



# KETTERING

## ENERGY PARK

EAP Briefing  
14<sup>th</sup> October 2024

# Introductions



FIRST RENEWABLE  
DEVELOPMENTS

**Anthony Watkins**

Co - Founder of First Renewables  
Developments Ltd



**Matthew Thomas**

Chartered Architects and Planning  
Consultants

The logo for SQW is the letters "SQW" in a bold, red, sans-serif font. The letters are slightly shadowed, giving them a three-dimensional appearance as if they are floating above a white surface.

**Ross Gill**

Economic and Social Research  
Associate Director

---

# KETTERING ENERGY PARK

## CONCEPT AND NEED



**Energy Security:** To achieve energy security, we must end reliance on imported fossil fuels and replace them with cheaper, cleaner, renewable alternatives.



**Economic Security:** Economically and environmentally sustainable growth through schemes like Kettering Energy Park which offer affordable renewable energy to high – energy users.



**Food Security:** Advanced Agriculture can produce between 50 and 100 times more food per square foot than traditional methods.



**Environmental Security:** KEP will make local eco-systems more diverse and resilient. New hedgerows will be provided to replace any lost and will use selected native species to improve biodiversity.





# ADVANCED AGRICULTURE

- A key component of the master plan strategy is to allow synergistic benefits between occupiers.
- Advanced Agriculture at the park will minimise waste, reduce food miles, support food security and optimise the use of by-products.
- Energy dense developments (for example manufacturing or cold storage) produce usable heat as a by-product.
- The opportunity to attract high-tech food production through hydroponics which utilises the on-site energy production and waste heat from other occupiers will be a target of the development.



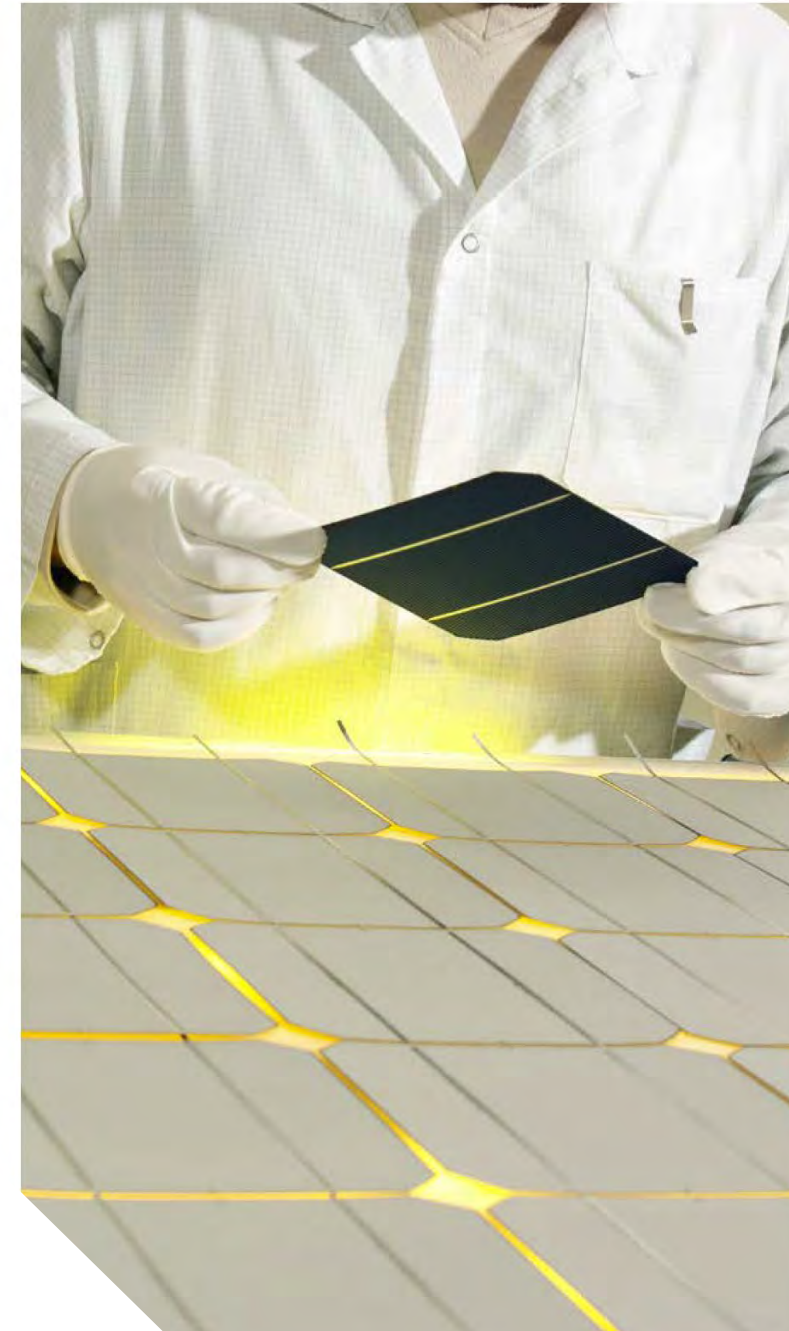
# FUTURE TECHNOLOGIES

**Kettering Energy Park is uniquely well placed to enable businesses to move towards net zero operations.**

The Energy Park will support innovation, and allow businesses to adopt future technologies early and remain at the forefront of the green energy market.

The park will contain facilities designed to attract:

- Innovative SMEs
- Green energy technology businesses
- R&D operations
- Businesses that can't find space in the Oxford/Cambridge arc



# ENERGY CRITERIA

**The Energy Criteria is a key component of the Energy Park proposals and creates a firm link with co-location of energy generation and energy consumption.**

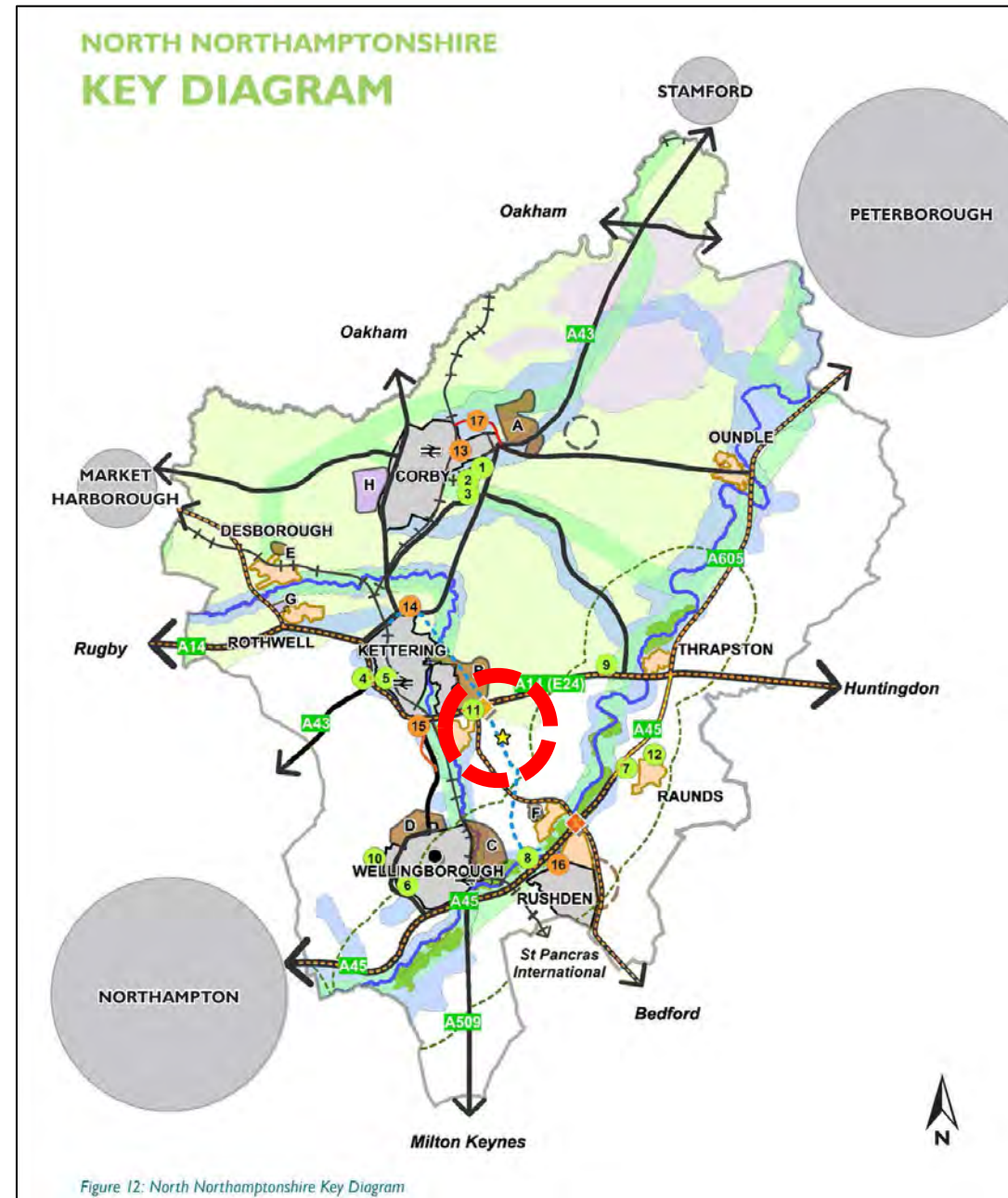
**The Energy Criteria will form a planning condition for any planning permission, controlling the type of business allowed to come to the site.**

## WHAT DOES THE CRITERIA COVER?

1. Identifies appropriate uses, limited to: Energy Infrastructure and Generation, Automated Operations, Engineering, Manufacturing, Research & Development or other operations linked to low/zero carbon sectors; and
2. Stipulates renewable energy consumption. A minimum of 50% of energy demand from operations within a new building must be provided by the on-site renewable energy generation (ability for 100% to be provided); and
3. Must be High Energy Users. Every Unit will have a minimum power supply based on the ratio of 1MW per 100,000 sq ft/ 9,290sq m (defines High Energy User).

# LOCAL POLICY CONTEXT

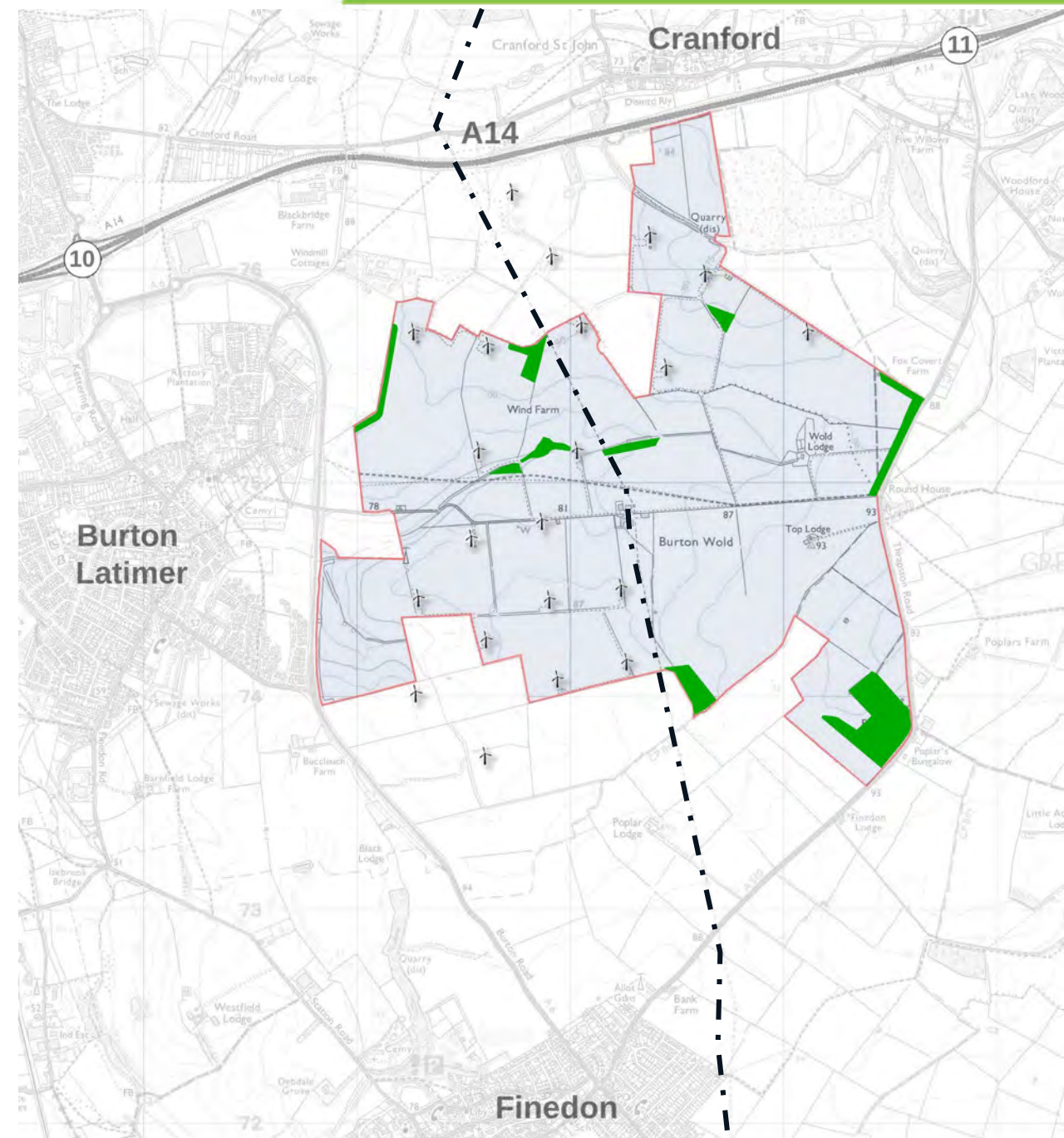
- The Energy Park will directly respond to the Climate Change and Environment Emergency declared by North Northamptonshire Council as well as key Objectives of the NPPF and National Government relating to Economic Growth and Investment into Renewable Energy Infrastructure..
- The North Northamptonshire Joint Core Strategy was adopted in 2016 and identifies the Burton Wold site as a location for an Energy Park.
- Policy 26 of the Joint Core Strategy requires a Masterplan to be prepared, with a programme of public consultation, to define the boundaries of development of the Energy Park appropriate uses and key principles of development.





# EXISTING INFRASTRUCTURE

Existing overhead  
power line

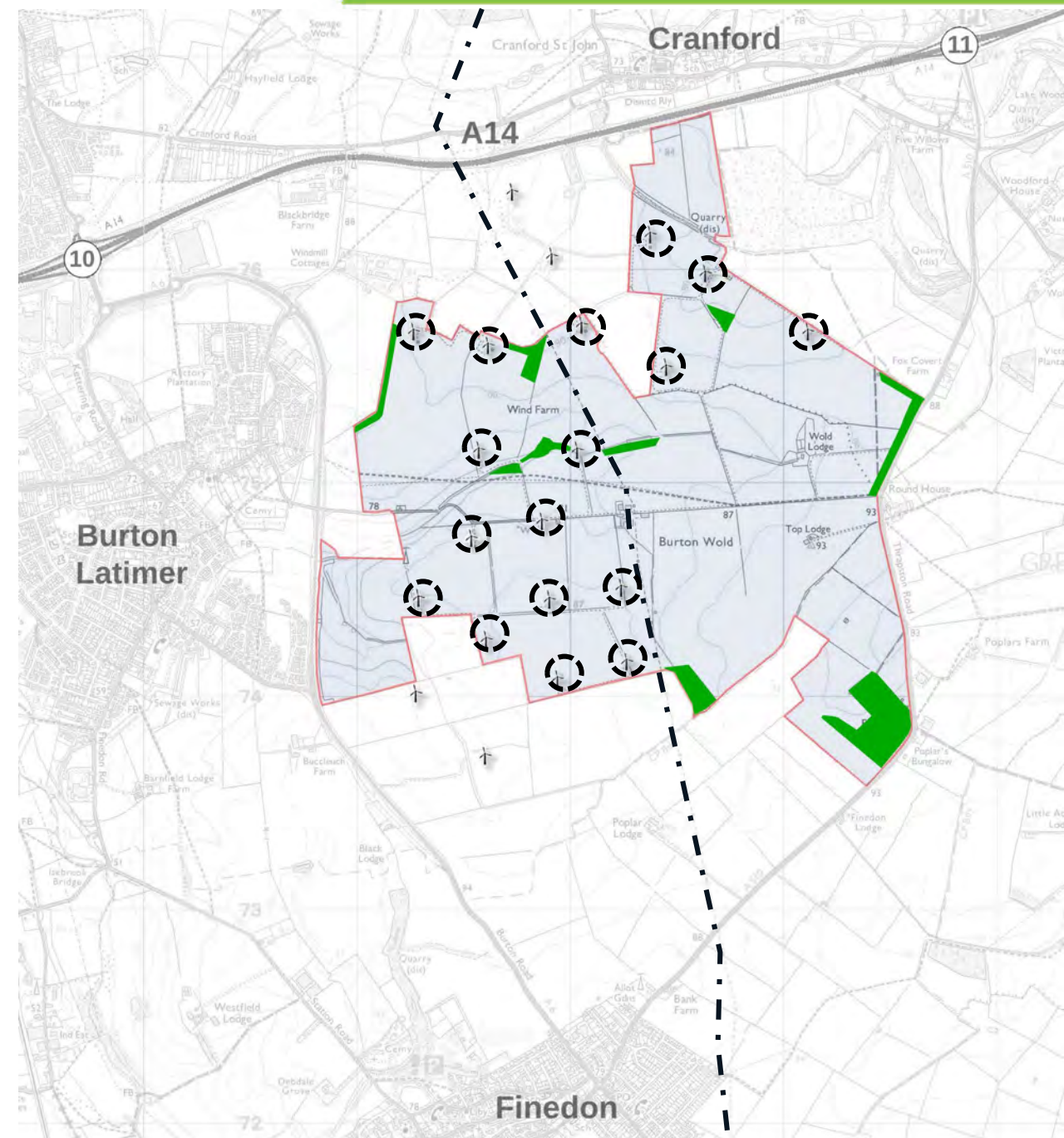


# EXISTING INFRASTRUCTURE

Existing overhead  
power line



Existing wind  
turbine



# EXISTING INFRASTRUCTURE

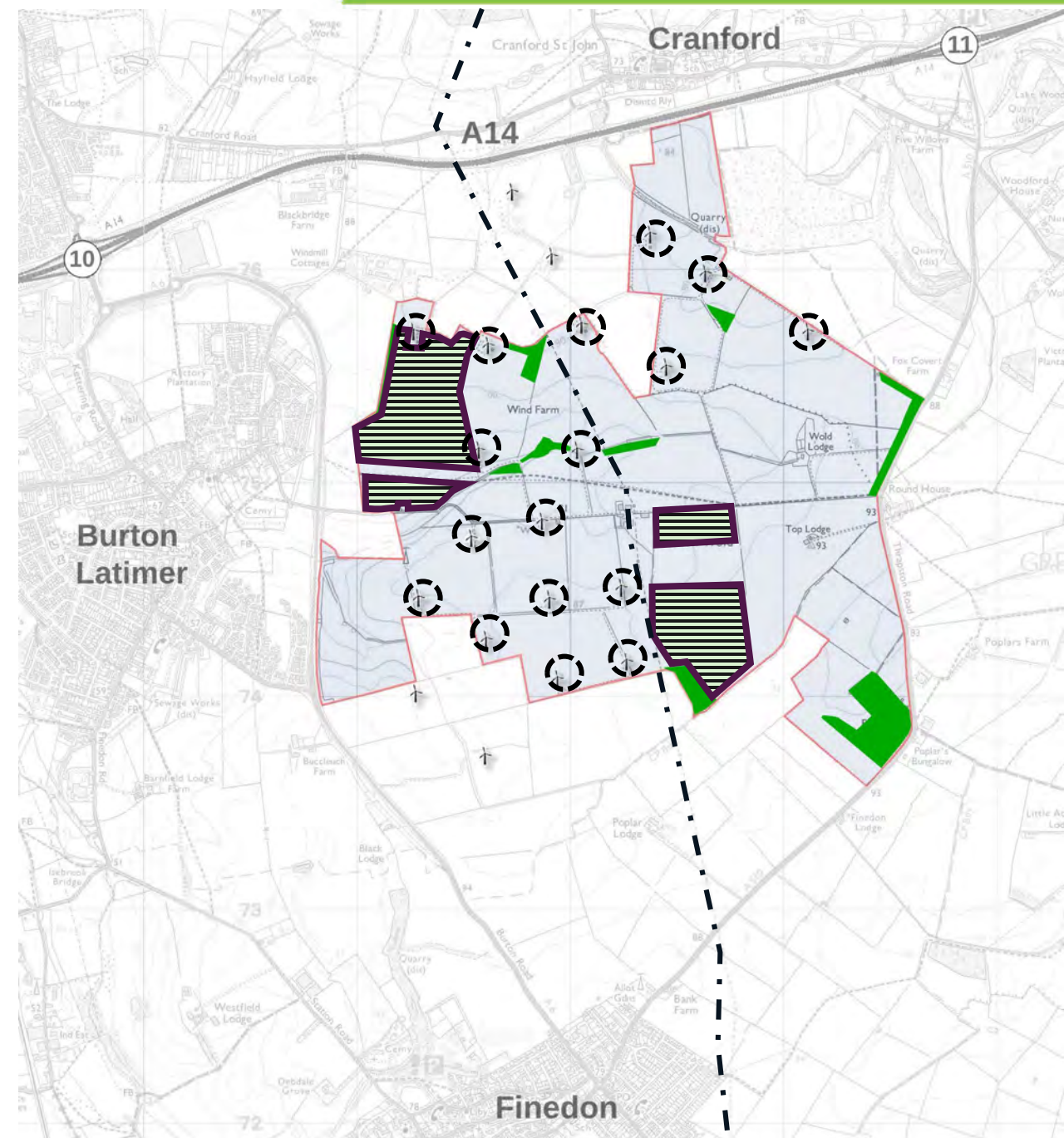
Existing overhead  
power line



Existing wind  
turbine



Consented  
solar farm



# EXISTING INFRASTRUCTURE

Existing overhead  
power line



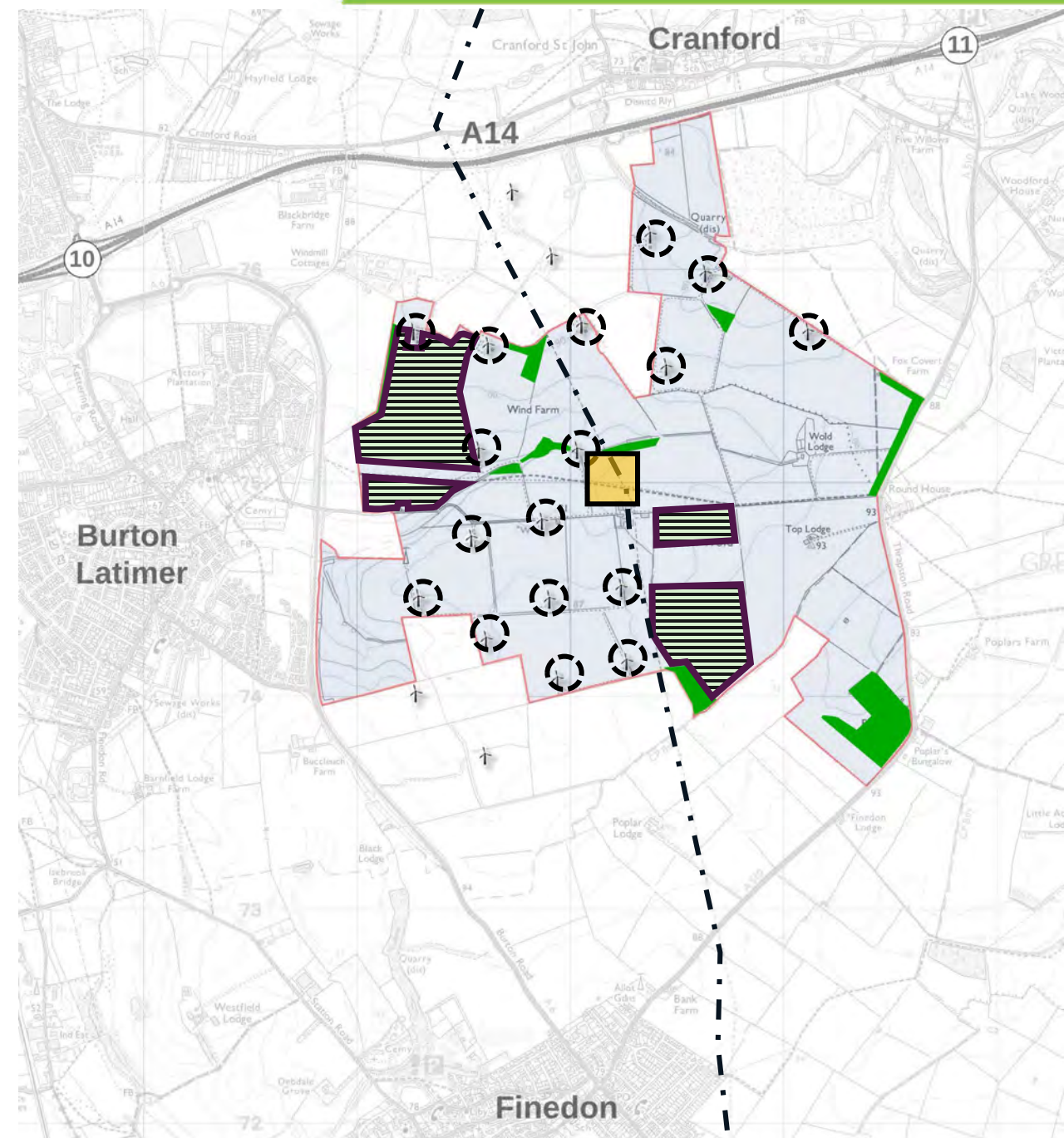
Existing wind  
turbine



Consented  
solar farm



Grid Connection  
agreement with  
NGED



# EXISTING INFRASTRUCTURE

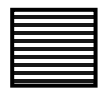
Existing overhead  
power line



Existing wind  
turbine



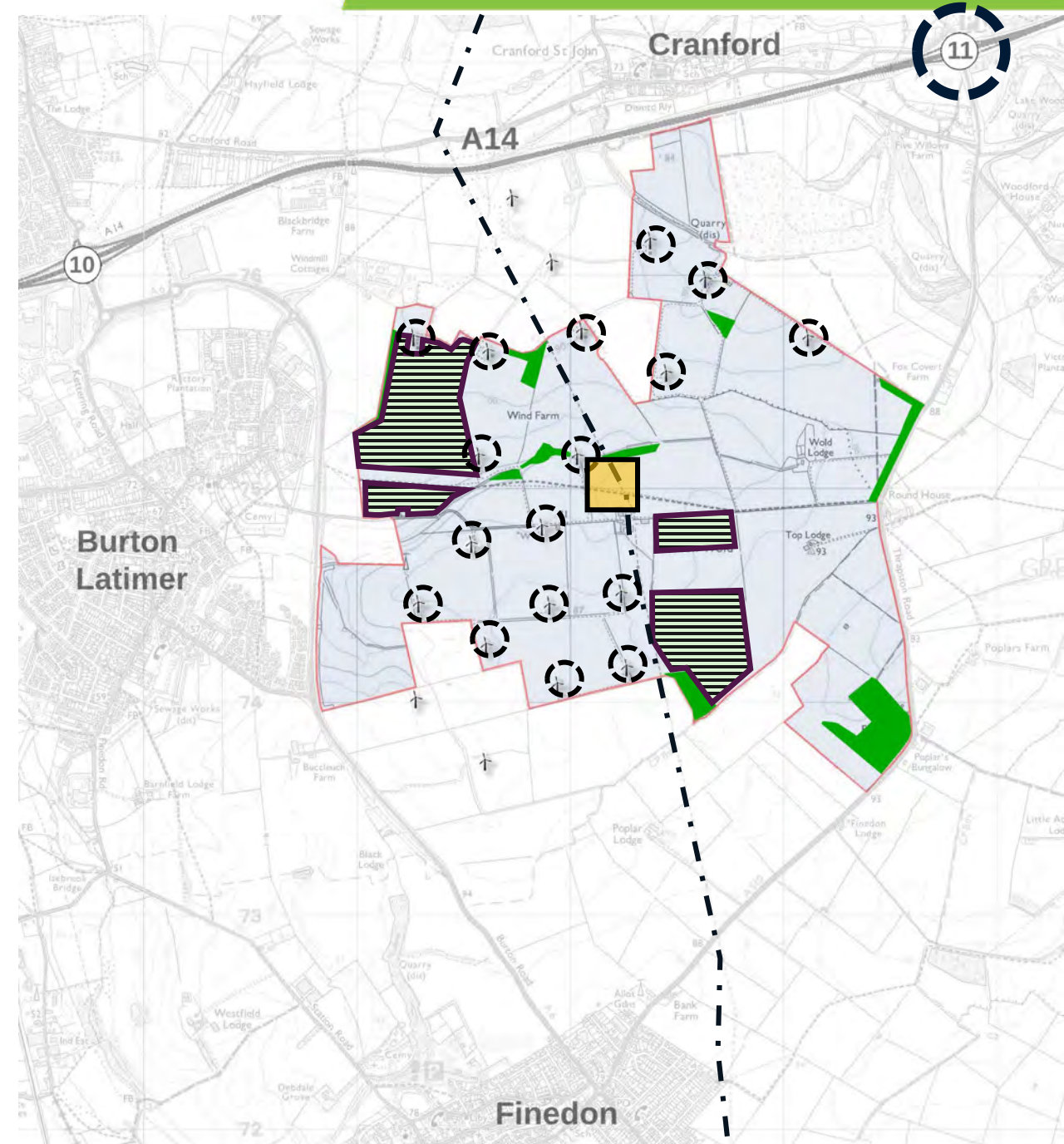
Consented  
solar farm



Grid Connection  
agreement with  
NGED



Junction 11 -  
available  
capacity



# UNDERSTANDING THE SITE

## SURVEYS & ASSESSMENTS

The Masterplanning process commenced in 2020.

A number of surveys and assessments have been undertaken to cover a range of topics and issues.

Consultants and technical specialists have been involved in this process.

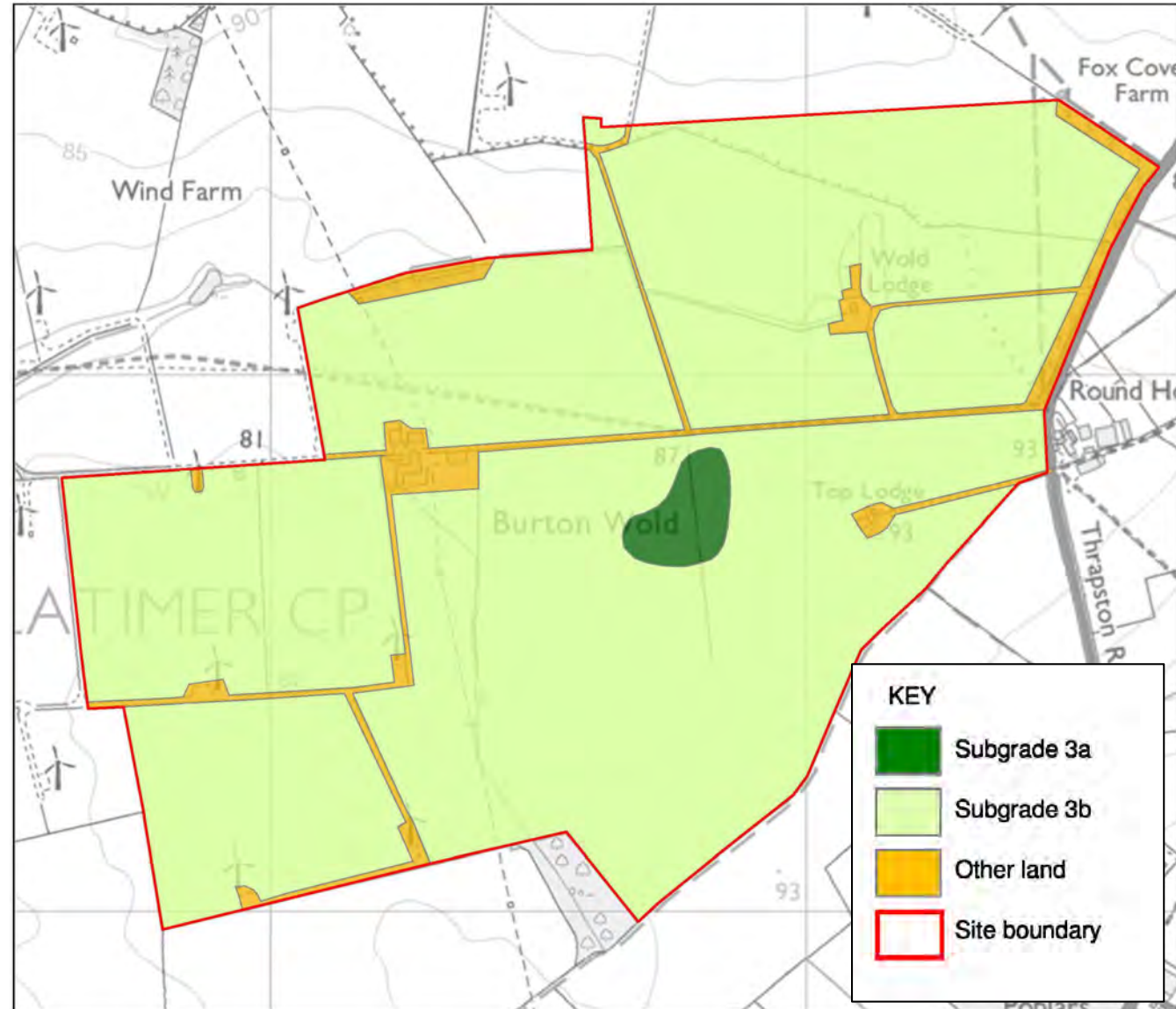
Stakeholders and agencies have been involved in this process including :

- Historic England
- Natural England
- Place Services
- National Highways

- Advanced Agriculture Assessment
- Agricultural Land Survey
- Archaeology Geophysics
- Biodiversity Net Gain Assessment
- Drainage Assessment
- Ecology Surveys (2021, 2022, 2023, 2024)
- Economic Impact Assessment
- Electricity Network Analysis & Overhead Line Survey
- Ground Investigations
- Heritage Assessment
- Highways Assessment and Surveys
- Landscape Assessment
- Mining Risk Assessment
- Tree and Hedgerow Survey

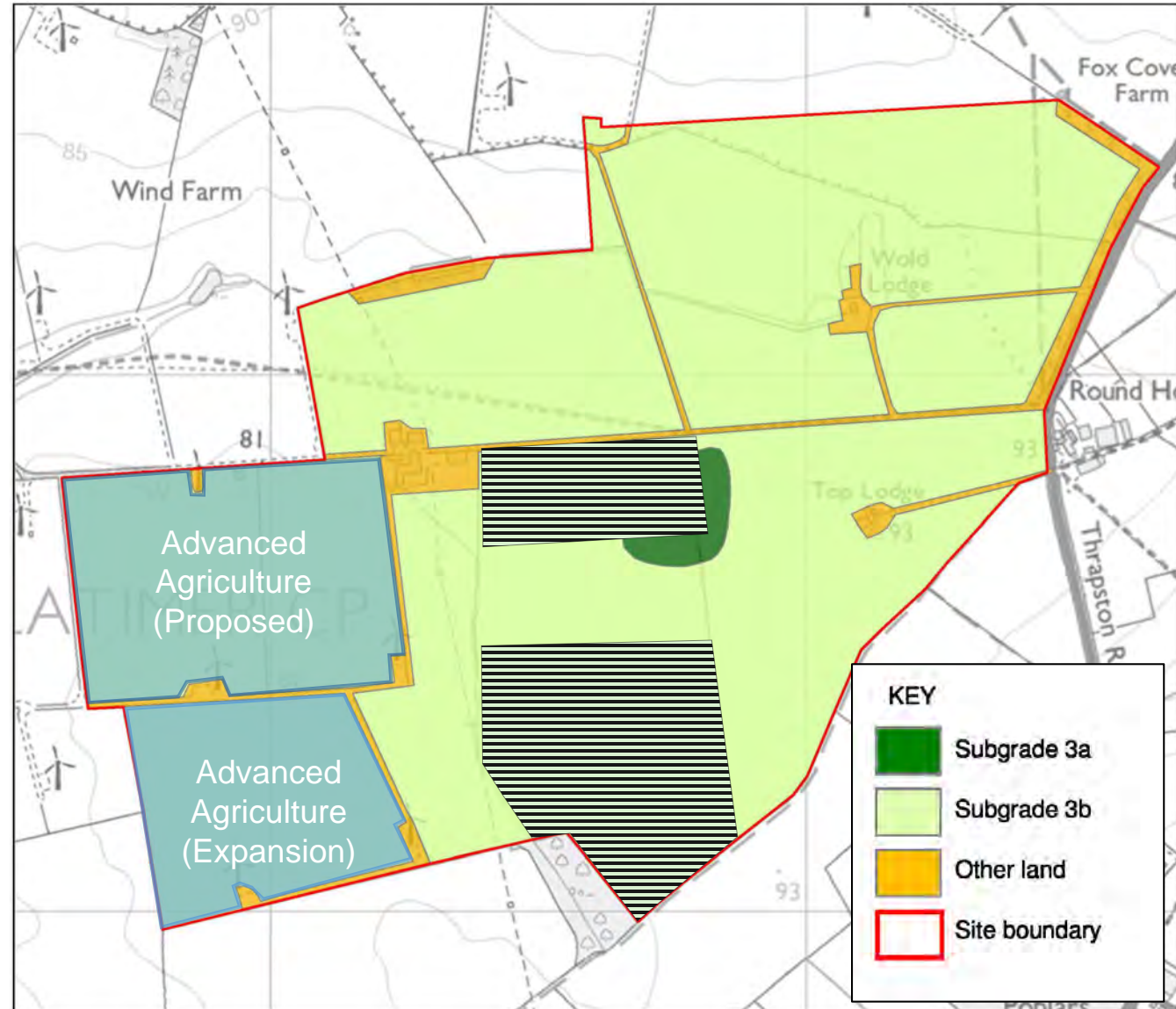
# AGRICULTURAL LAND

- An Agricultural Land Survey was undertaken in 2023.
- The testing results clarified that the site comprises mainly wet clay soils that is considered to be subgrade 3b quality, which is not Best or Most Versatile land.
- A small area of the site is of subgrade 3a quality, as it is subject to lesser wetness and workability limitations



# AGRICULTURAL LAND

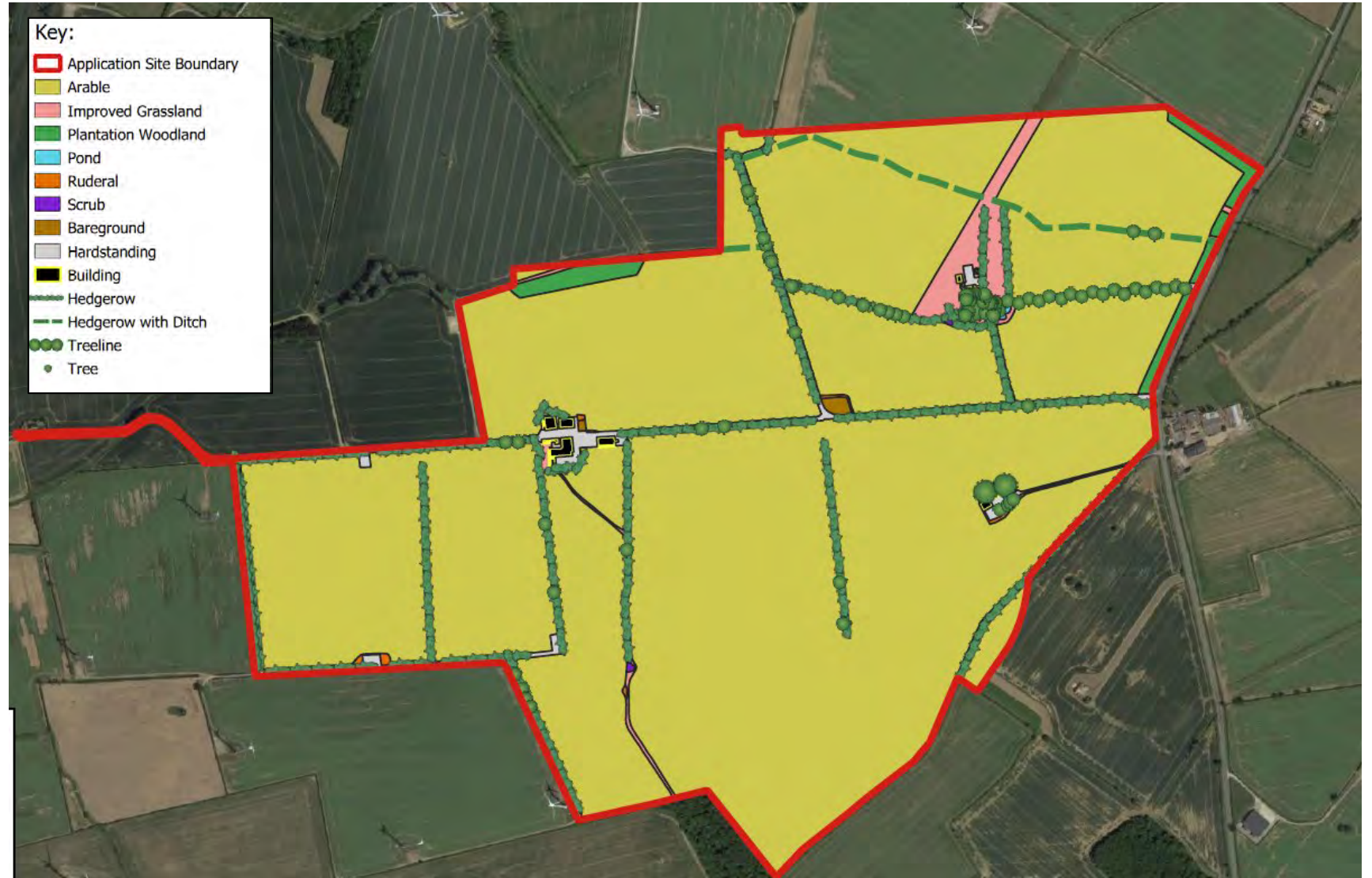
- An Agricultural Land Survey was undertaken in 2023.
- The testing results clarified that the site comprises mainly wet clay soils that is considered to be subgrade 3b quality, which is not Best or Most Versatile land.
- A small area of the site is of subgrade 3a quality, as it is subject to lesser wetness and workability limitations
- The Consented Solar Farm at the site has already been approved on the part of the site that is subgrade 3a
- The proposed Advanced Agriculture uses will retain food production at the site with the ability to grow different crops and with greater yields and reduction in food miles.










# ECOLOGY & HABITAT

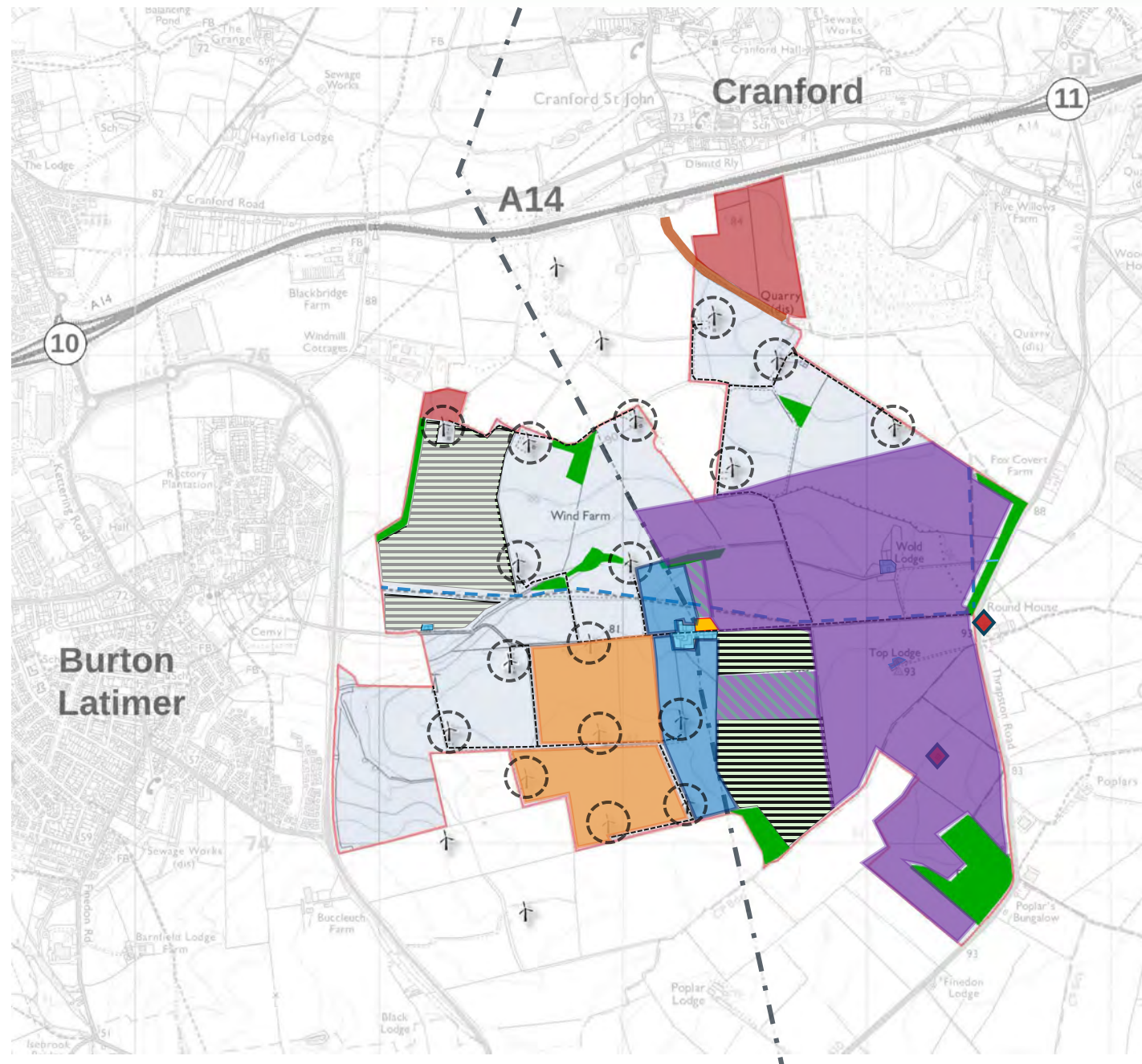
- Majority of the site is Arable land in Agricultural Use.
- Hedgerows are situated along field boundaries with isolated trees and areas of plantation woodland.



# SITE ANALYSIS

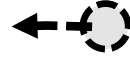







## EAP – Oct 2022

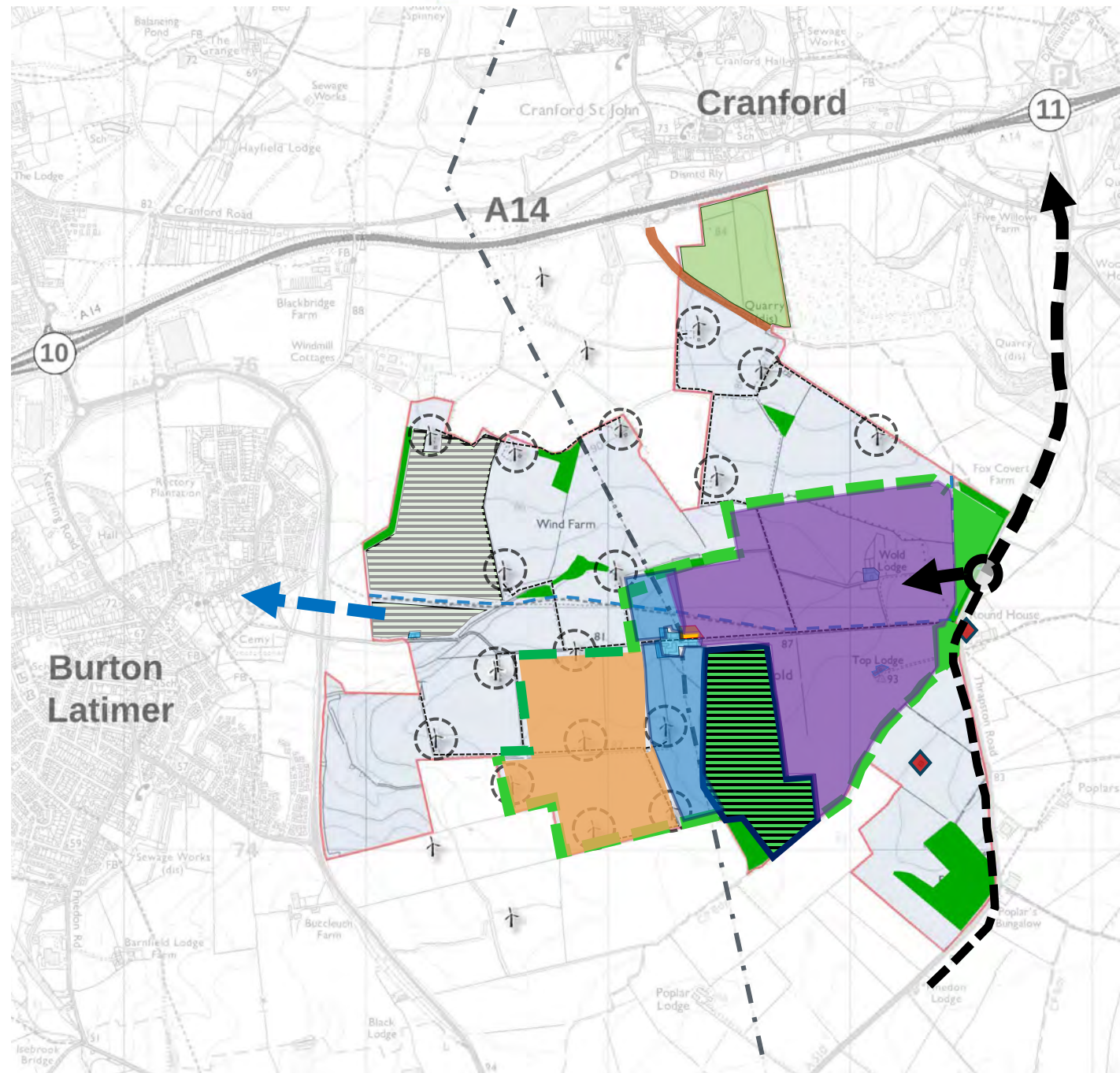
- Area with potential for additional Energy Infrastructure 
- Area with potential for development or infrastructure 
- Area with greatest Advanced Agriculture Potential 
- Area with strongest development potential 
- Area with best potential for Biodiversity Enhancement 



# SITE ANALYSIS

## EAP – Oct 2022

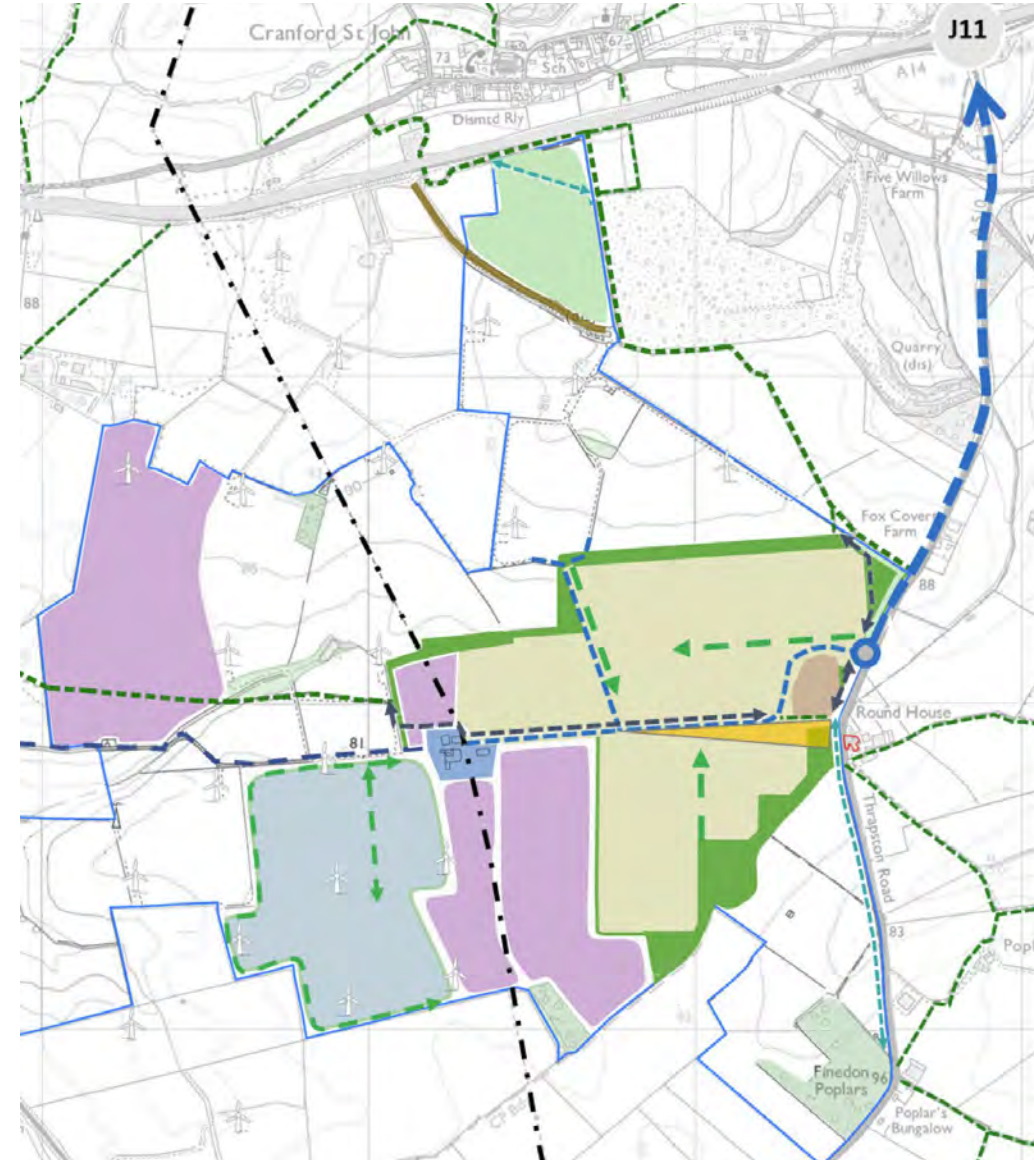
- Proposed site access 
- Landscape/ Buffers 
- Enhanced pedestrian and cycle link 
- Solar farm rationalised 
- Area for energy and other infrastructure 
- Proposed Advanced Agriculture Area 
- Energy Park Development Zone 
- Biodiversity Net Gain Site 



# INITIAL MASTERPLAN

## EAP – March 2023

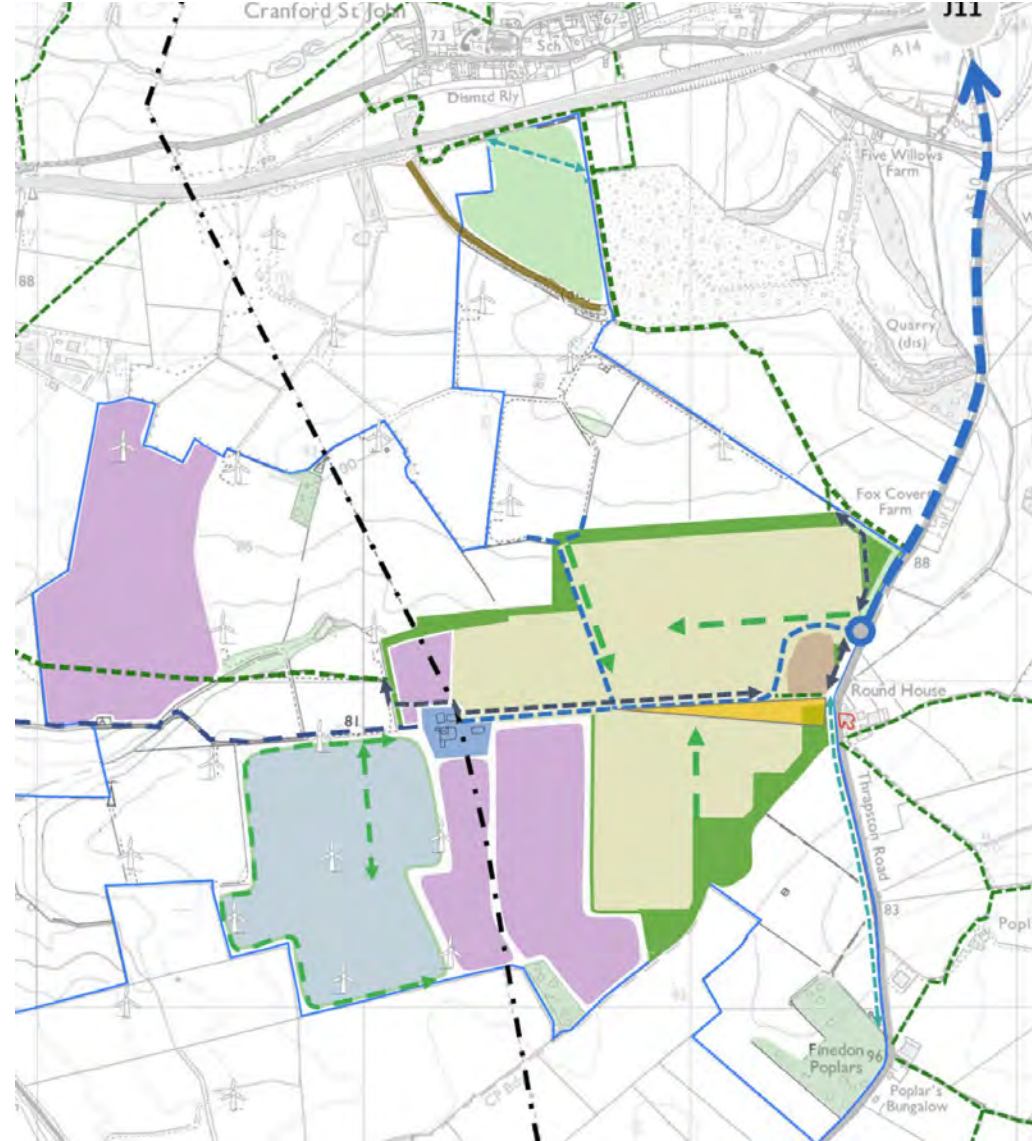
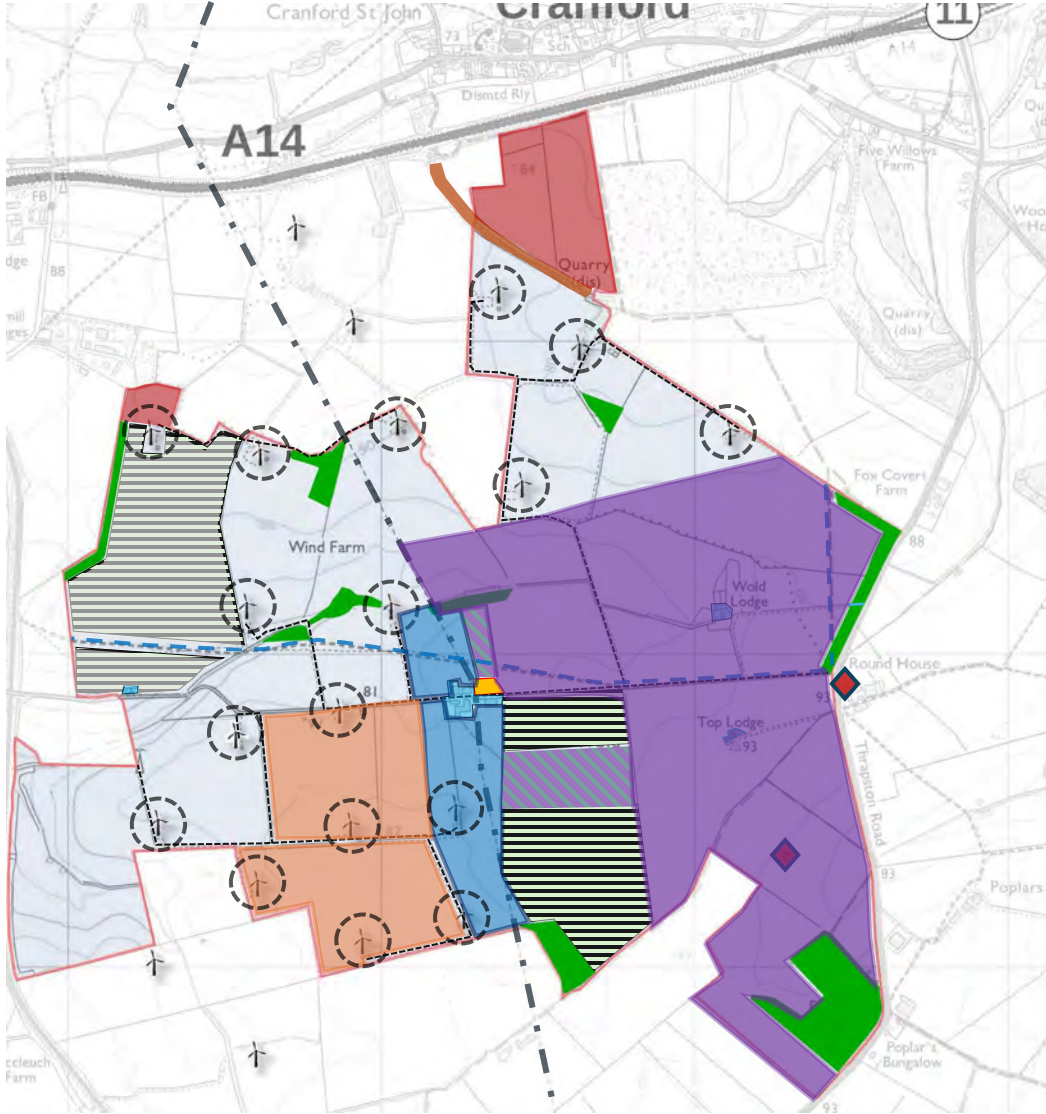
- Amended Grid Connection following agreement with NGED
- Landscape Buffers and incidental landscape identified
- Future Technology Centre Identified
- 3 Hectare Lapwing Habitat provided following discussions with Natural England
- View Cone to Round House defined following discussions with NNC Heritage Advisor
- Development Area Rationalised
- 390,000 sq m – 70:30 split (B8:B2) – 30m max height



# ANALYSIS 2022



# MASTERPLAN 2023



# RECOMMENDATIONS

## EAP – NOVEMBER 2023

- 54 Recommendations were made by the EAP in respect of the previous Masterplan
- These have been responded to positively and 91% of these points have been incorporated into the amended Masterplan document.
- The remaining 9% of points raised have been considered and further clarification or information on these issues will be provided as part of a future outline application for the Energy Park

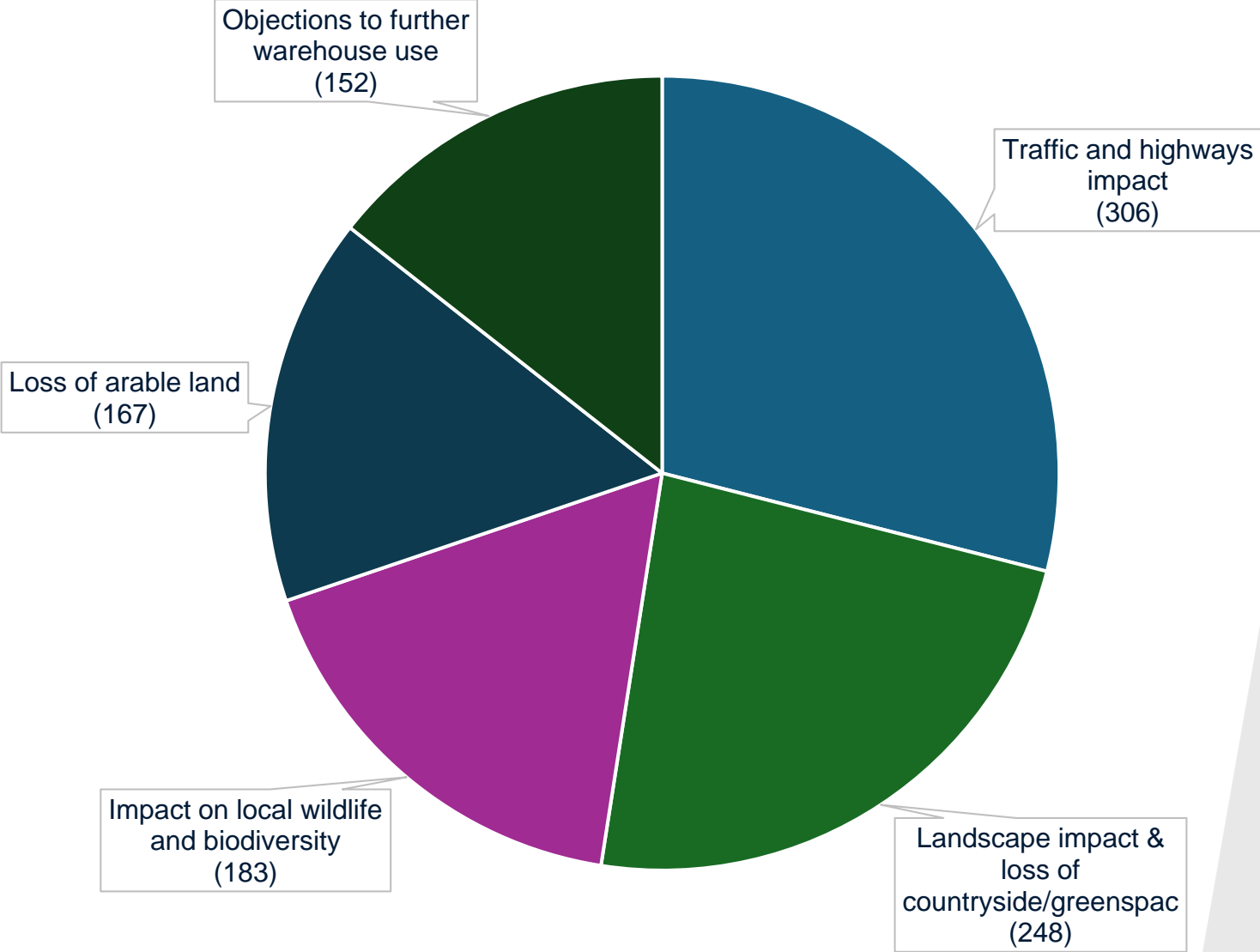
### Key Recommendations

1. **Further Consultation**
2. **Consider Scale of Development**
3. **Consider Mix of Uses**
4. **Consider Height of Development**
5. **Continue work on Highways**

# DELIVERING A ROBUST CONSULTATION PROCESS



# CONSULTATION SUMMARY



## OTHER THEMES IDENTIFIED

- Concerns over grid capacity
- Air / Noise / Light Pollution
- Impact on Heritage Assets
- Scale of development
- Type of employment offered
- Flooding Risk
- Safety Impacts
- Impact on site access

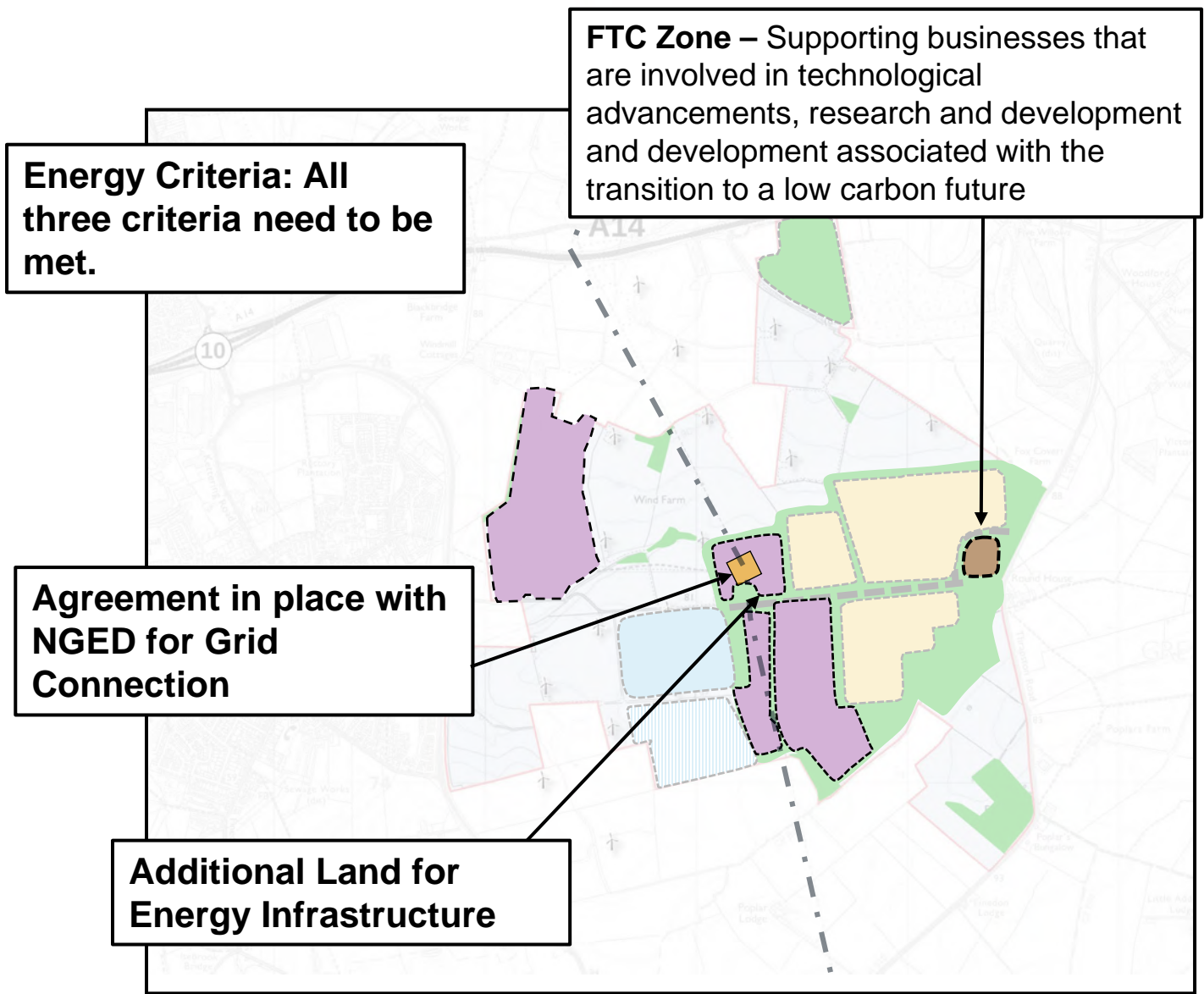
### 2024 Consultation Stats

- ❖ Leaflet drop to 8,880 residents
- ❖ Website viewed by 8,988 people (unique users)
- ❖ Public exhibition attended by 289 visitors
- ❖ 647 responses received



# REFINING THE MASTERPLAN

## Energy Infrastructure



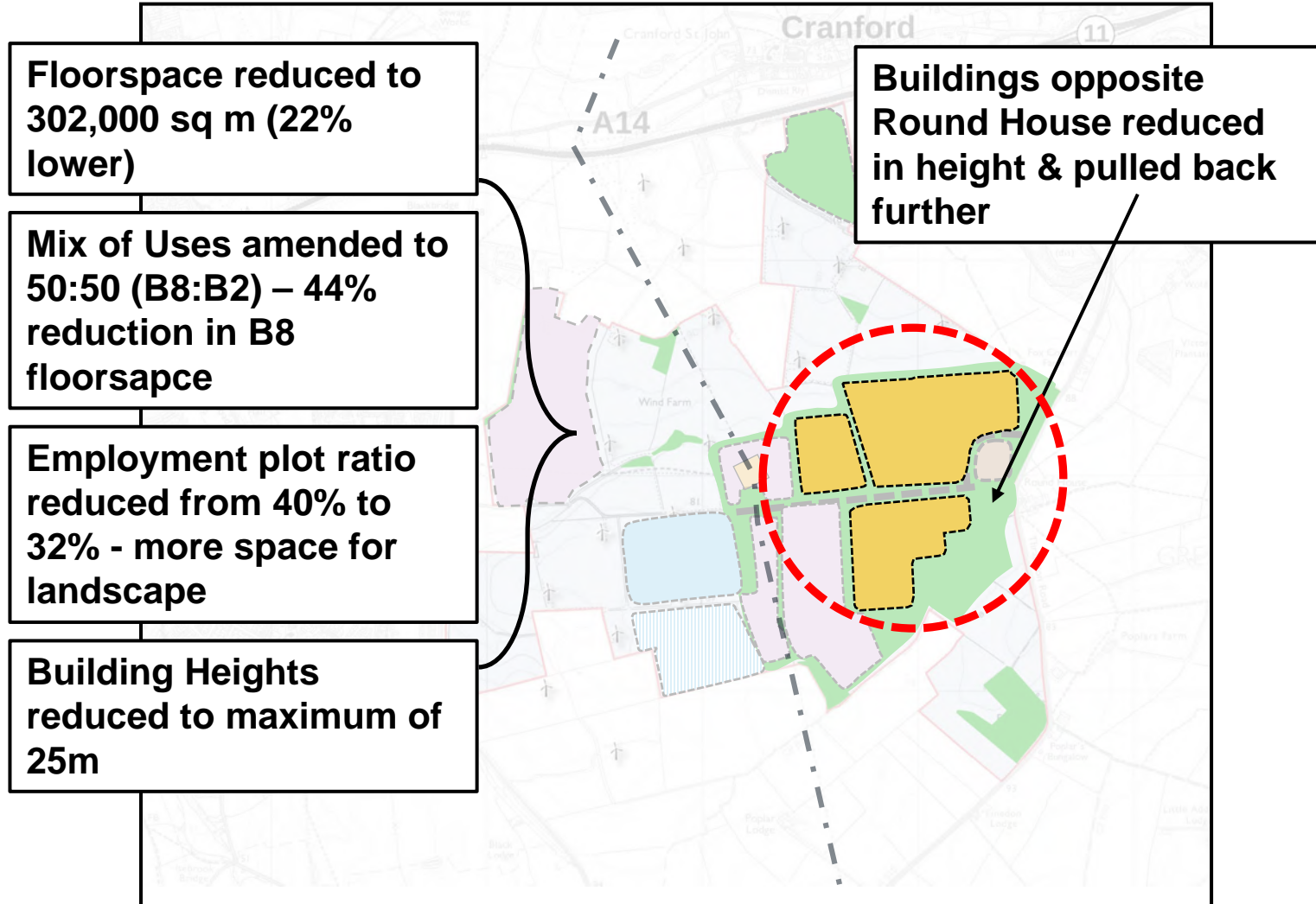
**Progress since end of consultation**  
❖ Discussions progressed with Industry Partners.

# REFINING THE MASTERPLAN

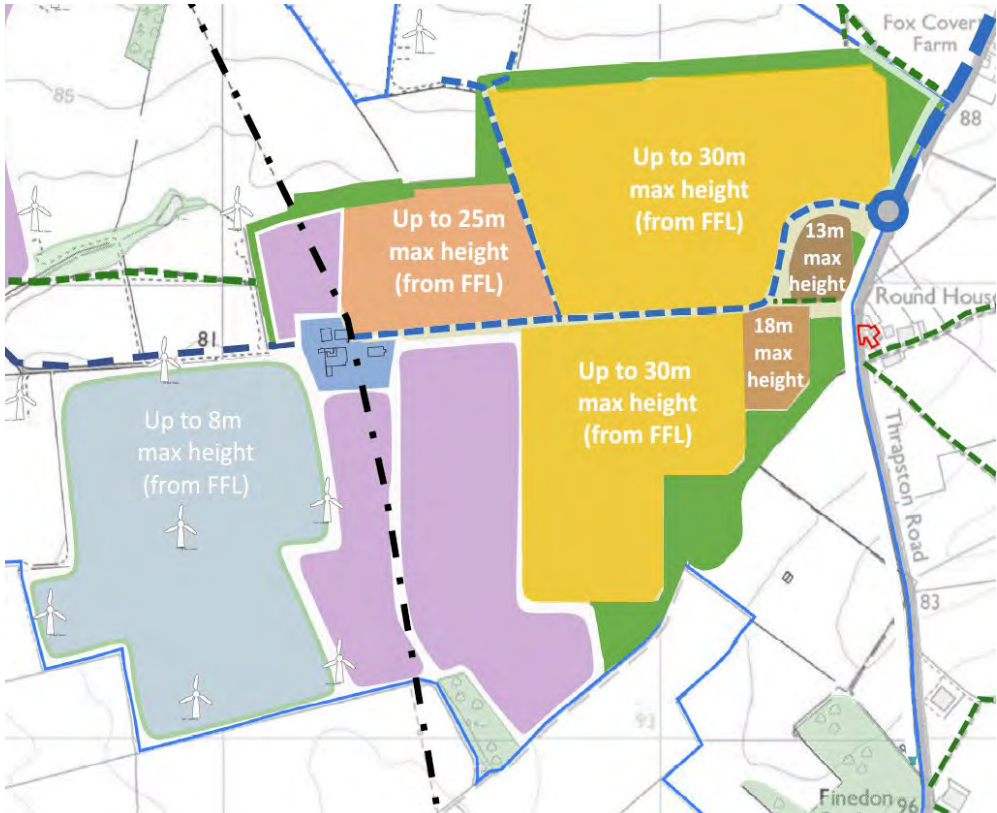
## Scale & Mix of Uses

### Progress Since End of Consultation

- ❖ Building Heights Reduced Further
- ❖ Internal Landscape Design Reviewed
- ❖ Views towards Round House considered further



# REFINING THE MASTERPLAN



Height Parameter – EAP March 2023



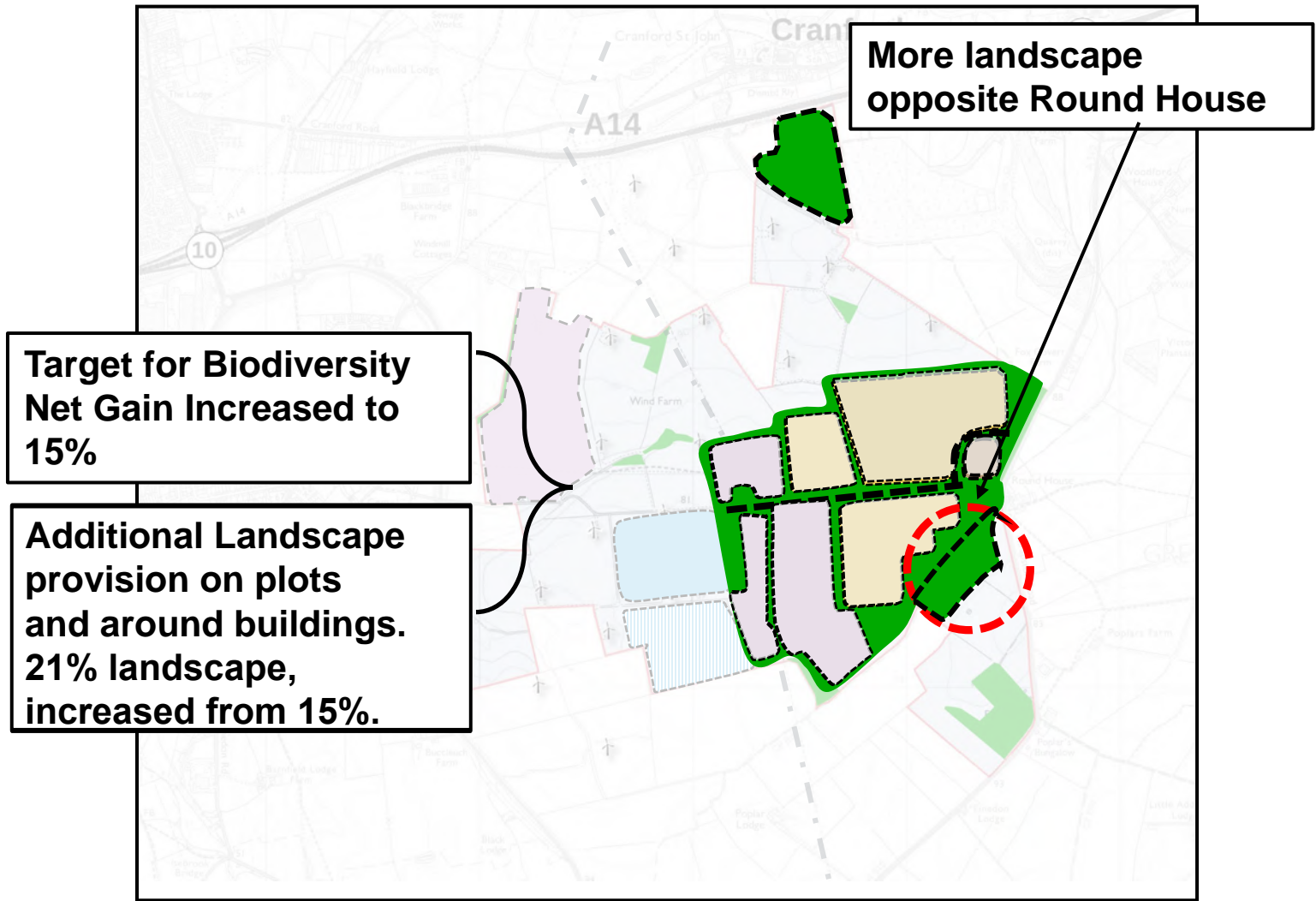
Height Parameter – EAP October 2024

# REFINING THE MASTERPLAN

## Habitat & Biodiversity

### Progress Since End of Consultation

- ❖ Lapwing Habitat Area increased to 10Ha
- ❖ Further Surveys Undertaken to verify previous assumptions

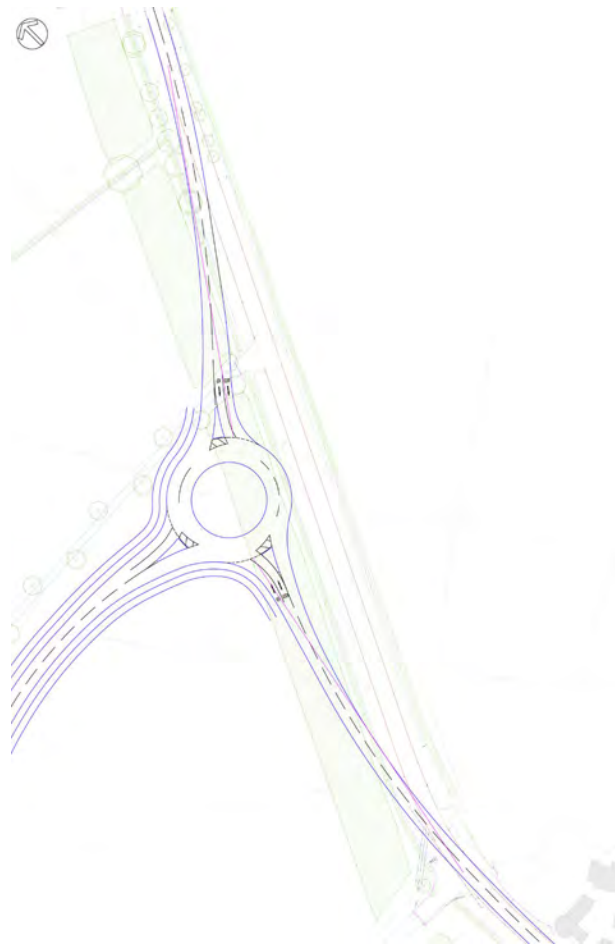


# ACCESS & HIGHWAYS

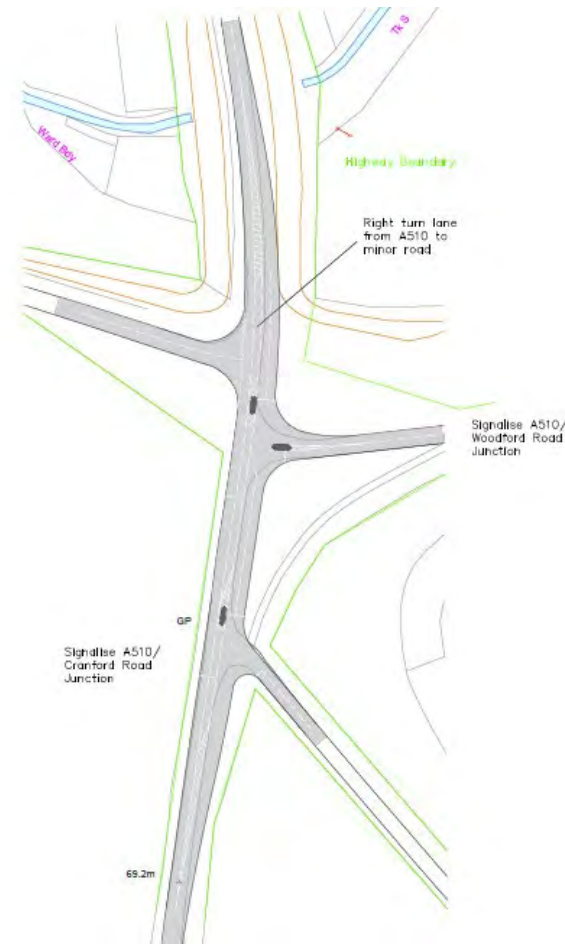
**Work has continued on Highway Assessment and measures to address concerns from the local community expressed clearly at the consultation.**

- **Scope of Assessment agreed with NNC Highways & National Highways**
- **HGV Routing Strategy:** Including signage and ANPR cameras at site entrance as part of package to require HGV's to use J11 of the A14, not travel south to Finedon.
- **Bus Services:** Discussions progressed with NNC and providers to consider potential for local DRT services and/or existing routes to serve the site.
- **Active Travel:** Opportunities for Cycling and Walking routes being refined to connect to existing rights of way and routes.

# ACCESS & HIGHWAYS



**Site Access Roundabout**



**Cranford & Woodford Roads**

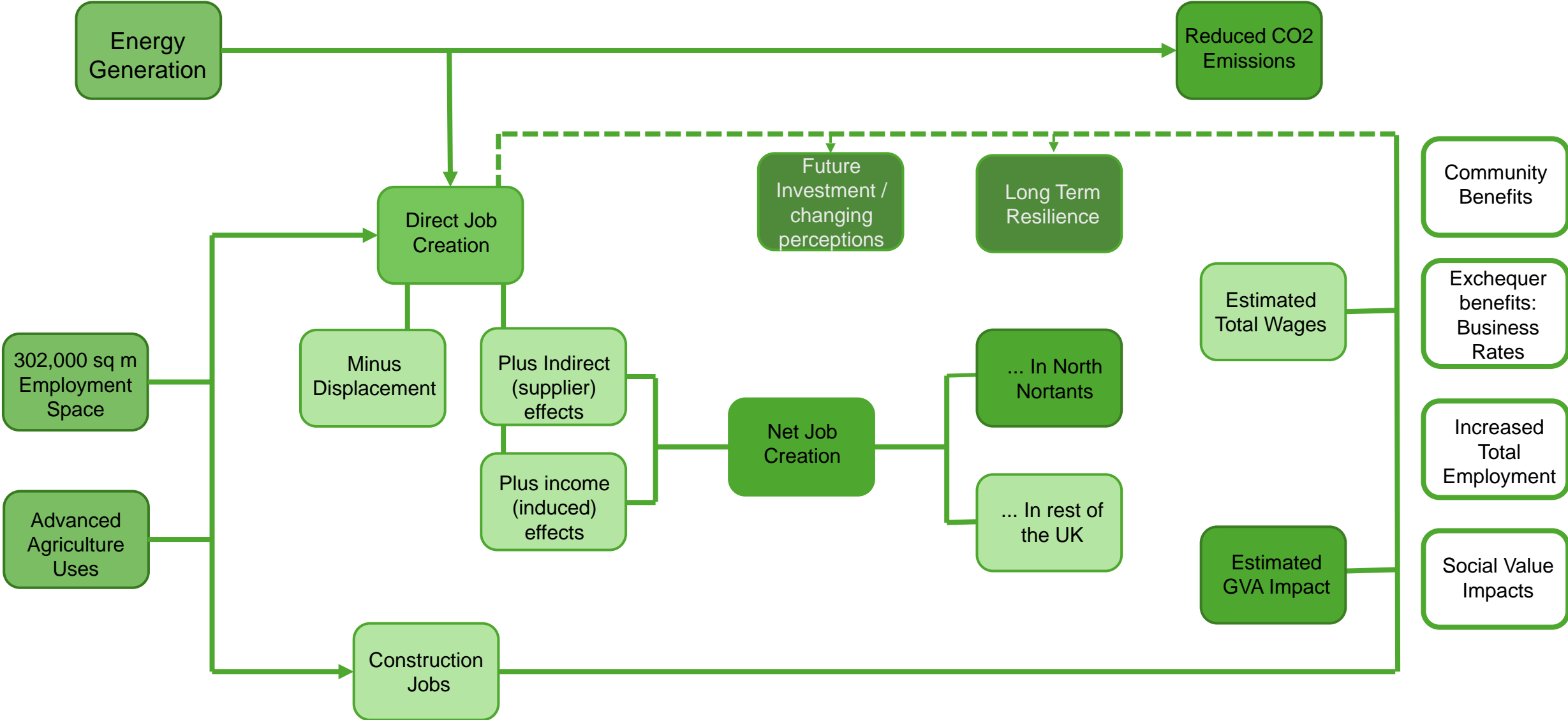


**Finedon A6 Junction**

# CHANGES TO MASTERPLAN RESPONSE TO FEEDBACK

ISSUES	BEFORE	AFTER
<b>Scale of development</b>	Explored potential to create circa 390,000 sq m of new employment space	The employment floorspace has decreased by circa 22% to 302,000 sq m
<b>The proposed uses</b>	Proposed split of 70:30 for B8 and B2 uses	Proposed B8 provision reduced by 44% to no more than 50% and occupiers must meet all three energy criteria
<b>Landscape and visual impact</b>	Maximum building heights of up to 30m	Maximum building heights reduced to 25m, with more detailed height parameter & units opposite the Round House reduced further
<b>Biodiversity</b>	Initial target of at least 10% BNG	50% increase in BNG target to 15% Lapwing Habitat increased from 3Ha to 10Ha
<b>Highways and transport</b>	Previous modelling work identified that the network could accommodate the development traffic, with local improvements	Reduced floorspace means fewer traffic movements, but local improvements will still be funded
<b>The extent and reach of consultation</b>	Initial consultation between November 2022 and May 2023, including: website launch, meetings with local councillors and stakeholders and a public exhibition	Additional consultation carried out in Spring 2024, with councillors, parishes and 8,800 residents consulted

# ECONOMIC IMPACTS





# ECONOMIC IMPACTS

## Carbon Savings and Energy Impacts

- Minimum of 50% of energy use provided from on-site generation
- Net contribution to national energy system
- Increased resilience and cost savings for industrial occupiers

## Jobs

- Estimated 2,700 – 3,600 net jobs in North Northamptonshire
- 5,500 - 7,500 across the UK, including supply chain benefits
- c.1,800 construction job years

## Gross Value Added

- £340m - £410m net additional GVA

## Wider Benefits

- c.£9m in annual business rates
- Wider attractiveness of North Northants as a business location
- Longer term resilience of industrial based
- Wider community benefits

# BENEFITS



DIRECTLY SUPPORT CIRCA

## 550 jobs

DURING THE CONSTRUCTION STAGE

EMPLOYMENT AND TRAINING DURING THE CONSTRUCTION PHASE



INVESTMENT OF CIRCA

## £512 million

DURING THE CONSTRUCTION PHASE (DIRECT AND INDIRECT)



## Biodiversity area with public access



ECONOMIC CONTRIBUTION

DIRECTLY SUPPORT CIRCA

## 4,500 jobs

ONCE THE FULL DEVELOPMENT IS OPERATIONAL (COULD BE HIGHER DEPENDING ON EMPLOYMENT MIX)

ONGOING INVESTMENT OF CIRCA

## £410 million

PER ANNUM INTO THE UK ECONOMY

ADD TO THE SUPPLY OF HIGH-QUALITY EMPLOYMENT LAND, WITH POTENTIAL TO CREATE CIRCA

## 302,000 sq m

OF NEW EMPLOYMENT FLOORSPACE TO ADD TO PIPELINE



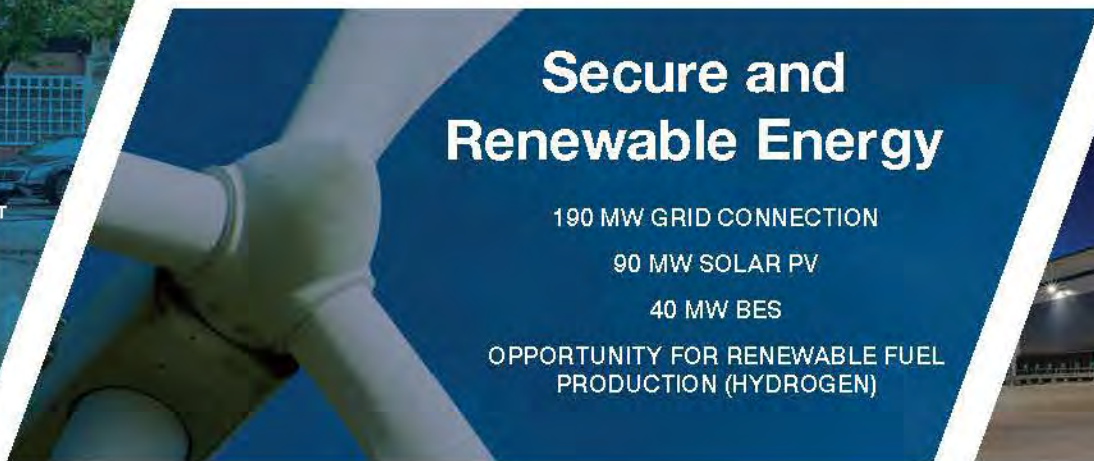
## Community fund

TO SUPPORT LOCAL COMMUNITIES



## Sustainable food production

REDUCING FOOD MILES  
LONG TERM INVESTMENT IN AGRICULTURAL SECTOR



## Secure and Renewable Energy

190 MW GRID CONNECTION  
90 MW SOLAR PV  
40 MW BES

OPPORTUNITY FOR RENEWABLE FUEL PRODUCTION (HYDROGEN)



EMPLOYMENT AND TRAINING INITIATIVES FROM EMPLOYERS AT THE SITE

BUSINESS RATES OF CIRCA

## £9 million per annum

(IN TOTAL)

# DELIVERING THE BENEFITS

## COMMITMENTS

- Adopt an Energy Criteria to clearly define who can come to the site
- Target a Biodiversity Net Gain in excess of statutory minimum
- Identify Improvements to Active Travel and Public Access
- Establish a Community Fund to fund local initiatives
- Ongoing Landscape Management & Maintenance
- Facilitate Highways Improvements to Local Junctions – e.g. signals at Woodford Rd
- Adopt an Employment & Skills Plan to improve skills, training and local opportunity
- Leverage Private Investment to secure require infrastructure
- Provide new, energy efficient workspaces for a mix of R&D, Industrial and Storage uses
- Maximise opportunity for renewable energy – PV on available roof space, EV facilities,
- Support food security through Advanced Agriculture
- Support Energy Security with connection to feedback to the Grid

## PLANNING CONDITIONS

The use of planning conditions ensures that development will only go ahead once certain conditions are satisfied, such as:

- Drainage
- Landscape
- Biodiversity Net Gain
- Access
- Public Right's of Way

## S106 REQUIREMENTS

Developer contributions are secured as part of the grant of planning permission, and are specifically related to the development impacts

- Training Opportunities
- Provision of required highway infrastructure/both on and off site
- Local improvements to highways / road infrastructure
- Landscape Management and Maintenance
- Drainage Management and Maintenance
- Biodiversity Enhancements both on plot and to Receptor area, as well as ongoing management
- Training and skills for the construction and operational phases
- Provision of Sustainable Travel Infrastructure and Travel Plan
- Traffic Routing/Management Plan
- Proposals for a Community Fund

# REVISED MASTERPLAN DOCUMENT – October 2024

- Prepared to meet objectives of Policy 26 of the Joint Core Strategy.
- Provides Framework for a Future Application.
- Identifies Reports needed to support an application.
- Identifies Commitments for new development for infrastructure, Community Fund etc.
- Prepared following Extensive Consultation over 3 years.



Remaining points raised by the EAP and from consultation will be addressed in application & subject to formal consultation.



**Thank You**

# THE OPPORTUNITY TO SUPPORT SUSTAINABLE GROWTH



## ENERGY GENERATION & CARBON REDUCTIONS

- Battery storage capacity of 40MW
- Solar PV generation of 80MW
- Potential to accommodate further energy uses (hydrogen, solar etc)
- Lower carbon emission from reducing food miles
- Greater certainty on costs for businesses



## JOB, SKILLS, TRAINING

- Support up to 4,500 jobs in new employment premises at the site (e.g. advanced distribution, manufacturing, Data Centres/Machine Learning etc)
- Support up to 200 jobs at the site in Advanced Agriculture
- Total net employment impact of up to 7,500 jobs for the UK
- Skills and Training initiatives including apprenticeships, work placements and outreach programmes
- Education partnerships to spread the benefits of the Energy Park



## ENVIRONMENT

- 100 acres of new landscape optimised for biodiversity & sustainable drainage
- Target to secure a minimum biodiversity net gain of 15%
- 40 acres specifically identified for biodiversity net gain
- 3 Ha (minimum) designated specifically for lapwing habitat
- Net gain of 1.8km of new hedgerow and improved management of those retained
- Net gain of c 1,300 new trees



## INVESTMENT & PARTNERSHIPS

- Net GVA impact of up to £410m per annum nationally
- Up to £9m business rates per annum
- £512m private investment into infrastructure and construction (no public financing)
- Works to improve sustainable travel, pedestrian and cycle routes and public access
- Community fund to benefit the local areas
- Funding of improvements to problematic highway junctions
- Partnerships in place with industry partners for infrastructure, energy & advanced agriculture

# LOCAL PLAN POLICY

Preliminary Energy  
Park Concept  
presented in  
Representations to  
Joint Core Strategy  
– in 2013

