

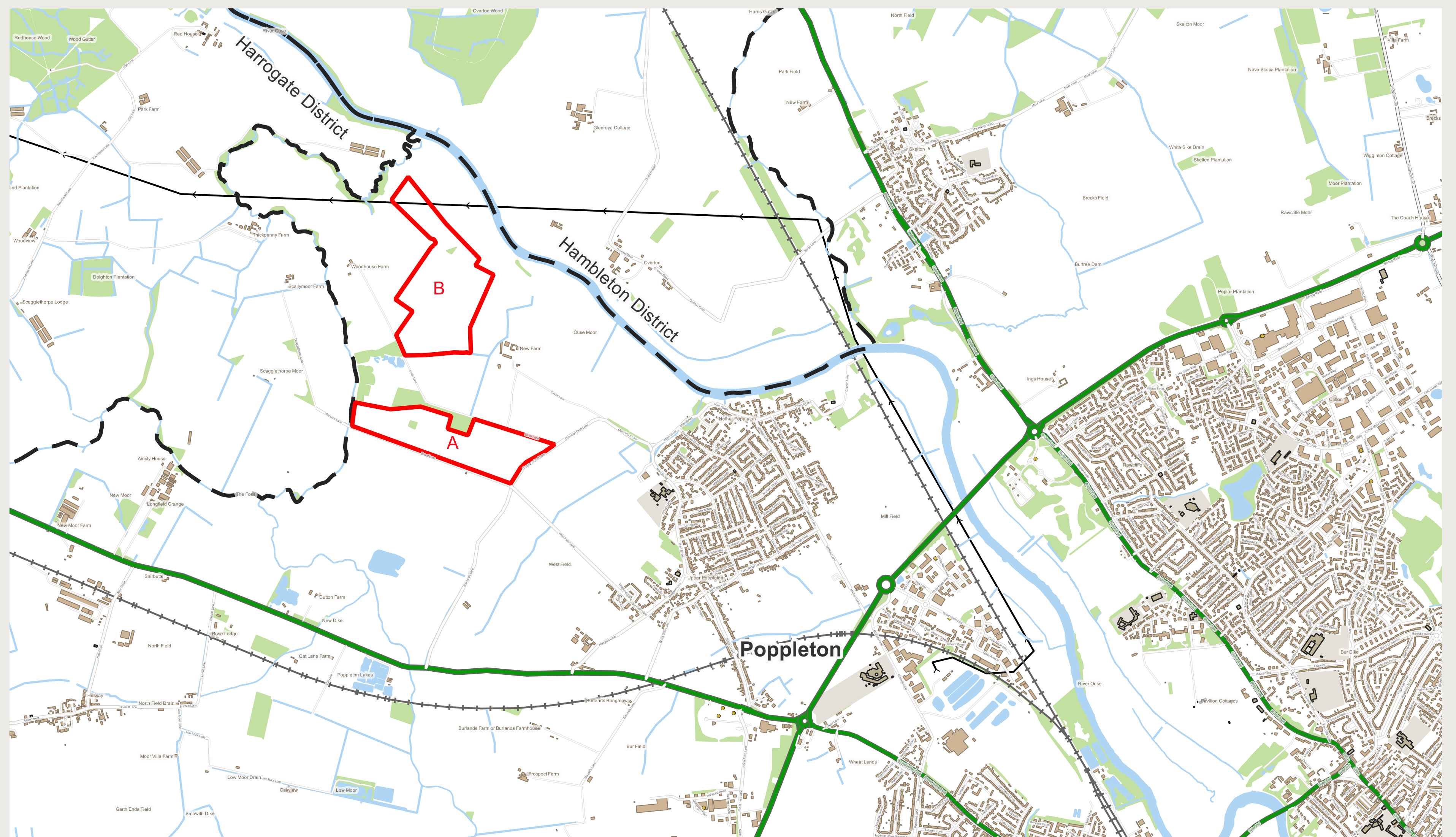
Introduction

Welcome to our public consultation on Poppleton Solar Farm.

Ampyr Solar Europe (ASE) is developing proposals for a solar farm to the northwest of the village of Poppleton, in York. The proposed solar farm will cover 125 acres over two parcels of land at New Farm (labelled Fields A and B in the plan on this board).

We anticipate the solar farm being able to supply the electricity needs of approximately **12,400 homes** a year. It would also support City of York Council's net zero carbon ambitions.

The clean energy generated will save on average **12,900 tonnes of carbon** per year, which adds up to **386,000 tonnes of carbon** over the next 30 years. We are also exploring options for supplying cheap power to major local power users.



Poppleton Solar Farm location



Field A (southern field) as it currently looks



Field B (northern field) as it currently looks

Why do we need the solar farm?



The UK is transitioning to zero and low carbon sources of power. All coal-fired power stations have to close by 2025, meaning over a quarter of the UK's energy generation needs to be replaced. The UK's climate change ambitions are amongst the highest in Europe and the aim to achieve net-zero carbon emissions by 2050 is set in law.



By 2050 we could use 80% more electricity than we do today. For example, electric vehicle and heat pump ownership has grown thirty-fold and is set to rise with the abolition of new diesel and petrol cars by 2040.



Currently the UK's electricity price is among the highest in Europe, meaning that we need to find ways of generating more affordable, renewable and clean electricity. Energy security for the country is now of paramount importance.

About us

ASE was created in 2021 through the merger of NaGa Solar with the existing Ampyr Energy UK joint venture between AGP Group and Hartree Partners.

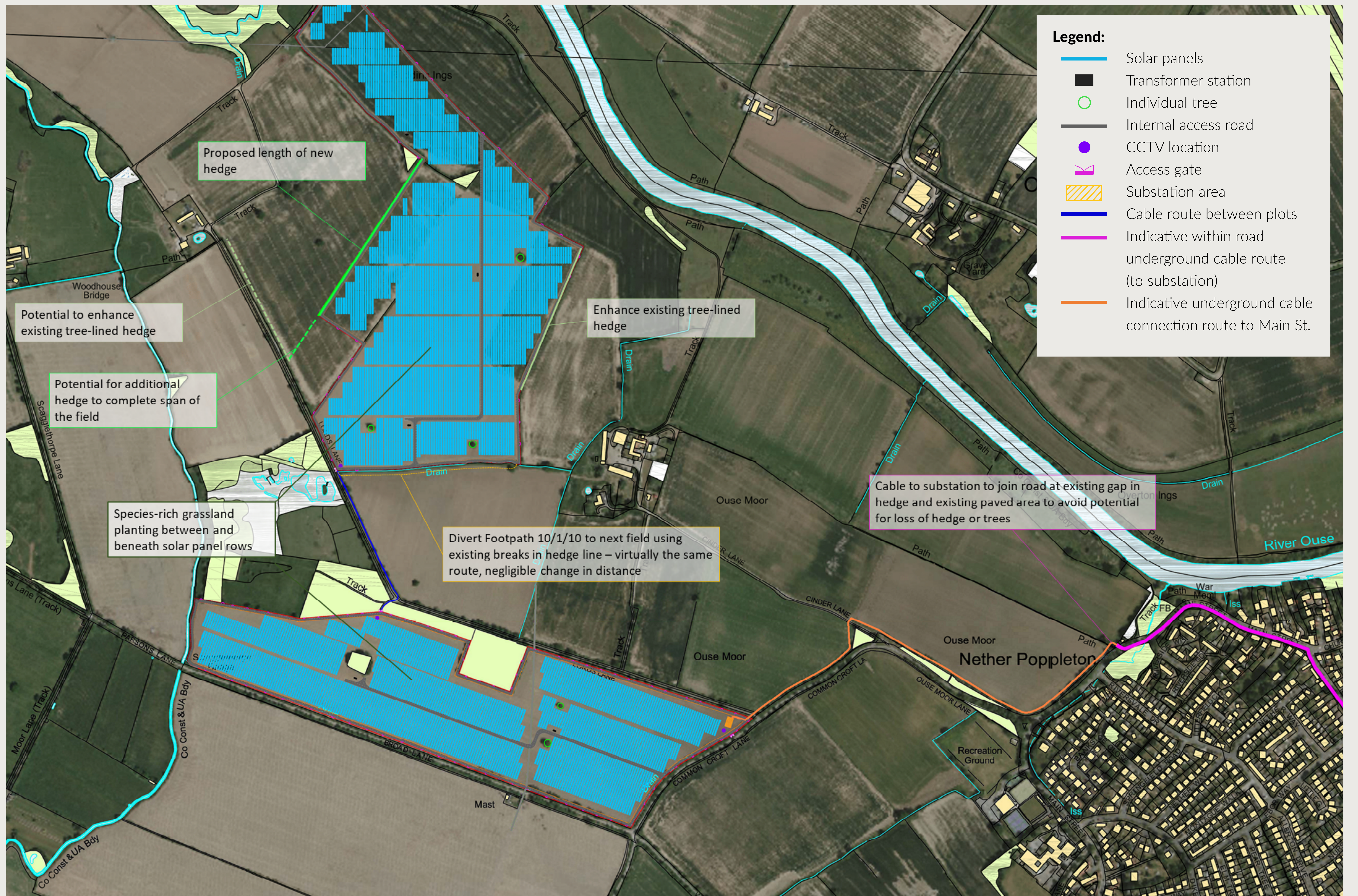
For this project, we have created a Special Purpose Vehicle (SPV) called Poppleton Solar Limited. SPVs are often used for solar developments and operate as separate legal entities, which help attract investment. This SPV brings together highly experienced partners to help accelerate the transition to a zero-carbon future.



Example image of a single axis tracker solar farm

Our proposals

Our proposals are for a new solar farm at New Farm, to the north west of the village of Poppleton, with an expected generating capacity of up to 34 megawatts (MW), and a connection to the electricity network at an existing substation in Nether Poppleton.



Proposed site layout

The layout of the site and the route of the grid connection have been designed to be sensitive to public footpaths and local views, and to avoid disruption to the local community. We are also developing a landscaping approach that includes enhancing and improving the network of hedgerows around and within the site and planting new trees.

Site selection

We have carefully considered the best location for the solar farm, both operationally and in terms of minimising impacts on the community and environment. The steps we have followed are set out below.

- 1. Find a grid or private wire connection.** Solar farms depend on demand for electricity, so development always starts with finding a good connection into a wider electricity network.
- 2. Conduct a desktop assessment.** Once a potential connection was identified, we conducted a desktop assessment to find suitable areas for the solar farm. This considered a number of things including national and local designations, heritage, ecology, flood risk, agricultural land grading, neighbouring land uses, visual impacts, and proximity to homes.
- 3. Identify land options in the search area.** Based on the search area identified during the desktop assessment, we then engaged with landowners to find suitable sites.
- 4. Carry out a detailed assessment on suitability of the land.** Once we had identified a site in the right area, we carried out a detailed assessment of its suitability.

The solar farm

- Approximately 50.5 hectares (125 acres) of land.
- Around 65,000 panels with a power generation capacity of around 33.8 DC (Direct Current) MW-peak.
- Single-axis tracker solar photovoltaic system, which can adjust along one axis to increase solar absorption.
- Solar panels set on lightweight frames in rows spaced 2.5m apart with a minimum ground clearance of 0.6m and a maximum panel height of up to 3.5m.
- 2m high fence with CCTV cameras on 3m high poles.
- Internal access tracks through each field for operation and maintenance.
- Substation area with a small site maintenance facility.
- Inverters and transformers to convert power from DC to AC (Alternating Current).
- A 2.6km underground grid connection cable between the site and Main Street, to connect into Poppleton Substation.
- Proposed diversion of the Public Right of Way that runs across the south of Field B to the other side of the existing hedgerow, with a proposed change of between 1m and 3m in distance. This diversion will make use of two existing gaps in the hedgerow.

How will it look and how does it work?

We know that the overall look of Poppleton Solar Farm is likely to be a key point of interest for the local community.

As the site is located within the York Green Belt, we have been mindful of situating it carefully to reduce the overall impact on both the environment and the community. This board explains how the solar farm may look, as well as how the solar panels would work.

How will it look?

We have carefully considered how Poppleton Solar Farm will fit into the landscape in order to reduce any visual effects on the community and local wildlife. The solar farm will not be visible from Poppleton, and only a few surrounding properties will have view of the site.

Height: The panels will range from 2.5m in height at the lowest point, rising to no more than 3.5m when upright. This means that the visual effects of the solar farm will be limited for the communities close to the site.

Glint and glare: Glint and glare are visual effects that can sometimes affect nearby motorists or homes. Solar panels are designed to maximise the absorbency of the sun's rays, and this means that glint and glare levels will be lower compared to surfaces such as window glass, water, or snow. We are undertaking a Glint and Glare Assessment, which will cover homes, key roads within 1km of the site, and Rufforth East and West Airfields.

Screening: Existing hedgerows and trees will be maintained and enhanced to help screen the solar farm. We will also look at introducing planting such as wildflower meadows, hedgerows and trees to further minimise visual impact and support wildlife. This will all be considered as part of our Landscape and Visual Assessment, which will be submitted with our planning application.

Green Belt: New Farm was identified following our four-step site selection process (see Our Proposals board). It is located on Green Belt land, but we believe it is still appropriate to develop here for the following reasons.

- The development is temporary, meaning any impact would be reversible, and the site will be returned to its previous state when it is decommissioned.
- The development benefits are believed to outweigh any harm resulting from developing within Green Belt land.
- There is a lack of suitable alternative sites in this area offering connections into the grid.
- A solar farm can be developed on Green Belt land under very special circumstances, and we believe this project meets the relevant criteria for this.

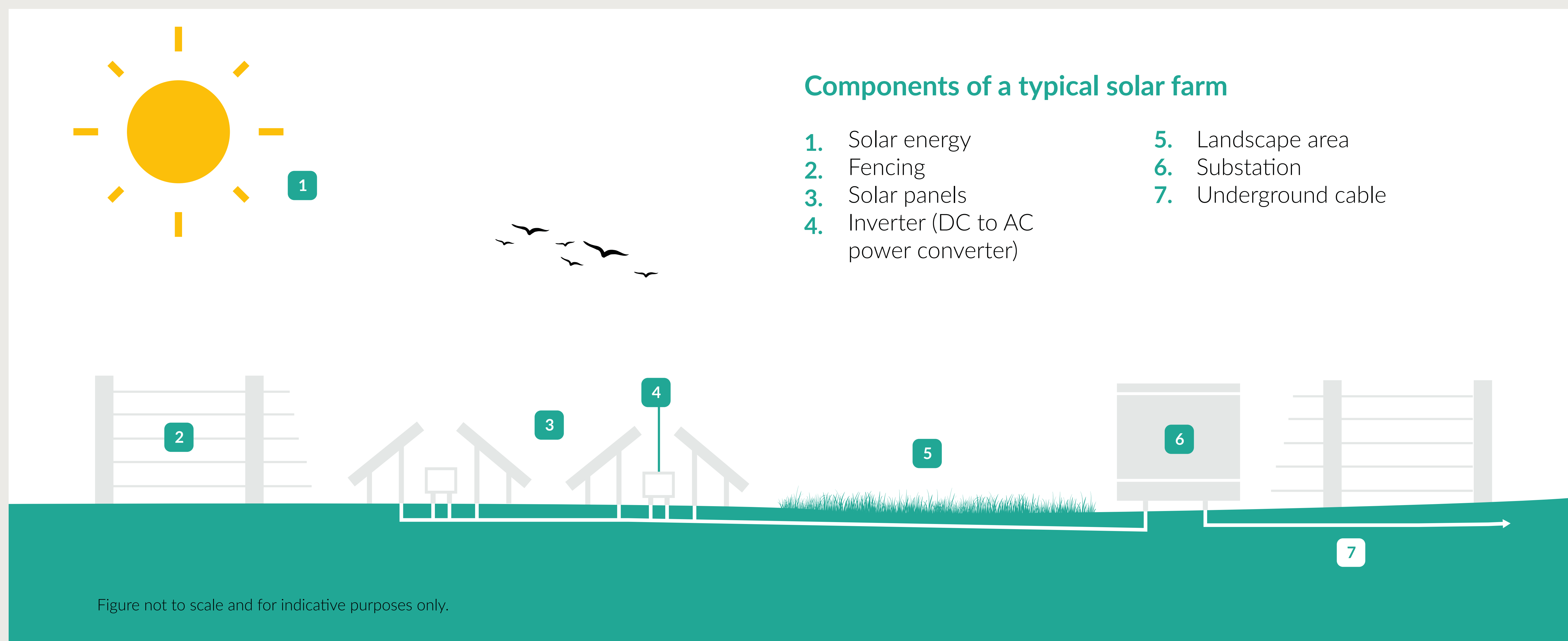
How does it work?

Solar panels are made out of photovoltaic cells (which is why generating electricity with solar panels is also called solar PV) that convert the sun's energy into electricity.

Photovoltaic cells are sandwiched between layers of semi-conducting materials such as silicone. Each layer has different electronic properties that energise when hit by photons from sunlight, creating an electric field. This is known as the photoelectric effect, and this creates the electrical current.

Solar panels generate a Direct Current of electricity. This is then passed through an inverter to convert it into an Alternating Current, which can then be fed into the National Grid, or directly to large local power users. This process is illustrated on the figure below.

Solar panels need daylight and sunshine, not high temperatures, so solar panels can and do work well in England.



Components of the proposed solar farm

Environment

We are mindful of the existing environmental context of the site. We are doing this by undertaking a number of surveys to make sure we understand the impacts the proposed solar farm may have.



Surveys are being carried out to assess Poppleton Solar Farm's likely effects on the environment, landscape, heritage and local community. We are also looking at ways to enhance local ecology and biodiversity through the project.

Early engagement has been undertaken with regulatory bodies and an Environmental Impact Assessment is not required for this development.

Ecology and biodiversity

Conserving and enhancing the biodiversity around Poppleton Solar Farm is important to us. We have undertaken surveys to understand if there are any protected wildlife and habitats at the site, and to identify any mitigation required to minimise impacts on them. These surveys have concluded that the solar farm will not have a significant impact on the local ecology, wildlife or habitats of the area. We will also be working to enhance the natural environment through our work, and some of the options we are considering include:

- areas of woodland planting in support of York Community Woodland project, which aims to plant 50,000 trees by the end of 2023 for carbon capture;
- species-rich grassland seeding in the fields containing the solar panels (beneath, in between and surrounding them); and
- planting trees, hedgerows, a species-rich grassland mix, and a wildflower meadow on sections of the site to support habitat creation and help with screening.



Agriculture

We know that food security is important. The next big challenge to our food supply is expected to be caused by climate change, so addressing this, including by using solar energy, will improve our food security.

The land within the proposed solar farm site is not “best and most versatile” agricultural soil. It has been confirmed by an Agricultural Land Classification assessment as being grade 3b - moderate quality.

During the solar farm's life span (approximately 30 years), the ground beneath the solar panels will be planted with a species-rich grassland mix. The area under the panels can also safely be used for grazing small livestock such as sheep, since the panels will be 0.6m above the ground. This will help to continue agricultural use of the land after the site is built. After its operational period, the solar farm will be decommissioned and the land returned to full agricultural use.



Noise

Solar panels themselves do not make any noise and there are no known health issues associated with being near solar developments. When the solar farm is operational, low levels of noise can be generated by the electrical system, such as from the inverters, which can sound like a quiet buzz or fan noise. Residents and others within Poppleton would be over 500m away from the site, meaning any such noise would not be audible within the village. The only residents within 500m of the solar farm would be at New Farm itself, and Woodhouse Farm. All of these properties would be 390m or more away from any noise-generating equipment, which means noise would not be audible to them either.

The construction of the solar farm will take place quickly, as minimal digging is required. The potential effects of noise and vibration during construction will be limited to specific locations within the site and only for short periods. We will make the community aware when works are likely to take place and details of our limited working hours will be set out in our planning application.

Environment

Traffic

During construction, there is likely to be more traffic due to materials being delivered to the site, but when the solar farm is operational additional traffic would be limited to maintenance vehicles less than once a week.

During the construction phase, access to the site will be via existing access to Fields A and B. Site traffic is expected to leave the A1 at Junction 47 near Hopperton and head east along the A59, then north along Newlands Lane before turning west on Lords Lane, where the site will be accessed. Site traffic will consist of HGVs, light goods vehicles and cars. Movements during the construction phase are expected to have a minimal impact on local network.

Traffic management measures may be implemented for cable installation works, however these will be short-term and are not likely to cause significant disruption. We will also consider any cumulative impacts from other nearby works.

Flooding

Rivers and water courses near the development will not be impacted by the solar farm's development. Maintaining the grass below the solar panels will ensure that the land will remain permeable, meaning surface water can pass through easily.

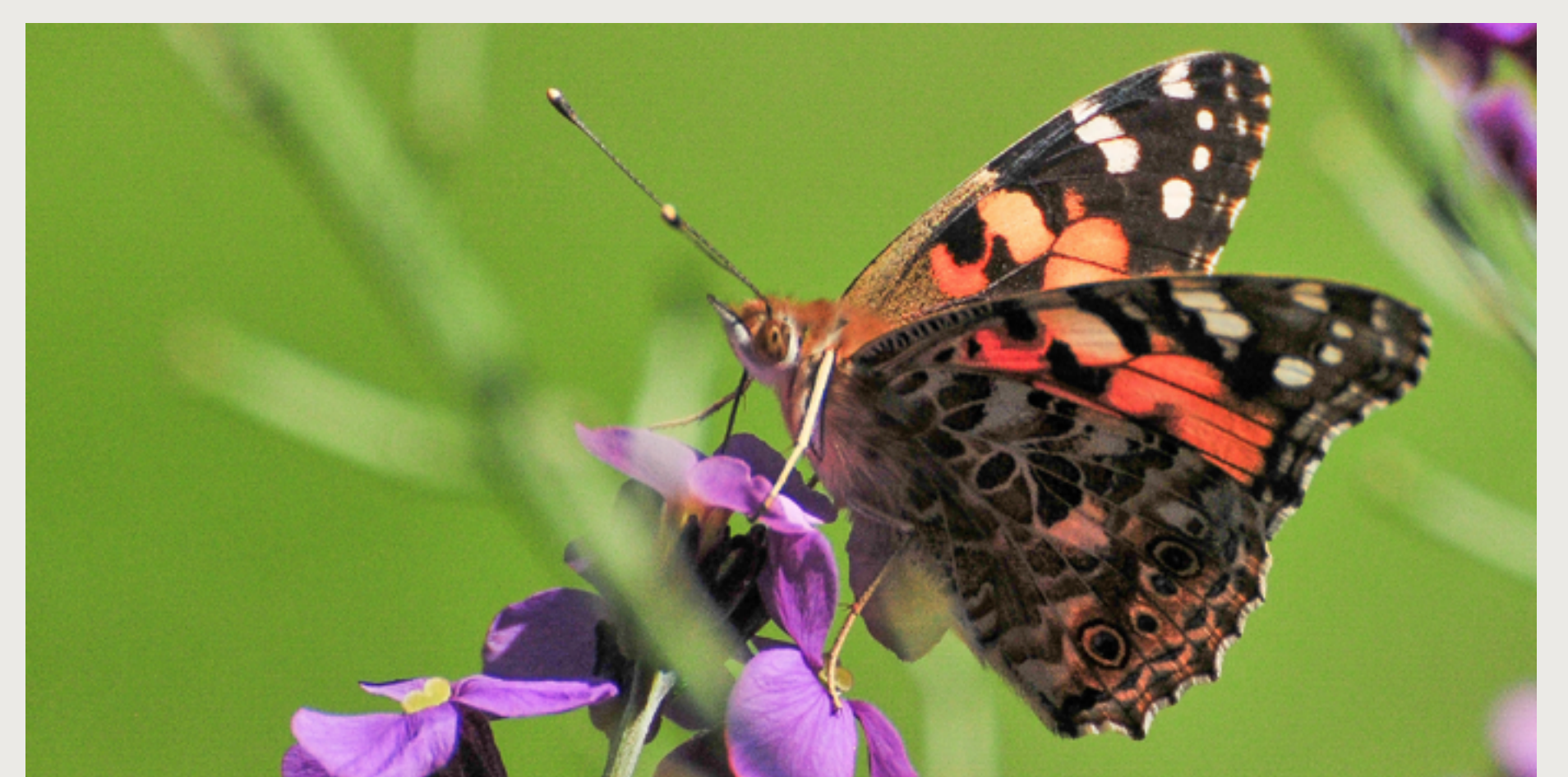
As part of our planning application, we will submit a Flood Risk Assessment that will demonstrate that the site will not be affected by flood risk, nor affect flood risk elsewhere.



Heritage

The planning application will include a Heritage Assessment that assesses any potential impacts on the setting and character of heritage sites, and the potential for undiscovered archaeological remains.

A geophysical survey has been undertaken, which has used magnetometry (magnetic detection) in order to determine the potential for buried archaeology beneath the ground within the site, including proposed cable route. Consultation with the City of York Council archaeologist and further assessment will determine whether and how findings are investigated.



Community benefits and next steps

This consultation is the local community's opportunity to shape our proposals before we submit a planning application later this year.

Community benefits

We are looking at ways to help ensure Poppleton benefits from the development of the solar farm. This may include setting up a Community Benefit Fund to support local projects. Other benefits could include creating community cooperative electricity to provide cheaper energy to the local community. If planning permission is granted, there may also be supply chain opportunities for local businesses.

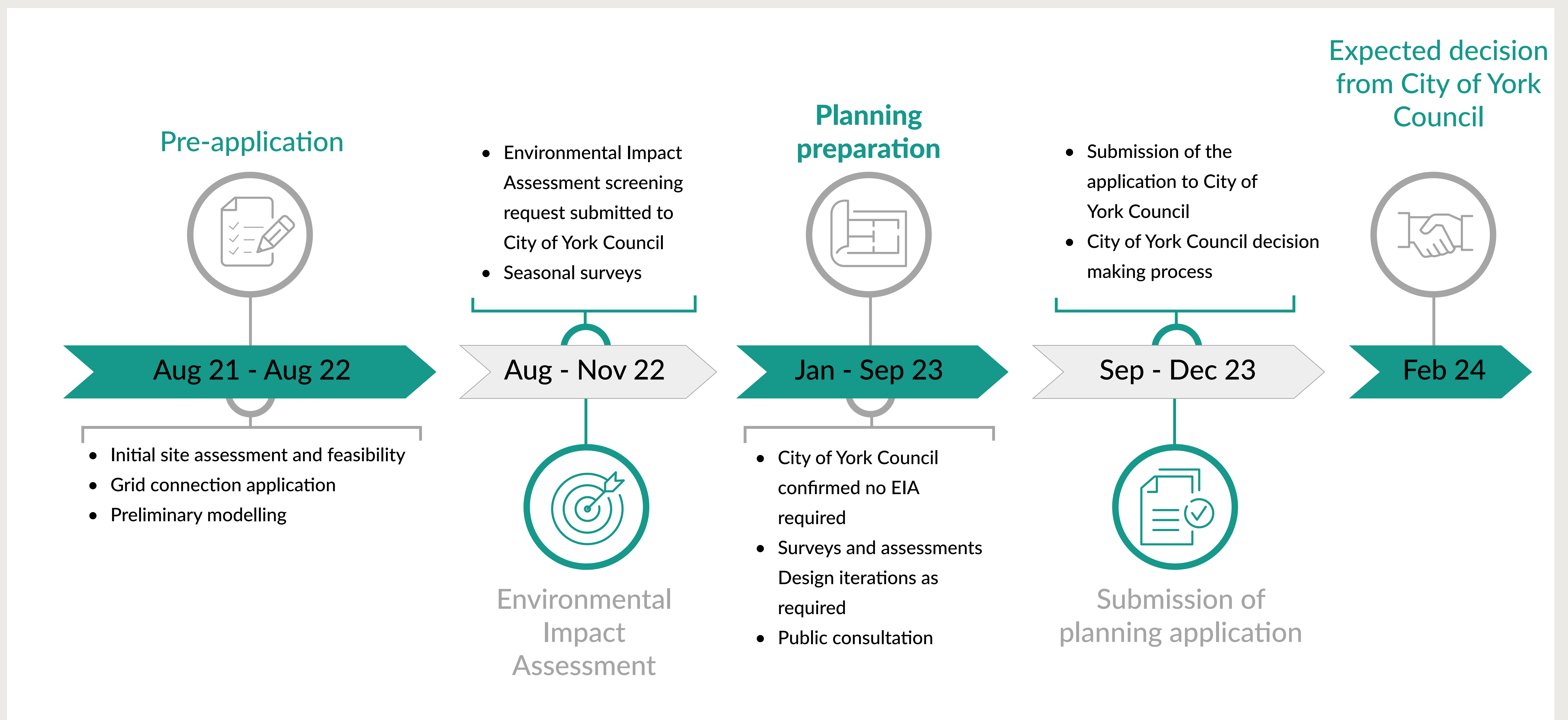
We would like to hear your ideas on what benefits you would like to see delivered. Please share any ideas or suggestions with us using our feedback form.

Timeframes and next steps

We are currently carrying out surveys and assessments, which will inform our proposals alongside the outputs from this consultation. We will then submit a planning application to City of York Council later this year.

Once the planning application is submitted, City of York Council will host a statutory consultation, where you will be able to comment further, directly to the council. At this point, we will share an update with the local community on how feedback has influenced our proposals.

Should planning permission be granted, we would look to begin construction as soon as our grid connection date is finalised, with the currently anticipated date at around 2030. We expect that construction will take six months.



This consultation is your opportunity to fully understand the scheme, ask us questions, and share your feedback. We will consider all feedback received and use it to inform our proposals. We would also like to hear suggestions on how we can deliver community benefits through the scheme.

This consultation is running from **4 July 2023 to 28 July 2023**. You can share your views on the project in one of the following ways.

- **Online:** using the online form at www.poppletonsolar.co.uk
- **Email:** using the scheme email address, contact@ampyrsolareurope.com
- **Post:** using the scheme Freepost address, **Freepost ASE**
- **At this event:** by filling in a hard copy form and submitting it to a member of the project team

We will stay in touch through the development of the scheme, including through our scheme website: www.poppletonsolar.co.uk.

Decommissioning

Poppleton Solar Farm will be temporary, with an operational period of approximately 30 years. At the end of the development's lifespan, the site will be decommissioned with the land returned to full agricultural use, with improved soil quality.