

Sunnica Energy Farm Proposed Layout Fordham, Moor Wicken Fordham West Fen Burwell Water Hall

About us

Sunnica Energy Farm is being brought forward by Sunnica Limited – a joint venture between two established solar developers, Tribus Energy and PS Renewables. Together, the Scheme partners have assembled an experienced team with a strong track record of delivering high quality solar and energy storage developments.





Introduction

Welcome to this consultation booklet on our proposals for **Sunnica Energy Farm**

We originally planned to hold a statutory consultation in early 2020 and had hoped to hold a series of public events to showcase our proposals, which have been updated following the non-statutory consultation we held in 2019. However, due to the ongoing COVID-19 pandemic, it has taken us longer to reach this point than we had anticipated, and we are now asking for your views using alternative methods to the previous consultation.

We have thought carefully about how to ensure that everyone across the community can respond to our consultation on the proposed Sunnica Energy Farm. We have developed a revised approach to consultation during the COVID-19 pandemic, working closely with the relevant local authorities. You can find out more about how you can respond to the consultation at the end of this booklet.

We first introduced our initial proposals during a non-statutory consultation held between June and July 2019. These are for a new solar energy farm and battery storage facility connecting to the Burwell National Grid Substation in Cambridgeshire that would allow for the generation, storage, import, and export of electricity.

Since then, we have considered the feedback we received from the non-statutory consultation and have continued with our environmental impact assessments. We have updated our proposals taking into account the consultation feedback and the outputs of the assessments. As a result, we are now seeking your views on our design proposals and the preliminary outcomes of our environmental impact assessments.

This is a statutory consultation process that we are required to carry out by the Planning Act 2008 because the project is classified as a Nationally Significant Infrastructure Project (NSIP). We are holding this statutory consultation between 22 September 2020 and 2 December 2020.

Following the consultation, we will have regard to the feedback received through this process as we develop the final Scheme. We will then prepare and submit an application for a Development Consent Order (DCO). The planning process for the application will be managed by the Planning Inspectorate (PINS) on behalf of the Secretary of State for Business, Energy & Industrial Strategy (BEIS).



The planning process

The proposed Sunnica Energy Farm is classified as a Nationally Significant Infrastructure Project (NSIP) because its proposed generating capacity is higher than 50MW.

NSIPs are major developments which require planning permission to be granted by the relevant Secretary of State through a Development Consent Order (DCO). This is a process established by the Planning Act 2008.

Unlike local planning permissions, which are considered by local authorities, DCO applications are made to the Planning Inspectorate (PINS). This independent body administers the application process on behalf of the relevant Secretary of State, including a maximum six month examination into the proposals with which interested parties can get involved. In this case, the appropriate government department is the Department for Business, Energy & Industrial Strategy (BEIS).

DCOs are governed by a fixed, statutory process which requires us to consult with persons with an interest in the land and certain bodies as prescribed under section 42 of the Planning Act 2008; the local community under section 47 of the Planning Act 2008; and to publicise the Scheme locally and nationally under section 48 of the Planning Act 2008. It also provides a fixed role for local authorities and means we will be following a well-established and clear process to develop the proposals for the Scheme.

Voluntarily, we carried out a non-statutory consultation on the Scheme proposals during June and July 2019. We are now carrying out this further, statutory, consultation to fulfil the requirements of the Planning Act 2008. Our next step, at the end of the consultation, will be to have regard to all the feedback we receive and, where appropriate, revise the Scheme accordingly. A consultation report will then be submitted as part of our DCO application which will explain how we had regard to this feedback.

We have set out details of how we intend to consult with the local community under section 47 of the Planning Act 2008 in a document called a Statement of Community Consultation (SoCC). Details of how to view the SoCC are provided later in this booklet.

Indicative Timeline



AUTUMN 2020 Statutory consultation



WINTER 2020 Finalise our Scheme proposals



SPRING 2021 Submit our DCO application



SUMMER 2021 PINS begins examination



SUMMER 2022 Decision expected









AUTUMN 2022 Post-decision period

AUTUMN/WINTER 2022 If approved, construction starts on site

The Environmental Impact Assessment process

For the proposed Sunnica Energy Farm, we are required to carry out an **Environmental Impact Assessment (EIA)** of our proposals as part of the planning process.

The output from this assessment has informed the site design and content of this consultation.

As part of the EIA design process, we formally 'scoped' our approach with PINS and, on the 11 April 2019, we received its formal Scoping Opinion. This confirmed the scope of work that should be included in our EIA and should be reported in the Environmental Statement that will accompany our DCO application when submitted to the Secretary of State. In addition to this, we have considered the feedback we received through the nonstatutory consultation and have continued to engage with local authorities and other regulatory bodies, such as Historic England and the Environment Agency, on our approach to the EIA.

We are now sharing the preliminary results of our assessments as part of this consultation. This booklet summarises our findings in areas such as ecology, landscape, and visual impacts that were raised during the last consultation. The results are presented in a document called the Preliminary Environmental Information Report (PEI Report). You can view the PEI Report on our website (www.sunnica.co.uk/downloads).

Following this statutory consultation, we will have regard to all feedback received and will finalise the Environmental Statement. This will be submitted in support of our DCO application and will set out the final outcomes of our assessments, as well as details of any proposed mitigation. During the statutory consultation process, we will continue to engage with other regulatory bodies.



1. Scope

Consult with statutory bodies on the type and method of assessments we need to carry out.



2. Conduct assessments

Including air quality, landscape and visual amenity, transport, noise, vibration, socioeconomics, cultural heritage, water and flood risk, ecology and nature conservation, and any cumulative effects.



3. Consult

Publish the preliminary results of our findings during the statutory consultation.



4. Consider

Consider all feedback received and finalising our Environmental Statement.



5. Submit

We must submit an Environmental Statement as part of our DCO application.

Our previous consultation



We held a non-statutory consultation on the proposed Sunnica Energy Farm in June and July 2019. As part of the consultation, we wrote to more than 10,000 addresses in the local area, held 8 public exhibitions, and made information available online.

We asked for views on our outline proposals for the Scheme and our proposed approach to assessing its environmental impacts. We received 265 responses overall. The issues most commonly raised through the consultation were:

- The scale of the proposed Sunnica Energy Farm many people who responded felt it was too large
- 2. **The proximity** of parts of the proposed Scheme boundary to nearby homes
- 3. The visual impact of the Scheme
- 4. The loss of valued agricultural land
- 5. **The need** for the Scheme to include extensive screening/mitigation

The issues raised during the non-statutory consultation have informed the content we are presenting as part of this consultation and are addressed in this booklet and the PEI Report. We present more information on how specific pieces of feedback have influenced our proposals later in this booklet.



Our proposals

We are proposing to build a new energy farm with solar photovoltaic (PV) and energy storage infrastructure connecting to the **Burwell National Grid Substation in Cambridgeshire.**

As you will see, the Scheme is now located across four sites as set out in the plans on page 7. These are:

- Sunnica East Site A, near Isleham
- Sunnica East Site B, near Freckenham and Worlington
- Sunnica West Site A, near Chippenham and Kennett
- Sunnica West Site B, near Snailwell

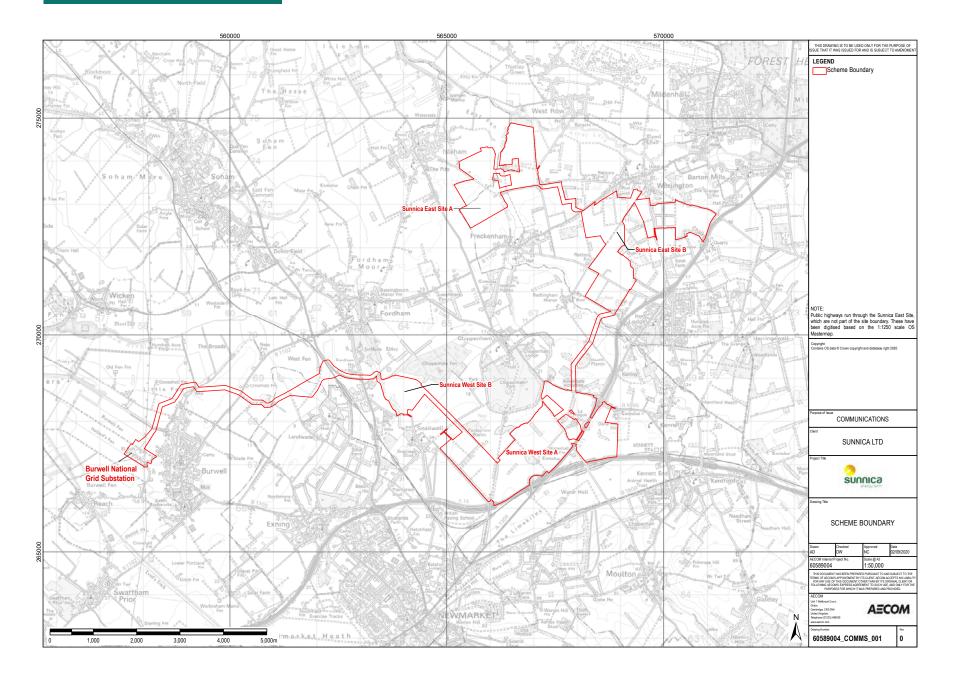
The following pages will detail the specific features of each site.

Since the last consultation, we have looked carefully at where we would locate the different elements that comprise the Scheme and how we would manage their impact on the local environment. We are now able to show the locations of the different elements of the Scheme in our proposals, such as solar panels, battery storage, landscaping, and screening. These are shown in the plans in this section of the booklet.

We have considerably reduced the degree to which our Scheme impacts on nearby communities as part of this process. Around 26% of the land within the Scheme boundary is no longer proposed for energy production or battery storage. It will instead be used for landscaping, ecological or archaeological mitigation purposes. The areas proposed for development are now set further back from nearby villages. One of the sites that we presented at the non-statutory consultation – Sunnica East – now comprises two smaller sites: Sunnica East Site A and Sunnica East Site B.

We have also further developed our proposals for connecting Sunnica Energy Farm to the National Grid. This has included confirming the route that the underground cable will take from the above sites to the connection point at Burwell. Whilst the cable corridor route has been confirmed, the width of the corridor remains wider than will actually be required as we are still undertaking environmental assessment and design work.

The Scheme Boundary



Sunnica East Site A and Sunnica East Site B

We received a large number of comments about Sunnica East during the last round of consultation. Sunnica East was the largest of the initial proposed sites and was located between Freckenham and Worlington. The most consistent comments were that it was too large, that it was too close to homes and surrounding nearby villages, that its visual impact was significant, and that views of Sunnica East from homes as well as roads and footpaths going through the site would need to be screened. There were also concerns about the impact of development on wildlife.

In response, we have developed a landscaping scheme to mitigate the visual impact of the proposals. This includes setting back solar panels from the parts of the Scheme boundary near homes and introducing planting and screening, particularly in areas where the fields containing development would be visible from homes and roads through the site. We have also set aside parts of the site for ecological mitigation – there is more information about this in the following pages.

The design of the Scheme for the original Sunnica East site has therefore evolved with the creation of two smaller sites, which we are calling Sunnica East Site A and Sunnica East Site B. Both sites are detailed in the plan on page 9.

In particular, each site will include the following elements:

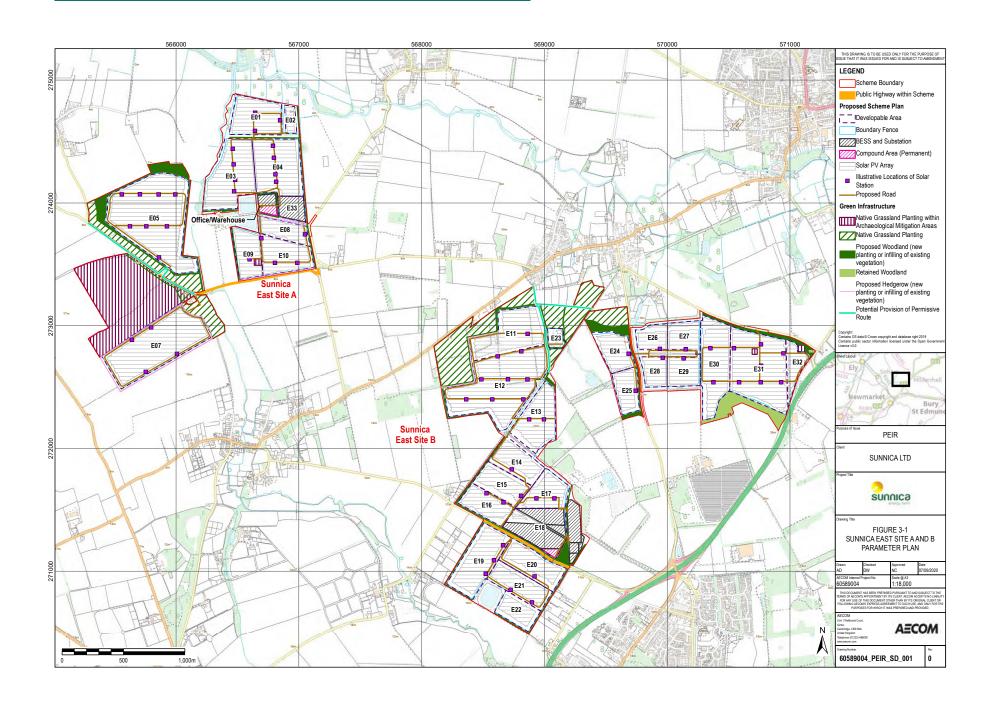
Sunnica East Site A

- Solar PV panels
- Solar stations
- A battery energy storage system (BESS) and electrical compound made up of a substation and control building within the area marked E33 on the plan
- Office space including mobile welfare units, canteens, and storage space. This will be in use for the duration of the Scheme's operating life. We propose that this is located within the area marked E33 on the plan
- A number of internal access tracks
- Visual and ecological mitigation including offsets, grassland planting, new woodland, and infilling of existing vegetation at a number of areas marked on the plan
- An archaeological mitigation area with native grassland planting to be located between the areas marked E05 and E07 on the plan

Sunnica East Site B

- Solar PV panels
- Solar stations
- A battery energy storage system (BESS) and electrical compound made up of a substation and control building within the area marked E18 on the plan
- A compound area for offices and storage space that will be used for the duration of the Scheme's operating life. The proposed location for this is within the area marked E18 on the plan
- A primary access point for Sunnica Energy Farm from the road network via the A11 and B1085
- A number of internal access tracks
- **Visual and ecological mitigation** including offsets, grassland planting, retention of existing woodland, new woodland, and infilling of existing vegetation at a number of areas marked on the plan

Sunnica East Site A and Site B Parameter Plan



Sunnica West Site A and Sunnica West Site B

While we received fewer comments overall about Sunnica West Site A and Sunnica West Site B than Sunnica East during the last round of consultation in 2019, they were along similar lines to those of Sunnica East.

A number of responses said the site was too large, while others said it was too close to housing, that they were concerned about loss of farmland, and that they were concerned about impacts on wildlife.

We have developed a landscaping scheme for the Sunnica West sites taking these comments into account. As with Sunnica East, this includes setting back solar panels within fields as well as planting and mitigating views into and out of the sites. It also includes areas set aside for ecological and archaeological mitigation.

Our revised proposals for Sunnica West Site A and Sunnica West Site B are set out in the plan on page 11.

In particular, each site will include the following elements:

Sunnica West Site A

- Solar PV panels
- Solar stations
- A battery energy storage system (BESS) and electrical compound made up of a substation and control building within the area marked W17 on the plan
- A compound area for offices and storage space that will be used for the duration of the Scheme's operating life. The proposed location for this is within the area marked W17 on the plan
- A primary access point for Sunnica Energy Farm from the road network via the Chippenham junction of the A11
- A number of internal access tracks
- Visual and ecological mitigation including offsets, grassland planting, retention of existing woodland, new woodland, and infilling of existing vegetation at a number of areas marked on the plan
- An archaeological mitigation area with native grassland planting to be located between the areas marked W07 and W09 on the plan and between the areas marked W03 and W04

Sunnica West Site B

- Solar PV panels
- Solar stations
- A number of internal access tracks
- Visual and ecological mitigation including offsets, retained native grasslands and wetlands, and retained woodland marked on the plan
- An archaeological mitigation area with native grassland planting to be located within the area marked W01 on the plan

Sunnica West Site A and Site B Parameter Plan



Solar PV technology

We will be using the technology detailed below across the four sites. **The proposed locations of each element** are shown on the Parameter Plans.



The areas marked as 'developable' will include solar photovoltaic (PV) modules that will convert sunlight into electrical current. We are proposing that each solar module will be approximately up to 2.5m long and 1.3m wide. The modules will each consist of a series of PV cells beneath a layer of glass. Each module will make up a single solar panel.

Each solar PV module will be oriented to the south at a slope of between 15 and 35 degrees from the horizontal. The modules will be mounted on a rack that is driven into the ground. This approach is common across existing UK solar farms. Each module will be between 0.6m and 2.5m above ground level. This range has been chosen to assist with visual mitigation.

Solar stations will be constructed at regular intervals across each site, illustrative locations for these stations are marked on the plans on the previous pages. Each solar station is made up of an inverter, transformer, and switchgear. Each of these elements is outlined here:

The inverters will convert the direct current (DC) electricity collected by the PV modules into alternating current (AC). This needs to happen to ensure that the electricity generated can be exported to the National Grid.

Transformers are required to control the voltage of the electricity generated by each of the four sites before it reaches a substation. From a substation, the electricity is then exported to the National Grid.

Switchgear is a combination of electrical disconnect switches, fuses or circuit breakers. They are used to control, protect, and isolate electrical equipment.

Each solar station would be situated either outdoors or inside a container. Indicative images of each of these options are shown on the next page.

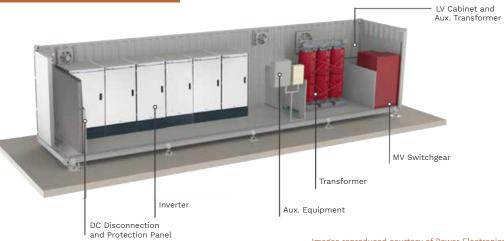
Outdoor Solar Station



Example of White Indoor Solar Station Exterior



Indoor Solar Station Interior



Battery storage

During the non-statutory consultation, we asked for views on whether the Battery Energy Storage Systems (BESS) should be concentrated in specific locations or spread across different locations across all the sites.



A majority of people who responded to the consultation said that the BESS should be concentrated. A number of responses also emphasised that the BESS should be located away from homes and well screened.

We are now proposing that the BESS is concentrated at three locations marked on the plans on pages 9, 11 and 15. These are:

- Sunnica East Site A within the area marked E33
- Sunnica East Site B within the area marked E18
- Sunnica West Site A within the area marked W17

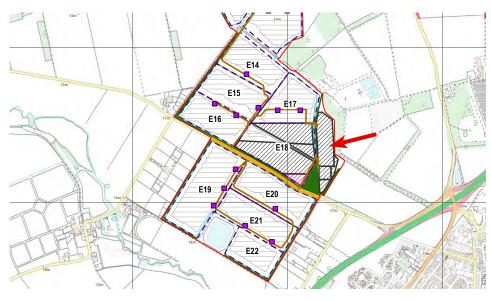
Each will consist of containers that will house the batteries. The containers will be a maximum of 6m in height. Images with the indicative appearance of these containers are shown here.

Locating the BESS together means we are better able to screen them from the outside. We have looked to locate the BESS away from homes, select appropriate colours, and screen them with planting.

We were asked at our public exhibitions last year about how safe the BESS would be, particularly with regards to fire risk. We take the risk of a potential fire very seriously. Each container would be isolated and would contain an automatic fire control system. If approved, the Scheme would be subject to a Battery Fire Safety Plan.

BESS Locations – Sunnica East Site A and Site B





BESS Location – Sunnica West Site A



Grid connection

The electricity generated and stored by the Scheme will be imported and exported to the National Grid via underground cables from the onsite substations to the Burwell National Grid Substation.

To achieve this, we are proposing to install a 132 kilovolt (kV) cable to connect Sunnica East Site A, Sunnica East Site B, Sunnica West Site A, and Sunnica West Site B to the Burwell National Grid Substation. The proposed route of this cable is shown on the red line boundary plan, running between each of our sites and the grid connection.

During the non-statutory consultation, we set out two possible options for the route of the cable connecting Sunnica East, Sunnica West Site A, and Sunnica West Site B to Burwell National Grid Substation. At the time, we did not know exactly where the cable would be able to cross the railway line between Fordham and Snailwell.

Following consultation with Network Rail, we are now proposing to use the more northern of the two options – which we referred to as option 1 during the last consultation. This has also allowed us to confirm the route of the cable through the industrial area and across the A142 Fordham Road.

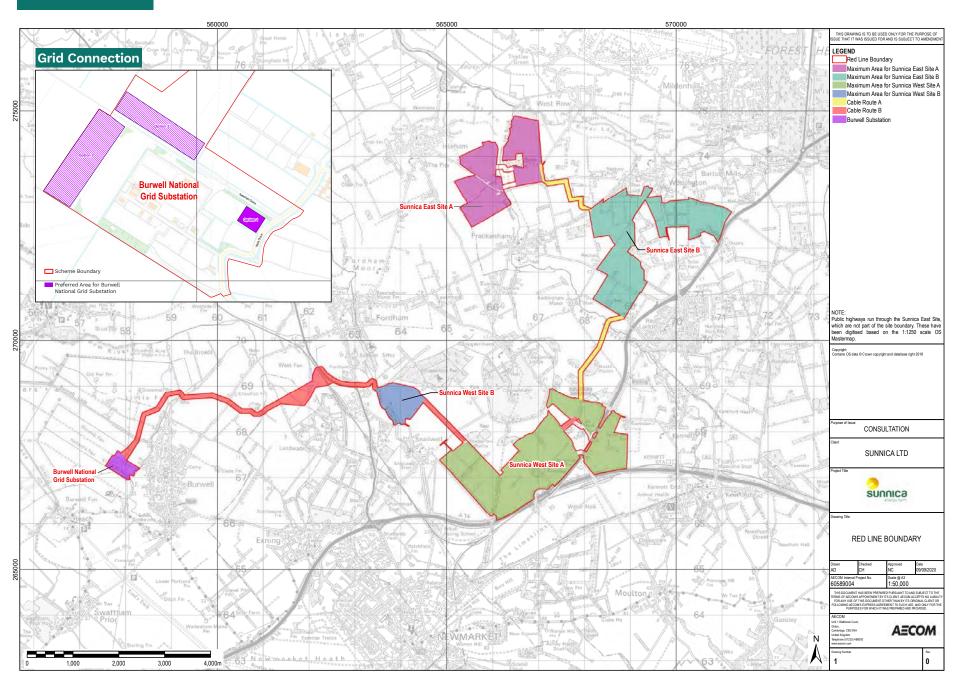
In proceeding with this option, we have made minor amendments, including widening its path to allow for further survey work to be undertaken. This will enable us to refine our proposed route and tunnelling methods further, prior to the submission of our DCO application. This amended option is reflected on the plans here and shows a width of up to 50m to allow for survey work and local conditions. To install the cable itself, we anticipate that we will use a trench with a width of approximately 1.2m and a depth of approximately 2m.

We have also continued our discussions with National Grid about the upgrade required to Burwell National Grid Substation to accommodate the connection. This will involve a small extension to the substation to house a new transformer.

We have identified three areas as suitable options for this extension. Each option remains under consideration and each is shown on the plan. The three areas identified for Burwell National Grid Substation extension are currently agricultural fields. The preferred location is within National Grid land ownership to the east of the existing substation, adjacent to Weirs Drove, approximately 200m west of Burwell. The alternative two locations are to the north and north-west of the existing substation approximately 450 and 650m from Burwell, respectively.



Cable Route



Landscape and visual impact

Assessment

We have assessed potential impacts of the Scheme on the local landscape, the landscape character areas, views into and out of the site, and visual amenity. This process has involved looking at the impact of our design proposals from a number of different landscape and visual receptors that have been agreed with the local authorities, including different parts of the Scheme, during the construction, operation, and decommissioning of the Scheme. The selection of viewpoints has included residential and commercial properties, heritage receptors (Chippenham Park, for example), road users, and public rights of ways.

Assessment outcome and mitigation

The Landscape and Visual Impact Assessment (LVIA) has informed the iterative design process, with the aim of minimising the effects of the Scheme through design principles which have been embedded into our proposals. The embedded mitigation covers the siting, scale, and mass of structures, as well as proposed Green Infrastructure (mitigation planting) to improve the landcover and vegetation patterns, as well as reducing the visibility of the Scheme, as described in Chapter 3 of the PEI Report and shown on the Parameter Plans. An Outline Landscape and Ecology Management Plan has been drafted and included within the consultation materials (Appendix 10I of the PEI Report) to demonstrate how the proposed mitigation measures will be delivered.

These measures reduce the significance of effect of the Scheme from many viewpoints and locations. Some significant adverse effects on landscape and visual receptors are currently predicted to occur during the construction phase, due to temporary changes in landcover and the presence of construction machinery. This is inevitable from locations where there are views into the site, from which there will be an obvious change in the landscape from farmland to a solar farm development. Some significant adverse effects are also initially predicted to occur during the early years of operation of the Scheme until the proposed planting and screening measures become established. Full details of these effects are included in Chapter 10 (Landscape and Visual Assessment) of the PEI Report.

It is expected that over time there would be a reduction in the effects on the landscape and visual receptors due to the long-term establishment of the Green Infrastructure, and this would remain following the eventual removal of the solar panels and associated structures.

Summary

Several viewpoints close to the Development Consent Order (DCO) site are anticipated to experience significant effects on their landscape character and visual amenity during construction. This is due to the visual appearance of construction works on land that is currently used as farmland. This effect will only last for the duration of the construction works.

Some significant effects are expected to occur on landscape and visual amenity during operation. The effect will be less once mitigation planting has been established, reducing most of these significant visual effects to minor significance. There is only a single viewpoint that is anticipated to experience a significant visual effect once the Green Infrastructure has established. This is the Users of the Gallops viewpoint.

The decommissioning phase is expected to lead to similar effects to construction, although it would benefit from the Green Infrastructure shielding some views into the site and therefore lessening some effects. The long-term effects of the operational Scheme would be reversed following decommissioning and reinstatement, albeit the Green Infrastructure planting would remain.

More information

See Chapter 3 (Scheme Description), Chapter 10 (Landscape and Visual Assessment) of the PEI Report, Figures 3-16 and 3-17 and Parameter Plan Figures 3-1 and 3-2.

Ecology

Assessment

The ecology assessment proposes measures to minimise potential impacts and effects of the Scheme on ecology and nature conservation (biodiversity) during construction, operation, and decommissioning.

Our assessment has been informed by existing data sources, a series of habitat assessments, and ecological surveys which have been carried out on the site and on other ecological sites in the surrounding area, and which will continue as necessary up to submission of the DCO application.

Assessment outcome and mitigation

The main impact on ecology from the Scheme is expected to be some habitat loss from within the site itself, although overall the Scheme is being designed to provide biodiversity enhancement. In addition, any disturbance of protected species and off-site ecological receptors will be prevented and controlled through various control measures.

Primary mitigation measures are embedded within the Scheme. These are documented within the draft Outline Landscape and Ecology Management Plan (LEMP) which outlines the management and mitigation measures to be implemented for the Scheme to successfully integrate within the context of the site.

A total of 214 hectares of embedded mitigation and biodiversity enhancement areas have been included within the Scheme design for creation of biodiverse habitats to mitigate the loss of existing habitats. These mitigation and enhancement areas include at least three nesting plots for stone-curlew, acid grassland creation/restoration, marshy grassland creation/restoration, and planting of seed-bearing species for overwintering farmland birds.

The Scheme has been designed to ensure that existing woodland, treelines, and the majority of hedgerows are retained and will be protected during construction of the Scheme, and extensive additional woodland and hedgerow planting throughout the Scheme is embedded within the Scheme design, as shown on the Parameter Plans. In addition, the following embedded mitigation has been incorporated into the design:

- Undeveloped buffers of at least 5m from existing boundary features have been retained throughout the Scheme
- Existing designated sites within the Scheme have been retained and will not be impacted
- The crossing of watercourses where the presence of otter and water vole have been determined, as well as the River Kennett, River Snail, Lee Brook, New River, and Burwell Lode, will be undertaken using underground methods that do not disturb the watercourse, with appropriate setbacks from the top of the banks (depending on habitats and other individual ecological constraints)
- Throughout the Scheme, the use of motion detection security lighting to avoid permanent lighting will be utilised and a sensitive lighting scheme will be developed ensuring inward distribution of light and avoiding light spill onto existing boundary features

A Construction and Environment Management Plan (CEMP) will be used to manage the environmental effects of the Scheme during construction. The CEMP will include control measures such as: avoiding the spread of invasive non-native species; no working within 10m of watercourses to prevent hazards such as chemical and soils spills into the watercourses; vegetation clearance to be undertaken at an appropriate time of year so as to avoid harming protected species and the nesting bird period; and avoidance of protected species' habitats using certain construction techniques.



Where protected species are at risk of being affected, we will use mitigation strategies and, where required, apply for species licences from Natural England for translocation of animals away from construction areas sufficiently in advance of the works to meet with the optimum time for mitigation and to minimise any changes to the construction programme.

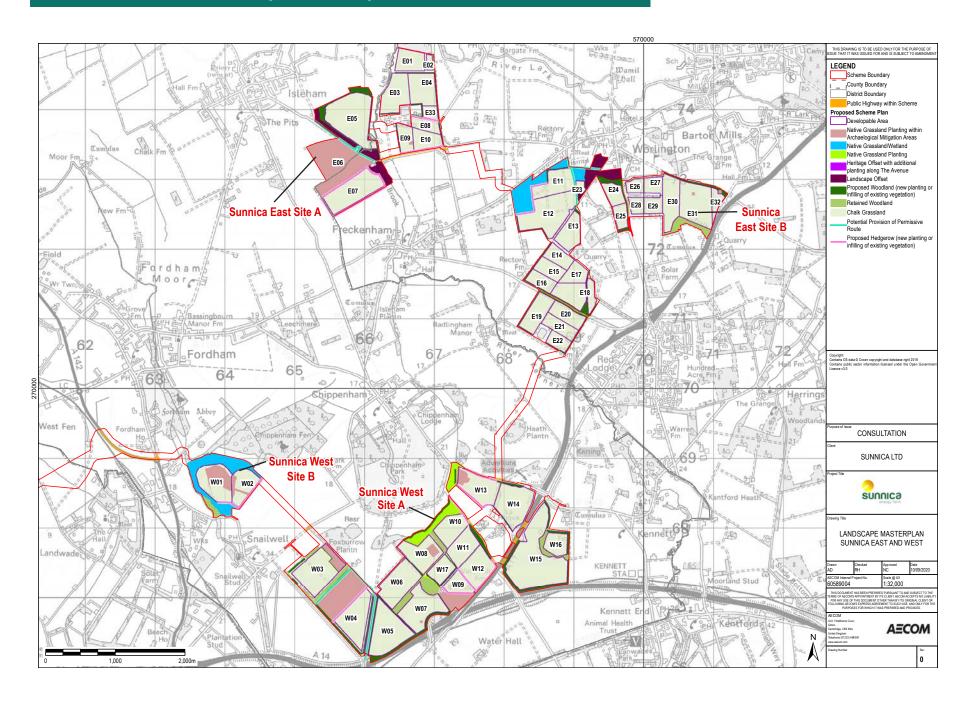
Summary

There are minor adverse impacts predicted on habitats and species as a result of the construction, operation, and decommissioning of the Scheme. However, given the embedded mitigation measures provided for the Scheme, no significant residual adverse effects on ecological features are predicted and the Scheme is aiming to achieve a net gain in biodiversity value.

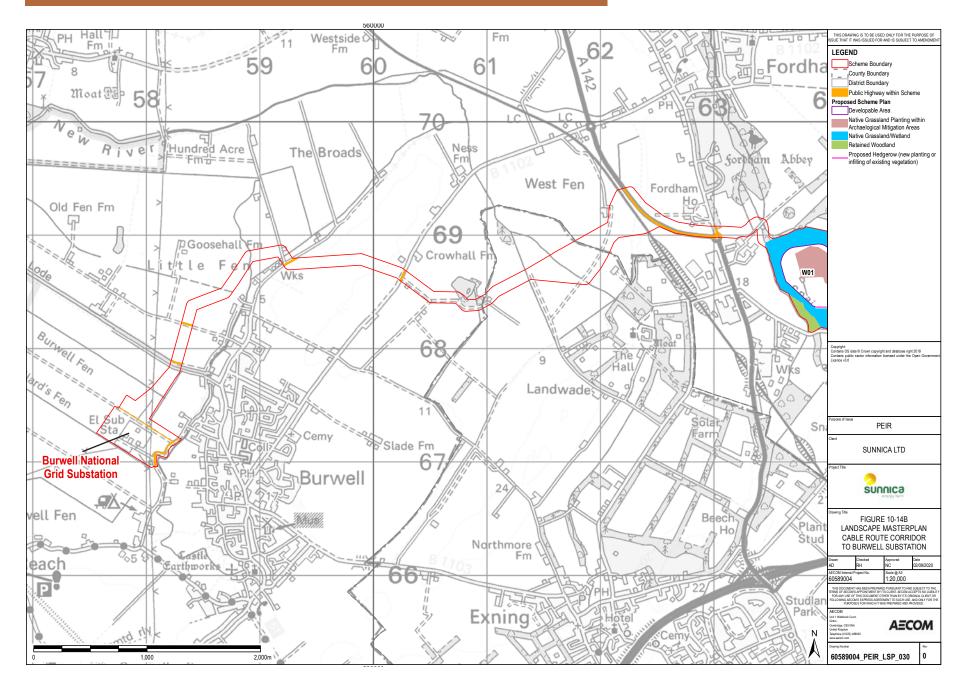
More information

See Chapter 8 of the PEI Report.

Environmental Landscape Masterplan Sunnica East and West

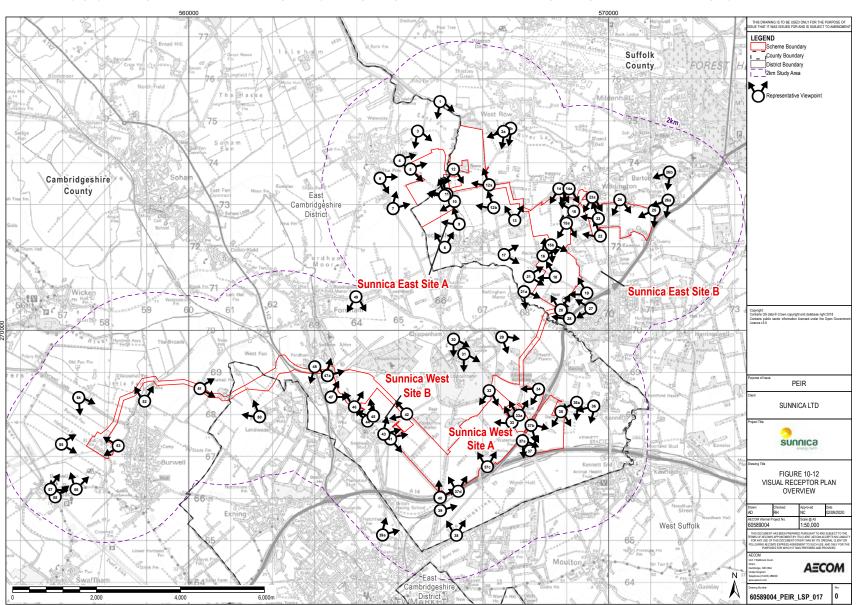


Environmental Landscape Masterplan Burwell Substation

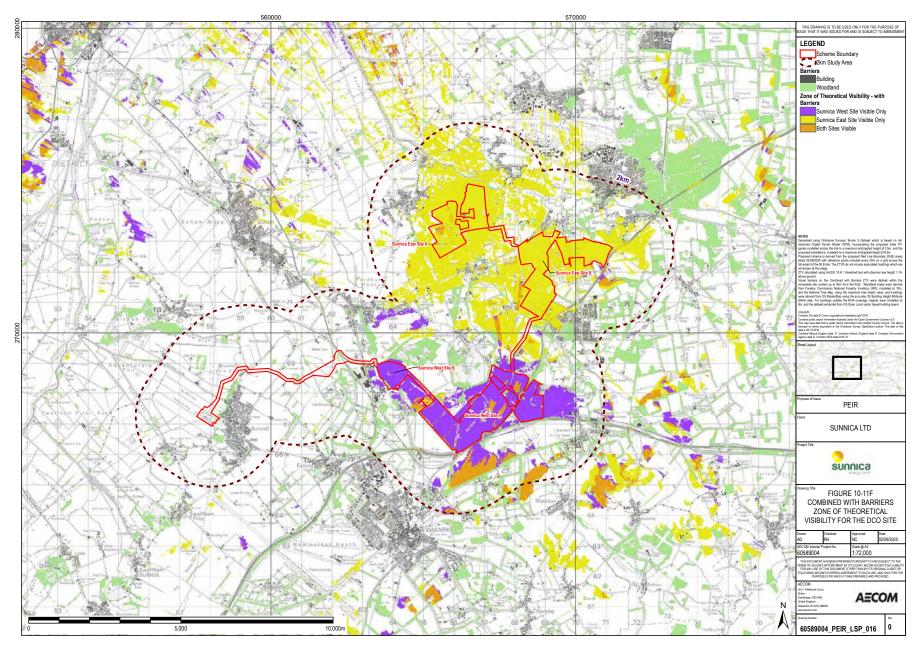


Environmental Landscape Viewpoints

Photomontages showing specific views of the site, from different locations, can be downloaded from the scheme website: www.sunnica.co.uk/downloads Alternatively, physical copies are available on request by calling Freephone 0808 168 7925 and speaking to a member of the project team.



Environmental Landscape Viewpoints



Other environmental considerations



We have set out information about other potential environmental impacts we have assessed in the table below. This includes the outcomes of our assessments and proposed mitigation.

	Assessment	Assessment outcome and mitigation	Summary	More information
Climate Change	We have assessed potential impacts of the Scheme on the climate via a lifecycle greenhouse gas (GHG) impact assessment and also considered the resilience of the Scheme to physical impacts of climate change via a Climate Change Resilience (CCR) review.	The overall impact of the Scheme is beneficial due to the Scheme providing low carbon solar energy to help the UK achieve its net zero target. There are likely to be some unavoidable GHG emissions resulting from the Scheme as materials, energy and fuel use, and transport will be required, but these are small relative to the operational benefits of the Scheme. There are embedded climate resilience mitigation measures in the design, including the use of sustainable drainage systems and no loss of floodplain storage, to protect the Scheme from potential climate change impacts.	While the Scheme is anticipated to have minor adverse impacts during construction, operation (including maintenance), and decommissioning, these are offset by the net positive impact of the Scheme on GHG emissions and the UK's ability to meet its carbon targets. The GHG savings achieved throughout the assessed lifetime of the Scheme demonstrate the role solar energy generation has to play in the transition to, and longer-term maintenance of, a low carbon economy. The CCR review has considered the measures, including in relation to flood risk, which have been integrated into the Scheme design and these are considered adequate protection against potential climate change impacts.	See Chapter 6 of the PEI Report.

	Assessment	Assessment outcome and mitigation	Summary	More information
Cultural Heritage	We have assessed potential impacts of the Scheme on designated heritage assets and their setting, including scheduled monuments, listed buildings and conservation areas, and on non-designated assets, including archaeological remains and historic buildings and historic landscape.	Archaeological assets that have been identified through geophysical surveys are being protected through the Scheme design by removing the areas from solar development. Where foundations are to be installed, work is being done to understand the archaeological sensitivity and prevent significant effects. No direct impacts are anticipated on the surrounding built heritage assets (such as Chippenham Registered Parks and Gardens and Triumphal Arches); however, they may, absent mitigation, still experience significant temporary adverse effects as a result of visual intrusion of the Scheme to their setting. Embedded mitigation is therefore proposed within the design, using screening to minimise visual intrusion. Additional mitigation, including a programme of archaeological fieldwork, will be implemented to mitigate the significant adverse effects.	As a result of the Scheme, there are anticipated to be significant adverse residual temporary effects on the setting of archaeological mounds and built heritage (Chippenham RPG and Triumphal Arches). However, the embedded mitigation will minimise the visual intrusion of the Scheme on built heritage with the establishment of the proposed planting. An additional programme of archaeological fieldwork is being undertaken prior to the submission of the Environmental Statement to mitigate the significant adverse effects on buried archaeology.	See Chapter 7 of the PEI Report.
Water Environment	We have assessed potential impacts of the Scheme on the water environment. The water environment includes surface water bodies (e.g. rivers, streams, ditches, canals, lakes and ponds, etc.), 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 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.	Through the use of embedded mitigation, there would be no significant effects on the water environment from the Scheme. The flood risk assessment has concluded that the flood risk is very low to low across the majority of the Scheme with isolated areas of medium to high risk. The Scheme will not increase the flood risk outside of the site and the design included in the Surface Water Drainage Strategy will improve flood risk both within and outside of the Scheme area.	See Chapter 9 of the PEI Report.
Noise and Vibration	We have assessed noise impacts from the Scheme by comparing the noise which may be generated by construction, operation, and decommissioning with the baseline noise environment at noise-sensitive receptors near the Scheme.	Embedded mitigation including best practice measures during construction and decommissioning implemented via a CEMP, and the specification of operational plant with low noise emissions are proposed to be implemented to minimise adverse noise and vibration effects.	Although the construction and decommissioning activities may be audible, through the use of embedded mitigation, there are not anticipated to be any significant noise effects from the construction, operation or decommissioning of the Scheme.	See Chapter 11 of the PEI Report.

	Assessment	Assessment outcome and mitigation	Summary	More information
Socio- Economics	We have assessed potential impacts of the Scheme on socio-economics and land use, including employment generation, gross value added during construction, impact on the use of public rights of way, and impact on residential properties, businesses, and community facilities.	The embedded mitigation that has been implemented in the design of the Scheme as a result of the other technical assessments has provided sufficient mitigation to avoid or minimise the socio-economic effects. The only potential significant adverse effect that has been identified is the temporary impact on users of public rights of ways as a result of construction and decommissioning of the Scheme. The temporary closures and diversions of the public rights of ways will have clearly signed alternative routes and where possible will be planned and programmed to minimise disruption to the users.	Through the use of embedded mitigation, there is not anticipated to be any significant socio-economic effects associated with the Scheme.	Chapter 12 of the PEI Report.
Transport	We have assessed the potential impacts on traffic and transport as a result of the construction and decommissioning of the Scheme. The operational phase is likely to require five permanent staff on site. As such, the operational impacts of the Scheme have been scoped out of this assessment as the increases in traffic are likely to be minimal.	The main impact on traffic and transport is likely to be from Heavy Good Vehicles and staff vehicles during construction. These effects will be prevented by managing arrival and departure times to ensure they are outside of the highway peak period thereby not worsening the peak traffic; implementing central car parking for staff adjacent to the strategic road network to minimise the use of the local road network; encouraging staff to lift share; and implementing a car parking permit system to control the arrival and departure of vehicles from the site. These mitigation measures would be secured through a Construction Traffic Management Plan and Construction Worker Management Plan.	After mitigation, it is anticipated that there would be no significant traffic and transport impacts.	See Chapter 13 of the PEI Report.
Air Quality	We have assessed the potential impacts on air quality as a result of the construction and decommissioning of the Scheme. The operational impacts of the Scheme have been scoped out of this assessment as the effects are likely to be minimal. Dust impacts are considered in the PEI Report; traffic air quality impacts will be reported in the Environmental Statement.	Adverse dust effects on human and ecological receptors will be avoided through the use of good industry standard mitigation measures incorporated into the CEMP, including inspections, barriers, and planning of site layout.	After mitigation, there are not anticipated to be any significant air quality impacts. In addition, at this stage based on previous experience of similar projects, due to the predicted traffic volumes and the low total baseline nitrogen dioxide concentrations in the area, it is not anticipated that there will be any significant air quality effects from traffic sources; however, this will be confirmed at the Environmental Statement stage.	See Chapter 14 of the PEI Report.

	Assessment	Assessment outcome and mitigation	Summary	More information
Glint and Glare	We have assessed the potential impacts of glint and glare resulting from the Scheme on surrounding receptors, including aviation, railway, road, public rights of way users, bridleway users (including equestrian) and residential receptors.	There will be no impacts for RAF Mildenhall, RAF Lakenheath or Cambridge Airport given their respective distances and locations. All other receptors will be significantly screened by existing vegetation, vegetation proposed as part of the embedded mitigation, and/or surrounding buildings and are assessed as low impact and not considered to be significant. Therefore, no additional mitigation requirement has been identified once the embedded mitigation has established.	It is expected that with the proposed embedded and additional mitigation there would be no significant impact from glint and glare as a result of the Scheme.	See Chapter 16 of the PEI Report.
		An assessment of the impact on railway and road receptors, residential properties, public rights of way, and bridleway receptors (including equestrian) has been undertaken. All receptors, apart from road users on a short section of the A14 (approximately 200m), are assessed as not resulting in a significant effect due to the location of the solar refection, reflections coinciding with direct sunlight, and therefore, not resulting in a safety hazard.		
		Mitigation will be provided for the road users on the A14 in the form of a temporary, solid hoarding that will be a maximum of 2m in height. The hoarding would be located on a short section, approximately 300m, of the Sunnica West Site A boundary with a high percentage of evergreen (native and non-native) species, planted adjacent to the temporary hoarding in line with the indicative planting strategy shown on the Parameter Plans.		
Ground Conditions	We have assessed the ground conditions of the Scheme to identify any potentially significant contamination source-pathway-receptor linkages.	Adverse effects will be avoided through the use of mitigation measures incorporated into the CEMP, including appropriate storage of chemicals and materials. In addition, intrusive site investigation is proposed to be carried out prior to construction works to provide adequate geoenvironmental data to evaluate soil and groundwater quality and further assess potential contamination linkages.	It is expected there would be no significant impact on ground conditions from the Scheme.	See Chapter 16 of the PEI Report and the Preliminary Environmental Risk Assessment (PERA).
Human Health	The assessment has been undertaken in accordance with the Healthy Urban Development Unit Rapid Health Impact Assessment Matrix and draws on information presented in other chapters of the PEI Report and assesses the potential impacts on human health and wellbeing within the construction, operation, and decommissioning phases of the Scheme.	Adverse impacts are anticipated on air quality, noise, and public rights of way as a result of the Scheme. However, with the embedded mitigation measures outlined for transport, air quality, and noise, and vibration, these are not anticipated to be significant.	The assessment has shown that with the primary mitigation measures embedded in the design for other relevant topics, namely transport, air quality, and noise and vibration, there are no anticipated significant adverse impacts on health and wellbeing.	See Chapter 15 of the PEI Report.

	Assessment	Assessment outcome and mitigation	Summary	More information
Major Disaster	We have assessed potential impacts of the Scheme on the risks of major accidents or disasters occurring. 'Accidents' are an occurrence resulting from uncontrolled developments in the course of construction, operation, and decommissioning (e.g. major emission, fire or explosion). 'Disasters' are naturally occurring extreme weather events or ground related hazard events (e.g. subsidence, landslide, earthquake).	Minimising the risk of major accidents during construction and decommissioning will be addressed through appropriate risk assessments which will be delivered through the CEMP. An assessment of major accidents and disasters resulting from the Scheme has been undertaken, considering impacts from criminal damage, bird strike, fire, and rail accidents. With the implementation of embedded mitigation including best practice design measures and a Battery Fire Safety Plan, no significant effects are anticipated.	After mitigation, it is anticipated that there would be no significant major accidents and disasters effects from the Scheme.	See Chapter 16 of the PEI Report. Also see Chapter 8 and 9 of the PEI Report.
Telecoms	We have assessed potential impacts of the Scheme on the surrounding telecommunication infrastructure, television reception, and existing utilities.	The only potential impact from the Scheme is on existing utilities during construction. Embedded mitigation in the design, including locating the Scheme outside of utilities' protected zones and the use of ground penetrating radar to identify unknown utilities, and the measures required in the CEMP would reduce the risk of impacting existing utilities during construction of the Scheme.	After mitigation, it is anticipated that there would be no significant telecommunications effects from the Scheme.	See Chapter 16 of the PEI Report.
Waste	We have assessed the expected waste streams from construction, operation, and decommissioning of the Scheme.	Given the nature of the Scheme, significant quantities of waste are not anticipated. A Construction Resource Management Plan (CRMP) and a CEMP will be prepared for the construction and decommissioning phases. These will include measures to control and manage waste onsite. Waste arisings will be prevented and designed out where possible. Opportunities to re-use material resources will be sought where practicable. Where re-use and prevention are not possible, waste arisings will be managed in line with the Waste Hierarchy.	After mitigation, it is anticipated that there would be no significant waste effects from the Scheme.	See Chapter 16 of the PEI Report.

Construction

Should we receive development consent, we expect construction to take **around 24 months**. The proposed Sunnica Energy Farm involves several different elements and we expect to work on them at different times in this period. The construction of some of these elements would happen in parallel.

We anticipate that working hours onsite will run from 7am to 7pm, Monday to Saturday. Working days will be one 12-hour shift. We anticipate reaching our construction peak 11 months into the construction period. At this point, an average of 1,260 staff per day would be required to work across the entire Scheme. This is a maximum amount. Staff numbers would decrease at other times during the construction phase.

In terms of construction traffic, we anticipate 841 staff vehicles will travel to the scheme sites per day during the peak of construction. To mitigate the impact of these vehicle movements on the highways network, construction staff would be expected to arrive on site between 6am and 7am. They would be expected to leave the site between 7pm and 8pm every day. Additionally, workers will arrive at two sites and be bussed to other sites where appropriate. This means that construction staff traffic during peak periods across all four sites will be zero. We are proposing to reduce the potential impact of HGV deliveries by managing the arrival and departure times of HGVs travelling to the scheme sites. This will minimise the number of HGVs travelling to the site during highway peak hours. For this reason, we anticipate that any change in vehicle movements during the peak period will be minimal.

We recognise the potential impact of construction on our neighbours and will put in place a plan designed to ensure potential impacts are managed and properly communicated. To aid this, we will include a draft Construction Environmental Management Plan (CEMP) and Construction Traffic Management Plan (CTMP) with our DCO application. This will set out the principles, controls, and measures we will use to manage potential environmental impacts during construction. These are both available at www.sunnica.co.uk/downloads.

Anticipated key dates for each stage of work include:

Start of construction: Autumn/Winter 2022

Scheme operational: Spring 2025





Construction at Sunnica East Site A, Sunnica East Site B, Sunnica West Site A, and Sunnica West Site B

The first step in the construction process would be to prepare the land for construction. This may require localised site levelling. Other initial construction activities would include the import of construction materials, plant, and equipment to each site; the installation of a perimeter fence; construction of internal access roads; and the establishment of construction compounds.

Installation of the solar PV panels would include piling and the erection of the module mounting structures. Following this, the panels would be mounted to the structures by hand. Localised trenching would be required to install the electric cabling required to transport the electricity generated from the panels to the solar stations and onwards to the substations and grid connection cable. The solar stations and control systems would also be installed at this stage.

Constructing the Battery Energy Storage System (BESS)

To construct the BESS, the following activities would be required:

- Import the components to each of the three sites
- Construction of the foundations
- · Installation of the electrical cabling
- Installation of the transformers, batteries, inverters, and switchgear

Constructing the cable route

We would construct the cable route in sections; each section would take four months to construct. To install the cable, we propose using a single trench of approximately 1.2m in width and 2m in depth. To construct the trenching and install the cable we will require a working width of up to 35m depending on local conditions.

To install the cable, jointing pits will be required every 500m to 2,000m to allow the construction team to join each section of the cable together. The distance between each jointing pit will be determined through the design process and will take into account existing infrastructure, cable specification, and delivery options.

The cable route will need to cross a range of existing infrastructure including roads, tracks, underground utilities, a railway, rivers, and drains. We will primarily use open cut trenching for such crossings. Where this is not possible we will use boring, micro-tunnelling, or moling methods. Further details of these methods are provided in the PEI Report.

Operations and management

At our public exhibitions last year, we received a lot of questions about **how Sunnica Energy Farm would operate once built**. We were also asked about what would happen at the end of Sunnica Energy Farm's operational lifecycle.

Operations

During its operational lifetime, Sunnica Energy Farm would be maintained and operated by a **designated management company on behalf of Sunnica Limited**. The management of the Scheme would be overseen from a number of offices that would be staffed and operational for the duration of the Scheme's operating life. The locations of the offices are shown on the plans on pages 9 and 11.

During the operating life of the Scheme, activity across the sites would be minimal and largely restricted to monitoring, maintenance, and the management of vegetation. We anticipate that there would be up to five permanent members of staff onsite during the operational phase of the Scheme. This number may rise during times of maintenance and cleaning.

Decommissioning

The Scheme would be designed for an **operating life of at least 40 years**. Once the Scheme reaches the end of its operating life, it would be decommissioned in accordance with a decommissioning plan that will need to be approved as part of the DCO. This would involve, for example, removing the solar panels and BESS and **restoring the land to its previous condition**. This means farmland will not be permanently lost as a result of our proposals. The solar panels and batteries would be recycled at this stage.

Decommissioning is expected to take between 12 and 24 months to complete.

Sunnica Limited would have a **legal responsibility** throughout the operational life of the Sunnica Energy Farm to ensure that it complies with the DCO and all other relevant legislation and regulations.

Community

The proposed Sunnica Energy Farm is a Nationally Significant Infrastructure Project (NSIP) and will help meet the urgent national need for new renewable energy generation and to cut carbon emissions by 2050 as set out in government policy.

It will also bring a range of local benefits. Across the four sites, this will include local pedestrian access, including three new permissive routes, and protection for a number of areas of archaeological interest.

These areas of archaeological interest include:

- Land at Sunnica East Site A close to Isleham
- Land at Sunnica West Site A close to the A14
- Land at Sunnica West Site B close to Snailwell

Some of these sites came to light as a direct result of our geophysical land investigations. Our proposals also include ecological enhancements which have the potential to contribute to local biodiversity.

The Scheme will also create local economic benefits during the construction process. These include use of local suppliers and businesses and a dedicated skills programme for local people to be involved in the Scheme.

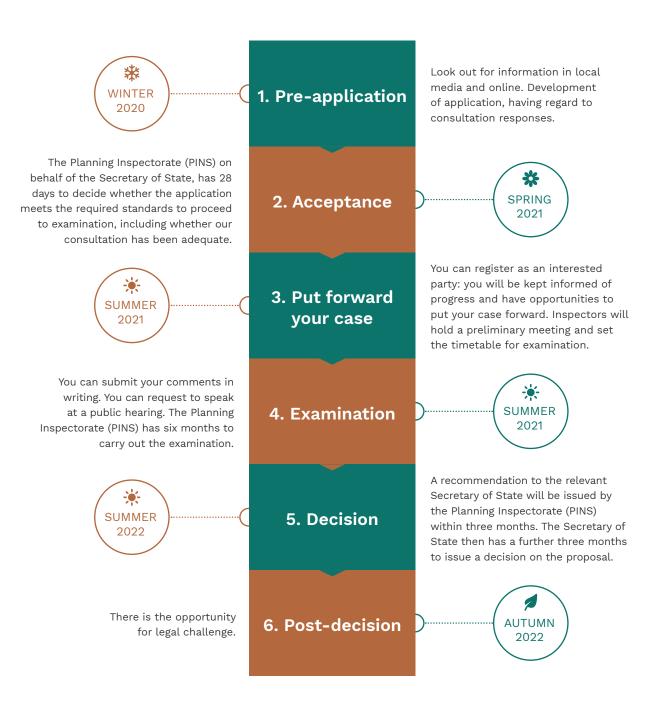


Timeline

Thank you for your interest in our proposals for Sunnica Energy Farm. Following this statutory consultation, we will consider **all the views we receive** and use them to finalise our DCO application.

The application will include a Consultation Report setting out how we have had regard to the responses received during this consultation. It will also include a summary of the non-statutory consultation. We expect to submit our DCO application in spring 2021. If our application is accepted by PINS on behalf of the Secretary of State for Business, Energy & Industrial Strategy, there will be a further opportunity for you to make comments and submissions as part of the process for determining the application.

Indicative Timeline



Responding to the consultation

We want as many people as possible to share their views on our proposals as part of this consultation.

We are consulting at a time when it is not possible to meet in person, due to health and safety requirements for the ongoing COVID-19 pandemic. We are putting in place a detailed package of measures to ensure we can continue with the consultation.

We remain very aware of how important it is to make sure that anyone in the community who wants to find out more or share their views on the proposals can do so. We are providing a range of ways to do this.

Share your views

The consultation will take place between **22 September 2020** and **2 December 2020**. There are a number of ways you can respond:

- Complete a consultation questionnaire on our website: www.sunnica.co.uk
- Complete a questionnaire (available on request through the contact details below) and return it to info@sunnica.co.uk or Sunnica Consultation, FREEPOST reference RTRB-LUUJ-AGBY, c/o Newgate Communications, Sky Light City Tower, 50 Basinghall Street, London, EC2V 5DE

Write to us at info@sunnica.co.uk or Sunnica Consultation, FREEPOST reference RTRB-LUUJ-AGBY, c/o Newgate Communications, Sky Light City Tower, 50 Basinghall Street, London, EC2V 5DE

Following the statutory consultation, we will have regard to the comments received and continue to develop our design for the proposed Sunnica Energy Farm ahead of submitting our DCO application to the Secretary of State. Our DCO application will include a Consultation Report setting out how we have considered all responses received.

Any comments received will be analysed by Sunnica Limited and any of its appointed agents. Copies may be made available in due course to the Secretary of State, the Planning Inspectorate, and other relevant statutory authorities so that feedback can be considered as part of the DCO process. We will request that any personal details are not placed on public record but will be held securely by Sunnica Limited and its agents in accordance with the data protection law and will be used solely in connection with the consultation process and subsequent DCO application and, except as noted above, will not be passed to third parties.





Find out more

You can find out more about our proposals by:

- Viewing a virtual exhibition on our website: www.sunnica.co.uk
- Joining online webinars we will hold about our proposals. These will include presentations on specific topics and will offer the opportunity to ask questions. You can find the dates of the webinars and details of how to register at our website, www.sunnica.co.uk
- Booking an appointment to talk to us individually about the proposals, using the freephone number detailed below. We will offer the opportunity to speak with members of our technical team if you have questions about specific aspects of our proposals.
- Viewing consultation documents, including the PEI Report and the SoCC, on our website: www.sunnica.co.uk
- Contacting us directly with any other questions, using the details below.
- Requesting copies of the materials on a memory stick or CD/DVD, using the contact details below. If you would like a hard copy of the PEI Report and its non-technical summary please contact us using the details in this booklet. A charge of £0.35 per page will be made for these materials.

Contact us

For further information, please contact us by:

Visiting our website: www.sunnica.co.uk | Calling: 0808 168 7925 (9am to 5pm, Monday to Friday)
Emailing: info@sunnica.co.uk | Writing to us at: Sunnica Consultation, FREEPOST reference RTRB-LUUJ-AGBY,
c/o Newgate Communications, Sky Light City Tower, 50 Basinghall Street, London, EC2V 5DE

