

# East Claydon Battery Energy Storage System (BESS) Addendum to Planning Design and Access Statement

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#### Contents

1 Introduction		oduction	4	
1	.2	Buckinghamshire MWLP	4	
		text		
2	2.1	The Site	8	
2	.2	Geological Context	8	
2	.3	Proposed Development 1	0	
3	Acc	ordance with MWLP Policy1	1	
4	4 Conclusion			
Appendix 1				

### 1 INTRODUCTION

- 1.1.1 This document is an addendum to the Planning Design and Access Statement (PDAS) provided as part of the planning application by Statera Energy Limited for a proposed battery energy storage system ("BESS") facility (the "Proposed Development").
- 1.1.2 The purpose of the document is to specifically address matters relating to the Buckinghamshire Minerals and Waste Local Plan (July 2019) (MWLP).

### 1.2 Buckinghamshire MWLP

- 1.2.1 The MWLP forms the land use planning strategy for minerals and waste development within the administrative area of Buckinghamshire County through to 2036 and is a material consideration for other forms of development.
- 1.2.2 The policies of the MWLP are targeted toward existing minerals and waste developments within the county and future needs for mineral extraction. As such, Strategic Objective SO2 of the MWLP confirms the allocation of Minerals Safeguarding Areas (MSAs) to protect minerals resources from development that "would hinder their future use".
- 1.2.3 The National Planning Policy Framework (NPPF) page 70 defines an MSA as being an area 'designated by minerals planning authorities which covers known deposits of minerals which are desired to be kept safeguarded from unnecessary sterilisation by non-mineral development'. Paragraph 4.14 of the MWLP echoes this and for MSAs to protect mineral resources from being "needlessly sterilised".
- 1.2.4 MWLP Paragraph 4.15 states that the "most significant" resources warranting protection in Buckinghamshire are the "sand and gravel deposits situated in the southern half of the county, as these are the most economically viable and essential". The MWLP also includes safeguarding for resources "in the Great Ouse Valley east of Buckingham". In the context of the Proposed Development, the proposal site is not within the above areas of Buckinghamshire but is identified as being partially within an MSA for sand and gravel (alluvium) on the MWLP proposals map, controlled by MWLP Policy 1. This MSA covers watercourses across the north of the county and is closely aligned to the Claydon Brook which flows nearby to the proposal site. The MSA allocation is shown at Figure 1, Figure 2 shows an extract from the MWLP with county-wide MSA.

#### Figure 1: MSA Allocation<sup>1</sup>



<sup>&</sup>lt;sup>1</sup> Extract from online MWLP proposals map



Figure 2: MWLP showing county-wide MSA<sup>2</sup>

<sup>&</sup>lt;sup>2</sup> Extract from MWLP Map 4 (Page 23)

- 1.2.5 Policy 1 of the MWLP<sup>3</sup> states that MSA are defined to prevent needless sterilisation by nonminerals development, and that proposals within MSA must demonstrate that:
  - Prior extraction of the mineral route is practicable and environmentally feasible and does not harm the viability of the proposed development; or
  - The mineral concerned is not of any value or potential value; or
  - The proposed development is of a temporary nature and can be completed with the site restored to a condition that does not inhibit extraction within the timescales that the mineral is likely to be needed; or
  - There is an overriding need for the development.

<sup>&</sup>lt;sup>3</sup> Appendix 1 to this Addendum provides the policy in full.

## 2 CONTEXT

### 2.1 The Site

- 2.1.1 The site can be accessed from Hogshaw Road, which runs in a south-western direction from the village of Granborough and is located on the south-eastern boundary of the site. Claydon Brook runs along the majority of the western border of the site.
- 2.1.2 The majority of the site is covered by a patchwork of agricultural fields, bordered by hedge rows. Numerous semi-mature and mature trees are present on-site, particularly bordering Claydon Brook.
- 2.1.3 Claydon Sub-Station is located to the northwest of the site and powerlines run across the far northern part of the site in an east-west direction and in a northwest-southeast direction through the centre of the site.
- 2.1.4 The location of the site is shown on the Location Plan (drawing SL261\_L\_X\_LP\_01) included within the planning application submission.

### 2.2 Geological Context

- 2.2.1 An assessment of baseline conditions has been undertaken with reference to a Landmark Sitecheck, Reference: 307024616, dated 10th February 2023 and publicly available data and information, this is reported within the Environmental Statement Volume 10 Ground Conditions.
- 2.2.2 According to the BGS 1:50,000 maps (source BGS GeoIndex<sup>4</sup>) the bedrock geology across the majority of the site is anticipated to consist of the Mudstone of the Weymouth Member. Superficial deposits of alluvium (clay, silt, sand and gravel) are anticipated to overlie the Weymouth Member along the line of the Claydon Brook, as detailed in the BGS 1:50,000 maps see Figure 3 below.

<sup>&</sup>lt;sup>4</sup> British Geological Society (2023) BGS GeoIndex Onshore

Figure 3: BGS 1:50,000 Map Extract <sup>5</sup>



- 2.2.3 With the proposed development overlayed onto Figure 3 above, it is notable that the deposits of alluvium (clay, silt, sand and gravel) overlie the Weymouth Member along the line of the Claydon Brook, affecting a small area of the site. None of this area is proposed to be occupied by the built area (batteries will exist to the east). The areas of the site where the deposits of alluvium are expected are proposed as an area of planting, biodiversity enhancements and ponds.
- 2.2.4 As detailed in the BGS 1:50,000 maps, no artificial ground is located on the site, although Claydon Sub-Station, on the north-western border of the site, is underlain by artificial ground.
- 2.2.5 The Weymouth Member, which covers the majority of the site, is considered to be unproductive strata (source BGS GeoIndex). Unproductive strata are largely unable to provide usable water supplies and are unlikely to have surface water and wetland ecosystems dependent on them. The alluvium overlying the Weymouth Member is classified as a Secondary A aquifer (source BGS GeoIndex). Secondary A aquifers comprise permeable layers that can support local water supplies, and may form an important source of base flow to rivers.
- 2.2.6 There are no publicly available historic borehole records (source BGS GeoIndex) across the site.
- 2.2.7 In summary, bedrock geology across the majority of the site is anticipated to consist of the Mudstone of the Weymouth Member. Superficial Deposits of Alluvium (Clay, Silt, Sand and Gravel) are anticipated to overlie the Weymouth Member along the line of the Claydon Brook.

<sup>&</sup>lt;sup>5</sup> British Geological Society (2023) BGS GeoIndex Onshore https://mapapps2.bgs.ac.uk/geoindex/home.html

### 2.3 Proposed Development

- 2.3.1 BESS facilities provide a means of allowing electricity from the grid to be imported and stored at times of low demand/high generation, which can then be exported back into the grid at times of higher demand / system stress.
- 2.3.2 The Government considers that larger capacity BESS developments are crucial to meeting overall net zero targets (2050), as well as targets to decarbonise the power system by 2035, which will require a substantial growth in renewable energy generation, along with electricity storage to balance the intermittent generation from renewables, and stability services to keep the national grid stable.
- 2.3.3 National Grid's Future Energy Scenarios document (July 2022) states "we expect battery storage to make up the largest share of storage power capacity in all scenarios by 2050 to help with shifting demand within the day and managing network constraints as battery costs fall". This meant that the FES foresees battery use rising "from 1.6GW in 2021 to as much as 20GW by 2030 and 35GW by 2050".
- 2.3.4 Battery storage facilities can support this constant need for balancing. Statera's battery systems are developed using proprietary control logic, and designed to deliver the most efficient, reliable service that can adapt to the various market conditions to help provide a secure supply of electricity to the end consumer at the lowest cost.
- 2.3.5 In summary, there is significant policy support at a national level for BESS proposals of a scale to that being proposed. This policy support is coupled with an overriding need for battery storage in the UK to decarbonise our economy and support renewable energy generation nationally.
- 2.3.6 A full description of the Proposed Development is provided within the PDAS.

## **3 ACCORDANCE WITH MWLP POLICY**

3.1.1 MWLP Policy 1 sets out the criteria against which non-mineral development within an MSA should be considered. These are considered in-turn within Table 1 below

Policy Text	Comment
Proposals must demonstrate	
Prior extraction is practicable and environmentally feasible and does not harm the viability of the proposed development; <b>or</b>	Superficial sand and gravel deposits are anticipated to exist is along the line of the Claydon Brook. This area of the Proposed Development site is not intended to form the built area, and instead will form an area of planting, biodiversity enhancements and ponds. As such, excavations within this area are not anticipated.
	It would not be practical or environmentally feasible to 1) extend excavated areas into areas where only minimal development is proposed (enhancements, ponds and planting) 2) dewater the Claydon Brook for prior extraction with associated environmental impacts 3) undertake additional works and environmental mitigations necessary to extract sand and gravel, the Proposed Development is designed to have as small an impact as practicable, prior extraction would increase the impact of construction harming the viability of the proposed development through increased costs and impacts.
The mineral concerned is not of any value or potential value; <b>or</b>	Sand and gravel is a resource of value and there is demand for these within Buckinghamshire <sup>6</sup> .
The proposed development is of a temporary nature and can be completed with the site restored to a condition that does not inhibit extraction within the timescales that the mineral is likely to be needed; <b>or</b>	The Proposed Development is for a period of 40 years, following which the existing use of the site will be reinstated (agriculture) and any minerals reserves could be worked from this time. In short, the Proposed Development is temporary (40 years) and the site will be restored to a condition which will not inhibit future mineral working.
There is an overriding need for the development.	National objectives for decarbonisation of the economy and reaching net zero provide a compelling national policy case for energy storage to facilitate renewable energy generation in the future. Grid scale battery storage is one such method of storage and is identified as being a core component to allow for fast responding stored renewable electricity supplies into the National Grid. There is an overriding need for the development. <sup>7</sup>

<sup>&</sup>lt;sup>6</sup> 2021 Buckinghamshire Council Local Aggregates Assessment (LAA).

<sup>&</sup>lt;sup>7</sup> Please refer to PDAS for full summary of the need for the development.

## 4 CONCLUSION

- 4.1.1 In conclusion, the Proposed Development sits in accordance with SO2 and Policy 1 of the MWLP due to:
  - Prior extraction of the mineral is not practicable or environmentally feasible, doing so would harm the viability of the proposed development through greater environmental impacts during construction and additional costs. **And**
  - The Proposed Development is for a period of 40 years, once the project lifetime of 40 years has passed the BESS use for the site ends and the site will be restored to agriculture in a condition which will not hinder or inhibit future mineral working. **And**
  - There is an overriding need for the Proposed Development, due to the national need for battery energy storage projects to help balance demand on the National Grid, support renewable energy and facilitate decarbonisation in-line with UK wide policy objectives.

### **APPENDIX 1**

#### MWLP Policy 1: Safeguarding Mineral Resources<sup>8</sup>

#### **Policy 1: Safeguarding Mineral Resources**

Minerals are a finite natural resource; in order to secure their long-term conservation Mineral Safeguarding Areas (MSAs) have been defined within Buckinghamshire to prevent mineral resources of local and national importance from being needlessly sterilised by non-minerals development. Mineral resources of local and national importance identified within Buckinghamshire include: sand and gravel deposits of the Thames Valley (situated in the southern half of the county), the Great Ouse Valley east of Buckingham, the sand and gravel deposits in the north of the county, clay-with-flints around Bellingdon and white limestone in the far north of the county.

Proposals for development within MSAs, other than that which constitutes exempt development, must demonstrate that:

- prior extraction of the mineral resource is practicable and environmentally feasible and does not harm the viability of the proposed development; or
- the mineral concerned is not of any value or potential value; or
- the proposed development is of a temporary nature and can be completed with the site restored to a condition that does not inhibit extraction within the timescale that the mineral is likely to be needed; or
- there is an overriding need for the development.

A Mineral Assessment will be required to accompany the planning application for the proposed non-minerals development, detailing:

- the size, nature and need for the (non-minerals) development,
- the effect of the proposed development on the mineral resource beneath or adjacent to the site,
- site-specific geological survey data (in addition to the MSAs and BGS mapping data) to establish the existence or otherwise of a mineral resource (detailing resource type, quality, estimated quantity and overburden to reserve ratio),
- whether it is feasible and viable to extract the mineral resource ahead of the proposed development to prevent sterilisation and the potential for use (of the mineral resource) in the proposed development, and
- where prior extraction can be undertaken how this will be carried out as part of the overall development scheme, with reference to the proposed phasing of operations and construction of the non-mineral development.

In the event that the non-mineral development is delayed or not implemented the site must be restored to a stable landform and appropriate after-use.

<sup>&</sup>lt;sup>8</sup> Extract from Page 24, Buckinghamshire Minerals and Waste Local Plan (MWLP): https://buckinghamshire-govuk.s3.amazonaws.com/documents/buckinghamshire-minerals-and-waste-local-plan-2016-2036\_yiYUGSb.pdf