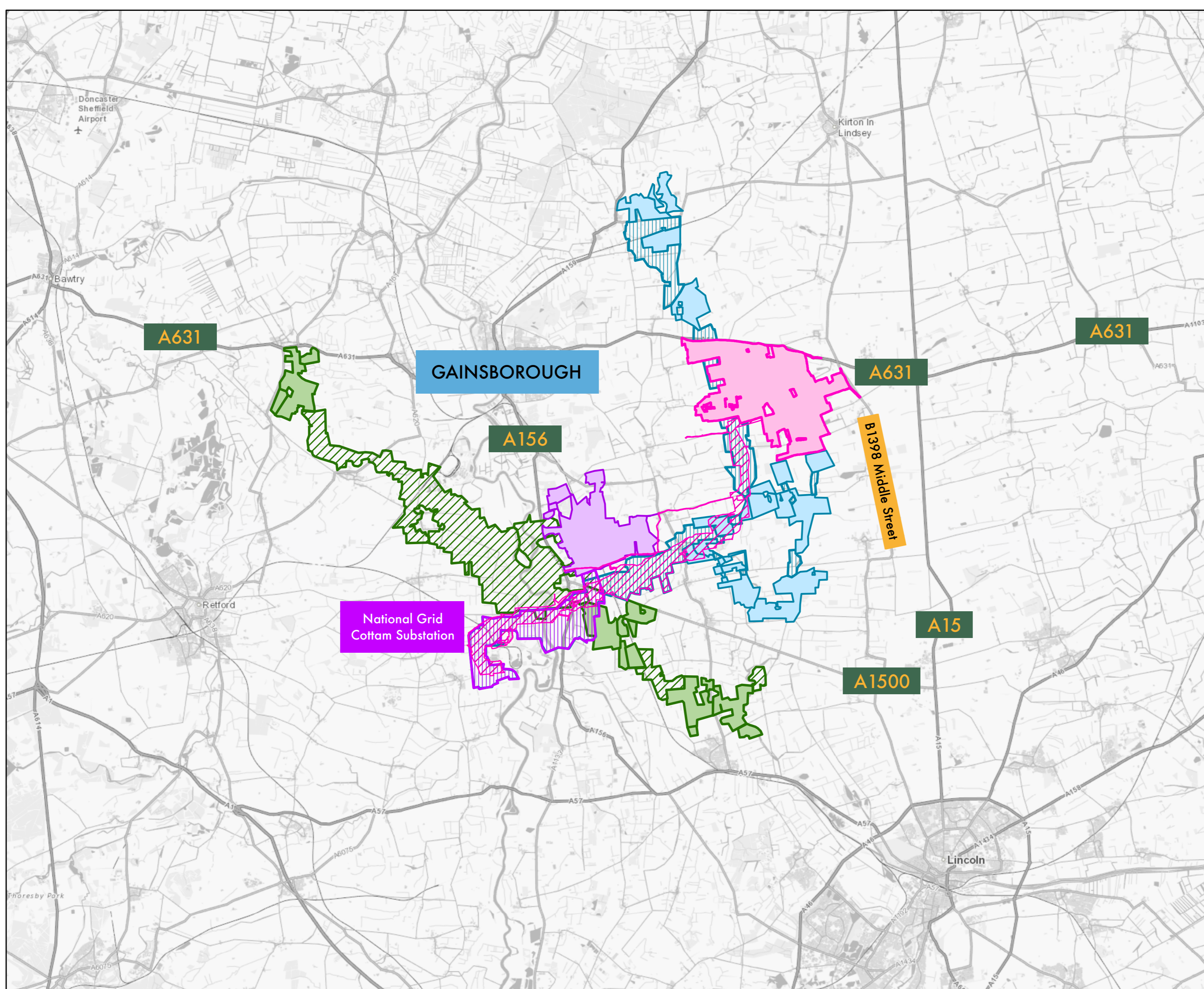
We are continuing to work with Low Carbon and Island Green Power and this work, along with your comments during this statutory consultation and our ongoing studies and surveys, will help shape the final plans for our corridor submitted as part of our DCO application.

## Cumulative effects

**Volume 1 Chapter 17 of the PEI Report** reports on the assessments carried out to date relating to cumulative effects.

If there is overlap during the construction phases of other solar schemes planned in the area, then transport effects may be able to be managed jointly, with the potential for the different solar developers to prepare a joint Construction Traffic Management Plan (CTMP) that could facilitate co-ordination of deliveries to each site and avoid peak traffic hours.

Further detail about the design of the Scheme and further assessment is required to understand the potential for there to be significant cumulative effects on nearby landscape, heritage assets and ecology. This will be reviewed further in the Environmental Statement that is submitted with the DCO application.



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### Key

- Tillbridge Solar Principal Site Boundary
- Cable Route Corridor Search Area
- Gate Bourton PEI Report red line boundary**
- Principal Site
- Cable Route Corridor Search Area
- Cottam Solar project PEI Report red line boundary**
- Principal Site
- Cable Route Corridor Search Area
- West Burton project PEI Report red line boundary**
- Principal Site
- Cable Route Corridor Search Area

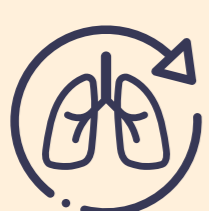


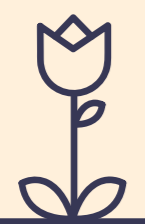
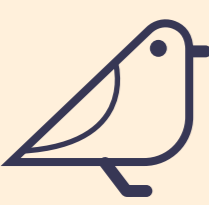

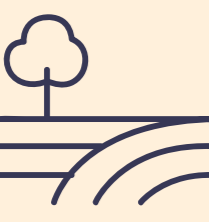

# Environmental Impact Assessment (EIA)

We are continuing to gather environmental information that allows us to identify the potential impacts of the proposed Scheme and develop measures to avoid or reduce them.

While this is ongoing, we have prepared a Preliminary Environmental Information Report (PEI Report), which outlines our early findings and will be developed into an Environmental Statement. The Environmental Statement will be submitted as part of our application.

## Summary of the findings of the PEI Report

The table below summarises some of the areas of assessment, along with some of the potential effects and proposed mitigation measures. Please see our non-technical summary (NTS) of the PEI Report for more information on the environmental effects of our proposals and measures we'll take to avoid or reduce any impact.

Area of assessment	Potential effects and proposed mitigation	For more information
<b>Air quality</b> 	The construction and decommissioning of the Scheme are likely to generate dust.	We will implement a Construction Environment Management Plan (CEMP), which identifies procedures to which all staff and contractors working on site would be required to adhere.
<b>Climate change</b> 	Greenhouse gas emissions would occur during the construction phase as a result of the manufacture of materials to build the Scheme.	As a whole, the Scheme would help the UK achieve net zero and the target of 70 GW of solar capacity by 2050
<b>Cultural heritage</b> 	<p>In terms of buried archaeology, any disturbed assets would be recorded and evaluated during the construction phase.</p> <p>Once operational, solar infrastructure may be visible from the Scheduled Monument of Harpswell Hall and the Grade I listed Church of St Chad.</p>	We will route away from valuable archaeological assets. New planting has been included to mitigate effects.
<b>Landscape and visual amenity</b> 	Some significant visual effects, i.e. those on people's views, will arise for some residential properties near the Principal Site and roads or footpaths where there are open views (such as Middle Street along The Cliff).	Inclusion of mitigation screen planting is intended to limit the majority of these visual effects as vegetation matures over time. In particular, we will look to reduce effects from the green space and Scheduled Monument at Harpswell.
<b>Ecology and nature conservation</b> 	The layout of the Principal Site has been designed so that impacts on habitats such as woodland, running water and ponds are avoided. However, there may be a significant effect on skylarks due to temporary loss of habitat within the Principal Site whilst newly created habitats become established.	<p>As part of the landscape design for the Scheme, new habitats would be provided to increase biodiversity compared to existing. This would include:</p> <ul style="list-style-type: none"> <li>• Converting areas of agricultural land adjacent to and beneath the solar panels into grassland</li> <li>• Strengthening hedgerows by planting up any gaps</li> <li>• Planting new areas of trees and enhancing habitats next to watercourses.</li> </ul> <p>It is expected that the Scheme would deliver more than 10% biodiversity net gain.</p>
<b>Transport and access</b> 	Additional traffic movements to the Principal Site and Cable Route Corridor during construction would be within the overall capacity of the highway network.	We would operate in accordance with a Construction Traffic Management Plan (CTMP), which would define the routes that deliveries to the Principal Site and Cable Route Corridor would need to take and would avoid peak hours.
<b>Socio-economics and land use</b> 	One public right of way (Gltw/85/1) runs through the Principal Site but would continue to be accessible, with woodland screening measures proposed to mitigate against potential amenity impacts.	The land use can be returned to agriculture after the Scheme is decommissioned and the land would be available for some forms of use (such as sheep farming) during operation.
<b>Flood risk, drainage and surface water</b> 	The Scheme would look to implement sustainable drainage systems (SuDS), whereby new planted areas and ponds would be created to ensure that rainfall that lands within the Scheme Boundary does not reach local watercourses quicker than existing land use.	Construction works would be carried out in accordance with mitigation measures documented within a CEMP, so that impacts on local watercourses are appropriately managed and prevented. We would also cross watercourses using non-intrusive methods.



# Community Benefits

In addition to biodiversity enhancement, a community benefit fund is being explored and could be provided as part of our development.

We believe those communities living closest to the proposed solar farm should benefit from it with these communities being best placed to recommend what a 'community-benefit' should be.

Suggestions to date have included funding towards:

- Improvements to existing community facilities, such as village halls and sports facilities
- Provision of electrical vehicle charging points
- Subsidised solar PV panels for community use and lower cost energy
- Grants for broadband and wider improvements
- Educational visits and wider education/apprenticeship opportunities

We are currently investigating how a community benefit fund could be managed and delivered independently. One way of doing this is by appointing a community foundation who would independently manage the fund on our behalf. We have spoken with Lincolnshire Community Foundation and Nottinghamshire Community Foundation, who would be able to use their local knowledge and experience to identify funding opportunities and help maximise benefits for local communities.

A community benefit fund would only operate if the Scheme receives development consent. We recognise that other funds could also be active from other developers. We are therefore considering the possibility of coordinating on these localised benefits.

We're inviting your continued views on how such a benefit could be made available through our Scheme and how it could be administered and managed. We also continue to welcome any further suggestions for local Schemes and initiatives that we could support.



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## Have your say

While we are open to any comments on our proposals, we are particularly keen to receive comments on:

- The overall Scheme.
- Our updated plans for the Principal Site, including the indicative location of equipment and infrastructure within this area.
- Our Cable Route Corridor between the Principal Site and connection at National Grid's Cottam substation.
- Measures we are proposing to reduce the impacts associated with the construction, operation and maintenance of the Scheme, as set out in the PEI Report.
- Any additional measures you would like us to include in our proposals, including local community benefits.
- Any other feedback on our work so far or local issues and sensitivities of which we should be aware.

## Please complete a feedback questionnaire.



You can hand it in at a public event or take it home and return it to: **'FREEPOST TILLBRIDGE SOLAR'** (please note you do not need a stamp).

You can also complete a questionnaire online via [www.tillbridgesolar.com](http://www.tillbridgesolar.com)



Please send all feedback to us by **23:59 on 11 July 2023**. Responses received after this time may not be considered.

If you have any further questions, please contact us by:



**Email:** [info@tillbridgesolar.com](mailto:info@tillbridgesolar.com)



**Our Freephone information line on:** 0800 046 9643

# Scheme timeline

The Scheme is classified as a Nationally Significant Infrastructure Project (NSIP) due to it having a proposed generation capacity exceeding 50MW. We are therefore required to submit an application for development consent to the Secretary of State, in accordance with the Planning Act 2008.



## Summer 2022

Initial engagement with stakeholders, including collaboration workshops

## September 2022

EIA Scoping Request submitted to the Planning Inspectorate

## Spring 2023

Publication of our Statement of Community Consultation (SoCC) and ongoing development of our EIA

## May - July 2023

Statutory consultation to be held with community and technical stakeholders, including sharing the findings of our PEI Report

## Winter 2023

Anticipated submission of DCO application to the Planning Inspectorate for public examination

## 2024 - 2025

DCO examination and decision

## Autumn 2025

Anticipated start of construction

## Next steps

Once the consultation has closed at **23:59 on Tuesday 11 July 2023**, we will review all comments and suggestions that have been received during the consultation period.

We will set out a summary of the responses that you have given us in a Consultation Report, with details on how your feedback has shaped and influenced the proposals. This report will form part of our application for a Development Consent Order (DCO).

We expect to submit our DCO application later this year. Once our application has been accepted, the Planning Inspectorate (acting on behalf of the Secretary of State) will examine the application.

You will be able to register your interest in our proposals directly with the Planning Inspectorate, who will then inform you about the progress of our application during the examination process, and let you know about further opportunities you will have to inform and contribute to the planning process.

The Planning Inspectorate will then make a recommendation to the Secretary of State for Energy Security and Net Zero, who will decide on whether or not the Scheme will go ahead.

More information about the DCO process can be found on the Planning Inspectorate's website: <https://infrastructure.planninginspectorate.gov.uk>

Thank you for attending our exhibition.