Proposed battery energy storage system (BESS) and associated infrastructure.

Report Item No
A1

Land to the South-East of Remembrance Way, Kegworth, Derbyshire.

Application Reference:
24/01376/FULM

Grid Reference (E) 448746
Grid Reference (N) 328636

Date Registered:
6 November 2024

Applicant:
Root-Power (South)

Consultation Expiry:
10 June 2025

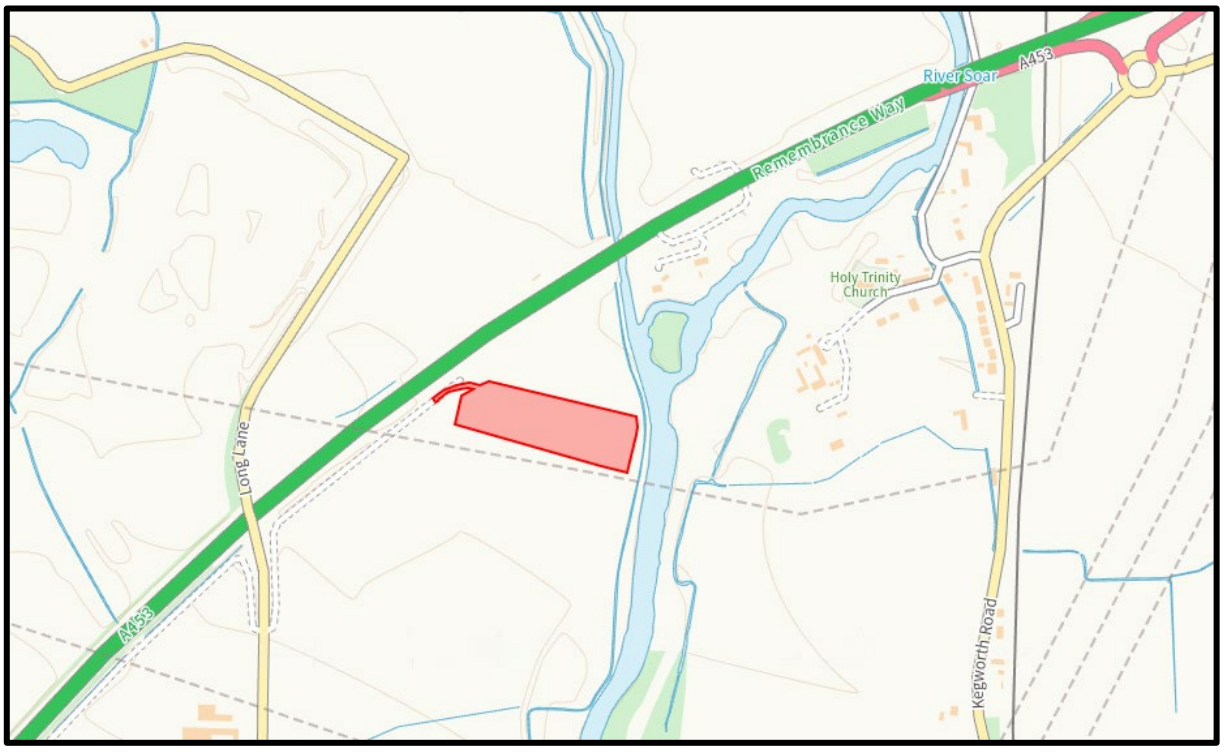
13 Week Date:
5 February 2025

Case Officer:
Adam Mellor

Extension of Time:
9 July 2025

Recommendation:
PERMIT

Site Location - Plan for indicative purposes only



Reasons the case is called to the Planning Committee

This application is brought to the Planning Committee at the request of Councillor Sewell, as the application site is within Flood Zone 3 and therefore at serious risk of flooding despite some elements of the development being placed on stilts above ground level, and that in her opinion the development would have an adverse visual impact on the countryside.

RECOMMENDATION – PERMIT, subject to the following conditions;

1. Standard time limit (3 years).
2. Approved plans.
3. Within 10 working days of energy being stored at the site notify the District Council.
4. 40 year timespan for the battery energy storage system (BESS).
5. Submission of a decommissioning and restoration scheme (DRS) no later than six months prior to the expiry of the 40 year timespan, or within six months of the cessation of energy being stored at the site (whichever is the sooner), to be submitted, approved and implemented.
6. Submission of a restoration management plan (RMP) no later than six months prior to the expiry of the 40 year timespan, or within six months of the cessation of energy being stored at the site (whichever is the sooner), to be submitted, approved and implemented.
7. Biodiversity net gain (BNG) gain plan to be submitted, approved and implemented in accordance with Paragraph 14(2) of Schedule 7A of the Town and Country Planning Act 1990 (as amended).
8. Biodiversity enhancement management and monitoring plan (BEMMP) (including timetable for implementation) prior to commencement to be submitted, approved and implemented.
9. Biodiversity construction management plan (BCMP) prior to commencement to be submitted, approved and implemented.
10. Aviation safety construction management plan (ASCMP) prior to commencement to be submitted, approved and implemented.
11. Construction traffic management plan (CTMP) prior to commencement to be submitted, approved and implemented.
12. Bridleway management plan (BMP) prior to commencement to be submitted, approved and implemented.
13. Construction travel plan (CTP) prior to commencement to be submitted, approved and implemented.
14. Precise design details (including construction materials and colour finishes) of the battery clusters, BESS transformers, BESS switchrooms, site welfare / low voltage (LV) switchroom, 132/33kV substation switchrooms, and water tanks to be submitted, approved and implemented.
15. Precise design details of the supporting structure(s) (including construction materials and any colour finish(es)) prior to the supporting structure(s) being provided to be submitted, approved and implemented.
16. Precise design details and positioning of the BESS spares container (if required) (including construction materials and any colour finish(es)) prior to the BESS spares container being provided to be submitted, approved and implemented.
17. All cabling to be underground except for any connecting to the BESS infrastructure on the supporting structure(s) and whereby a precise scheme of cable management to prevent visual detriment shall first be submitted, approved and implemented.
18. Any installed alarm systems to be silent at all times.
19. Hours of construction and decommissioning works.
20. Development to be undertaken in accordance with the flood risk and drainage assessment report (FRDAR) including its mitigation measures.
21. A scheme detailing how contaminated water will not be discharged from the site prior to commencement to be submitted, approved and implemented.
22. A flood action plan (FAP) prior to commencement to be submitted, approved and implemented.
23. Surface water drainage scheme during the construction phase (including details of a scheme to treat and remove suspended solids from surface water) prior to commencement to be submitted, approved and implemented.

24. Surface water drainage scheme prior to commencement to be submitted, approved and implemented.
25. Surface water drainage maintenance scheme prior to the first use of the development to be submitted, approved and implemented.
26. Delivery of the access arrangements in accordance with the submitted details prior to the development being first brought into use.
27. Provision of vehicular visibility splays of 2.4 metres by 65 metres in both directions at the site access prior to the development being first brought into use.
28. Delivery of the manoeuvring facilities in accordance with the submitted details prior to the development being first brought into use.
29. Scheme of signing and waymarking to Bridleway L62 prior to the development being first brought into use to be submitted, approved and implemented.
30. Development to be undertaken in accordance with the submitted arboricultural method statement (AMS), including the provision of tree and hedge protection measures prior to the commencement of the development.
31. Soft landscaping scheme to be delivered in accordance with the submitted details in the first planting and seeding season following either the substantial completion of the BESS or the BESS being first brought into use (whichever is the sooner) and replacement of failed landscaping for the lifetime of the development.
32. Landscape management plan (LMP) prior to the development being first brought into use to be submitted, approved and implemented.
33. Hard landscaping scheme (including timetable(s) for provision) prior to hard landscaping being installed to be submitted, approved and implemented.
34. Boundary treatments to be delivered in accordance with the submitted details prior to the development being first brought into use and removal of permitted development rights for alternative boundary treatments.
35. Colour finish to boundary treatments (including acoustic fence) prior to the boundary treatments being installed to be submitted, approved and implemented.
36. Precise design details of the gates to be installed to the BESS compound (including construction material and colour finish(es)) prior to the gates being installed to be submitted, approved and implemented.
37. Provision of the 4.4 metre high acoustic barrier to the northern boundary in accordance with the submitted details prior to the development being first brought into use.
38. Fitting of attenuators to the BESS inverters in accordance with the submitted details before the development is first brought into use.
39. Infrastructure associated with the BESS to be in accordance with that outlined within the submitted noise assessment.
40. Battery safety management plan (BSMP), incorporating a risk reduction strategy (RRS), prior to the development being first brought into use to be submitted, approved and implemented.
41. Emergency response plan (ERP) prior to the development being first brought into use to be submitted, approved and implemented.
42. No external lighting to be installed (including during the construction phase) unless precise details and location of such external lighting is first submitted and approved.
43. No CCTV cameras to be installed unless precise details and locations of such CCTV cameras are first submitted and approved.
44. Details to demonstrate that the proposed development will not generate electromagnetic interference to critical aviation communications, navigation, and surveillance infrastructure prior to the first use of the development to be submitted and approved.
45. Programme of archaeological work prior to commencement to be submitted, approved and implemented.

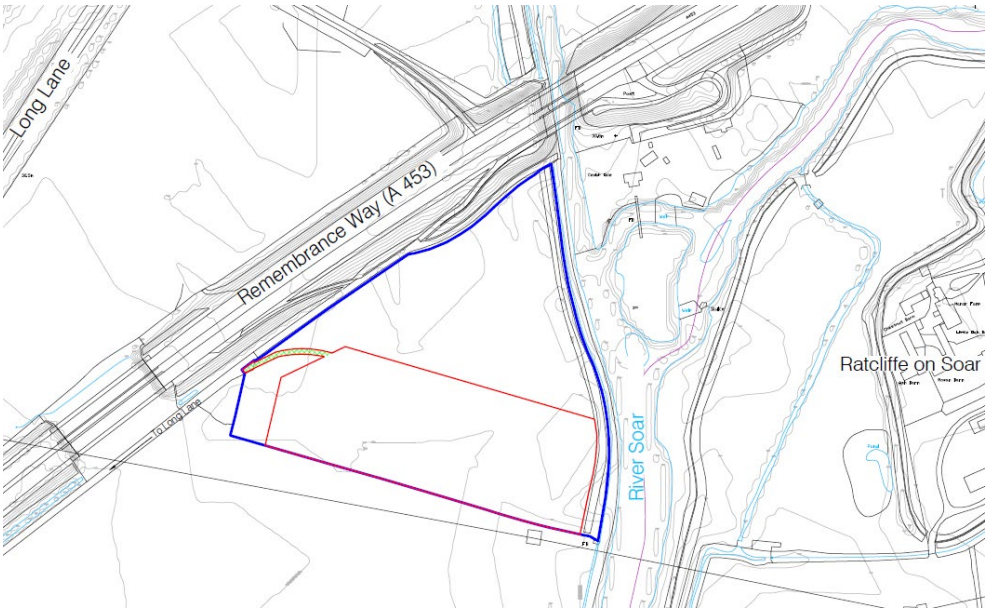
MAIN REPORT

1. Proposals and Background

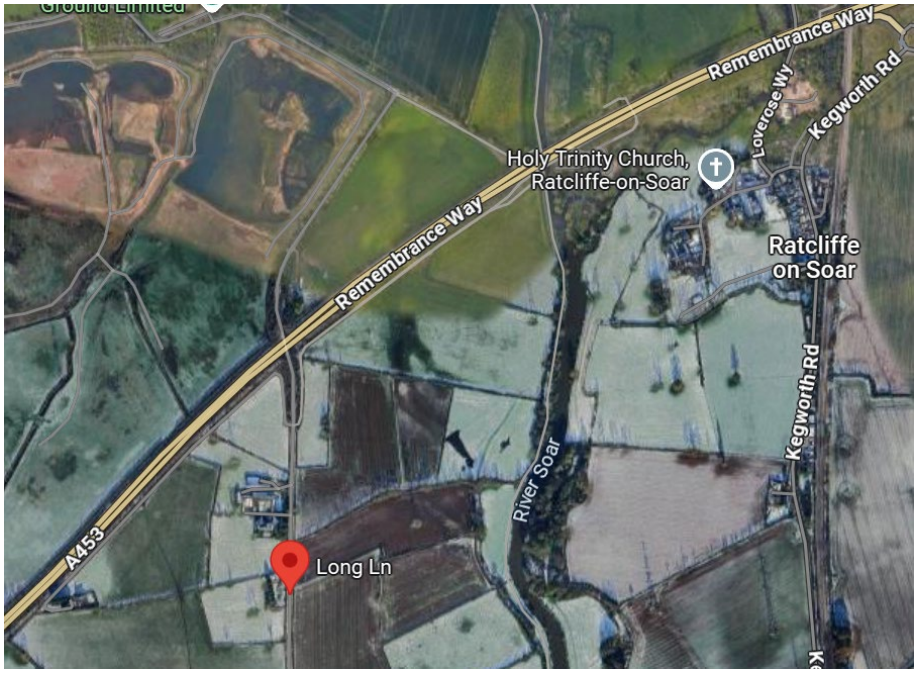
The mandatory requirement for 10% Biodiversity Net Gain (BNG) for major applications as required by the Environment Act has come into force on the 12th of February 2024 and this application was submitted to the Council after that date. The proposals are therefore required to demonstrate compliance in this regard.

Planning permission is sought for a proposed battery energy storage system (BESS) and associated infrastructure at land to the south-east of Remembrance Way, Kegworth. The 1.8 hectare site (as identified in the image below) is located to the immediate south-east of the A453 (Remembrance Way) and to the west of the River Soar with vehicular access via an existing access track (Bridleway L62) which runs off Long Lane. The site is located outside the defined Limits to Development in the adopted North West Leicestershire Local Plan. The surrounding area predominately comprises agricultural fields with Ratcliffe-on-Soar power station being to the north-east and the village of Ratcliffe-on-Soar being located on the opposite side of the River Soar to the east of the site. Bridleway L62 runs along the length of the access track from its junction with Long Lane and continues on past the site. Public footpath L63 lies to the east of the site on the western side of the River Soar.

Site Location Plan



Aerial Image of the Site Location



For context some photos of the site are shown below:

Site Photos

A screening opinion under the Town and Country Planning (Environmental Impact Assessment) Regulations 2017 (as amended) in respect of the proposed BESS was issued on the 8th of August 2024 (under application reference 24/00941/EIA), where it was determined that an application would not need to be accompanied by an Environmental Statement (ES).

The proposed development comprises a 99 megawatt (MW) BESS which will provide energy balancing services to the National Grid. A BESS operates by taking electricity from the grid at times of low demand, storing it in batteries, and releasing it back to the grid when demand is high. Whilst the proposed development is not for the production of renewable energy, it will mainly use energy from renewable sources and can balance energy production with need. On this basis it will significantly increase the use of energy produced by renewable sources and combat the intermittent nature of renewable energy sources. It is intended that the BESS would be operational for a period of 40 years.

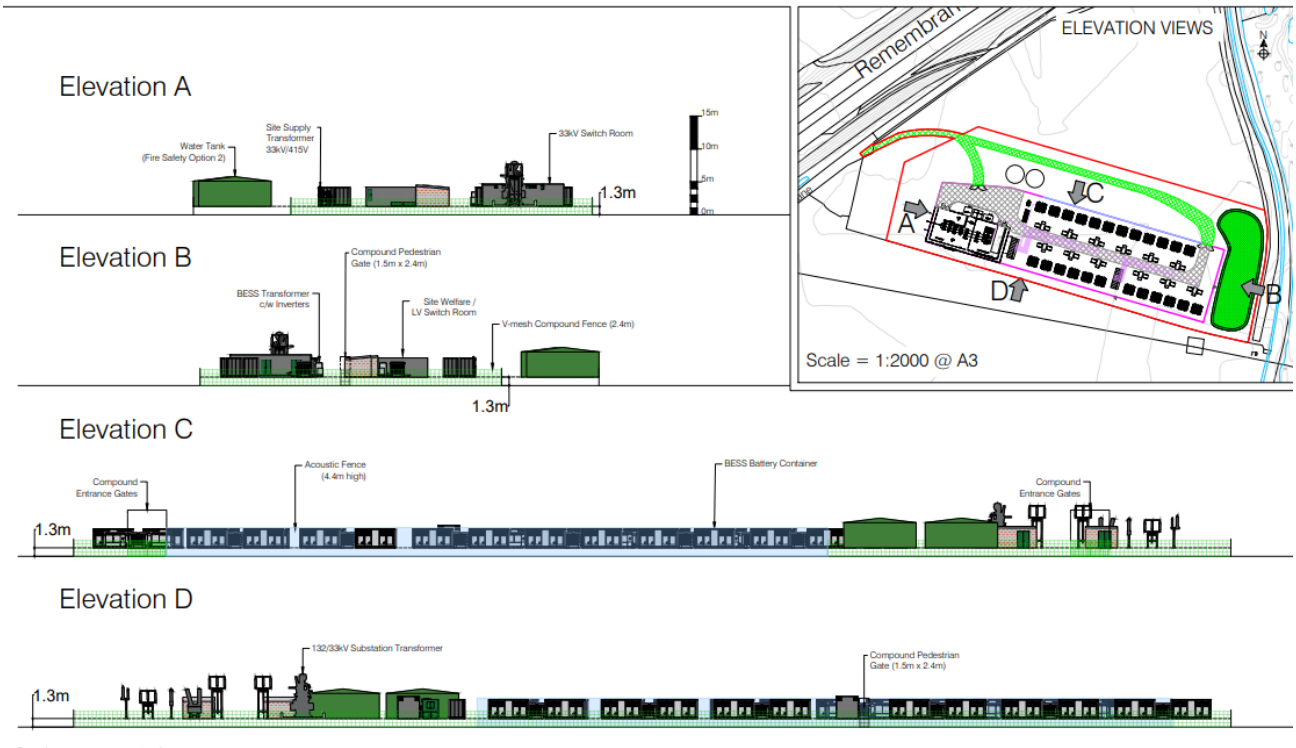
The applicant has provided correspondence from National Grid Electricity Distribution (NGED) which confirms their grid offer and this has been accepted by the applicant. It is considered that such correspondence demonstrates that a grid connection is available where the proposed development would connect (being to the Kegworth substation within the confines of Ratcliffe-on-Soar power station). Whilst Ratcliffe-on-Soar power station is to be demolished and the site redeveloped, the Kegworth substation will remain given that it forms part of the wider distribution network.

As proposed the development would comprise the following infrastructure:

(a) 24 no. battery clusters;
(b) 12 no. BESS transformers on bunded foundations;
(c) 2 no. 33 kilovolts (kV) BESS switchrooms on raised pillars;
(d) 1 no. 33kV site supply transformer on bunded foundation;
(e) 1 no. site welfare and low voltage (LV) switchroom placed on paving slabs at the corners;
(f) 2 no. 132kV substation switchrooms;
(g) 1 no. 132kV/33kV transformer within a separate compound; and
(h) 2 no. water tanks.

An elevation plan of the proposed infrastructure is as shown in the image below:

Elevation Plan of the Proposed Infrastructure



Scale = 1:500 @ A3

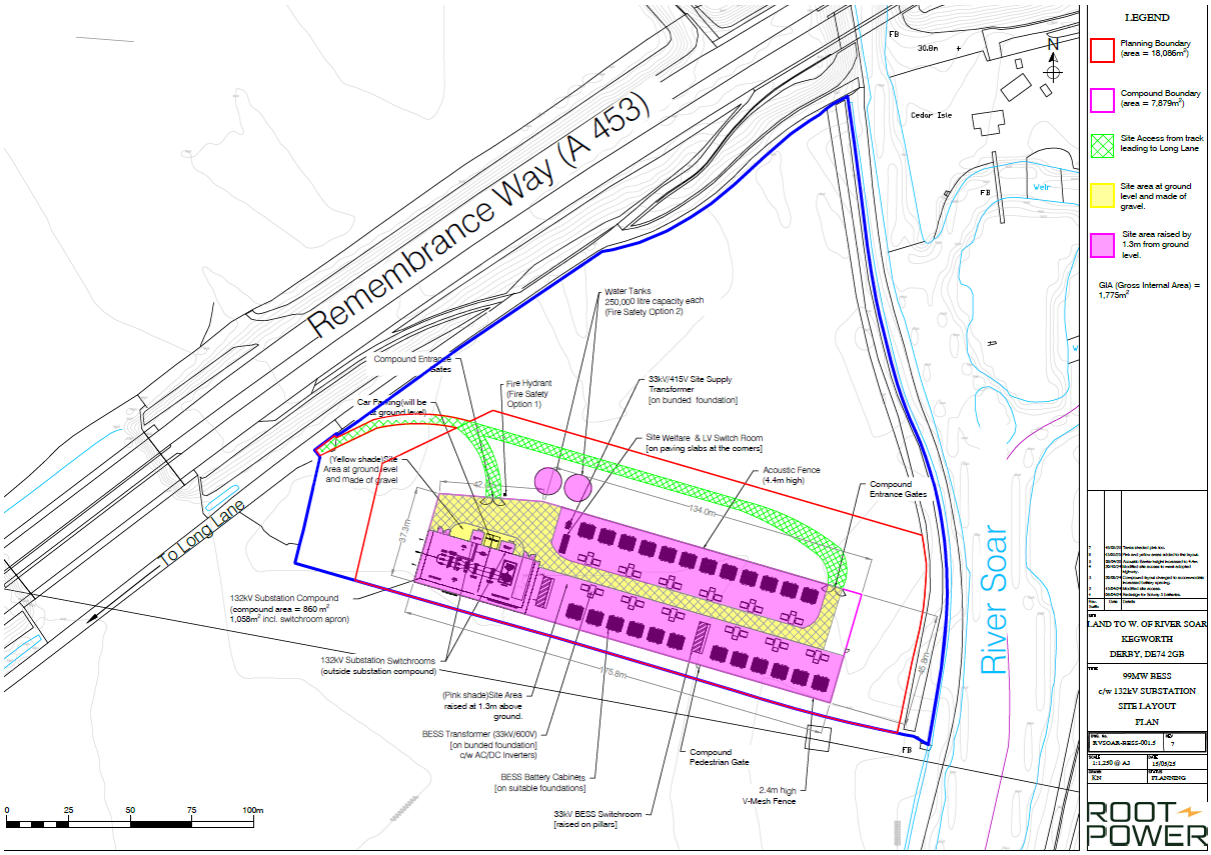
Note: V-Mesh and acoustic fence have been printed with 70% transparency.

As the application site lies within Flood Zone 3 (land which is at the highest risk of fluvial flooding) it is proposed that all the above infrastructure would be placed on a supporting structure(s) at a height of 1.3 metres above the ground level and therefore in the event of a flood, water would flow below the development. Whilst located within Flood Zone 3, BESS equipment is safe to be located within such a flood zone given that in the event of a flood the equipment would be turned off via an off-site operator (i.e. remotely controlled) and would not become live again until the flood water has subsided. This would be notwithstanding the fact that the raising of the BESS equipment above the flood event level would lead to it not 'lying' within flood water during a flooding event.

The compound would be contained by 2.4 metre high V-mesh fencing, with a 4.4 metre high acoustic fence being provided along the northern boundary of the compound for a length of 100.43 metres. Such heights of the fencing would be from ground level as they would not be placed on the supporting structure(s).

The layout of the development is as shown in the image below:

Site Layout



It is proposed that the access for construction, operation and maintenance would be via the existing access track off Long Lane, which would include the need to traverse Bridleway L62. Three sections of the track would be widened, including at its junction with Long Lane.

Further information in respect of the application, including the supporting documentation and relevant plans, can be found on the District Council's website.

Relevant Planning History

- 21/00348/AGP – Erection of an agricultural building – Withdrawn 4th June 2021.

2. Publicity

One neighbour notified on the 8th November 2024.

Two site notices were displayed on the 13th of November 2024.

A press notice was published in the Derby Evening Telegraph on the 20th of November 2024.

3. Summary of Consultations and Representations Received

The following summary of representations is provided. All responses from statutory consultees and third parties are available to view in full on the Council's website.

Objections from:

Kegworth Parish Council whose objections are summarised as follows:

(1) Negative visual impact – the site is open countryside, and the site is an important area of green land;
(2) Negative environmental impact – the development would have an adverse impact on nature conservation interests and biodiversity opportunities. The site is also an important green 'lung' for the local area and is a haven for brown hare and other wildlife;
(3) Loss of amenity, such as the footpath, would have a negative impact; and
(4) The site is in Flood Zone 3 and is not suitable for this development – there is a neighbouring brownfield site which would be more suitable.

Leicestershire Footpaths Association who whilst having no comment on the desirability or otherwise of the development, object as the development would adversely affect users of Bridleway L62 not only in terms of their enjoyment but also their safety.

Comments from:

The Gardens Trust.

No Objections from:

Leicestershire County Council – Minerals and Waste Planning Authority.
National Highways.
NWLDC Planning Policy.

No Objections, subject to conditions and/or informatives, from:

East Midlands Airport Safeguarding.
Environment Agency.
Leicestershire County Council – Archaeology.
Leicestershire County Council – Ecology.
Leicestershire County Council – Highways and Footpaths Authority.
Leicestershire County Council – Lead Local Flood Authority.
Leicestershire Fire and Rescue Service.
NWLDC Environmental Protection.
Rushcliffe Borough Council.

No response received from:

British Horse Society.
East Midlands Ambulance Service.
Leicestershire Police.
Open Spaces Society.
Ramblers Association.
Ratcliffe-on-Soar Parish Meeting.

Third Party Representations

11 representations have been received objecting to the application with the comments raised summarised as follows:

Grounds of Objections	Description of Impact
Principle of Development	There will be a loss of countryside and green space to accommodate the development which is of detriment to the local area.
Landscape and Visual Impact	The proposed development will impact negatively on the surrounding area and is not in keeping with the environment in which it is set.
	There will be adverse visual impacts associated with the development which is intended to be in place for 40 years. The development should be located on the Ratcliffe-on-Soar power station site.
	The amenity of the use of Public Right of Way (PRoW) L63 and Bridleway L62 will be adversely impacted on.
Loss of Agricultural Land	The proposal will result in the loss of valuable agricultural land.
Highway Safety	The application site has poor access with construction traffic required to use highways subject to a 7.5 tonne weight restriction as well as a single track road and Bridleway L62. Such construction vehicles will also pass through a residential area. Any substantial improvements to such highways to accommodate construction and maintenance traffic would cause disruption to the local community and significantly increase traffic in the neighbouring settlements, whilst also affecting horse riders and walkers.
	The installation of the cables to connect to the grid would

	likely require significant roadworks on the A453 (Remembrance Way) which would cause disruption and delays to local residents and commuters.
	The application site appears to lie on a PRoW and no diversion is proposed.
Residential Amenity	There will be a detrimental noise impact associated with the development.
Ecology	There could be a risk that the batteries leak which will then cause direct leakage into the River Soar and potential damage the fragile ecosystem which exists. There could also be health issues to horses which graze on the neighbouring fields.
	The proposed development will impact adversely on ecological species.
Drainage and Flood Risk	The application site is within Flood Zone 3 and therefore the land is subjected to frequent flooding. On this basis it is not suitable for electrical infrastructure.
	The development does not pass the sequential test as more suitable land in Flood Zone 1 is available to accommodate the development, particularly the Ratcliffe-on-Soar power station site.
	The submitted alternative sites assessment is inadequate as insufficient work has been carried out to identify alternatives.
	The proposed development does not comprise 'essential infrastructure' and therefore should not be built within Flood Zone 3.
	The application site is at risk of ground water flooding with such ground water flooding evident during heavy rainfall events.
Other Matters	The application forms and supporting documents refer to the wrong site and therefore the application should be invalidated with the reliability of the reports questioned.

	The isolated location will result in a security risk to the site and may result in vandalism or theft occurring.
	If the planning permission is granted and there is no grid connection available (or for some time) would the developer implement the planning permission and then leave the development unused until a connection is provided? Could a condition be imposed which prevented the development being implemented until it is demonstrated that a grid connection is available?

4. Relevant Planning Policy

Local Policies

Adopted North West Leicestershire Local Plan (2021)

The following policies of the adopted local plan are consistent with the policies of the NPPF and should be afforded full weight in the determination of this application:

Policy S2 – Settlement Hierarchy;
Policy S3 – Countryside;
Policy D1 – Design of New Development;
Policy D2 – Amenity;
Policy Ec5 – East Midlands Airport: Safeguarding;
Policy IF1 – Development and Infrastructure;
Policy IF4 – Transport Infrastructure and New Development;
Policy IF7 – Parking Provision and New Development;
Policy En1 – Nature Conservation;
Policy En6 – Land and Air Quality;
Policy Cc1 – Renewable Energy;
Policy Cc2 – Water – Flood Risk; and
Policy Cc3 – Water – Sustainable Drainage Systems.

Leicestershire Minerals and Waste Local Plan (2019)

This plan was adopted on the 25th September 2019 and as such the following policies would be considered relevant to this application:

Providing for Minerals:

Policy M11: Safeguarding of Mineral Resources.

Other Local Policies and Guidance

North West Leicestershire District Council Zero Carbon Roadmap & Action Plan – June 2019.
North West Leicestershire District Council Renewable and Low Carbon Energy Study – 2021.
Good Design for North West Leicestershire Supplementary Planning Document – April 2017.
Leicestershire Highways Design Guide (Leicestershire County Council).

National Policies

National Planning Policy Framework (2024)

The following sections of the NPPF are considered relevant to the determination of this application:

Paragraphs 8 and 10 (Achieving sustainable development);
Paragraphs 11 and 12 (Presumption in favour of sustainable development);
Paragraph 35 (Development contributions);
Paragraphs 39, 40, 41, 42, 43, 45, 48 and 55 (Decision-making);
Paragraphs 56, 57 and 58 (Planning conditions and obligations);
Paragraph 105 (Promoting healthy and safe communities);
Paragraphs 109, 110, 112, 113, 115, 116 and 117 (Promoting sustainable transport);
Paragraphs 124, 125 and 129 (Making effective use of land);
Paragraphs 131, 133, 134, 135 and 139 (Achieving well-designed places);
Paragraphs 161, 163, 164, 166, 168, 170, 173, 174, 175, 181 and 182 (Meeting the challenge of climate change, flooding and coastal change);
Paragraphs 187, 193, 196, 197, 198 and 201 (Conserving and enhancing the natural environment);
Paragraphs 202, 207, 208, 210, 212, 213, 215, 216, 218 and 219 (Conserving and enhancing the historic environment); and
Paragraphs 222 and 224 (Facilitating the sustainable use of minerals).

National Planning Policy Statement for Energy (NPS EN-1)

NPS EN-1 was originally published in July 2011 to set out national policy for energy infrastructure in the UK. Its primary purpose is to be applied to decisions for Nationally Significant Infrastructure Projects (NSIPs), but this document can be a material consideration in the determination of planning applications: *"In England and Wales this NPS may be a material consideration in decision making on applications that fall under the Town and Country Planning Act 1990 (as amended). Whether, and to what extent, this NPS is a material consideration will be judged on a case by case basis."*

Paragraph 3.4.1 sets out the UK's commitment to sourcing 15% of energy from renewable sources by 2020. To hit this target, and to largely decarbonise the power sector by 2030, Paragraph 3.4.5 goes on to state that: *"It is necessary to bring forward new renewable electricity generating projects as soon as possible. The need for new renewable energy electricity generation projects is therefore urgent."*

The updated National Policy Statement for Energy EN-1 took effect in January 2024 and includes a new section with the heading *'The urgency of need for new electricity infrastructure'* and reiterates the imperative of bringing forward renewable energy schemes as soon as possible. This is particularly pertinent, given the clear and immediate need to reduce reliance on the importation and use of fossil fuels.

National Legislation

On the 12th June 2019, the Government laid the draft Climate Change Act 2008 (2050 Target Amendment) Order 2019 to amend the Climate Change Act 2008 by introducing a target for at least a 100% reduction of greenhouse gas emissions (compared to 1990 levels) in the UK by 2050. This is otherwise known as a *'net zero target'*. The draft order would amend the 2050 greenhouse gas emissions reduction target in the Climate Change Act from at least 80% to at least 100%, thereby constituting a legally binding commitment to end the UK's contribution to climate change.

Infrastructure Planning (Electricity Storage Facilities) Order 2020 (the Storage Order)

The Storage Order redefined electricity storage facilities in the Planning Act 2008 (as amended) so that proposals for battery storage above 50MW in England are submitted as planning applications rather than follow the longer NSIP process. These changes were introduced to remove barriers to electricity storage and make it simpler for large storage facilities to obtain planning permission.

Clean Power 2030 Action Plan

This action plan sets out the government's pathway to a clean power system and what the government will do to support and accelerate delivery of the new infrastructure required.

UK Infrastructure: A 10 Year Strategy

The strategy was published in June 2025 and sets out the government's new approach to delivering infrastructure and growth. The strategy states that short term fluctuations in supply and demand happen often but can be managed by well-understood technologies that can shift supply or demand to ensure the system balances. It also states that the Clean Power Action Plan set an ambition for 23-27 GW of battery storage in 2030 (compared to 4.5 GW of installed capacity in 2024). It also set out actions to develop a pipeline of mature battery projects, including connection reform and future planning reforms.

Other National Policies and Guidance

National Planning Practice Guidance.
The Community Infrastructure Levy Regulations 2010.
The Conservation of Habitats and Species Regulations 2017.
Circular 06/05 (Biodiversity and Geological Conservation - Statutory Obligations and Their Impact Within The Planning System).

5. Assessment

Principle of Development

Insofar as the principle of development is concerned, and in accordance with the provisions of Section 38(6) of the Planning and Compulsory Purchase Act 2004, the starting point for the determination of the application is the development plan which, in this instance comprises the adopted North West Leicestershire Local Plan (2021).

Paragraph 187 of the NPPF (2024) highlights the need to recognise the intrinsic character and beauty of the countryside but does not specifically preclude development within the countryside.

The application site lies outside of the defined Limits to Development, and therefore the proposal would be subject to Policy S3 (Countryside) of the adopted Local Plan.

A battery energy storage system (BESS) is a technology which does not itself produce renewable energy, it instead stores energy within the batteries and transfers it back to the National Grid when required, for example, in times of peak energy demand.

However, the *'Planning for Renewable and Low Carbon Energy'* chapter of the NPPG incorporated Paragraph 032 (Reference ID: 5-032-20230814) on the 14th of August 2023 which states:

*"Electricity storage can enable us to use energy more flexibly and **de-carbonise our energy system cost-effectively** – for example, by helping to balance the system at lower cost, **maximising the usable output from intermittent low carbon generation (e.g. solar and wind)**, and deferring or avoiding the need for costly network upgrades and new generation capacity."* (***officer emphasis***)

Numerous appeal decisions have also concluded that battery energy storage systems are a form of renewable energy.

This type of development is therefore accepted as a form of renewable energy.

Policy S3 outlines, under criterion (o), that renewable energy development is acceptable outside the defined Limits to Development, with any development supported under Policy S3 also needing to satisfy criteria (i) to (vi) of the second part of this policy.

Part (1) of Policy Cc1 of the adopted Local Plan also outlines support for renewable energy development, be that within or outside the defined Limits to Development, subject to compliance with criteria (a) to (g) of this policy.

In terms of the compliance with Policies S3 and Cc1 of the adopted Local Plan this would be as follows:

Criterion (i) of Policy S3

(i) The appearance and character of the landscape, including its historic character and features such as biodiversity, views, settlement pattern, rivers, watercourses, field patterns, industrial heritage and local distinctiveness is safeguarded and enhanced.

Criterion (b) of Policy Cc1

(b) There is no adverse impact on the landscape character taking account of the special qualities set out within the individual National Character Areas.

For the reasons as outlined in the *'Landscape and Visual Impact'* section of this report below, it is considered that the proposed development would impact adversely on the appearance and character of the landscape.

On this basis the proposed development would not be compliant with criterion (i) of Policy S3 and criterion (b) of Policy Cc1 of the adopted Local Plan.

Criteria (ii) and (iii) of Policy S3

(ii) It does not undermine, either individually or cumulatively with existing or proposed development, the physical and perceived separation and open undeveloped character between nearby settlements, either through contiguous extensions to existing settlements or through development on isolated sites on land divorced from settlement boundaries; and
(iii) It does not create or exacerbate ribbon development.

The application site is situated to the north-east of Kegworth, with the nearest settlement being Ratcliffe-on-Soar which lies outside the administrative area of the Council (being within the administrative area of Rushcliffe Borough Council).

In addition to the above, the application site is bound to its north by the A453 (Remembrance Way), and to its east by the River Soar.

When accounting for the location of the application site in relation to Kegworth and the neighbouring settlement, and the definition provided by the presence of the River Soar, it is considered that the physical ***and*** perceived separation (***officer emphasis***) between settlements would not be undermined and consequently there would be no conflict with this criterion. This is notwithstanding the fact that the likely purpose of criterion (ii) of Policy S3 is to ensure the physical and perceived separation between settlements within the district rather than those within neighbouring authority areas where the terms of Policy S3 would not apply.

It is also considered that the proposed development would not create or exacerbate ribbon development.

On this basis the proposed development would be compliant with criteria (ii) and (iii) of Policy S3 of the adopted Local Plan.

Criterion (iv) of Policy S3

> *(iv) Built development is well integrated with existing development and existing buildings, including the re-use of existing buildings, where appropriate.*

The nearest buildings to the application site are the dwelling known as Cedar Isle on Green Lane and its associated outbuildings which are on the opposite side of the River Soar to the application site. Given the separation, it is considered that built development on the application site would not be well integrated with such buildings.

However, the proposed development lies to the immediate south of the highway infrastructure associated with the A453 (Remembrance Way) which comprises a highway of substantial construction (due to it being a dual carriageway) and therefore has a degree of integration with this existing development.

Based on this relationship, it is considered that a reason to refuse the application against criterion (iv) could not be substantiated in this instance.

Criterion (v) of Policy S3

> *(v) The development will not seriously undermine the vitality and viability of existing town and local centres.*

Given the nature of the proposed development this criterion is not considered to be relevant.

Criterion (vi) of Policy S3

> *(vi) The proposed development is accessible, or will be made accessible, by a range of sustainable transport.*

Under Policy S2 (Settlement Hierarchy) of the adopted Local Plan, Kegworth is identified as a 'Local Service Centre' which is defined as a settlement which provides *"some services and facilities primarily of a local nature meeting day-to-day needs and where a reasonable amount of new development will take place."*

It is considered that criterion (vi) of Policy S3 is more applicable to developments which have the potential to generate many vehicular movements (e.g. residential or employment generating development) and whose purpose is to ensure that such developments are appropriately located to reduce the reliance on the private car to access the most basic of services and employment opportunities.

In respect of the proposal, it is considered that most of the vehicular movements would be associated with the construction phase of the development which would be unavoidable given that large scale infrastructure would need to be transported on private vehicles. The submitted Construction Traffic Management Plan (CTMP) specifies that the development would be constructed over a 12 to 14 month period and would consist of six phases:

Phase 1 – Site preparation, including highways access;
Phase 2 – Site civils and earthworks;
Phase 3 – BESS equipment deliveries;
Phase 4 – Mechanical installation;
Phase 5 – Electrical installations; and
Phase 6 – Demobilisation and site clearance.

Table 1 within the CTMP outlines the estimated heavy goods vehicle (HGV) construction traffic generation and is as outlined below.

Estimated HGV Construction Traffic Generation (Table 1 within the CTMP)

Table 1: Estimated HGV Construction Traffic Generation

Activity	Month														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Total
Phase 1	65														65
Phase 2	200	200	200	10	10	10	10	10	10	10					670
Phase 3												72			72
Phase 4											3	3	3		9
Phase 5								8	8	8	4	4	4	4	40
Phase 6														12	12
Total	**265**	**200**	**200**	**10**	**10**	**10**	**10**	**18**	**18**	**18**	**7**	**79**	**7**	**16**	**868**
Average HGV Movements per week*	**62**	**47**	**47**	**2**	**2**	**2**	**2**	**4**	**4**	**4**	**2**	**18**	**2**	**4**	
Average HGV Movements per day**	**12**	**9**	**9**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**4**	**1**	**1**	
Average number of staff on-site	**10**	**10**	**10**	**10**	**10**	**10**	**10**	**14**	**14**	**14**	**8**	**12**	**12**	**10**	

*Based on an average of 4.3 weeks per month.

**Based on an average of 5 working days (Monday-Friday).

The CTMP also stipulates that the maximum number of construction staff likely to be working on the site at any one time would be 14.

For the operational phase, the CTMP specifies that there would be between 10 and 20 vehicle trips per month to support site operations and general maintenance activities at the site. Such vehicle trips would be typically made by cars, 4x4s or light goods vehicle (LGVs) (e.g. a van). It is again considered that such trips would be undertaken in private vehicles given the need to transport maintenance equipment / tools to and from the site.

Notwithstanding that the ability to use non-car modes of transport to serve a development of the nature proposed would be extremely limited, it is noted that the SkyLink bus service between Leicester and Derby serves the settlement of Kegworth (albeit the nearest bus stops would be on High Street at a considerable distance from the site), Ratcliffe on Soar is served by the Soar Valley Community Bus services 01, 02, 03, 04, 05, 06 and 07, and the Nottsbus On Demand service provides access from East Midlands Parkway railway station to Kegworth. East Midlands Parkway lies just over 1km to the north east of the site, which is served by a frequent service from Loughborough, Long Eaton, Derby and Nottingham and beyond. All of these services enable construction employees (in particular) an opportunity to utilise the bus and subsequently car share

to the application site, or be picked up by a minibus as suggested within the CTMP. Cycling may also be a form of transport which construction and operational employees could utilise when noting the link to Kegworth via Long Lane and Sawley Marina via Long Lane, Ratcliffe Lane and Warren Lane. A condition could be imposed on any permission granted which required the submission of a construction travel plan which sought to discourage the use of private cars (except for car sharers) and promoted alternative forms of transport to construction employees.

Subject to the imposition of such a condition, it is considered that the proposal would be compliant with criterion (vi) of Policy S3 of the adopted Local Plan when accounting for the type of development proposed.

Criterion (a) of Policy Cc1

(a) There is no unacceptable impact on residential amenity in terms of noise, shadow flicker, vibration and visual dominance.

For the reasons as outlined in the *'Residential Amenity'* section of this report below it is considered that there would be no unacceptable impact on residential amenity. It is, however, noted that shadow flicker would not be applicable in this instance as that relates to wind turbine development.

On this basis the proposed development would be compliant with criterion (a) of Policy Cc1 of the adopted Local Plan.

Criterion (c) of Policy Cc1

(c) All impacts on biodiversity have been adequately mitigated or enhanced.

For the reasons as outlined in the *'Ecology'* section of this report below it is considered that there would be substantial biodiversity net gains and enhancements associated with the proposed development.

On this basis the proposed development would be compliant with criterion (c) of Policy Cc1 of the adopted Local Plan.

Criterion (d) of Policy Cc1

(d) Heritage assets and their settings are conserved or enhanced.

For the reasons as outlined in the *'Impact on the Historic Environment'* section of this report below it is considered that *no harm* would arise to the significance of any designated heritage assets including the Grade I listed Church of Holy St Trinity (in Ratcliffe-on-Soar), Grade II listed Manor Farmhouse (in Ratcliffe-on-Soar), Grade II listed Kingston Park Pleasure Gardens Registered Park and Garden, and Kegworth Conservation Area.

On this basis the proposed development would be compliant with criterion (d) of Policy Cc1 of the adopted Local Plan.

(e) Proposals take account of the cumulative effect that would result from the proposal in conjunction with permitted and existing renewable energy schemes.

A solar array at Whatton Road, Kegworth is located 2.47 kilometres to the south of the site, with a solar array at Langley Priory, Walnut Yard, Diseworth being set 8.42 kilometres to the south-west.

In addition, planning permission was granted on the 5th May 2024 for a solar farm together with associated works, equipment and necessary infrastructure at land to the west of Hathern Road, Long

Whatton under application reference 23/00211/FULM. This solar farm would be 5.89 kilometres to the south of the site.

The recent planning permission (under application reference 23/01712/FULM), granted on the 12th May 2025, for the construction and operation of a ground-mounted solar farm with a generation capacity of 7.15MW together with access, landscaping and associated infrastructure at Donington Park Service Area, Junction 23A, Ashby Road, Castle Donington would be set 4.29 kilometres to the south-west of the site.

Within their consultation response, Rushcliffe Borough Council (RBC) has also advised of the following renewable energy developments within their administrative area:

(a) RBC Application Reference 24/01054/FUL – Land West of Kegworth Road, Ratcliffe-on-Soar – Proposed Battery Energy Storage System (BESS) – Pending Consideration – Set 0.43 kilometres to the south-east;
(b) RBC Application Reference – 23/01285/FULM – Land Off West Leake Lane, Ratcliffe-on-Soar – Proposed BESS – Refused but Allowed at Appeal – Set 2.38 kilometres to the north-east;
(c) RBC Application Reference 22/00809/FUL – Land at Church Farm, Gotham Lane, Kingston-on-Soar – The construction, operation and decommissioning of a solar photovoltaic (PV) farm and associated infrastructure, including inverters, substation compound, security cameras, fencing, access tracks and landscaping – Approved – Set 0.54 kilometres to the south-east.

It is considered that these renewable energy developments are most likely to have a cumulative impact with the proposed development and have been assessed accordingly.

Officers are also aware of other renewable energy developments elsewhere, both within and outside of North West Leicestershire, however these are unlikely to have material cumulative impacts with the proposed BESS at the application site. Whilst RBC has also referred to the Local Development Order (LDO) granted at Ratcliffe-on-Soar power station (RBC application reference 22/01339/LDO) this is not principally a renewable energy development and therefore is not relevant to the assessment under criterion (e) which specifically refers to renewable energy schemes.

In terms of the renewable energy developments within the district, it is considered that the separation distances, limited height of the solar arrays on the identified sites, and the landscaping infrastructure to the boundaries of such sites would ensure that no adverse cumulative effects would arise.

Whilst those renewable energy development within the administrative area of RBC would be closer to the application site, it is considered that landscaping infrastructure proposed as part of such developments, as well as that which exists to field and road boundaries and the River Soar, would filter and restrict views and therefore the proposed development would not be visually assessed cumulatively with such renewable energy developments. It is also the case that the wording of criterion (e) specifically refers to *permitted* or *existing* renewable energy schemes, with the BESS proposed under RBC application reference 24/01054/FUL pending consideration and therefore not being of relevance at this time.

Overall, the proposed development would be compliant with criterion (e) of Policy Cc1 of the adopted Local Plan.

Criterion (f) of Policy Cc1

(f) Proposals are accompanied by details to demonstrate how the site will be decommissioned to ensure the restoration of the site following cessation.

The submitted Planning Statement (PS) indicates that at the end of the 40 year operational lifespan

of the BESS the infrastructure approved as part of any planning permission granted would be removed and the land fully restored to agricultural use. In addition, the applicant has confirmed that they have a legal obligation, as part of their land agreement, to decommission the site and restore it to its previous condition or provide betterment. A decommissioning bond is also in place should there be any reason that the applicant was no longer able to fulfil their legal obligation.

It is considered that a condition could be imposed on any permission granted which would require the submission of a Decommissioning Strategy (DS) six months prior to the BESS ceasing operation. Whilst the information within the PS suggest that the screening landscaping infrastructure would also be removed as part of the decommissioning of the site, it is considered that a view could be taken at the time when the DS is submitted as to whether it would be beneficial to retain such landscaping infrastructure, and its associated biodiversity benefits, should there not be a pressing need for the land to be restored to agriculture.

Overall, the proposed development would be compliant with criterion (f) of Policy Cc1 of the adopted Local Plan.

Criterion (g) of Policy Cc1

> *(g) Proposals for large scale renewable energy should demonstrate that the economic, social and environmental benefits are for those communities closest to the proposed facility.*

The proposed development:

(a) would form a low carbon development which will assist in balancing grid capacity and reduce carbon emissions by up to 17,345 metric tonnes annually (which would be a conservative assessment and therefore a likelihood that this would be higher). This would be the equivalent of taking 3,770 cars off the road (based on the conservative assessment) at an average of 10,000 miles per annum per vehicle. The subsequent reduction in harmful emissions will create 'cleaner' air which would be of benefit to local communities;
(b) has the capacity to store and supply up to 144,540,000 kilowatts per hour (kWh) of electricity per year as enabling technology for renewable generation and a replacement for gas fired power generation in providing rapid response power to satisfy peak demand.
(c) will support the operation of existing, and the development of proposed, renewable energy projects which is essential to delivering the Clean Power 2030 Action Plan.
(d) will contribute to moving electricity to a low carbon future, thereby contributing to the objectives set out in the NPPF including the wider environmental benefits associated with increased production of energy from renewable sources; and
(e) will provide a significant contribution towards compliance with the Council's published Zero Carbon Roadmap which has an overarching aim of reaching Zero Carbon in 2030 (Council emissions only) and 2050 (District as a whole).

In terms of the three objectives of the NPPF it is also considered that:

Economic

- Over time, the improvements to the efficiency of the grid should reduce energy bills for consumers, including those communities within the surrounding areas.

Social

- Battery storage enhances grid resilience by providing quick responses to supply – demand imbalances and prevents blackouts during peak demand or supply shortages. This would benefit all users of the network, including those communities within the surrounding area.

Environmental

- The proposed development will comprise Biodiversity Net Gain (BNG) improvements of 70.98% habitat units and 81.52% hedgerow units which will create new habitats within the local area. It is considered that such biodiversity enhancements, along with the planting of landscaping infrastructure, would be of benefit to local communities as a means of screening the development whilst also encouraging biodiversity.

The applicant has also outlined that they have a community fund for local areas where their developments are situated which, for their built projects such as the proposal, comprises the award of a grant to a local charity, scheme or initiative that applies for it. This award would be provided every year of the 40 year operational lifespan of the BESS. Although this is acknowledged, it is considered that the community fund is not something which could be secured by condition or legal agreement as part of any permission granted given that it would not be something which is required to mitigate the impacts of the development and thereby would not meet the tests for conditions and / or a legal agreement as set out in Paragraphs 57 and 58 of the NPPF as well as the CIL Regulations. Whilst this is the case, an informative would be included on any permission granted to encourage the applicant to proceed with the establishment of the community fund.

Overall, the proposed development would be compliant with criterion (g) of Policy Cc1 of the adopted Local Plan.

Principle of Development Conclusion

In principle the development is an acceptable form of development outside the defined Limits to Development given its compliance with criterion (o) of Policy S3 of the adopted Local Plan. This acceptability, however, would be subject to the development satisfying criteria (i) to (vi) of the second part of this policy. In this respect compliance with criteria (ii) to (vi) has been demonstrated but, as discussed in the *'Landscape and Visual Impact'* section of this report below, there would be conflict with criterion (i) as the development would not safeguard and enhance the character and appearance of the landscape.

Policy Cc1 of the adopted Local Plan also supports the provision of renewable energy development subject to compliance with criteria (a) to (g). Whilst compliance with criteria (a), (c), and (d) to (g) has been demonstrated, there would be conflict with criterion (b) given that there would be an adverse impact to the landscape character of the area.

The conflict with the aforementioned policies would be a factor weighing against the scheme in the overall planning balance which is undertaken in the *'Overall Planning Balance, Contribution to Sustainable Development and Conclusions'* section of this report below.

Such 'balance' would include that the UK Government has declared a climate emergency and set out a statutory target of achieving net zero emissions by 2050, and this is a material consideration. A target of 40 gigawatts (GW) of battery energy storage capacity to be achieved by 2035 has been set by the government to assist in the aim of meeting net zero targets with this figure being just over 2GW in 2022. On this basis, and notwithstanding consents granted elsewhere for similar forms of development, the need to install more battery storage of the type proposed remains of upmost importance and this position will only continue to be strengthened by government publications and guidance.

Also, the National Planning Policy Statement for Energy (NPS EN-1) sets out the UK's commitment to sourcing energy from renewable sources to largely decarbonise the power sector by 2030. Paragraph 3.4.58 states that *"there is an urgent need for new (and particularly low carbon) electricity NSIPS to be brought forward as soon as possible, given the crucial role of electricity as the UK decarbonises its economy."*

Other issues associated with the development are assessed in more detail in the relevant sections of this report below.

Assessment of Alternatives

The Alternative Site Assessment including Sequential Test (ASAST) outlines that once capacity is found on the grid, it is imperative to find and secure a site which is within a viable distance of a grid point of connection (POC). On this basis the feasibility of the development is constrained to a site which is within a 2.2 kilometre radius of the POC which would be via an underground 132 kilovolts (kV) cable to the Kegworth substation within the confines of Ratcliffe-on-Soar power station (in order to cross the River Soar the cable would be dug into the highway which is accounted for in the cost). Beyond this distance cabling costs would become prohibitive (being around £1 million per kilometre of cable) and thereby impact on the economic viability of the development. Furthermore, the selected cable route would also need to be practically viable when allowing for excavation and cable laying with such a route potentially traversing public highways as well as third-party land (if consent(s) can be secured).

It is also indicated in the ASAST that there are several locational constraints associated with the development of a battery energy storage system (BESS) and that for an energy connection to be viable the POC must meet the following criteria:

(a) It must be located on a part of the electricity network that has available capacity;
(b) It must be located at a strategic substation or pylon; and
(c) It must be located at a substation with available demand capacity.

It is concluded by the ASAST that such criteria are met at the POC for the proposed development, with a grid connection into Kegworth grid supply point (GSP) being located within Ratcliffe-on-Soar power station (for the avoidance of doubt the POC and GSP are the same location and refer to the same thing). The applicant also considers that a willing landowner (which applies in this instance) is an important factor in the overall site selection, as without the landowner's consent development would not be able to come forward.

For the targeted capacity of 99 megawatts (MW), a plot of land of at least 1.5 hectares in size is required with such a site also requiring land for a suitable access. Additional land to deliver a biodiversity net gain (BNG) of a minimum of 10% was also required.

A range of technical, environmental and economic factors have also been utilised within the ASAST when assessing suitable viable sites for the proposed development which include:

(a) *Proximity to sensitive receptors* – development being an appropriate distance from sensitive receptors such as domestic, ecological and sensitive commercial (e.g. schools / hospitals / care homes) to not cause nuisance by way of noise and visual disruption.
(b) *Access and feasibility* – site must have a workable topography (i.e. be relatively level) and have either an existing access or the ability for an access to be constructed which would allow access for heavy goods vehicles (HGVs) (including low loaders, cranes and aggregate trucks).
(c) *Site Size and Shape* – Land of an appropriate scale to accommodate the development when considering the infrastructure involved, as well as internal separation distances mandated by regulations (e.g. fire specific BESS separation distance) and a requirement to deliver a minimum of 10% BNG.
(d) *Development Plan Policy* – where possible, avoiding areas where planning restrictions may apply (such as within Conservation Areas or National Landscapes).
(e) *Agricultural Land Quality* – prioritising land, in terms of its arable potential, by looking at the

Agricultural Land Classification (ALC) with the preference being Brownfield and lower grade ALC land.

(f) *Landscape and Visual Impact* – A site should either benefit from existing screening or have the capacity to be screened from any sensitive receptors including public viewpoints, heritage assets or domestic residences.

(g) *Nature Conservation and Potential for Enhancement* – The site must not be high quality land from an ecological perspective with a high baseline biodiversity value or feature any protected species. Land should achieve a minimum of 10% biodiversity net gain (BNG) on site.

(h) *Flood Risk* – Whilst the preference is to avoid sites within Flood Zones, if a site within a Flood Zone is the most sequentially preferable then the risk of water damage from flood risk should be designed out and it be ensured that flood requirements (i.e. flood storage schemes) retain their function.

(i) *Ground Conditions* – A site must be devoid of unsuitable ground conditions including steep topography and contamination.

(j) *Land Availability* – It must be possible to acquire land for an appropriate time, cost and scale to allow for construction, operation and decommissioning of the development. This typically makes arable land the most viable option for this form of development due to the rates on land in commercial / industrial areas.

Principally the ASAST seeks to ascertain whether there are more sequentially preferable sites, in flood risk terms, to accommodate the development with the initial ASAST considering the 5 sites identified in the image below.

Five Alternative Sites within the Initial ASAST

The assessment within the initial ASAST discounted such sites as follows:

Site 1

Site 1 is within Flood Zone 1, and partly within Flood Zones 2 and 3, and includes a Scheduled Monument listed as a *'Roman site on Red Hill.'* This site is therefore discounted as the proposal would impact adversely on a heritage asset.

Site 2

Site 2 is within Flood Zone 1 but comprises the Thrumpton Conservation Area (within the administrative area of Rushcliffe Borough Council (RBC)) and contains numerous listed buildings. This site is therefore discounted as the proposal would impact adversely on heritage assets.

Site 3

Site 3 is within Flood Zone 1 and currently consists of the Ratcliffe-on-Soar power station which is subject to the Ratcliffe-on-Soar power station Local Development Order (LDO) as adopted by RBC on the 19th July 2023 (ref: 22/01339/LDO). This site is therefore discounted for the reasons as discussed in the *'Ratcliffe-on-Soar LDO'* sub-section below.

Site 4

Site 4 is within Flood Zone 2 but includes the Grade II listed Manor Farmhouse. This site is therefore discounted as the proposal would impact adversely on a heritage asset.

Site 5

Site 5 is within Flood Zone 1 but comprises part of the Kingston Park Pleasure Gardens which is a Grade II Registered Park and Garden and contains several Grade II listed buildings. This site is therefore discounted as the proposal would impact adversely on heritage assets.

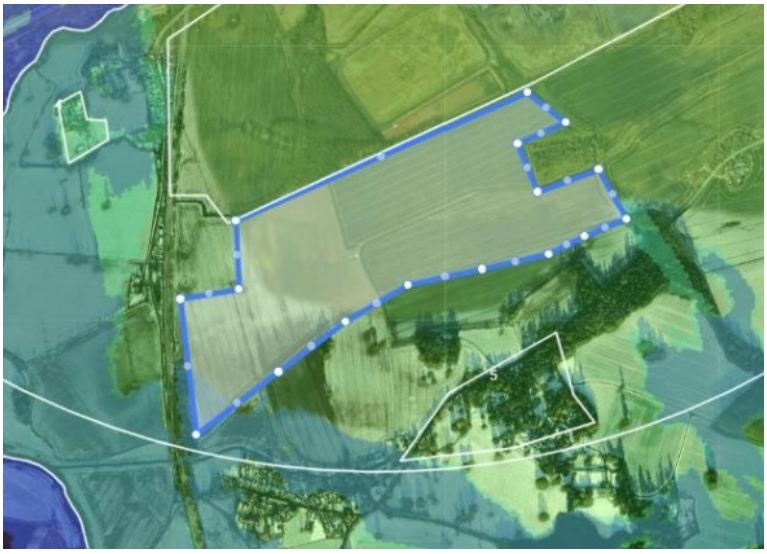
The initial ASAST concluded that the remaining areas within Flood Zone 1 were allocated as Green Belt within the administrative area of RBC and comprised Grade 3 Agricultural Land with several of the sites also subject to planning applications. This position, however, was disputed by officers when accounting for an appeal decision within the administrative area of RBC which allowed for a BESS within the Green Belt at Land Off West Leake Lane (appeal ref: APP/P3040/W/24/3352048). Therefore, the designation of land as Green Belt would not be a reason to discount a site.

Also, as the application site comprises sub-Grade 3A agricultural land (as discussed in the *'Agricultural Land Impact'* section of this report below) other Grade 3 agricultural land in an area of lower flood risk could be considered sequentially preferable.

An amended ASAST was subsequently submitted by the applicant assessing further sites which all fell within the administrative area of RBC.

The amended ASAST outlines that the below sites were discounted as there is no willing landowner and consequently an opportunity to develop the land would not arise.

Sites with No Willing Landowner



It is acknowledged that land 'ownership' would not be a relevant consideration when determining if a site is 'reasonably available' for the purposes of applying the flood risk sequential test.

Notwithstanding this, it is considered that the consent of the landowner is a different consideration with all the sites assessed by the applicant (except for the application site) not being within their ownership.

The amended ASAST also discounts the following 6 sites within the Green Belt and Flood Zone 1.

Land Identification Image 1

The area to the north sits adjacent to the Thrumpton Conservation Area and several listed buildings and therefore would not be suitable for a BESS development. The land to the south-east was also subject to an Environmental Impact Assessment (EIA) screening in 2021 (ref: 21/02163/SCREIA) for a proposed solar farm and battery storage facility and therefore is discounted as there is interest from another energy developer.

Land Identification Image 2

An existing residential dwelling (as identified by the red dot) is situated centrally within the land. On the basis that the fields are generally open, a proposed BESS would cause a visual impact to this dwelling. Furthermore, the access to the fields would be along tight single tracks and consequently would not be suitable for large construction vehicles.

Land Identification Image 3

Due to the steep topography, as identified in the image below, most of the land would be unsuitable for a BESS development. The 'flatter' area to the south of this parcel of land would sit near an existing residential dwelling and would therefore be discounted on amenity grounds. In addition, the southern part of the land includes open views to the east and south which would lead to a BESS causing a visual impact as well as an impact to the landscape character of the area.

Topography of Land Identification Image 3

Land Identification Image 4

This land falls partially within Flood Zones 2 and 3 and in addition the Kingston Park Pleasure

Gardens Grade II Registered Park and Garden is to the south with an approved planning permission for a solar farm (RBC ref: 22/00809/FUL) on land to the north. Both constraints would discourage development on this land due to the impact to the heritage asset and the cumulative landscape impact.

Land Identification Image 5

The land to the north of the two fields lies within the Ratcliffe-on-Soar LDO, with land to the west being subject to the approved planning permission for a solar farm under RBC application reference 22/00809/FUL. The cumulative impact of these development would discourage a BESS development within such fields. Residential properties are also located to the north and east within the southern fields. On this basis such land would be discounted based on the visual and residential amenity impacts.

Land Identification Image 6

Within the western parcel of land, residential properties lie centrally and to the west. On this basis such land would be discounted based on the visual and residential amenity impacts. In terms of the eastern parcel of land, a residential property lies directly to the north and although some screening exists such land is discounted due to residential amenity concerns.

Ratcliffe-on-Soar LDO

The applicant was requested to consider the development being located on land subject to the Ratcliffe-on-Soar LDO given that one of the uses proposed as part of the LDO comprised energy storage. The amended ASAST outlines that the landowner and operator of Ratcliffe-on-Soar power station (Uniper) is transitioning into a 'low-carbon energy solutions' business and *"is seeking to redevelop parts of the site for its own use to generate energy from alternative sources and for energy storage."* On the basis that the landowner is developing the LDO site for their own purposes it has been discounted by the applicant as it would not be available.

Agricultural Land

In terms of agricultural land, the Agricultural Land Classification (ALC) map identifies that all land outside of Flood Zones 2 and 3 within the 2.2 kilometre radius search area is either Grade 2 (Very Good) or Grade 3 (Good) with Grade 2 and Grade 3a being classed as Best and Most Versatile (BMV) agricultural land and Grade 3b not being classed as BMV. The ALC map does not define between Grade 3a and Grade 3b agricultural land.

As discussed in the *'Agricultural Land Impact'* section of this report below, the application site comprises sub-Grade 3a agricultural land (given that it is subjected to frequent fluvial flooding) but given that other land within the search area is also Grade 3 such land would not be sequentially preferable. This is notwithstanding that such land has also been discounted for the reasons outlined above.

Assessment of Alternatives Conclusion

It is considered that the conclusions and assessments reached by the applicant within the ASAST are reasonable and have identified that alternative sites would not, in practice, meet the requirements of the development and therefore the application site is the only feasible site available at this time to deliver the scheme.

It is also accepted, as outlined in the ASAST, that the Kegworth substation is the only substation in the district where capacity and connection were available on the grid to accommodate the development. Consequently, it cannot be located elsewhere in the district.

Landscape and Visual Impact

Criterion (i) of Policy S3 and criterion (b) of Policy Cc1 of the adopted Local Plan support development which safeguard and enhance the appearance and character of the landscape.

A Landscape and Visual Appraisal (LVA) has been submitted in support of the application, which has been undertaken in accordance with best practice as outlined in the *'Guidelines for Landscape and Visual Impact Assessment 3rd Edition'* (also known as GLVIA3). The LVA has been amended during the consideration of the application following alterations to the proposal in response to the comments of the Environment Agency (EA).

Landscape Impact

The application site is not subject to any statutory landscape (i.e. National Park or National Landscape, nature conservation or heritage designations, or non-statutory designations (such as a Local Wildlife Site (LWS)).

It is outlined within the LVA that the local area is influenced by Ratcliffe-on-Soar power station and its associated elements related to the movement of energy such as pylons. In addition, it states that

the site is generally undulating and comprises part of a field in agricultural use which is bound by hedgerows with trees and that to the north of the site the A453 (Remembrance Way) introduces vehicular noise and movement. To the east, the River Soar crosses the landscape in a broadly north to south direction. The LVA also determines that the landscape is generally well vegetated which creates enclosure to longer range views.

At a National Level the application site falls within the *'Trent Valley Washlands'* National Character Area (NCA 69) (which is outlined in Paragraphs 4.1.3 to 4.1.5 of the LVA).

At a sub-regional level, the Leicester, Leicestershire and Rutland Landscape and Woodland Strategy (LLRLS) also defines the character area of the site as *'Trent Valley'* which is as outlined in Paragraphs 4.1.6 to 4.1.11 of the LVA.

The LVA determines that the landscape is of ***medium value***, with the susceptibility to change being ***low***, and therefore the overall sensitivity of the landscape would be considered ***medium***. In such circumstances the LVA determines that the proposed development would be consistent with the current landscape character, and its surrounding context, and that a successful mitigation strategy would enable the proposal to further integrate with its setting.

Visual Impact

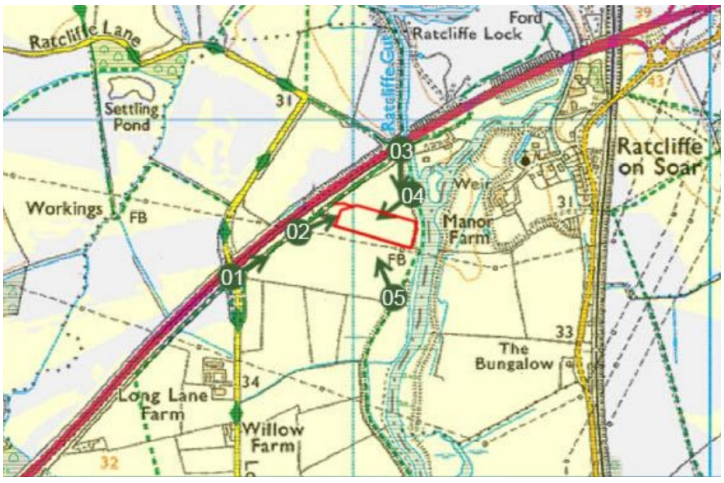
In terms of the visual impact, it is outlined within the LVA that a Zone of Theoretical Visibility (ZTV) was modelled and used as a working tool to inform the extent of the zone within which the proposed development may have an influence or effect on visual amenity. This set a study area with a radius of 2.5 kilometres from the centre of the application site, given that at such a distance the form of development (when seen by the human eye) would not be discernible or legible.

The LVA has selected five locations where viewpoints have been provided which are specified below. Such viewpoints are not intended to cover every possible view of the proposed development, but rather they are representative of a sensitive receptor type at varying distances and orientations to the application site.

(a) Viewpoint 1 – Long Lane on route of Midshires Way;
(b) Viewpoints 2 and 3 – Bridleway L62; and
(c) Viewpoints 4 and 5 – Public Right of Way (PRoW) L63.

A plan identifying the location of the five viewpoints within the LVA is as shown below.

Plan of Viewpoint Locations within the LVA



It is determined by the LVA that such locations were selected as the sensitivity of the visual receptor is high given that it relates to users of either a PRoW or bridleway.

Viewpoint 1 – View from Long Lane on route of Midshires Way – 0.33 kilometres from the site looking north-east

Viewpoint 1 within the LVA is as identified below.

Viewpoint 1

Viewpoint 2 – View from Bridleway L62 – 0.11 kilometres from the site looking north-east

Viewpoint 2 within the LVA is as identified below, the red line depicted on the image represents where the development would be located.

Viewpoint 2

Viewpoint 5 - View from PRoW L63 – 0.21 kilometres from the site looking north-west

Viewpoint 5 within the LVA is as identified below.

Viewpoint 5

It is determined by the LVA that from these viewpoints the proposed development would be perceptible but that the retained hedgerow to the southern boundary of the site would form a partial visual barrier to the lower elements of the battery energy storage system (BESS), and its associated infrastructure. Although taller elements would be visible, they would be read as part of the existing baseline which includes the infrastructure at the Ratcliffe-on-Soar power station, the A453 (Remembrance Way) and vertical emphasis of electricity pylons.

Based on the above, the LVA concludes that whilst the sensitivity of the receptor is high, there would be a *small magnitude of change* in the view with the significance of the visual impact being *moderate*.

Viewpoint 3 - View from Bridleway L62 – 0.15 kilometres from the site looking south

Viewpoint 3 within the LVA is as identified below.

Viewpoint 3

Viewpoint 4 - View from PRoW L63 – 0.09 kilometres from the site looking south-west

Viewpoint 4 within the LVA is as identified below.

Viewpoint 4

The LVA acknowledges that the proposed development would be noticeable in these views and seen against the backdrop of the vegetation that forms the southern boundary of the application site but would not break the skyline. Although noticeable, the LVA determines that the development would be read as part of the existing baseline, which in this instance would relate to the vertical electricity pylons and A453 (Remembrance Way) and would form a limited reduction in the quality of the current environment.

Based on the above, the LVA concludes that there would be a *medium magnitude of change* in the view with the significance of the visual impact being *major to moderate adverse*.

LVA Landscape and Visual Impact Conclusion

As is outlined above the LVA determines that the landscape is of *medium value* and that the

susceptibility of the local landscape to this form of development would be ***low***. On this basis the overall sensitivity of the landscape would be considered ***medium***.

In terms of visual impacts, it is outlined above that in terms of viewpoints 1, 2 and 5 the significance of the visual impact would be ***moderate*** with a ***small magnitude of change***, whereas for viewpoints 3 and 4 the significance of the visual impact would be ***major to moderate adverse*** with a ***medium magnitude of change***. It is noted that the viewpoints principally relate to users of PRoW L63 and Bridleway L62 and that the visual impact varies depending on your position and direction of travel along such routes. The LVA also determines that the assessment is based without any mitigation being in place.

The recommendations on mitigation measures within the LVA would include:

(a) Management and retention of the native tree and hedgerow planting that sits around the site boundary;
(b) Additional native species hedgerow and tree planting along the site's northern and eastern boundaries;
(c) The setting of the BESS, and its associated infrastructure, away from the site boundaries to allow growth of boundary vegetation; and
(d) The use of materials for the external envelope of the buildings which would minimise potential visual intrusion and aid visual integration (i.e. appropriate colour finishes).

Subject to such mitigation being in place, the LVA determines that the proposed development would have a ***moderate*** visual impact, and a ***minor to negligible*** impact to the character of the landscape.

To demonstrate the visual impact of the development following its construction the applicant was requested to provide photomontages from viewpoints 3 and 4 given that the LVA determined that the visual impact would be greatest from such viewpoints. These photomontages are shown below and provide the visual impact at year 1 as well as year 15.

Viewpoint 3 Photomontage – Year 1

Viewpoint 3 Photomontage – Year 15

Viewpoint 4 Photomontage – Year 1

Viewpoint 4 Photomontage – Year 15

Officer Landscape and Visual Impact Conclusion

The application site is rectangular in shape but forms part of a larger triangular parcel of agricultural land located adjacent to the A453 (Remembrance Way) and Bridleway L62. The southern, eastern and western boundaries of the application site comprise hedgerows with the northern boundary of the wider triangular parcel of land forming a bund which comprises part of the Environment Agency's Soar Valley Improvement Scheme (or Lower Soar Alleviation Scheme) which is part of a flood defence system for the River Soar.

It is considered that the area remains predominantly rural, albeit the landscape has been altered by significant built forms including the Ratcliffe-on-Soar power station, A453 (Remembrance Way) and electricity pylons. Such infrastructure has reduced the tranquillity which would be expected in the locality.

Whilst acknowledging that Ratcliffe-on-Soar power station is to be demolished, the granting of the Ratcliffe-on-Soar power station Local Development Order (LDO) by Rushcliffe Borough Council (RBC) (RBC ref: 22/01339/LDO) would see the existing infrastructure replaced with buildings up to a maximum gross floor area of 810,000 square metres. Although such buildings would not be of the height of certain elements of the infrastructure associated with Ratcliffe-on-Soar power station (albeit they could still be around 40 metres tall), there is the potential for their built mass to be of more significance and therefore careful consideration would need to be given to the landscaping infrastructure required to screen the power station site. In the main, however, built forms would continue to reduce the tranquillity of the area even after the Ratcliffe-on-Soar power station is removed.

The application site remains open and devoid of built forms above ground level and this assists in maintaining the openness of the immediate area between the settlements of Kegworth and Ratcliffe-on-Soar. It is accepted that an electricity pylon is present in the field immediately adjacent to the southern site boundary, however it is considered that, overall, the application site makes a positive contribution to the landscape character of the area by virtue of assisting in maintaining its openness whilst containing no detracting elements.

It is intended that the BESS would be operational for a period of 40 years, with the infrastructure comprising the BESS being as outlined in the *'Proposals and Background'* section of this report above. Given the location of the site within Flood Zone 3 there is a requirement for such infrastructure to be placed on a supporting structure(s) at a height of 1.3 metres above the ground level. The perimeter of the BESS compound would be bound by 2.4 metre high V-mesh fencing, with a 4.4 metre high acoustic fence also being provided for a length of 100.43 metres along the northern boundary of the compound. Such fencing would be placed at ground level rather than upon the supporting structure(s).

As proposed industrial equipment would be swathed across the site with the 24 battery clusters having individual heights of 2.9 metres (or 4.2 metres when accounting for their placement on the supporting structure(s)) and arranged with a regular repeating gap between one another of 2.5 metres. The 12 BESS transformers would be 2.3 metres in height (or 3.6 metres on the supporting structure(s)) with the largest piece of equipment being the substation transformer at a height of 6.8 metres (or 8.1 metres on the supporting structure(s)). In addition, an element of hard surfacing would be introduced along with two water tanks at heights of 4.5 metres (or 5.8 metres on the supporting structure(s)). On this basis the character of the site would be completely changed to become heavily industrialised and would reduce the open nature of the site and the contribution it makes to the landscape character of the local area.

Soft landscaping would be proposed, particularly to the western and northern boundaries of the site, which would, in time, assist in softening the stark character of the components associated with the development. Although this would aid in the integration of the proposal into the local area, the photomontages supplied by the applicant demonstrate that the proposal would be very apparent and would not be fully screened even by the 15th year (particularly in viewpoint 3).

In visual impact terms, users of a PRoW or bridleway would be of higher sensitivity to changes in the view. It is the conclusion of the applicant's LVA that ***major to moderate adverse*** visual impacts would be experienced by users of both PRoW L63 and Bridleway L62, before mitigation. When accounting for the evidence of the photomontages, however, such visual impacts would not significantly reduce by the 15th year (potentially only reducing to ***moderate adverse***) even with the soft landscaping infrastructure being in place. Therefore, whilst potentially only experienced for a fleeting moment from PRoW L63 and Bridleway L62, the development would nonetheless appear stark and imposing.

As is outlined above, criterion (i) of Policy S3 and criterion (b) of Policy Cc1 of the adopted Local Plan support development which safeguard and enhance the appearance and character of the landscape. Despite the presence of nearby industrial landscape features, and the landscaping

mitigation proposed, it is considered that the proposed development would heavily industrialise the application site thereby reducing the positive contribution it makes to the landscape character of the local area. In addition, ***major to moderate adverse*** (or as a minimum ***moderate adverse***) visual impacts would be experienced by users of both PRoW L63 and Bridleway L62.

When accounting for the above, therefore, the proposed development would not safeguard, and enhance, the appearance and character of the landscape and therefore would be contrary to criterion (i) of Policy S3 and criterion (b) of Policy Cc1 of the adopted Local Plan.

This conflict with the aforementioned policies would be a factor weighing against the scheme in the overall planning balance which is undertaken in the *'Overall Planning Balance, Contribution to Sustainable Development and Conclusions'* section of this report below.

In coming to the above conclusion, regard has also been given to the Inspector's decision in the allowed appeal (on the 10th February 2025) for a BESS at Land Off West Leake Lane, Ratcliffe-on-Soar (appeal ref: APP/P3040/W/24/3352048) which is within the administrative area of RBC (RBC ref: 23/01285/FUL). This is considered reasonable in the context of the wider landscape character of the two sites not being materially different, with their separation distance being 2.38 kilometres.

Design

Policy D1 of the Local Plan (2021) requires that all developments be based upon a robust opportunities and constraints assessment and be informed by a comprehensive site and contextual appraisal.

The submitted documents outline that the battery energy storage system (BESS) would comprise the following components:

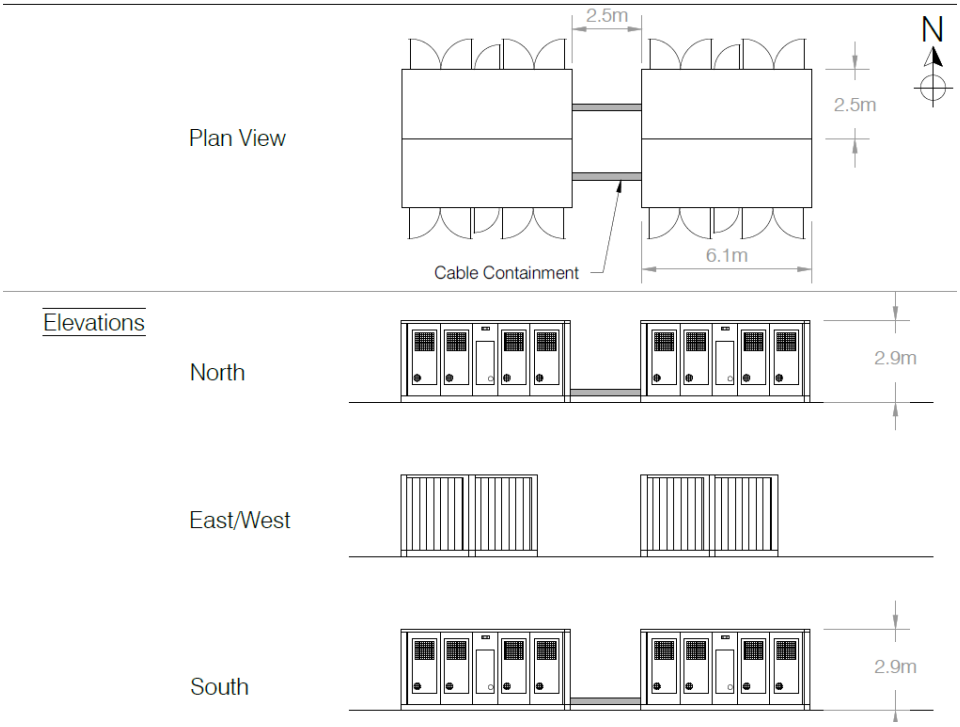
(a) 24 no. battery clusters;
(b) 12 no. BESS transformers;
(c) 2 no. 33 Kilovolts (kV) BESS switchrooms;
(d) 1 no. 33kV site supply transformer;
(e) 1 no. site welfare and low voltage (LV) switchroom;
(f) 2 no. 132/33kV substation switchrooms;
(g) 1 no. 132/33kV substation transformer; and
(h) 2 no. water tanks.

Such components would be contained within a compound covering an area of around 7,704 square metres (0.77 hectares) with the 132/33kV substation transformer placed within a separate substation compound (within the main compound) which would cover a ground area of 860 square metres (0.09 hectares).

BESS Battery Clusters

The individual dimensions of one of the BESS battery clusters would be 2.5 by 6.1 metres with an overall height of 2.9 metres. This is as depicted in the image below.

BESS Battery Clusters Image



A cluster would comprise four batteries, with a total of 24 BESS battery clusters being provided.

BESS Transformers

The individual dimensions of a BESS transformer would be 5 by 9.8 metres with an overall height of 2.3 metres. This is depicted in the image below.

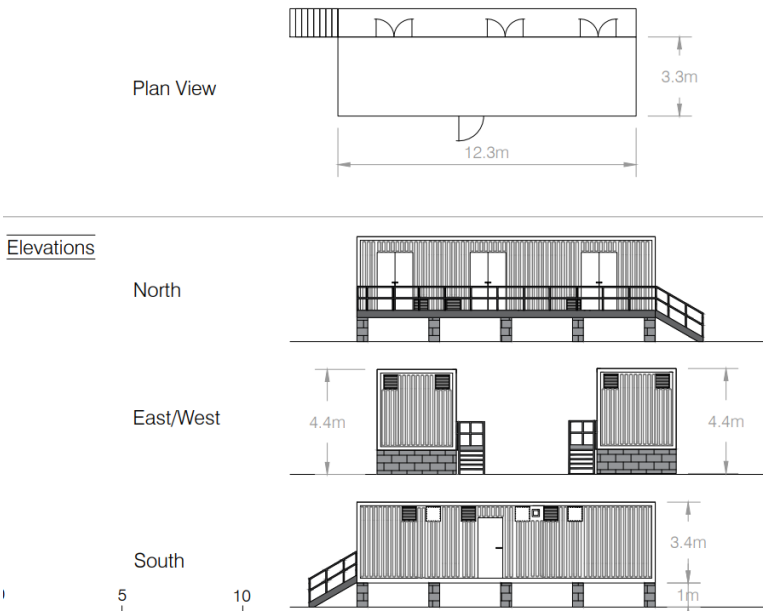
BESS Transformers

A total of 12 BESS transformers would be provided.

33kV BESS Switchroom

Two 33kV BESS switchrooms would be provided which would have individual dimensions of 3.3 by 12.3 metres and overall heights of 3.4 metres.

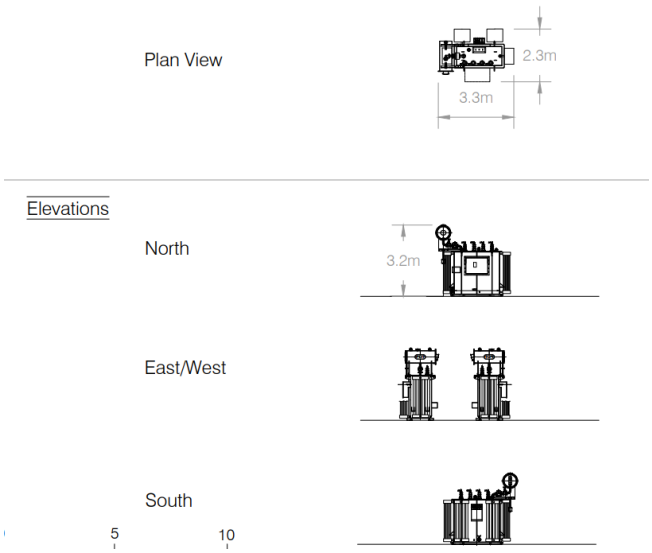
33Kv BESS Switchroom Image



33kV Site Supply Transformer

The 33kV site supply transformer would be sited to the immediate north of the site welfare and LV switchroom and would cover a ground area of 7.59 square metres with an overall height of 3.2 metres.

33kV Site Supply Transformer Image



Site Welfare and Low Voltage (LV) Switchroom

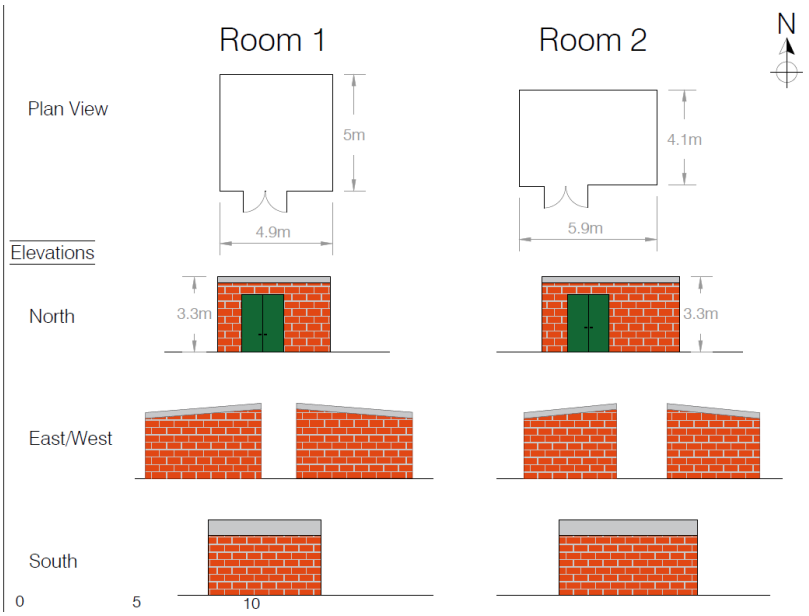
A site welfare and LV switchroom would be provided within the western part of the site near the 132/33kV substation transformer compound. The dimensions of the site welfare and LV switchroom would be 2.3 by 7.5 metres with an overall height of 2.9 metres.

Site Welfare and LV Switchroom Image

132/33kV Substation Switchrooms

Two 132/33kV substation switchrooms would be provided within the western part of the site where they would be adjacent to the substation compound. One of the substation switchrooms would be 5 by 4.9 metres and the other being 4.1 by 5.9 metres, both substation switchrooms would utilise mono-pitched roofs with overall heights of 3.3 metres.

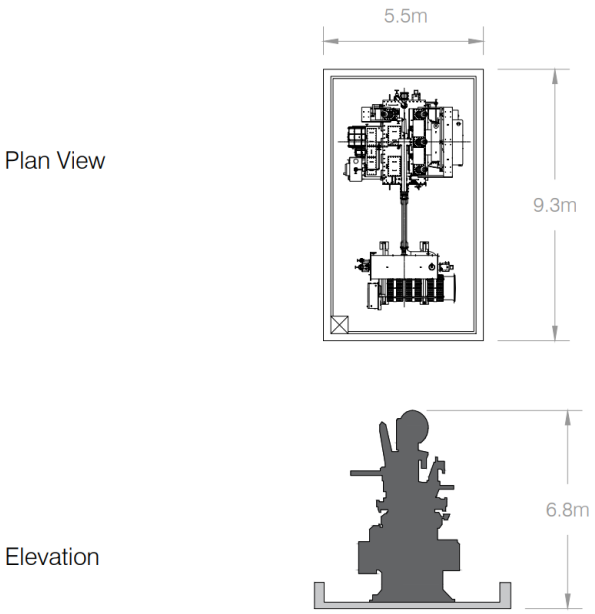
132/33kV Substation Switchrooms Image



132/33kV Substation Transformer

A 132/33kV substation transformer would be provided within the western part of the site which would cover a ground area of 51.15 square metres and have a height of 6.8 metres (at its highest point).

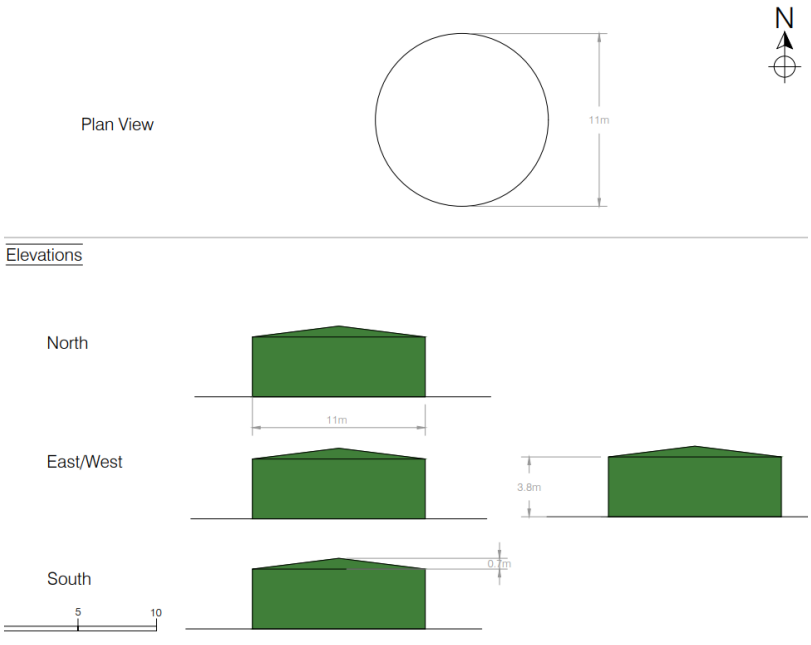
132/33kV Substation Transformer Image



Water Tank

Two circular water tanks would be provided within the western part of the site outside of the main compound near the northern site boundary. Such water tanks would have individual diameters of 11 metres and the capacity to hold 250,000 litres of water. The overall height of an individual water tank would be 4.5 metres.

Water Tank Image



Supporting Structure(s)

Given the location of the application site within Flood Zone 3 it is proposed that the above equipment would be raised 1.3 metres above ground level by a supporting structure(s). This is to ensure that in the event of a flood, flood water would flow below the development and therefore not impact on the functional floodplain (this being a matter discussed in more detail in the *'Flood Risk and Drainage'* section of this report above).

At this time, however, details of the supporting structure(s) have not been developed and therefore a condition would be imposed on any permission granted which would secure precise details and construction materials. There may be more than one as the sprinkler tanks would be on a supporting structure and they are located outside the secure compound area. It is considered that this approach is reasonable when accounting for any supporting structure(s) not having any greater visual impact than the BESS infrastructure.

Access to the supporting structure(s) would be via stairs, with the internal access road and car parking spaces depicted on the submitted site layout plan being at ground level.

BESS Spares Container

Details of a BESS spares container have been provided (which would have dimensions of 6.1 by 2.4 metres and an overall height of 2.4 metres), although the applicant has advised that the submitted layout does not detail the position of the BESS spares container as this would be dependent on the final engineering design by the manufacturer. On this basis a condition would be imposed on any permission granted which would require details of the appearance, scale, and positioning of the BESS spares container to be submitted for approval.

Colours and Materials

The applicant has outlined that the details of the materials of construction of the BESS switchrooms and site welfare and LV switchroom would vary dependent on the manufacturer but usually they would have a muted green colour finish. The substation switchrooms would be of brick construction.

In terms of the water tanks, these would be constructed from steel and coloured green.

Given the absence of precise details a condition would be imposed on any permission granted so that it can be ensured that the proposed materials of construction and colour finishes minimise the impact to the visual amenities of the landscape.

Fencing and Security

A V-Mesh fence to a height of 2.4 metres would be constructed to the perimeter of the compound with the submitted plan identifying that such fencing would be coloured green. An acoustic timber fence to a height of 4.4 metres would also be provided along the northern boundary of the compound which would run for a length of around 100.43 metres.

No details of the gates to be installed to access the compound have been provided at this time.

It is considered that the delivery of the perimeter fencing with an appropriate colour finish would ensure that such fencing would be of an acceptable design and would, in time, be screened by the landscaping infrastructure provided as part of the development. A condition would be imposed on any permission granted to secure a precise colour finish to the perimeter fencing along with details of the proposed gates (and their associated colour finish).

In terms of the acoustic fencing, it is accepted that such fencing is required to mitigate noise impacts associated with the development and therefore must be of a particular design and construction material to achieve its intended aim. However, with a height of 4.4 metres and overall length of 100.43 metres, such acoustic fencing would be more visual from the outset of the development and would only achieve a degree of screening when the proposed landscaping infrastructure matures. To reduce the immediate impact, a condition would be imposed on any permission granted which would require the acoustic fencing to be painted in a colour which would allow it to integrate into the environment in which it is set.

It is intended that closed circuit television (CCTV) cameras would be installed for security purposes, although the application as submitted does not detail where such CCTV cameras would be delivered and what the appearance of the CCTV cameras would be. In the absence of such details a condition would be imposed on any permission granted.

Cabling

All cables would be located underground, however where the cables would come up from the ground to reach the infrastructure upon the supporting structure(s) they would be aligned with the supporting foundations of the structure and therefore would not be noticeable. In addition, the applicant has advised that an inset layer could be provided underneath the supporting structure(s) so that any cabling that doesn't go directly to the supporting structure(s) is covered.

A condition would be imposed on any permission granted to secure this.

Design Conclusion

Overall, it is accepted that the infrastructure to be provided would be functional in appearance given the nature of the development to be delivered. However, to allow better assimilation into the environment in which the development would be set appropriate colour finishes would be secured for certain elements of the infrastructure by condition on any permission granted. Conditions would also secure precise details of the supporting structure(s), BESS spares container, gates to be installed to the compound, as well as the location and appearance of the CCTV cameras.

Subject to the imposition of such conditions, it is considered that the proposal would be compliant with Policy D1 of the adopted Local Plan and the Council's adopted Good Design SPD.

Impact on the Historic Environment and Archaeology

Policy He1 and criterion (d) of Policy Cc1 of the adopted Local Plan, as well as the advice in the NPPF, requires heritage assets to be preserved and enhanced. Where development results in harm to the significance of a designated heritage asset, this harm should be weighed against the public benefits of the proposal. The proposed development must also be considered against Sections 66 and 72 of the Planning (Listed Buildings and Conservation Areas) Act 1990, which state that special regard shall be had to the desirability of preserving the setting of a listed building and the character and appearance of the conservation area.

A Historic Environment Desk-Based Assessment (HEDBA) has been submitted in support of the application and provides information regarding the significance of the historic environment and archaeological resource, as well as a detailed review of the historic environment.

There are no known designated or undesignated heritage assets within the site, with the nearest listed buildings being the Grade II listed Manor Farmhouse (around 255 metres to the north-east of the site) and the Grade I listed Church of Holy Trinity (around 350 metres to the north-east of the site). Both listed buildings are within the administrative area of Rushcliffe Borough Council (RBC).

The boundary of the Kegworth Conservation Area is located 1.7 kilometres to the south-west of the site, with the Kingston Park Pleasure Gardens Grade II Registered Park and Garden (KPPG RPG) being located 1.47 kilometres to the south-east of the site.

The Conservation Officer at RBC has been consulted as part of the application (given that the development is significantly closer to heritage assets within the administrative area of RBC) and they have determined that the proposed development would result in ***no harm*** to the significance of the setting of any heritage assets within the administrative area of RBC. This would include the Grade I and Grade II listed buildings and Grade II KPPG RPG referred to above.

Given the separation distance to the Kegworth Conservation Area, ***no harm*** would arise to the significance of the setting of this heritage asset with the application site not experienced in views into, or out of, this heritage asset due to intervening development.

In terms of the Grade II KPPG RPG, the Gardens Trust has declined to comment on the application. Notwithstanding this, when accounting for the separation distance to this heritage asset it is considered that ***no harm*** would arise to the significance of its setting due to the infrastructure within the immediate area which has a greater degree of prominence, and impact, to this heritage asset, such as the Ratcliffe-on-Soar power station (which whilst to be demolished would be replaced with built development of a greater scale and mass than the proposed development) and the A453 (Remembrance Way). It is also noted that the Inspector in the determination of an appeal (dated: 10th February 2025) at Land Off West Leake Lane, Ratcliffe-on-Soar (appeal ref: APP/P3040/W/24/3352048) (within the administrative area of RBC) did not consider harm to arise to the significance of the setting of the KPPG RPG with both the application site, and the appeal site, being a similar distance from the boundary of this heritage asset.

On the basis that ***no harm*** arises to the significance of the setting of any heritage assets an assessment in the context of Paragraph 215 of the NPPF is not required.

The lack of harm would also ensure that the setting of the identified heritage assets would be preserved.

Archaeology

In terms of archaeology, the initial consultation response from the County Council Archaeologist outlined that the submitted HEDBA (which included a geophysical survey) demonstrated that there was a high potential for archaeology to be impacted by the proposed development. Principally, previous field walking had discovered Anglo-Saxon pottery, suggestive of a settlement, and Roman pottery with the geophysical survey supporting that such archaeological features were present. Given that Anglo-Saxon remains can often be 'invisible' within geophysical surveys (including burials), and that there was also the potential for metal working within the site relating to either the Anglo-Saxon or Roman elements, the County Council Archaeologist determined that further intrusive investigations were required pre-determination so that the impact to any archaeological remains could be fully understood.

The County Council Archaeologist therefore requested that an Archaeological Impact Assessment (AcIA), comprising a field evaluation by appropriate techniques (including trial trenching), be undertaken by the applicant and submitted for consideration.

An Archaeological Evaluation Interim Report (AEIR) has subsequently been submitted by the applicant which has been informed by trial trenching undertaken in April 2025.

Following re-consultation the County Council Archaeologist has confirmed that the trial trenching uncovered archaeological remains and although such remains are mainly undated, they were low enough within the trench to be considered archaeological rather than modern. On this basis, and

when accounting for the impacts of construction, archaeology would be impacted and consequently would need to be mitigated against.

When accounting for the above, the County Council Archaeologist has no objections to the application subject to the imposition of a condition requiring the submission of a written scheme of investigation (WSI) which would detail further archaeological work to be undertaken to mitigate for impacts on the archaeological remains.

Impact on the Historic Environment and Archaeology Conclusion

When accounting for the above conclusions, and subject to the imposition of the archaeological condition, the proposed development would be compliant with Policy He1 and criterion (d) of Policy Cc1 of the adopted Local Plan, Paragraphs 207, 208, 210, 212, 217 and 218 of the NPPF and Sections 66 and 72 of the Planning (Listed Buildings and Conservation Areas) Act 1990.

Residential Amenity

Policy D2 of the adopted Local Plan (2021) outlines that development proposals will be supported where they do not have a significant adverse effect on the living conditions of existing and new residents. Criterion (a) of Policy Cc1 seeks to ensure that renewable energy development does not have an unacceptable impact on residential amenity taking into account noise, vibration and visual dominance. Paragraph 198 of the NPPF requires development to be appropriate for its location.

The nearest residential receptor would be Cedar Isle on Green Lane which lies around 170 metres to the north-east of the site.

Physical Development Impacts

The tallest piece of equipment to be provided would comprise the 132/33 kilovolts (kV) substation transformer which has a height of 6.8 metres (at its highest point – or 8.1 metres when accounting for its placement on a supporting structure(s)) and would cover a ground area of 51.15 square metres. Other infrastructure to be delivered within the compound would largely be below the height of the acoustic fence (of 4.4 metres) to the northern site boundary, which even accounts for such infrastructure being upon a supporting structure(s).

Outside of the compound the two proposed water tanks would be 4.5 metres in height (or 5.8 metres when accounting for their placement on a supporting structure(s)).

Given the orientation of Cedar Isle to the application site, the separation distance involved, overall scale of the installed infrastructure, and the soft landscaping to the boundaries of both Cedar Isle and the River Soar, it is considered that the proposed development would not be visually dominant to residential receptors and therefore an adverse impact in this respect would not arise.

Given the separation distance to the nearest residential receptor, as well as the landscaping infrastructure present along the banks of the River Soar, to the boundaries of Cedar Isle, and that to be delivered as part of the development (as discussed in the *'Landscaping'* section of this report below), it is considered that no adverse overbearing, overshadowing or overlooking impacts would arise to residential amenities as a result of the development.

Other Residential Amenity Impacts

The other aspect to consider in respect of residential amenity is any potential impacts arising from noise, dust and fumes which is as outlined in Part 2 of Policy D2 of the adopted Local Plan.

Paragraph 201 of the NPPF outlines that the focus of planning decisions *"should be on whether proposed development is an acceptable use of land, rather than the control of processes or emissions (where these are subject to separate pollution control regimes). Planning decisions should assume that these regimes will operate effectively."*

A Noise Assessment (NA), which has been amended during the consideration of the application, identifies three noise sensitive receptors, one of which comprises Cedar Isle and the other two being within the administrative area of Rushcliffe Borough Council (RBC). It is the conclusions of the NA that road traffic noise, predominately associated with the A453 (Remembrance Way), is the dominant noise source in the area.

The NA assesses all proposed plant to be operating at a steady state and permanently on, with a 2 decibel (dB) correction applied for tonality which is considered within the NA to be the worst-case estimate. Based on the assessment within the NA, noise mitigation is proposed in the form of a 4.4 metre high acoustic barrier to the northern boundary of the development compound and attenuation to the inverters. With such mitigation in place the NA concludes that the noise impact of the development would be low.

As part of the consideration of the application both the Council's Environmental Protection Team and the Environmental Health Officer (EHO) at RBC have been consulted and no objections have been raised by either consultee subject to the imposition of conditions on any permission granted which would secure the acoustic barrier and the attenuation to the inverters. A condition would also be imposed on any permission granted which would require a revised NA to be submitted if the specific plant or layout was to be altered from that assessed within the NA.

To ensure that construction and decommissioning activity is undertaken at reasonable times a condition limiting the hours of construction and decommissioning would be imposed on any permission granted. Separate legislation (such as the Control of Pollution Act 1974 (as amended)) can control other issues arising from construction (and decommissioning) activity.

It is also the case that if any statutory nuisance issues were to arise as a result of the development, then the Council's Environmental Protection Team would be able to investigate such issues and take appropriate action, where required, under separate Environmental Protection legislation.

Details of any external lighting to be installed on the site, including any to be used during the construction and decommissioning phases, has not been submitted as part of the application. On this basis a condition would be imposed on any permission granted requiring the approval of any external lighting scheme prior to its installation if required.

Residential Amenity Conclusion

Based on the above assessment it is considered that no adverse impacts to residential amenities would arise as a result of the development, subject to the imposition of relevant conditions, and as such the proposal would be considered compliant with Policy D2 and criterion (a) of Policy Cc1 of the adopted Local Plan, as well as Paragraphs 198 and 201 of the NPPF.

Highway Impacts

Policy IF4 of the adopted Local Plan requires that development takes account of the impact upon the highway network and the environment and incorporates safe and accessible connections to the transport network to enable travel choice. Policy IF7 requires that development incorporates adequate parking provision.

The County Council Highways Authority (CHA) and National Highways (NH) have been consulted

on the application, with the assessment of the CHA being based on guidance within the Leicestershire Highways Design Guide (LHDG).

The application as originally submitted was accompanied by a Transport Statement (TS) and Construction Traffic Management Plan (CTMP) with further information subsequently being submitted in response to the original consultation response of the CHA.

Site Access

The CHA has outlined that the site would be accessed off the public highway via an existing access track served by an existing access on Long Lane which is an unclassified road subject to the national speed limit (60mph) and a 7.5 tonne weight restriction. Long Lane is a single track road and also comprises the route of the Mid Shires Way which is a long-distance walking route. Three sections of the track running from the access with Long Lane to the site would be widened, including at its junction with the lane.

Some photos of the site access, including the point off Long Lane, are provided below.

Site Access

The TS outlines that the existing access on Long Lane is an existing access which has served the site and surrounding fields for numerous years without issue. It also considered that the large vehicle movements generated by the construction of the battery energy storage system (BESS) are temporary and would cease once the BESS became operational. Given that the proposed development would result in the intensification in the use of the existing access, as well as the nature of its use, the CHA did not accept the justification outlined within the TS.

A site visit was undertaken by the CHA on the 25th November 2024, and it was observed that Long Lane was not well suited to cater for two-way vehicular movements. The CHA also noted that the applicant was proposing to access the site by upgrading Bridleway L62 which would act as a haul route during the construction (and decommissioning) period(s) of between 12 to 14 months.

At the request of the CHA a speed survey was undertaken (which the applicant undertook between the 7th and 13th March 2025), which resulted in 85th percentile speeds of 36mph northbound and 37.4mph southbound. Based on such speeds, visibility splays of 2.4 metres by 65 metres were required at the access off Long Lane in both directions.

Based on the visibility splay drawing provided, the CHA is satisfied that the required visibility splays can be delivered and are achievable within the highway boundary subject to the trimming back of existing roadside vegetation and the removal of wooden fencing which was present during the CHA's site visit. Such fencing is as identified in the image below.

Fencing to be Removed

The delivery of the visibility splays would be secured by condition on any permission granted.

Swept path analysis has also been provided for the widened access off Long Lane which demonstrates the tracked movement for a fire-tender vehicle and a 16.5 metre long articulated HGV. The applicant has confirmed that such a length of articulated HGV would be the largest to use the site during the construction / decommissioning stages and would only become longer if there was a major shift in the BESS infrastructure technology. If this was the case then the CHA would require revised swept path analysis, and this could be secured as part of a Construction Traffic Management Plan (CTMP) (as highlighted in the *'Construction Traffic Management Plan'* sub-section below).

Although the CHA acknowledge that the swept path analysis demonstrates that two-way movements could not be achieved along the access route between the access off Long Lane and the access into the application site, which would be along Bridleway L62, they note that the applicant would provide banksmen at either end of the bridleway when construction vehicles were on site. This again would be secured within the CTMP and is acceptable to the CHA.

Fire tender vehicles are likely to arrive at the site together, rather than one arriving and one departing, and therefore it is not probable that conflict between such vehicles would arise along the access route. It is also acknowledged by the CHA, and as outlined in the submitted Outline Battery Safety Management Plan (OBSMP), that fire tender vehicles would have an alternative exit via the A453 (Remembrance Way).

In terms of the tracking of HGVs, the CHA notes that the possibility of one HGV leaving the site and one arriving at the same time has not been considered. Based on the swept path analysis, however, the CHA consider that it would not be possible for two HGVs to cross at the site access off Long Lane and therefore a circumstance may arise where Long Lane is temporarily obstructed at the point of access.

Although this may be the case, the CHA considers the likelihood of two-way movements to be relatively low with the highest likelihood occurring during the first month of construction as depicted in Table 1 within the submitted CTMP.

Estimated HGV Construction Traffic Generation (Table 1 within the CTMP)

Table 1: Estimated HGV Construction Traffic Generation

Activity	Month														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Total
Phase 1	65														65
Phase 2	200	200	200	10	10	10	10	10	10	10					670
Phase 3												72			72
Phase 4											3	3	3		9
Phase 5								8	8	8	4	4	4	4	40
Phase 6														12	12
Total	**265**	**200**	**200**	**10**	**10**	**10**	**10**	**18**	**18**	**18**	**7**	**79**	**7**	**16**	**868**
Average HGV Movements per week*	**62**	**47**	**47**	**2**	**2**	**2**	**2**	**4**	**4**	**4**	**2**	**18**	**2**	**4**	
Average HGV Movements per day**	**12**	**9**	**9**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**4**	**1**	**1**	
Average number of staff on-site	**10**	**10**	**10**	**10**	**10**	**10**	**10**	**14**	**14**	**14**	**8**	**12**	**12**	**10**	

*Based on an average of 4.3 weeks per month.

**Based on an average of 5 working days (Monday-Friday).

Whilst the above table does not define whether the average daily movements refer to two-way trips or not, as a worst-case scenario there would be 24 two-way daily HGV trips. This number would then reduce throughout the construction period.

Notwithstanding that at the point of the site access off Long Lane the highway would be lightly trafficked, the CHA considers it necessary for the applicant to manage the HGV trips in a manner so that no HGVs would be stationary on Long Lane and subsequently obstructing the free flow of traffic. This is deemed possible to the CHA as there is sufficient space within the application site (i.e. where the BESS would be constructed) to allow for vehicles to wait until an arriving HGV has entered the site.

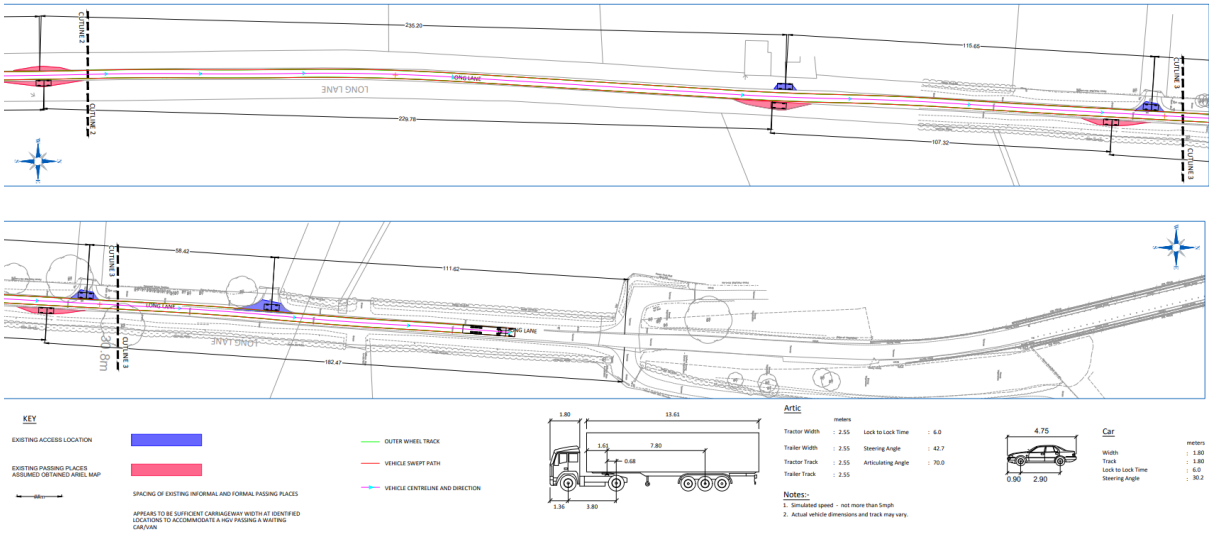
In such circumstances the access arrangements, including the use of Bridleway L62, are acceptable to the CHA, subject to the delivery arrangements of HGVs being strictly controlled by the CTMP which is as discussed in the *'Construction Traffic Management Plan'* sub-section below.

Off-Site Implications

At the request of the CHA, additional swept path analysis along the length of Long Lane has been provided. Such swept path analysis was required to ensure that there are suitable passing places for vehicles to pass whilst HGVs are utilising the route during the construction / decommissioning phases.

As has now been demonstrated by the revised information (see below image), there are a selection of existing access points and informal passing points along Long Lane with sufficient room for a car to wait whilst a HGV passes.

Passing Points on Long Lane



Although it is acknowledged by the CHA that there is not sufficient room for two-way movements of HGVs, they consider this to be acceptable given that such movements would only be temporary during the construction / decommissioning phases and can be controlled by the CTMP. It is also noted that such movements would only be associated with 5.8% of the overall lifetime of the development based on the maximum timeframe of both the construction / decommissioning phases being 28 months.

Construction Traffic Management Plan

In their original consultation response, the CHA noted that all vehicles routing out of the site would turn left onto Long Lane and travel south to its junction with Side Ley / Station Road.

Notwithstanding the contents of the submitted Construction Traffic Management Plan (CTMP), as part of any permission granted the CHA would require the provision of a revised CTMP which (as a minimum) would be required to address the following matters:

(a) A HGV arrangement should be included such as a strict booking system to avoid the possibility of any HGVs waiting on Long Lane and causing an obstruction to other traffic. HGVs should wait within the site for another arrival to travel along Bridleway L62 before leaving the site and not the other way round.
(b) Details of banksmen at either end of the bridleway should be included to manage arrivals and departures, as well as protecting users of the bridleway.
(c) It be confirmed that the maximum length of any HGV attending the site would be 16.5 metres and if the maximum length of HGV was greater then revised swept path analysis would be required;
(d) Details of other measures to protect users of Bridleway L62, including signage and speed limits (these would also be secured in a Bridleway Management Plan (BMP)).
(e) Demonstration of delivery / unloading locations, contractor parking and wheel washing locations within the site.
(f) Confirmation that a road sweeper would be available if detritus was deposited onto the public highway.

The approval of such details would ensure that the impact of the development to the road network would not be severe.

Bridleway L62

Paragraph 105 of the NPPF outlines that planning decisions should protect and enhance public rights of way and access, including taking opportunities to provide better facilities for users.

The initial consultation response from the CHA outlined concerns relating to how users of Bridleway L62 would be protected from construction traffic, given that it was observed by the CHA during their site visit of the 25th November 2024 that the route was used by pedestrians, cyclists and horse riders.

The applicant has subsequently submitted details which identify that widening works would be undertaken to the bridleway, along with the provision of passing places. Assurances have also been discussed between the applicant and the CHA to secure the safe use and enjoyment of the bridleway.

Principally the measures to protect users of Bridleway L62 would include:

(a) During the construction period the applicant has the option to apply for the closure of the bridleway to ensure safety. If this option was selected, then the bridleway could be temporarily closed (or diverted) for a period of up to six months to enable construction works to take place.
(b) If the bridleway was not to be temporarily closed than banksman at either end of the bridleway (i.e. where it adjoins Long Lane and where the site access is located) would be required to warn users of the bridleway and manage vehicular movements.
(c) The surfacing of the bridleway for the entirety of the length used as a construction route in a suitable hardbound surface (in this respect part of the bridleway is already bound with a suitable surface).
(d) A scheme of signing and waymarking including speed restrictions (likely restricted to 5mph) and warning signs.

The CHA has determined that the above requirements could be secured by condition on any permission granted and would therefore ensure that users of Bridleway L62 would be protected and not adversely impacted by construction traffic associated with the development.

For the operational phase, the CTMP specifies that there would be between 10 and 20 vehicle trips per month to support site operations and general maintenance activities at the site. Such vehicle trips would be typically made by cars, 4x4s or light goods vehicle (LGVs) (e.g. a van). This is not considered to be a significant level of trips. It should also be noted that the bridleway is likely to be used by existing traffic associated with the surrounding fields. The CHA has not raised any concerns or objections regarding impact on users of the bridleway during the operational phase.

Whilst the objection from the Leicestershire Footpaths Association is noted this view is not shared by the CHA given that the impacts can be appropriately managed and mitigated by the BMP.

No diversion of Bridleway L62, or a public right of way (PRoW), is proposed or necessary, with the BESS development itself not lying upon a bridleway or PRoW.

Highway Safety

The CHA has reviewed its records and has specified that within 500 metres of the site access no Personal Injury Collisions (PICs) have occurred in the most recent five year period, with the last being a PIC which was recorded as ‘slight’ in severity in July 2019. This PIC occurred approximately 200 metres to the north of the site access.

Based on this information the CHA does not consider there to be any outstanding highway safety concerns within the vicinity of the application site which would be exacerbated as a result of the development.

Trip Generation

Based on the contents of the TS, the CHA has outlined that the BESS would operate on an unmanned basis and would generate between 10 and 20 vehicle trips a month to support site operations and general maintenance activities at the facility. Such trips would typically be via cars or light goods vehicles (LGVs) (e.g. vans).

Once operational the CHA considers that the impact of trips generated by the proposed development on the wider local highway network would be low.

Internal Layout

The CHA is satisfied that vehicles would be able to manoeuvre within the application site and exit in a forward gear, with sufficient space also being available to facilitate off-street parking of both construction / decommissioning vehicles as well as those visiting the site during the operational phases.

Conditions would be imposed on any permission granted to secure the manoeuvring facilities, as well as the off-street parking for construction / decommissioning vehicles (which would be via the CTMP).

National Highways

In terms of NH, they have no comments to make on the application in relation to its access (which would be on a highway under the responsibility of the CHA), the operational traffic associated with maintenance (which would be minimal), fire safety, drainage, boundary treatments and landscaping, lighting, noise and geotechnical matters.

The only matter commented on by NH relates to construction traffic movements and whereby they have determined that the daily movements would have no adverse impact on the Strategic Road Network (SRN).

On this basis NH has no objections to the application.

Highway Impacts Conclusion

Paragraph 116 of the NPPF outlines that development should only be refused on highway grounds where *"there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network, following mitigation, would be severe, taking into account all reasonable future scenarios."*

In the circumstances that there are no objections to the application from the CHA or NH, subject to the imposition of conditions, it is considered that the proposed development would be compliant with Policies IF4 and IF7 of the adopted Local Plan as well as Paragraphs 105, 112, 115, 116 and 117 of the NPPF.

Flood Risk and Drainage

Policy Cc2 of the adopted Local Plan requires the risk and impact of flooding from development to be minimised, with Policy Cc3 requiring surface water drainage to be managed by Sustainable Drainage Systems (SuDS) (where feasible).

Flood Risk

Insofar as fluvial flood risk is concerned, the site lies within Flood Zone 3 as defined on the Environment Agency (EA) *'Flood Map for Planning'* and the Council's Strategic Flood Risk Assessment (SFRA). The EA *'Flood Map for Planning'* does not differentiate between areas of Flood Zone 3a (*'High Probability of Flooding'*) and Flood Zone 3b (*'Functional Floodplain'*), but areas within Flood Zone 3a are considered to have a high risk of fluvial flooding (annual probability occurrence of greater than 1% (1 in 100 year)) and those within Flood Zone 3b having an annual probability of 1 in 20% (5%) or greater.

In terms of pluvial (surface water) flood risk, the site is predominantly at very low risk of surface water flooding, although a topographic depression within the centre of the application site is at low, medium and high risk of surface water flooding, a very small area of the north eastern part of the site is at low risk of surface water flooding and a low to medium risk of surface water flooding is identified around the entrance into the site off Bridleway L62.

A Flood Risk and Drainage Assessment Report (FRDAR) has been submitted in support of the application and, notwithstanding the position in respect of fluvial and pluvial flood risk, the FRDAR concludes that the application site is not at risk of tidal / coastal flooding and is at a low risk of flooding from groundwater flooding, sewer / drainage system flooding and flooding from artificial sources (i.e. reservoirs and canals).

Sequential Test

Paragraph 173 of the NPPF outlines that a sequential risk-based approach should be taken to individual applications in areas known to be at risk now or in the future from any form of flooding. Paragraph 174 of the NPPF subsequently outlines that the aim of the sequential test is to steer new development to areas with the lowest risk of flooding from any source. It is, however, outlined at Paragraph 175 of the NPPF that the sequential test would not be applicable where a site specific FRA demonstrates that no built development within the site boundary would be located on an area that would be at risk of flooding from any source.

The *'Flood Risk and Coastal Change'* section of the NPPG specifies, at Paragraph 023 (Reference ID: 7-023-20220825), that the aim of the sequential test is to ensure areas at little or no risk of flooding from any source are developed in preference to areas at higher risk and this therefore means avoiding, as far as possible, development in current and future medium and high flood risk areas. Paragraph 024 (Reference ID: 7-024-20220825) further states that reasonably available sites in medium to high flood risk areas should only be considered where it is demonstrated that it is not possible to locate development in low flood risk areas.

On the basis that development would be proposed on land outside of Flood Zone 1, it would be necessary to apply the sequential test (as required by Paragraphs 173 and 174 of the NPPF) to determine whether there are more suitable sites for this form of development which would be sequentially preferable in flood risk terms.

An Alternative Site Assessment including Sequential Test (ASAST) has been undertaken by the applicant and it is outlined within the ASAST, as well as the FRDAR, that whilst battery energy storage system (BESS) developments are not specifically referenced they are considered to fall within the *'essential infrastructure'* vulnerability classification as identified in the NPPG (see Table 2: Flood risk vulnerability and flood zone 'incompatibility' of the *'Flood Risk and Coastal Change'* section). Essential infrastructure is defined as:

"Essential utility infrastructure which has to be located in a flood risk area for operational reasons, including electricity generating power stations and grid and primary substations; and water treatment works that need to remain operational in times of flood."

Such a use is acceptable within all Flood Zones (1, 2, 3a and 3b), subject to the sequential test being passed.

The above position is not disputed by the EA when accounting for the guidance provided by the West Midlands Area EA Team of July 2024 which stipulated that:

"For standalone BESS development, until the vulnerability classification is updated, or other guidance provided by DLUHC [Department for Levelling Up, Housing and Communities] *(or DESNZ* [UK Department for Energy Security and Net Zero]*), we would advise that such facilities should be treated as 'essential infrastructure' if providing 'grid and primary substation storage' (e.g. if the BESS is connected to the national grid)."*

In this instance the proposed BESS would be providing essential storage to the National Grid.

It is determined within the ASAST that a reasonably available site is one that is deliverable and developable for the proposed use and which:

(a) Lies within the agreed area of search; and
(b) Are within the agreed comparator site threshold; and
(c) Can accommodate the general requirements of the development; and
(d) Are in principle, in conformity with the objectives and policies of the adopted Local Plan, NPPF and NPPG.

The ASAST also defines that a site should not be considered 'reasonably available' if it contains an existing operational or business use, unless a planning permission exists to extinguish that use, or it has a planning permission for a similar type and scale of development which is likely to be implemented. The latter could be evidenced by a discharge of condition application, indication from a landowner / applicant / developer that a development is being brought forward, or the submission of / approval of a reserved matters application(s).

The sites considered within areas with a lower risk of flooding are as identified in the *'Assessment of Alternatives'* section of this report above which includes the reasoning as to why such sites have been discounted by the applicant. On this basis the applicant considers the sequential test to be passed.

It is acknowledged that the NPPG advocates a pragmatic approach to applying the sequential test. Insofar as the area of search is concerned, the NPPG suggests that the area to apply the sequential test across would be defined by local circumstances relating to the catchment area for the type of development proposed, also relevant would be the applicant's search parameters as identified above in the *'Assessment of Alternatives'* section of this report, i.e. within a 2.2 kilometre radius of the point of connection to the grid.

The contents of the ASAST have been updated following officer comments and includes consideration of other sites, the majority of which fall within the administrative area of Rushcliffe Borough Council (RBC) and include the Ratcliffe-on-Soar power station Local Development Order (LDO). As concluded within the *'Assessment of Alternatives'* section of this report above, it is considered that the number of alternative sites considered by the applicant (totalling 11 sites) is reasonable and the justification for them being discounted is also acceptable.

On the above basis the sequential test is passed.

Exception Test

As identified above, a BESS would be considered *'essential infrastructure'* for the purposes of the

NPPG which is acceptable within Flood Zones 3a and 3b. This acceptability, however, is subject to the development passing the exception test as required by Paragraphs 177, 178 and 179 of the NPPF.

Paragraph 178 of the NPPF specifies that to pass the exception test it should be demonstrated that:

(a) The development would provide wider sustainability benefits to the community that outweigh the flood risk; and
(b) The development will be safe for its lifetime taking account of the vulnerability of its users, without increasing flood risk elsewhere, and, where possible, will reduce flood risk overall.

The submitted FRDAR demonstrates that in relation to criterion (a) the purpose of the development is to provide essential energy storage measures for export to the National Grid at times of high demand, and this would be a significant wider sustainability benefit.

The following would also be considered wider sustainability benefits to the community:

(a) The proposal would reduce carbon emissions by up 17,345 metric tonnes annually (which would be a conservative assessment and therefore a likelihood that this would be higher) and would create 'cleaner' air.
(b) Improvements to the efficiency of the grid should reduce energy bills for consumers.
(c) The development would enhance grid resilience by providing quick responses to supply – demand imbalances and prevent blackouts during peak demand or supply shortages.
(d) The delivery of a Biodiversity Net Gain (BNG) significantly above the 10% (being 70.98% for habitat units and 81.52% for hedgerow units), as well as the proposed soft landscaping infrastructure, would create new habitats in the area and encourage biodiversity whilst also offering a means of screening the development.

With regards to criterion (b), the FRDAR states that all elements of the development have been designed to be flood resilient for the development's lifetime by raising all necessary equipment above the design flood elevation (with an appropriate freeboard allowance) and that flood risk elsewhere would not be increased. The development would also be unmanned, except for maintenance periods.

Should it be the case that employees are on site and a flood event occurs then the safety of such employees has been considered, with the FRDAR specifying that a Flood Action Plan (FAP) would be implemented, of which further details are set out below. A condition imposed on any permission granted would secure a FAP.

When accounting for the above it is considered that the exception test would be passed.

General Flood Risk

Although the sequential and exception tests are passed, Paragraph 181 of the NPPF identifies that in determining planning applications it should be ensured that flood risk is not increased elsewhere.

The EA considered the contents of the originally submitted FRDAR and commented that it was required to be amended to address the following:

(a) Confirm that all apparatus would be set 8 metres from the toe of the flood defence embankments to allow the EA access to maintain them;
(b) Confirm that the EA would have unrestricted access for routine maintenance operations and inspection of the flood defence embankments and structures;
(c) Provide sufficient details regarding how the supporting structure(s) would be maintained given that the FRDAR only included responding to, and removing, debris and silt on the site;
(d) Provide details on how the voids would be maintained / cleared;

(e) Consider on or off-site floodplain compensatory storage, or justification why it is not possible; and
(f) Provide dry access and egress during a flood event for emergency services and others.

Further revisions have been made to the FRDAR to address these matters and re-consultation undertaken with the EA.

In respect of points (a) and (b), the FRDAR confirms that the development would be a minimum of 25 metres from the embankment which would ensure full access for maintenance works. In respect of points (c) and (d), the FRDAR contains a maintenance schedule for the supporting structure and voids. In terms of point (e) from the EA's comments above, the revised FRDAR concludes that due to the development being upon a supporting structure(s) with an open void beneath there would be minimal obstruction to floodwater flows or a reduction in available floodplain storage. Notwithstanding this, the FRDAR has outlined that whilst it would be technically possible to undertake regrading or excavation within the application site its flat topography represents a significant constraint. In this respect the revised FRDAR determines that true 'level-for-level' compensatory storage would not be achieved, as required under flood risk management guidance, given there is insufficient level variation to create effective storage at the same elevation as the displaced volume. Furthermore, introducing excavated areas could unintentionally lead to other flood issues such as water ponding, poor drainage, or the creation of unintended flood water flow paths, which may potentially increase the possibility of localised flooding (outside of areas where flooding currently occurs) rather than mitigating it. On this basis the revised FRDAR determines that due to these limitations, such measures would not be considered viable or beneficial.

Off-site compensatory storage is also considered within the revised FRDAR but as land ownership is limited to the application site, there is no land within the applicant's control which would allow the delivery of a meaningful off-site flood water storage area.

The revised FRDAR also determines that any functional floodplain loss resulting from the small 'footprint' of the development would be negligible given that any marginal floodwater displacement would be absorbed by the existing flood extents which are widespread when accounting for all modelled scenarios.

The EA has not disputed the conclusions of the revised FRDAR in relation to point (e).

In terms of point (f), the revised FRDAR specifies that given the location of the site within the functional floodplain, along with the surrounding flat topography, it would not be possible to provide fully dry access / egress under all flood conditions.

As outlined in the *'Highway Impacts'* section of this report above, access to the site would be via an access track (Bridleway L62) which itself is accessed off Long Lane and in the circumstances where flooding occurs whilst personnel are present the emergency egress would utilise Bridleway L62 and Long Lane to travel south towards Kegworth (i.e. towards the junction of Long Lane with Side Ley / Station Road). However, in accordance with the site specific FAP (which would be secured by condition on any permission granted) no personnel would be permitted on-site during a flood alert or warning. Such proactive management would significantly reduce the likelihood of evacuation being required during a flood event, with it being acknowledged that the proposed development does not include buildings which are intended for regular use and / or occupation nor are any confined spaces present. In addition to this, the welfare unit would be placed upon the supporting structure(s) which would be above the maximum modelled flood level and consequently could serve as a safe refuge in extreme circumstances.

The revised FRDAR also stipulates that the development would be equipped with appropriate fire detection and monitoring systems which would be capable of remote operation. Such systems would enable continuous surveillance of the battery units, including during flood events when physical

access may be restricted. In circumstances where abnormal operation, overheating, or risk of thermal runway is detected, operators would have the ability to remotely shut down the system and initiate emergency protocols (including the isolation of affected units). If required during more extreme flood scenarios, emergency shutdown procedures could be enacted as a precautionary measure. Such procedures, which would be contained within the FAP, would allow for the safe deactivation of equipment to reduce the risk of fire or electrical hazards during adverse conditions. In addition to this, all the development (including the battery units) would be upon the supporting structure(s) and therefore floodwater would not come into direct contact with any live electrical components. Whilst, therefore, dry access for emergency services could not be guaranteed in all flood scenarios, the combination of remote monitoring, elevated equipment, and robust shutdown procedures ensures that fire risk remains low and is effectively managed. It is also accepted that the likelihood of fire occurring on-site is low, with the probability of such an event occurring simultaneously with a significant flood event being extremely unlikely.

The EA has not objected to the conclusions of the FRDAR in relation to point (f), with Leicestershire Fire and Rescue Service (LFRS) also having no objections. In addition, consultation was undertaken with the East Midlands Ambulance Service (EMAS) and Leicestershire Police with no comments being received from these consultees. In line with the notes to Table 2 outlined in the *'Flood Risk and Coastal Change'* section of the NPPG (Paragraph: 079 Reference ID: 7-079-20220825) it is considered that the proposed development has been designed and constructed to remain operational and safe for users in times of flood.

Overall, the EA has confirmed that they have no objections to the application subject to the imposition of conditions which would secure the following:

(a) A requirement for the development to be undertaken in accordance with the revised FRDAR for the lifetime of the development including that all site equipment is raised on a supporting structure(s) which shall have a level no lower than 31.82 metres above ordnance datum (AOD); that all of the infrastructure is located a minimum of 25 metres from the flood embankment; and that the void and support columns beneath the supporting structure(s) are routinely maintained and inspected;
(b) The submission of a scheme detailing how contaminated water would be prevented from discharging from the site into the River Soar, and its associated drains, given the importance of the River Soar as a surface water receptor; and
(c) The submission of a scheme detailing the treatment and removal of suspended solids from surface water run-off during the construction of the development.

Such conditions would be imposed on any permission granted.

Flood Risk Conclusion

It has been demonstrated that no sequentially preferable sites at a lower risk of flooding are available to accommodate the development, therefore passing the sequential test, with the exception test also being passed.

Based on the comments of the EA, and subject to the imposition of conditions and informatives, the proposed development would not increase the risk of flooding (and in particular fluvial flooding) elsewhere. On this basis the proposed development would be compliant with Policy Cc2 of the adopted Local Plan and Paragraphs 173, 174, 175 and 181 of the NPPF.

Surface Water Drainage

The Lead Local Flood Authority (LLFA) has outlined that the proposed development seeks to discharge surface water at a rate of 2.3 litres per second (l/s) via rainwater pipes (from the supporting structure(s)) and a below ground attenuation tank to a minor ditch situated to the east of the site

which is adjacent to the River Soar. It is intended that the attenuation tank would provide a sufficient level of attenuation capacity to allow for collected runoff and would be restricted by a hydrobrake chamber. Collected runoff would also be routed through manhole chambers to ensure that such runoff is treated.

It was originally requested from the LLFA that the applicant demonstrate they were able to discharge into the minor ditch as it lay outside the application site boundary (i.e. the land outlined in red on the site location plan). Following the receipt of further information, including Land Registry details, it has been determined that the minor ditch lies upon land within the ownership of the applicant (i.e. land outlined in blue on the site location plan) and on this basis the LLFA has no objections.

The above is subject to the imposition of conditions on any permission granted to secure a detailed surface water drainage scheme, the management of surface water during the construction phase and a scheme for the future management and maintenance of the surface water drainage scheme.

Surface Water Drainage Conclusion

Overall, and subject to the imposition of the recommended conditions of the LLFA on any permission granted, it is considered that the proposed development would not increase or exacerbate surface water flood risk and as such would be compliant with Policies Cc2 and Cc3 of the adopted Local Plan and Paragraphs 181 and 182 of the NPPF.

Foul Drainage

No foul drainage would be associated with the proposed development, given that it relates to the provision of a BESS, and on this basis there would be no conflict with Paragraph 198 of the NPPF.

Ecology

Vegetation, in the form of trees and other shrubs, are present on the site. Such features could be used by European Protected Species (EPS) or national protected species. As EPS may be affected by a planning application, the Local Planning Authority has a duty under regulation 9(5) of the Habitats Regulations 2010 to have regard to the requirements of the Habitats Directive in the exercise of its functions.

Part (1) of Policy En1 of the adopted Local Plan states that proposals for new development will be supported which conserve, restore or enhance the biodiversity in the district. Criterion (c) of Policy Cc1 requires all impacts on biodiversity to be adequately mitigated or enhanced.

In terms of Biodiversity Net Gain (BNG), the mandatory requirement for 10% BNG for major applications as required by the Environment Act has come into force. The proposals are therefore required to demonstrate compliance in this regard.

As submitted, the application is supported by a Preliminary Ecological Appraisal (PEA), Biodiversity Metric Report (BMR) and BNG Metric Calculations. Both the BMR and BNG Metric Calculations have been updated during the consideration of the application following amendments to the soft landscaping scheme.

Following a review of the PEA, the County Council Ecologist considers that the evaluations and recommendations detailed within the PEA are appropriate and reasonable whilst commenting that the River Soar is a Local Wildlife Site (LWS), with connections to other LWSs, and provides suitable habitat for otters, water voles, foraging and commuting bats and notable bird species. Therefore, protecting the habitat of the LWS would be of great importance for the lifetime of the development.

Mitigation measures proposed within the PEA include:

(a) Common amphibians being removed by hand from the working area during the construction phase;
(b) Any lighting being designed to ensure sensitive habitats, including the existing soft landscaping infrastructure on site and adjacent to the River Soar, are maintained as 'dark areas' during both the construction and operational phases of the development;
(c) An updated badger walkover survey being undertaken prior to the development commencing;
(d) A pre-commencement check for young hares being undertaken prior to the development commencing;
(e) Adopting a precautionary working method for badgers, otters and reptiles during the construction phase;
(f) A 10 metre buffer from the River Soar being retained to protect otter and water vole;
(g) Checking any vegetation prior to its removal (if required) for the presence of hedgehogs;
(h) If required, vegetation to be removed outside of the breeding bird season (March to September inclusive) unless a nesting bird check has been undertaken by a suitably qualified ecologist up to 24 hours before the removal is undertaken; and
(i) If required, any vegetation to be removed outside of the hedgehog hibernation season (December to March inclusive).

Based on such mitigation measures (the majority of which would be secured in a Construction Environmental Management Plan for Biodiversity (CEMP: Biodiversity)), the County Council Ecologist has no objections and considers that the proposals would not impact adversely on protected or notable species and / or habitats.

The consultation response from Rushcliffe Borough Council (RBC) also recommends the imposition of a condition requiring the submission of a CEMP: Biodiversity, along with a condition(s) associated with the delivery of ecological enhancements such as features for protected / priority species (i.e. bats and birds (including swifts)).

In terms of BNG, the submitted BNG Metric Calculations conclude that on site there would be a net gain of 2.86 habitat units (+70.98%) and 1.25 hedgerow units (+81.52%) which would be more than the 10% required and would satisfy the trading rules with no off-setting required. The accompanying BMR also indicates that additional species enhancements could be provided on the site, including bat and bird boxes, hedgehog houses and hibernacula (being a shelter occupied during the winter by dormant animals), which could be secured by condition.

The County Council Ecologist has accepted the BNG Metric Calculations and has no objections. Any permission granted would be subject to the mandatory BNG condition which is imposed as an informative rather than a condition.

An informative would also be imposed on any permission granted to advise the applicant that a Habitat Management & Monitoring Plan (HMMP) would be required to discharge the mandatory BNG condition.

The mandatory BNG condition and HMMP would secure the monitoring of the on-site BNG delivery for the 30 year period as specified in the Environment Act.

Ecology Conclusion

Overall, and subject to the imposition of the relevant conditions and informatives, there would be no conflict with Policy En1 and criterion (c) of Policy Cc1 of the adopted Local Plan, Paragraphs 187 and 193 of the NPPF and Circular 06/05.

Landscaping

Part (3) of Policy En1 of the adopted Local Plan outlines that new development will be expected to maintain landscape features (such as trees and hedgerows) for biodiversity, as well as for other green infrastructure and recreational uses.

The application is accompanied by an Arboricultural Impact Assessment (ArIA), which incorporates an Arboricultural Method Statement (AMS). Such documents are compliant with BS 5837:2012 *'Trees in Relation to Design, Demolition and Construction – Recommendations'.*

Impact to Existing Trees

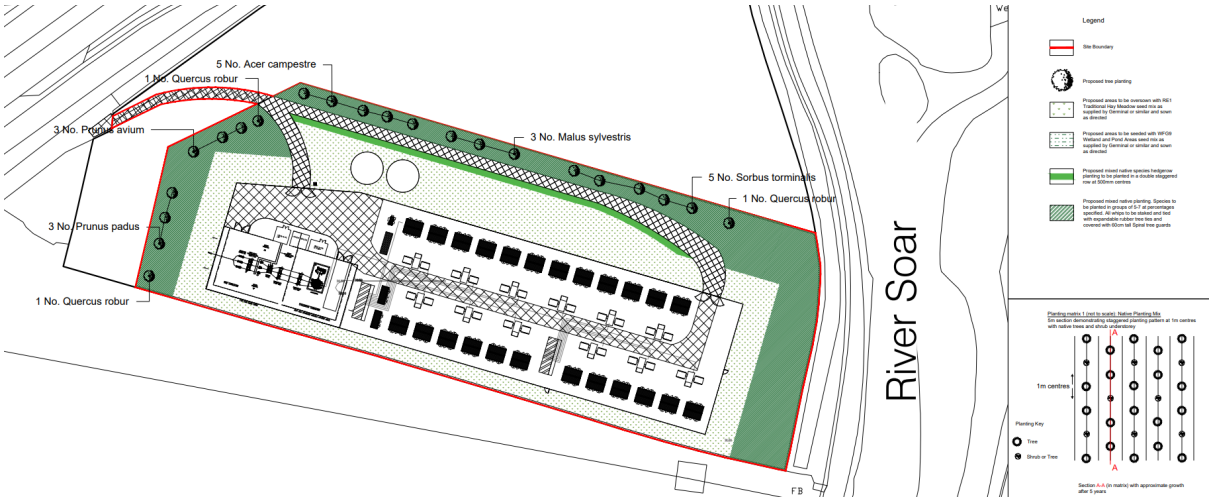
Within the ArIA it is outlined that there are two groups of trees (1 of which is rated Category B (*trees of moderate quality*)), two individual trees (1 of which is rated Category B), and two hedgerows (both of which are rated Category C (*hedges of poor quality*). Only one of the hedgerows lies within the boundaries of the application site.

To accommodate the development, there would be no requirement for any trees or hedgerows to be removed.

Proposed Soft Landscaping

A submitted soft landscaping plan, which has been amended during the consideration of the application, is shown below. This plan identifies that mixed native planting would be planted around the northern, eastern and western boundaries of the compound in which the battery energy storage solution (BESS) and its associated infrastructure would be set. In addition, 22 new trees would be planted to the northern and western boundaries of the application site, along with a mixed native hedgerow being planted to the northern boundary of the BESS compound.

Soft Landscaping Plan



Conditions imposed on any permission granted would secure the soft landscaping scheme, as well as a landscaping management plan.

Proposed Hard Landscaping

In terms of hard landscaping infrastructure, the submitted site layout plan identifies that a new track would be formed from the access route into the site off Long Lane (at this point being part of Bridleway L62) to two separate access points into the BESS compound. A hard surfaced route

connecting the two separate access points within the BESS compound would also be formed with the applicant advising that this would comprise permeable gravel.

Whilst noting the above, there is no detailed plan which precisely defines the surfacing materials to be utilised, along with any colour finishes, and in the absence of this information a condition would be imposed on any permission granted to secure such details.

Landscaping Conclusion

The proposed development would not impact on existing landscaping features, with such landscaping features being supplemented by the provision of additional soft landscaping infrastructure. Subject to the imposition of conditions on any permission granted, the proposed development would be compliant with Part (3) of Policy En1 of the adopted Local Plan.

Agricultural Land Impact

In terms of the loss of agricultural land, Paragraph 187 of the NPPF outlines that planning policies and decisions should contribute to and enhance the natural and local environment by, amongst other things, recognising the *"wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile (BMV) agricultural land."* Footnote 65 to Paragraph 188 of the NPPF suggests that *"where significant development of agricultural land is demonstrated to be necessary, areas of poorer quality land should be preferred to those of a higher quality."* BMV agricultural land is defined as that falling within Grades 1, 2 and 3a of the Agricultural Land Classification (ALC).

An Agricultural Quality Report (AQR) submitted in support of the application determines that the agricultural land is sub-Grade 3a (due to the frequency of fluvial flooding) which would be considered Best and Most Versatile (BMV) agricultural land.

Whilst the NPPF does not suggest that the release of smaller BMV sites is acceptable, the magnitude of loss of agricultural land is considered to be low where less than 20 hectares of BMV would be lost. Given that the application site area (of 1.8 hectares) would fall significantly below this threshold, it is considered that a reason to refuse the application in the context of criterion (b) of Paragraph 187 of the NPPF could not be substantiated.

It is also the case that the proposed development would not result in the permanent loss of agricultural land given that such agricultural land could be reinstated following the cessation of the development. It is also the case that the application site is within a Minerals Safeguarded Area (MSA) and whilst it is unlikely that such land would be worked for minerals in the future, given its proximity to the River Soar, any mineral extraction undertaken would have a more lasting impact on the agricultural value of the land.

The *'Assessment of Alternatives'* section of this report above has also determined that the application site is the most appropriate for the proposed development.

Agricultural Land Impact Conclusion

Overall, the proposed development would not result in the permanent loss of BMV given that conditions could be imposed on any permission granted which would require the agricultural land to be restored following the cessation of the development. It is also the case that alternative sites for the proposed battery energy storage solution (BESS), and its associated infrastructure, have been considered and discounted which therefore justifies the development being delivered on the application site.

On the above basis, the proposed development would not conflict with Policy En6 of the adopted Local Plan, Paragraphs 187 and 188 of the NPPF and the guidance within the NPPG (in particular Paragraph 013 (Reference ID: 5-013-20150327) of the *'Renewable and Low Carbon Energy'* section).

Impact on Safeguarded Minerals

As part of their consultation response the County Council Minerals and Waste Planning Authority (LCCMWP) has outlined that the application site is within a Mineral Safeguarding Area (MSA) for sand and gravel.

On this basis the development would be subject to the requirements of Policy M11 of the Leicestershire Minerals and Waste Local Plan (LMWLP).

Policy M11 of the LMWLP stipulates that minerals should be protected from permanent sterilisation by other development and therefore planning applications for non-mineral development within an MSA should be accompanied by a Mineral Assessment (MA), which would assess the effect of the proposed development on the mineral resource beneath, or adjacent to it. In the absence of an MA, the LCCMWP initially objected to the application.

The initially submitted Phase 1 Geo-Environmental Assessment was subsequently updated by the applicant to include an assessment of the MSA.

As part of their revised response the LCCMWP has acknowledged that in similar sites involving mineral extraction the Environment Agency (EA) has required a standoff from a river of 45 metres with no storage of materials, or screening bunds, being recommended within Flood Zone 3. On this basis the LCCMWP has accepted the constraints outlined in the assessment and therefore no objections are raised from a mineral perspective.

There are also no objections raised by the LCCMWP from a waste safeguarding perspective.

Impact on Safeguarded Minerals Conclusion

On the above basis the proposed development would be compliant with Policy M11 of the adopted LMWLP and Paragraph 225 of the NPPF.

Aviation Safety

Policy Ec5 of the adopted Local Plan indicates that development which would adversely affect the operation, safety or planned growth of East Midlands Airport (EMA) will not be permitted.

As part of the consideration of the application East Midlands Airport Safeguarding (EMAS) has been consulted and no objections are raised subject to conditions and informatives being imposed on any permission granted to address the following:

Conditions

(a) External Lighting (including any used during the construction phase);
(b) Control of Electromagnetic Interference to Aviation Communications, Navigation, and Surveillance Infrastructure; and
(c) Aviation Safety Construction Management Plan (ASCMP).

Informatives

(a) Communication, Navigation, and Surveillance Systems (CNS); and
(b) Tall Equipment Permit.

Aviation Safety Conclusion

Subject to the imposition of the relevant conditions and informatives as part of any planning permission granted, the proposed development would be compliant with Policy Ec5 of the adopted Local Plan.

Energy Storage Fire Risk

The proposed development relates to a battery energy storage system (BESS). There is a risk, like with most lithium based batteries, of fire though there has only ever been one case on a solar farm in the UK.

The NPPG, at Paragraph 034 (Reference ID: 5-034-20230814), within the *'Renewable and Low Carbon Energy'* guidance states:

"Where planning permission is being sought for development of battery energy storage systems of 1 MWh or over, and excluding where battery energy storage systems are associated with a residential dwelling, applicants are encouraged to engage with the relevant local fire and rescue service before submitting an application to the local planning authority. This is so matters relating to the siting and location of battery energy storage systems, in particular in the event of an incident, prevention of the impact of thermal runway, and emergency services access can be considered before an application is made.

Applicants are also encouraged to consider guidance produced by the National Fire Chiefs Council when preparing the application.

The location of such sites are of particular interest to fire and rescue services; who will seek to obtain details of the design, and firefighting access and facilities at these sites in their register of site specific risks that they maintain for the purposes of Section 7 of the Fire and Rescue Services Act 2004."

In the consideration of the Cleve Hill Solar Park Development Consent Order (DCO) (ref: EN010085), which whilst comprising a solar farm did include a BESS at a larger scale then that proposed as part of this application, fire risk and safety were examined in detail.

The Secretary of State's (SoS) conclusion on the above DCO was that the Examining Authority (ExA) *"took comfort from the legislation and guidance and the Battery Safety Management Plan which would be subject to consultation with relevant bodies and the ExA was, therefore confident that the risks could be managed and mitigated appropriately."* On this basis the issue of battery safety is neither a new issue in relation to BESS development, nor would it be a prescriptive issue since there are tested means of managing and mitigating the risks.

It is also noted that the Inspector in the consideration of the allowed appeal at Land off West Leake Lane, Ratcliffe-on-Soar, within the administrative area of Rushcliffe Borough Council (RBC) (appeal ref: APP/P3040/W/24/3352048 RBC ref: 23/01285/FUL) determined that the BESS proposal (of 600 megawatts (MW)) was acceptable subject to the imposition of a condition requiring the approval of a Risk Management Plan (RMP) and Emergency Response Plan (ERP).

As part of the consideration of the application Leicestershire Fire and Rescue Service (LFRS) has been consulted and who have had regard to the Outline Battery Safety Management Plan (OBSMP)

provided by the applicant.

In terms of the construction phase, LFRS has acknowledged that the number of daily vehicle movements in the local area would significantly increase. However, based on the information contained within the Transport Statement they are satisfied that such movements would not negatively impact on the ability of LFRS to respond to an incident in the local area.

With regards to the operational phase, LFRS has noted an error within the OBSMP in that it refers to Derbyshire Fire and Rescue Service (DFRS) rather than LFRS. Notwithstanding this, LFRS are largely satisfied with the contents of the OBSMP in relation to the means of mitigating the fire risks associated with the development.

On this basis no objections are raised by LFRS subject to the imposition of a condition on any permission granted which would secure a Battery Safety Management Plan (BSMP), incorporating a Risk Reduction Strategy (RRS) and Emergency Response Plan (ERP).

LFRS has advised that the BSMP should include:

(a) Demonstration to LFRS that there is adequate separation between the differing components of the BESS (it is noted by LFRS that this is compliant within the submitted OBSMP);
(b) Provision of adequate thermal barriers between switch gears and batteries;
(c) Installation of adequate ventilation, or an air conditioning system, to control the temperature;
(d) Installation of a very early warning fire detection system, such as aspirating smoke detection / air sampling;
(e) Installation of a fire suppression system (with the preference of LFRS being the use of a water misting system given that fires involving lithium-ion batteries have the potential for thermal runway with other systems being less effective in preventing reignition);
(f) Installation of Carbon Monoxide (CO) detection within the battery clusters;
(g) The delivery of the access points and turning facilities within the site to allow fire appliances to manoeuvre; and
(h) A Premises Information Box (PIB) provided at the access point for LRFS with the purpose of the PIB being to provide information for first responders (i.e. the ERP) and which includes water supplies for firefighting and drainage plans highlighting any Pollution Control Devices (PCDs).

The ERP should include:

(a) Details of the hazards associated with lithium-ion batteries;
(b) Insolation of electrical sources to enable firefighting activities;
(c) Measures to extinguish or cool batteries involved in fire;
(d) Management of toxic or flammable gases;
(e) Means of minimising the environmental impacts of an incident (including the prevention of ground contamination and water course pollution);
(f) Containment of fire water run-off;
(g) Handling procedures and responsibility for disposal of damaged batteries; and
(h) Establishment of regular on-site training exercises.

Energy Storage Fire Risk Conclusion

The securing and agreement of the BSMP, RSS and ERP by LFRS via the discharge of condition process if permission is granted would ensure that the fire risk associated with the development is appropriately considered and mitigated against.

Other Matters

Assessment of objections in relation to other matters

Objection	Officer Response
The application forms and supporting documents refer to the wrong site and therefore the application should be invalidated with the reliability of the reports questioned.	This objection relates to the co-ordinates stated in the application form, and a figure within both the Planning Statement (PS) and Alternative Site Assessment including Sequential Test (ASAST), identifying the application site incorrectly. Such a matter was raised with the applicant and amended documentation provided. All other reports, as well as the plans (including the site location plan), correctly identify the application site. On this basis there is no justification to invalidate, or decline to determine, the application.
The isolated location will result in a security risk to the site and may result in vandalism and theft occurring.	The submitted PS outlines that 24 hour closed circuit television (CCTV) cameras would be installed, with the compound of the battery energy storage system (BESS) being bound by 2.4 metre high fencing. The PS also states that a patrol would attend the site in the event of an emergency / incident. In addition to the above, it is also considered that the development is at no greater risk of a security incident than any other renewable energy scheme located in a countryside location. In this instance, surveillance of the site would be provided by users of the A453 (Remembrance Way) as well as users of Bridleway L62 and Public Right of Way (PRoW) L63. Consultation was undertaken with Leicestershire Police with no comments being received.
If the planning permission is granted and there is no grid connection available (or for some time) would the developer implement the planning permission and then leave the development unused until a connection is provided? Could a condition be imposed which prevented the development being implemented until it is demonstrated that a grid	As is outlined in the *'Proposals and Background'* section of this report, the applicant has provided a copy of their grid offer from National Grid Electricity Distribution (NGED) which has been accepted by the applicant. They have also advised that there are expensive build costs (upwards of £50 million) associated with a BESS, and that each piece of equipment is carefully selected and delivered to site for energisation. It is also relevant that the applicant would not get insurance to build out a project of this nature if there was no connection in place. When accounting for the above, it is considered that there are

connection is available?	sufficient assurances in place that the proposed development would not be built out if a grid connection was not in place. On this basis the imposition of a condition restricting the implementation of the development would not be reasonable or necessary to make the development acceptable in planning terms and would not meet the tests for conditions outlined in Paragraph 57 of the NPPF.

Overall Planning Balance, Contribution to Sustainable Development and Conclusions

In accordance with the provisions of Section 38(6) of the Planning and Compulsory Purchase Act 2004, the starting point for the determination of the application is the development plan which, in this instance, includes the adopted North West Leicestershire Local Plan (2021). Whilst the application site is outside the defined Limits to Development in the adopted Local Plan, the proposed provision of renewable energy development is deemed acceptable under criterion (o) of Policy S3. This acceptability would be subject to the development satisfying criteria (i) to (vi) of the second part of this policy. In this respect, whilst compliance with criteria (ii) to (vi) has been demonstrated, for the reasons outlined within the report above, the proposed development would not safeguard and enhance the character and appearance of the landscape and consequently there is conflict with criterion (i).

On this basis there is conflict with Policy S3 of the adopted Local Plan.

Policy Cc1 of the adopted Local Plan also supports the provision of renewable energy development subject to compliance with criteria (a) to (g). Whilst compliance with criteria (a), (c), and (d) to (g) has been demonstrated, there would be conflict with criterion (b) given that there would be an adverse impact to the landscape character of the area.

On this basis there is conflict with Policy Cc1 of the adopted Local Plan.

The conflict arising in relation to such matters would be attributed moderate weight and would be outweighed by the overall benefits of the proposed development as outlined in the report above and below. Fire safety matters can also be met by condition.

In addition to the need to determine the application in accordance with the development plan, regard also needs to be had to other material consideration (and which would include the requirements of other policies, such as those set out within the National Planning Policy Framework (NPPF) (2024)). The NPPF contains a presumption in favour of sustainable development and considers three objectives of sustainable development (economic, social and environmental).

The relevant considerations against the three objectives of sustainable development would be as follows:

Economic Objective

This objective seeks to ensure that sufficient land of the right type is available in the right places and at the right time to support growth, innovation and improved productivity, and that the provision of infrastructure is identified and coordinated. It is accepted that, as per most forms of development, the scheme would have some economic benefits including the benefits to the local economy during the construction and decommissioning stages of the battery energy storage system (BESS), as well as limited employment opportunities during the operational phase. These benefits would be attributed moderate weight.

The improvements to renewable energy production facilities and the efficiency of the grid would also reduce energy bills for consumers and would be attributed significant weight. BESS development also enhances grid resilience by providing quick responses to supply – demand imbalances and prevent blackouts during peak demand or supply shortages, which would be attributed significant weight.

Social Objective

The economic benefits associated with the proposed development, would, by virtue of the social effects of the jobs created on those employed in association with the construction and operation of the development, also be expected to provide some social benefits. The NPPF identifies, in particular, in respect of the social objective, the need to foster a well-designed and safe built environment, with accessible services and open spaces that reflect current and future needs and support communities' health, social and cultural wellbeing.

A reduction in carbon dioxide emissions (CO2) as a result of the development would support communities' health, with, as noted above, BESS development enhancing grid resilience by providing quick responses to supply – demand imbalances and prevent blackouts during peak demand or supply shortages. Such benefits would be given substantial weight. Surfacing works to Bridleway L62 would also enable greater use of the bridleway, outside of the construction and decommissioning periods, which would contribute towards the health and social wellbeing of residents and would be attributed limited weight.

In terms of the social objective's stated aim of fostering a well-designed and safe environment, it is acknowledged that the proposed development would lead to the industrialisation of an open and undeveloped site. Whilst landscaping and biodiversity improvements as part of the development would assist in assimilating the development into the landscape in which it is set, it would nonetheless result in harm to the visual amenities of the rural environment. Such harm would be attributed moderate weight against the development given that the harm is localised.

Environmental Objective:

The proposed BESS would take up energy at times of low demand, store this energy, and release it back to the grid at times of higher demand in order to cope with such demands. Such developments are inherently 'low carbon' types of development given that the storage of energy reduces losses in addition to providing energy security. This in turn reduces the amount of energy that needs to be produced, not just from renewable sources, but also from non-renewable sources such as coal and gas.

The UK Government has declared a climate emergency and set out a statutory target of achieving net zero emissions by 2050, and this is a material consideration. A target of 40 gigawatts (GW) of battery energy storage capacity to be achieved by 2035 has been set by the government to assist in the aim of meeting net zero targets with this figure being just over 2GW in 2022. On this basis, and notwithstanding consents granted elsewhere for similar forms of development, the need to install more battery storage of the type proposed remains of upmost importance and this position will only continue to be strengthened by government publications and guidance. It is considered that the proposal would make a meaningful contribution towards the required capacity of battery storage of energy in the UK and therefore towards net zero. This is worthy of substantial weight in favour of the proposal.

It is also the case that NWLDC declared a climate emergency in June 2019 committing to a target of the district being carbon neutral by 2050. The proposal would also make a favourable contribution to this target.

Moreover, the ability to store energy from renewable sources is especially beneficial given the

intermittent nature of wind and solar power generation. In this respect, rather than energy being lost when it cannot be utilised by the grid, or power generators being turned off when the grid cannot handle the load, the power will be stored and sent back to the grid for distribution as and when it is required. For this particular proposal a connection to the grid is available and secured which can often be a significant difficulty for BESS developments. Substantial positive weight would also be given to the likelihood of the majority of the energy stored being taken from the future solar farm to be constructed as part of the Ratcliffe-on-Soar power station Local Development Order (LDO), as well as that to be constructed at Gotham Lane in Kingston-on-Soar (Rushcliffe Borough Council (RBC) ref: 22/00809/FUL), given their proximity to the site.

The ability of the scheme to reduce carbon emissions by 17,345 metric tonnes annually (which would be a conservative assessment and therefore a likelihood that this would be higher), being the equivalent of taking 3,770 cars off the road (based on the conservative assessment) at an average of 10,000 miles per annum per vehicle, would reduce harmful emissions and create 'cleaner' air. In addition, the capacity to store and supply up to 144,540,000 kilowatts per hour (kWh) of electricity per year as enabling technology for renewable generation and a replacement for gas fired power generation will provide a rapid response power to satisfy peak demand. These would be substantial benefits in supporting the approach to a low carbon future and would weigh very heavily in favour of the development.

Such benefits are recognised in policies of the adopted Local Plan and in the NPPF (in particular Section 14) in accordance with the Climate Change Act of 2008.

There would also be further benefits from the oversupply of biodiversity net gain, which would far exceed the required 10% through landscaping and other ecological enhancements. This would be given further moderate weight in favour of the proposal.

The applicant has also demonstrated that there would be no other alternative sites for the proposed development within the district, or within the relevant search area which would include sites within the administrative area of RBC, and that whilst the application site is within Flood Zone 3 the sequential and exception tests are passed. The design of the development would also ensure that flood risk is not increased elsewhere, because of the development being within the functional floodplain, and would be safe for the lifetime of the development.

No harm would arise to the significance of the setting of any heritage assets and nor would the proposal result in the permanent loss of Best and Most Versatile (BMV) agricultural land.

Whilst acknowledging the above, and as set out in the report above, the development of the site would not result in the character and appearance of the landscape being enhanced or safeguarded and would also have an adverse impact on the landscape character of the area. This is primarily due to an open and undeveloped site being heavily industrialised as a result of the development proposed. On this basis there would be conflict with criterion (i) of Policy S3 and criterion (b) of Policy Cc2 of the adopted Local Plan. It is, however, accepted that as the proposed landscaping infrastructure matures the visual impact would be reduced (but not entirely) and such an impact would be limited to the local area and principally momentarily views gained from Public Right of Way (PRoW) L63 and Bridleway L62. In these circumstances the conflict with the above policies would be attributed moderate weight against the development.

Having regard to the three objectives of sustainable development, therefore, and having regard to the conclusions in respect of various technical issues set out within this report, it is accepted that the contribution to economic growth associated with the development, coupled with the support to the health and social wellbeing of residents, would ensure that the scheme would sit well in terms of the economic and social objectives. Insofar as the environmental objective is concerned, it is considered that whilst the proposed development would not safeguard and enhance the character and appearance of the landscape, and would have an adverse impact on the landscape character of the

area, the impacts in this respect would be significantly outweighed by the substantial benefit associated with the delivery of development contributing positively towards net zero targets and facilitating an increase in the use of renewable energy resources in the ongoing fight against climate change. Therefore, the proposal would represent sustainable development overall.

It is therefore concluded that, notwithstanding conflict with criterion (i) of Policy S3 and criterion (b) of Policy Cc2 of the adopted Local Plan, the proposed development would comply with the provisions of the development plan as a whole and would benefit from the presumption in favour of sustainable development. Overall, there are no material considerations which indicate the determination of the application other than in accordance with the development plan. Approval is therefore recommended.