

Planning Policy Executive Advisory Panel Monday 24 October 2022

Agenda Item 4

Presentation on Kettering Energy Park Masterplan







Matthew Thomas
Michael Sparks Associates - Chartered Architects and Planning Consultants



The Vision - Why an Energy Park?

- Energy Crisis / Energy Security
- Climate Change and Environment Emergency
- Existing Infrastructure on site or is already consented
- Biodiversity & Sustainability
- A Market leading development
- Sustainable Employment
- Businesses are seeking energy efficient premises to help transition to Net Zero

First Renewable and the landowners of the site, Stuart Beaty and his family, had the ambition of creating an Energy Park that would match existing energy production with consumption.

It's now time to realise that ambition.

The Joint Core Strategy identifies the site as a location for an Energy Park to maximise energy production and co-locate employment and other uses on the site

Preparation of the masterplan started in 2020. We have a detailed understanding of the site and what is needed to create a successful Energy Park development.



Proposed Uses at the Kettering Energy Park

Additional Energy Infrastructure



Page 6

Employment Development



Hydroponics



Innovation/Enterprise Hub

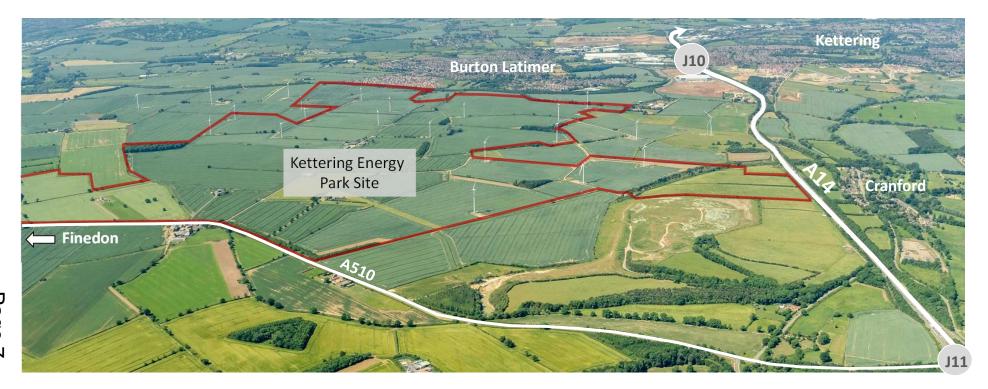


Energy Criteria: Every occupier will have the opportunity to take 100% of their energy from on-site renewable sources (minimum renewable supply of 50%)

The ambition is for the proposed development at the Energy Park to create an integrated and interacting ecosystem of complementary uses.



The Site



- The Energy Park site is located to the east of Burton Latimer and the south west of Kettering;
- The land comprises existing agricultural land (grade 3b), and is currently owned by the Beaty Family;
- In addition to the farm, the site accommodate a number of wind turbines that make up the Burton Wold Wind Farm and a High Voltage Power Line also crosses the site;
- The site is adjacent to the A510 and the A14, with Junction 11 located to the north east.



Page 7

Consultation To Date

- 1. Parish and Town Councils
 - Finedon Town Council
 - Burton Latimer Town Council
 - Cranford Parish Council
 - Woodford Parish Council

Feedback

Form of Development

Impact on local area

Additional public access at the site

New Community Fund similar to that provided by the existing wind turbines

- 2. Council Policy Team
- 3. Consultation with Stakeholders

e.g. Council Ecologist, Place Services, Natural England, Anglian Water, National Highways, Highway Authority

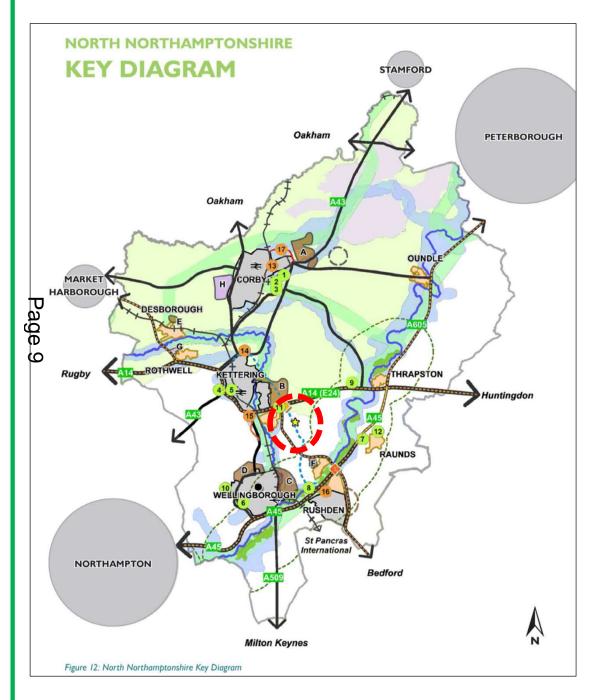
Future Consultation

- 1. Consultation Website
- 2. Additional Community Consultations
- 3. Formal Consultation on Draft Masterplan

The feedback received will be recorded and taken into account, which will help us improve the masterplan and the overall outcome.



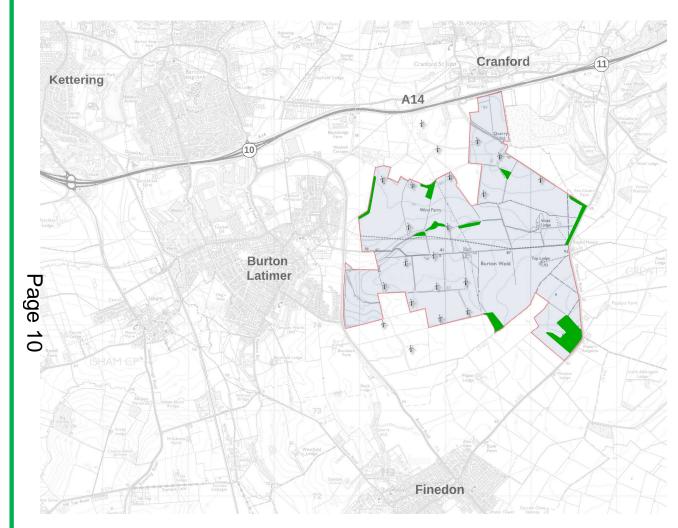
Policy Context & Masterplan



- The Energy Park will directly respond to the Climate Change and Environment Emergency declared by North Northamptonshire Council as well as key requirements of the NPPF in respect of climate change and economic growth.
- The North Northamptonshire Joint Core Strategy was adopted in 2016 and this identifies that the Burton Wold site as a location for an Energy Park.
- Policy 26 of the Joint Core Strategy requires a Masterplan to be prepared to define the boundaries of development of the Energy Park appropriate uses and key principles of development.
- A Masterplan is under preparation to meet this policy requirement.



Masterplan Studies and Assessment



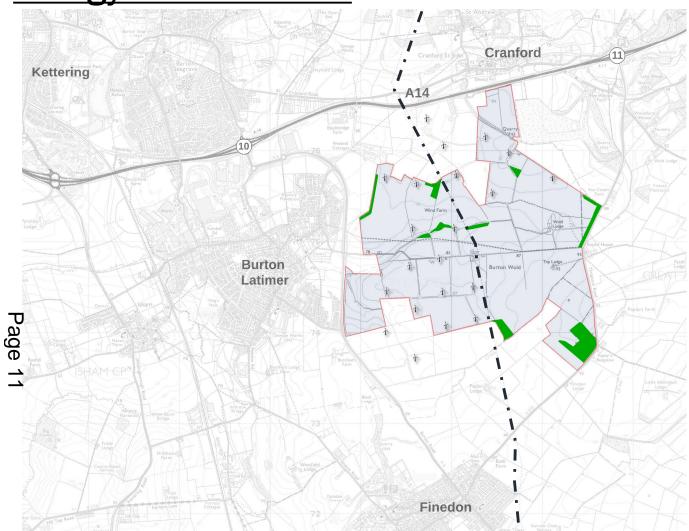
Assessments have been undertaken to identify constraints, opportunities and key areas of the site where development of new energy infrastructure, business premises and other complementary uses could be located.

These assessments have considered the wider site that is controlled by First Renewable, shown opposite

Potential development zones for the Energy have then been identified based on this analysis.

This assessment work for the masterplan has also considered proposals to mitigate any potential impacts that may arise from development at the site.





The primary reason that the site is identified as a location for an Energy Park is the existing and consented Energy Infrastructure.

The site is crossed by a High Voltage 132kv power line that is part of the National Grid

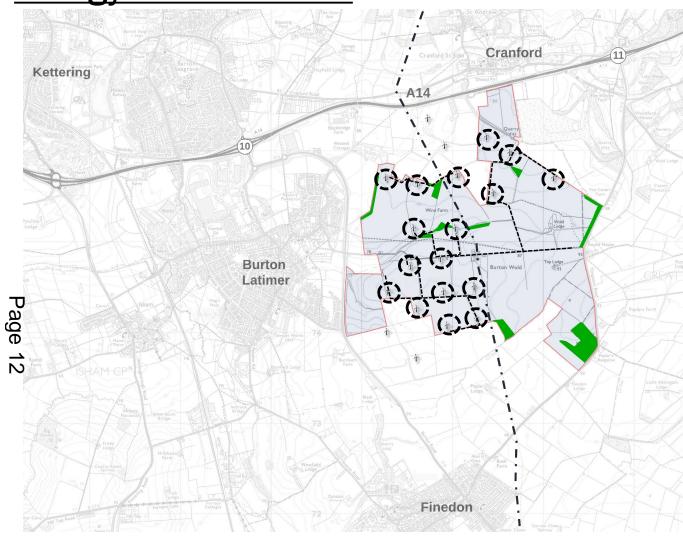
Masterplan area of search

Existing vegetation (excluding field margin hedgerows Existing overhead power line









The first phase of the wind farm was the largest on land wind farm in the UK at that time.

When the Wind Farm extension was installed in 2014, the new turbines were the most efficient in the UK.

The wind turbines had broad support from the local community.

This site has therefore been at the leading edge of renewable energy provision.



Masterplan area of search

Existing vegetation (excluding field margin hedgerows

Existing overhead power line

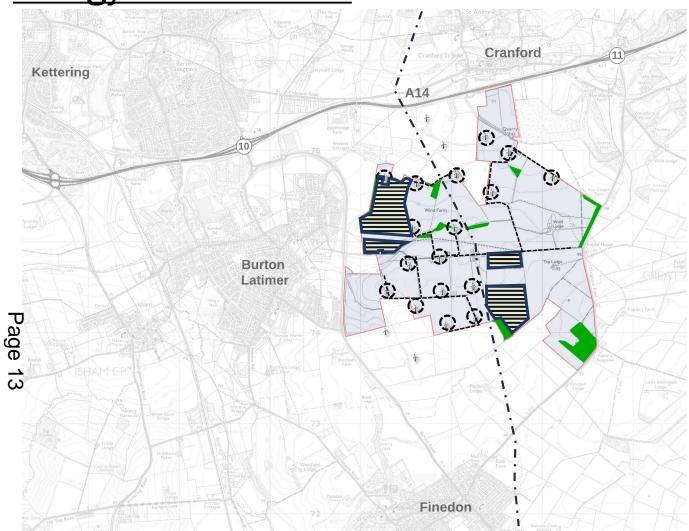
Existing on-site wind turbine

Access route/cable run to on-site wind turbine









Two Solar Farms have planning permission which has been implemented, but not yet installed.

The solar farms will provide a minimum of 40 Mva, sufficient power for up to 10, 191 homes.

These solar farms have permission for up to 40 years and will provide a connection to new development at the site.

Masterplan area of search



Existing vegetation (excluding field margin hedgerows



Existing overhead power line

Existing on-site wind turbine



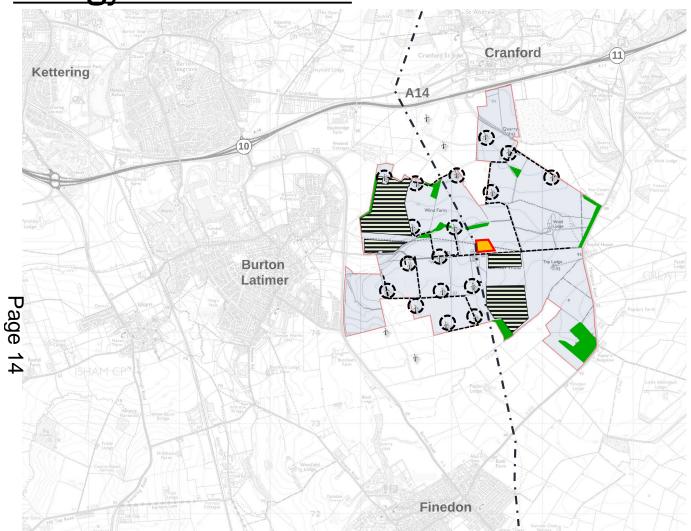
Access route/cable run to on-site wind turbine

.____

Consented solar farm







Planning Permission has also been granted for a Grid Connection that will connect to the overhead power lines.

A contract is already in place with the energy operator for the import and export 40 MW energy from/to the National Grid.

This will provide a resilient supply to new development and allow surplus energy to be fed back into the Grid.

Masterplan area of search



Existing vegetation (excluding field margin hedgerows



Existing overhead power line





Access route/cable run to on-site wind turbine

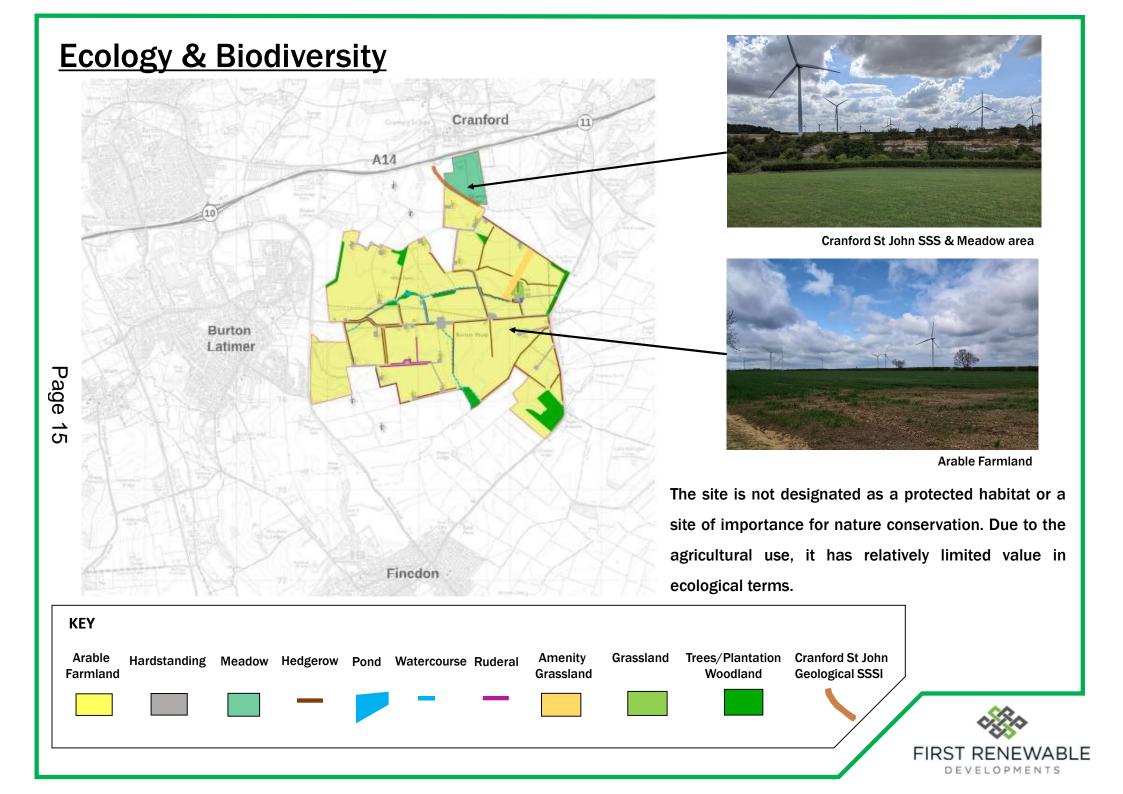
Consented solar farm



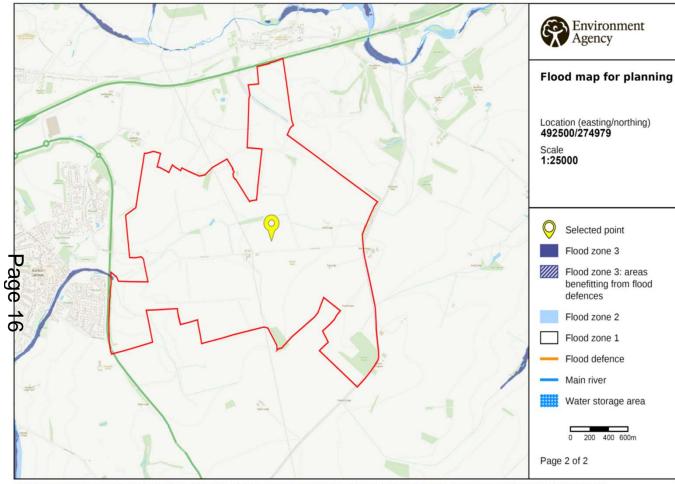
Consented 132kv grid connection







Flood Risk



© Environment Agency copyright and / or database rights 2021. All rights reserved. © Crown Copyright and database right 2021. Ordnance Survey licence number 100024198.

The site is in Flood Zone 1 and has a low risk of flooding.

There are ordinary watercourses in the site and an appropriate drainage strategy will be developed incorporating Sustainable Urban Drainage features.

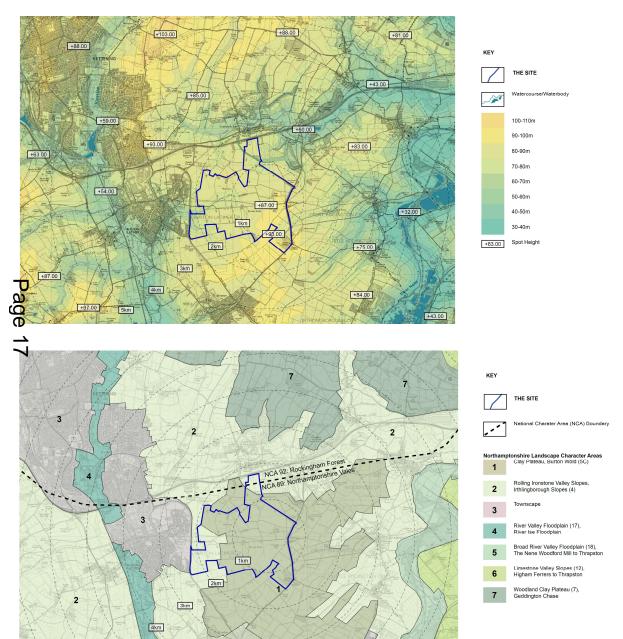


Illustrative Sustainable Drainage Image



Landscape

5km



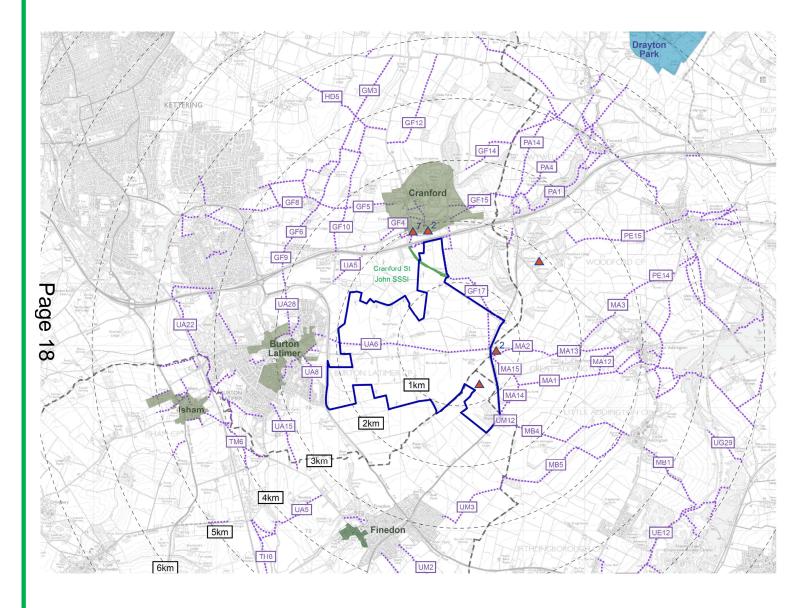
The site has no specific designations that affect it and it forms part of the undulating landscape that typifies this area of North Northamptonshire. The site's topography comprises an elevated area with a slightly rounded profile, with ground heights varying from 80m – 90m AOD.

The highest part of the site is at the south western however falls gradually away to the south towards Finedon and the north towards the A14.

The existing wind turbines measure up to 110 metres in height.



Landscape



KEY



THE SITE



Previous District Boundary



Public Rights of Way (with reference, within 4km)

Historic



Registered Parks & Gardens



Listed Building (including number within close vicinity, within 2km)

Policy 2 – Historic Environment

Ecological/Natural Environment



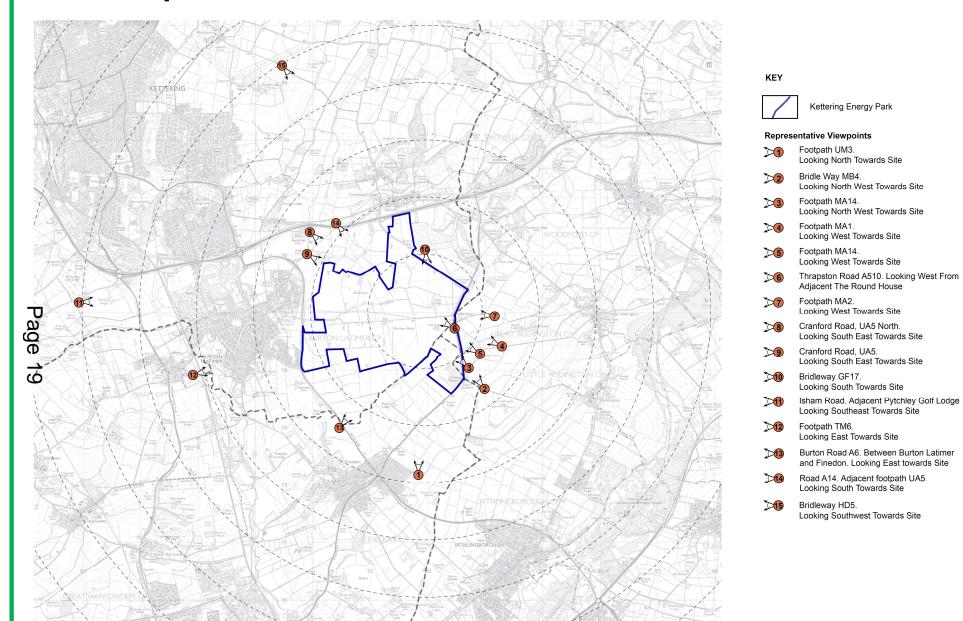
Conservation Areas



Site of Special Scientific Interest (SSSI) Policy 4 – Biodiversity & Geodiversity

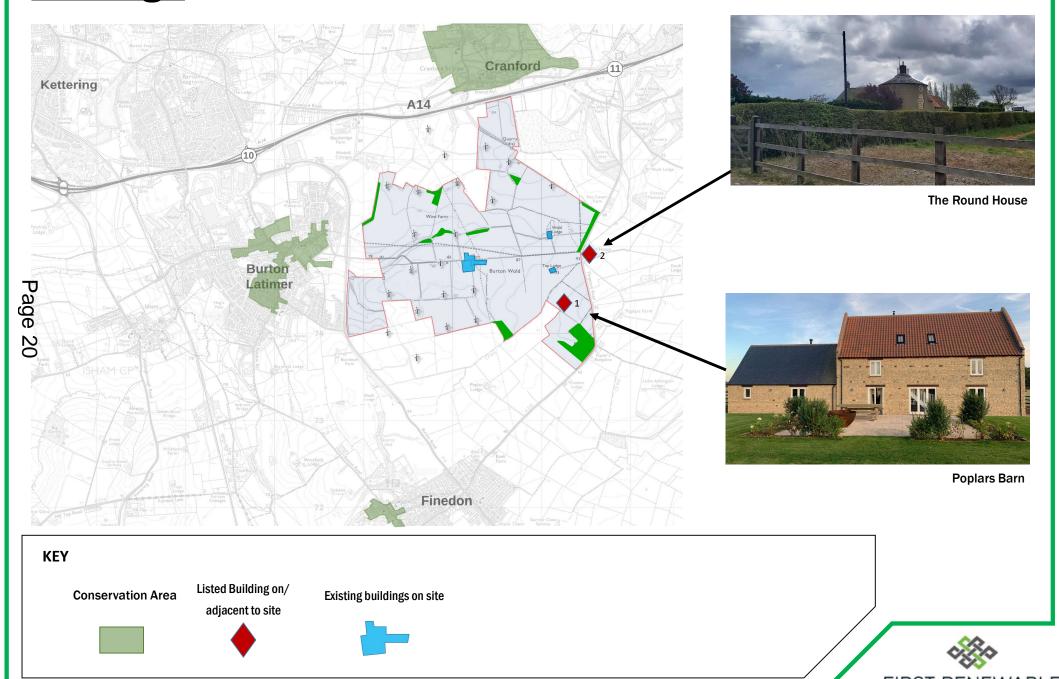


Landscape





Heritage



Archaeology

- There is the potential for below ground archaeological features to be present but are likely to have been affected by the farming activity.
- Potential for below ground remains of value to be present adjacent to the consented solar farm plot to the west.
- Detailed site investigations comprising trenching have not been undertaken but will be undertaken following further detailed assessment prior to any development taking place.

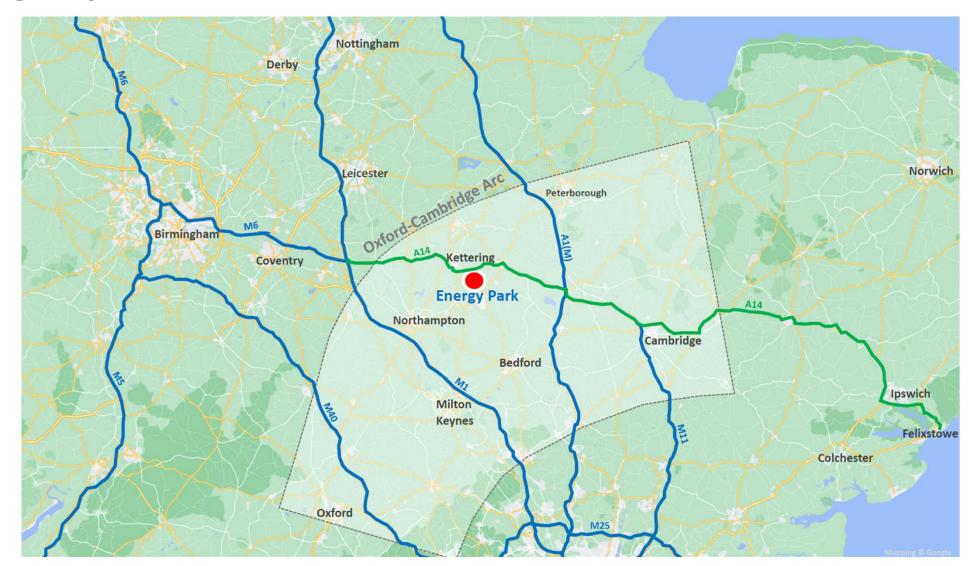


The grey area shown on the map demonstrates part of the site which has been surveyed to date.



Highways & Movement

Page





Highways & Movement

Highway modelling work undertaken to date identifies that Junction 11 of the A14 has capacity to accommodate an increase in traffic movements associated with development of the Energy Park site. Development Traffic will be directed to this junction.

Measures to improve sustainable travel to and from the site will be incorporated into the proposals.

There are no national cycle routes within the study area, but Wold Road could form a strong connection to Burton Latimer and Kettering

Page 23

The nearest railway station to the site is Kettering Railway station. A shuttle bus service to connect the Energy Park to this station is proposed.

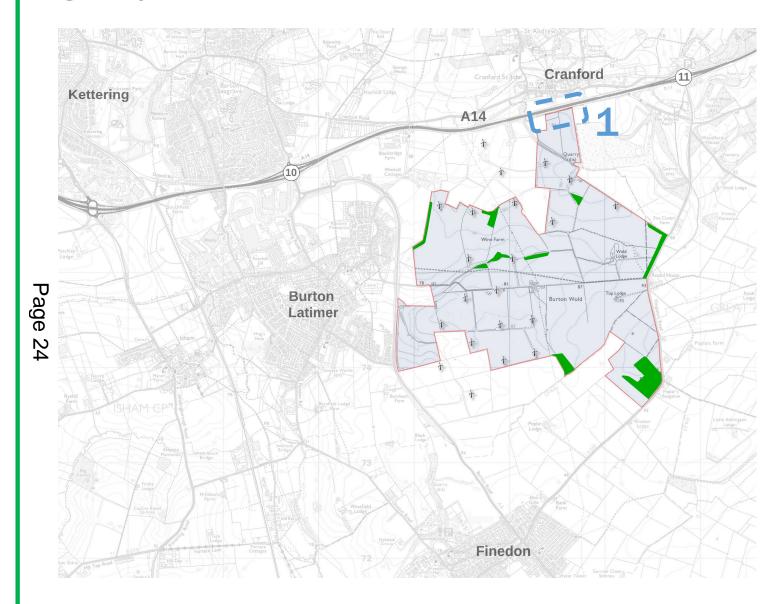


A Sustainable Transport Hub is being considered as part of the Masterplan to potentially include:

- Electric Bike Hire and Charging Station
- Electric Car Charging Facilities for the Public
- Bus Stops for the Shuttle Bus
- Transport Information



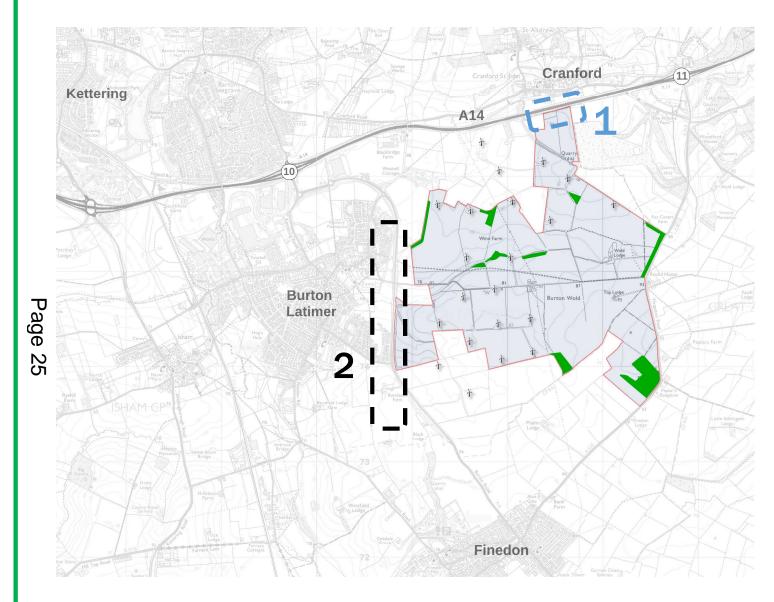
<u>Highways & Movement - Site Access</u>



1 Access from A14



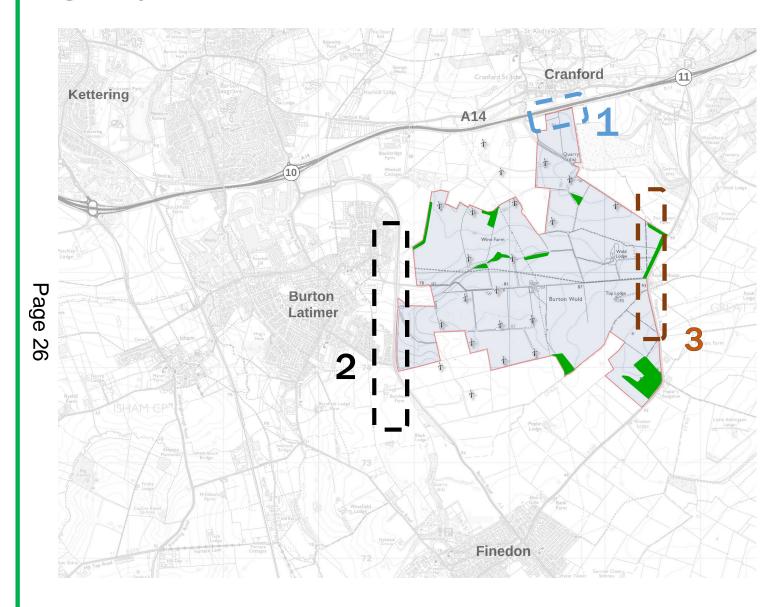
<u>Highways & Movement - Site Access</u>



- 1 Access from A14
- Access from A6/Burton Latimer

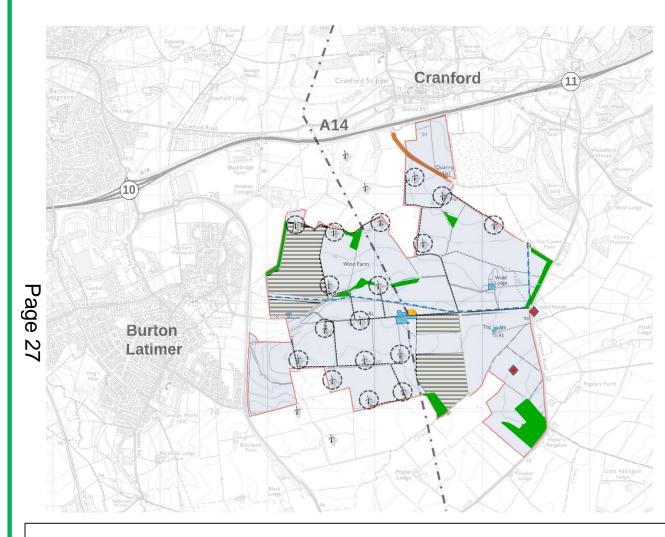


Highways & Movement - Site Access



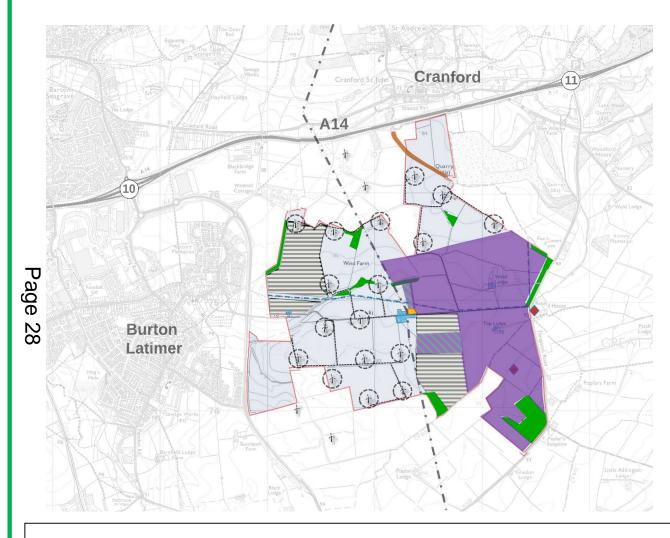
- 1 Access from A14
- Access from A6/Burton Latimer
- 3 Access from A510





KEY







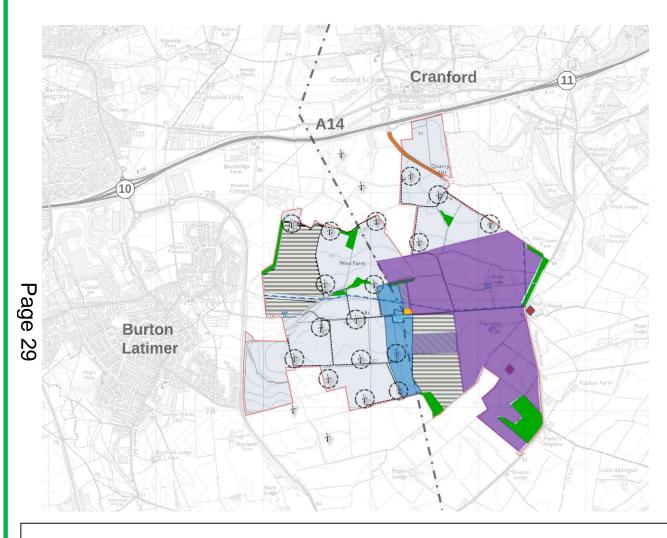
Area with strongest development potential

Area with potential for development or infrastructure











Area with strongest development potential

Area with potential for development or infrastructure

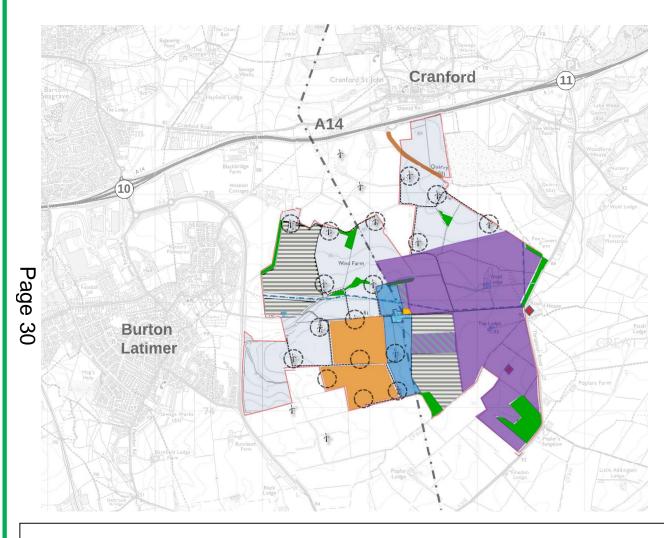
Area with potential for additional Energy Infrastructure













Area with strongest development potential

Area with potential for development or infrastructure

Area with potential for additional Energy Infrastructure

Area with greatest Hydroponics Potential

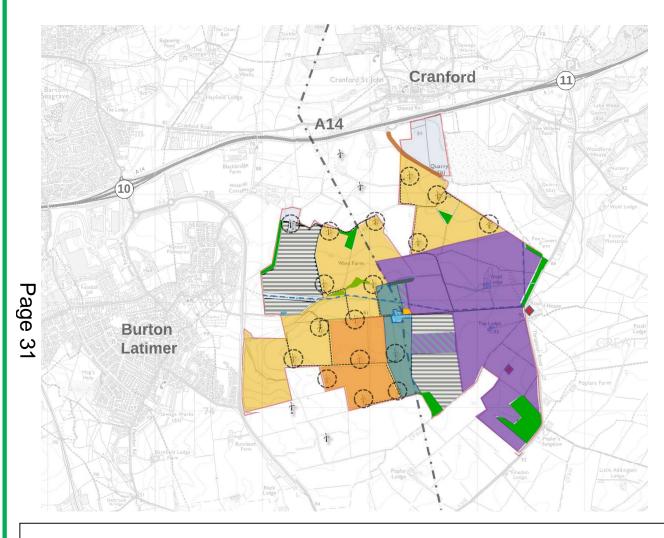














Area with strongest development potential

Area with potential for development or infrastructure

Area with potential for additional Energy Infrastructure

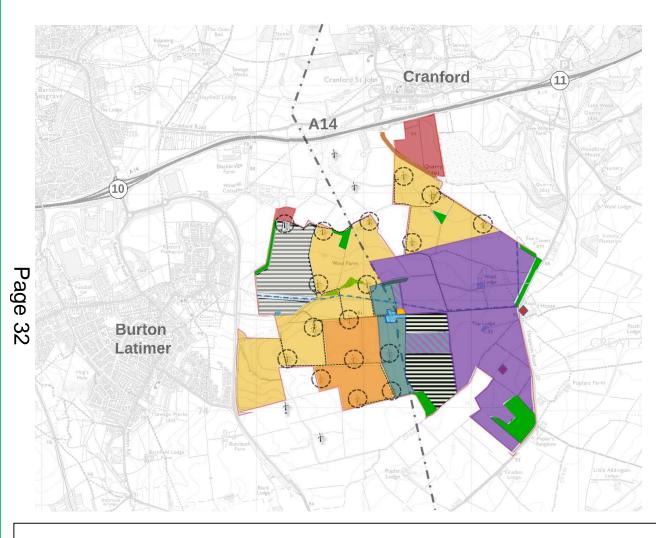
Area with greatest Hydroponics Potential Area most suited for continued agricultural use













Area with strongest development potential

Area with potential for development or infrastructure

Area with potential for additional Energy Infrastructure

Area with greatest Hydroponics Potential Area most suited for continued agricultural use

Area with best potential for Biodiversity Enhancement

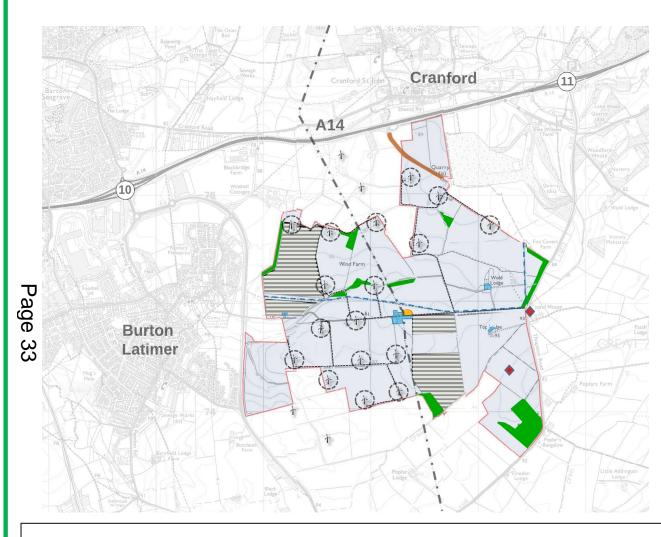






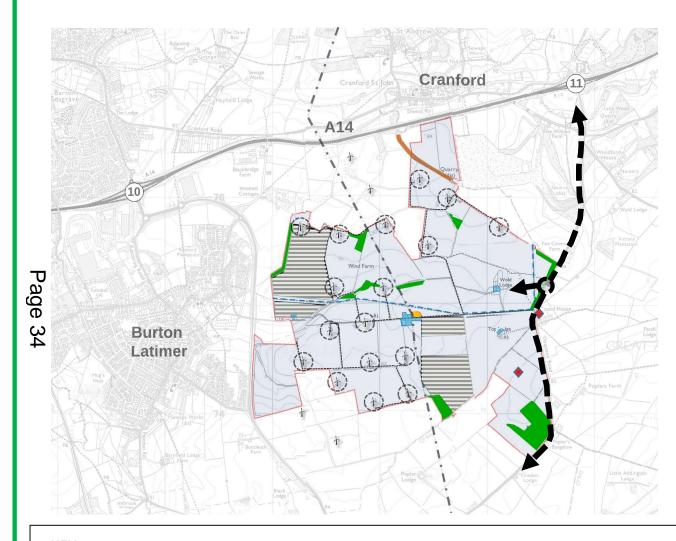






KEY



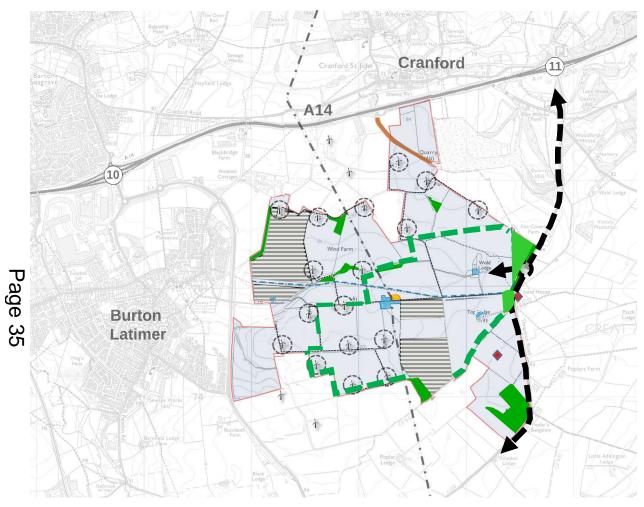


KEY

Proposed site access

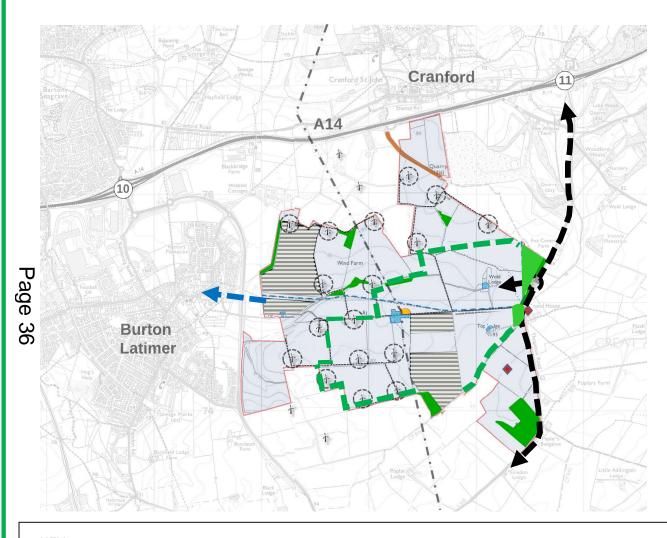






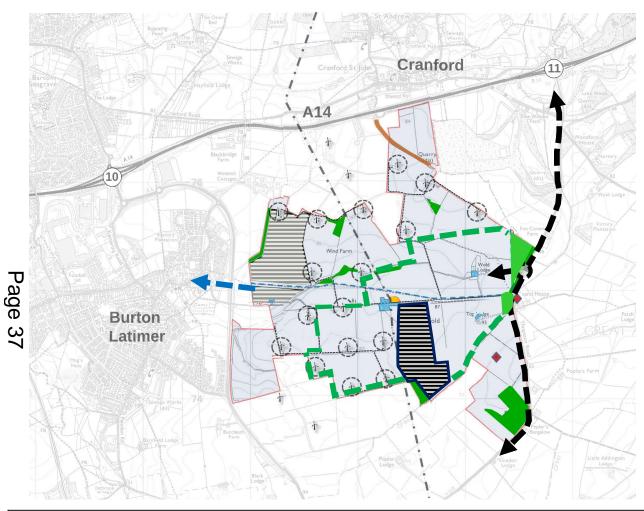


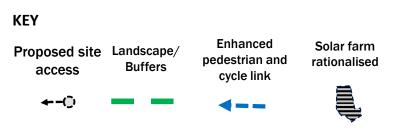




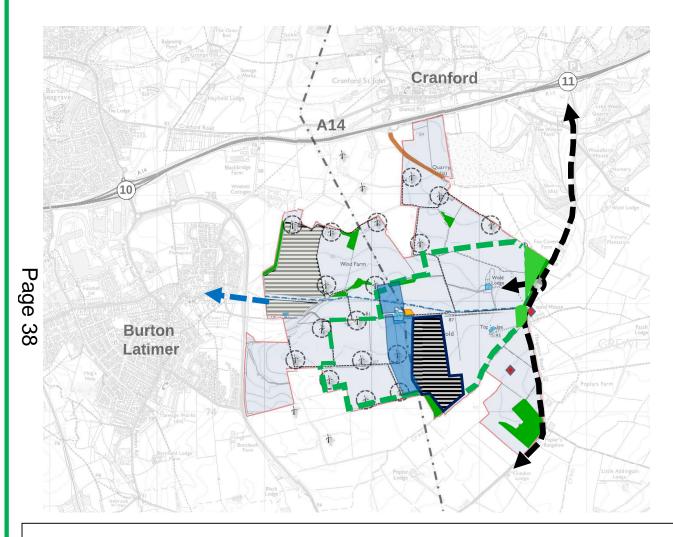














Proposed site Landscape/ access Buffers





Enhanced pedestrian and cycle link



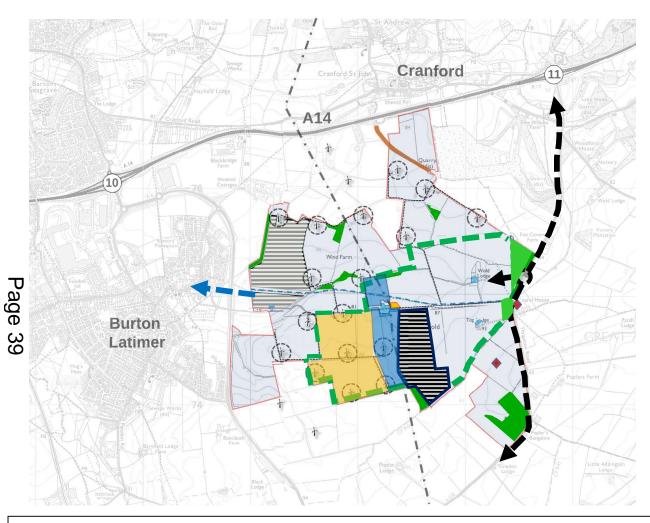
Solar farm rationalised

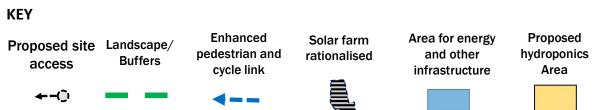


Area for energy and other infrastructure

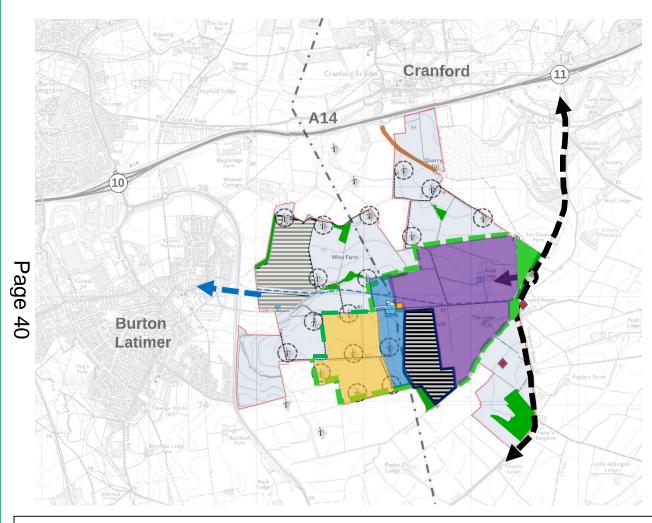


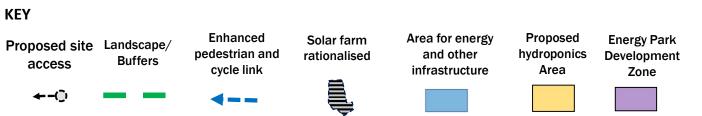




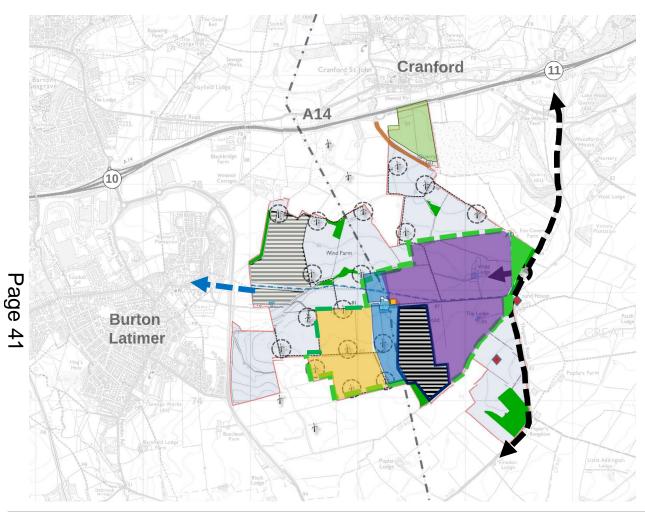


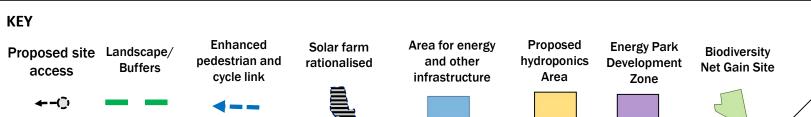










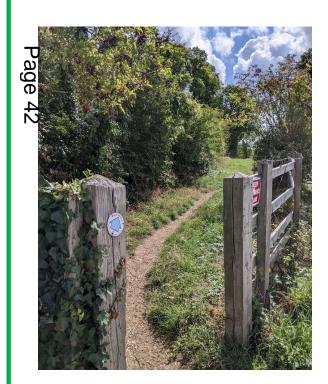




Benefits

- First of it's kind
- Greater Energy Security through renewables
- Response to the Energy Crisis and Climate Change





Community & Stakeholder Benefits

- Incorporate and improve public access
- Opportunity to extend community fund
- Local bio-diversity enhancements
- Education and training opportunities
- Integration with retained farmland synergy with regenerative farming practices and biodiversity friendly approach



Economic Benefits

Jobs

- 550 jobs during the construction stage
- Directly support 5,000 jobs during operational phase

Financial

- Investment of £512 million during the construction phase (direct and indirect)
- Investment of £167 million per annum into the local economy through wages
- Business rates of circa £8 million per annum

Quality Employment Premises

- Flexible for variety of uses
- BREEAM Excellent
- Solar PV on roofspace
- Potential for up to 400,000 sqm of new employment space





Enabling Infrastructure for the Energy Park will total c.£40 million. First Renewable have committed to bring this forward and this is fully funded for delivery.



Draft Masterplan presented to the Policy Panel December 14th 2022

Formal public consultation to take place across December 2022/January 2023

The masterplan will be reviewed following public consultation

Final Proposed Masterplan presented to the Policy Panel on March 27th 2022

Page 44





This page is intentionally left blank