Vale of White Horse District Council

South Oxfordshire District Council

Listening Learning Leading

LANDSCAPE COMMENTS

TO:	Ben Duffy				
FROM:	Hazel Osborne				
DATE:	10 June 2024	**REF:**	P24/S1498/FUL		
SUBJECT:	Land to the north of the Culham Science Centre Thame Lane near Clifton Hampden OX14 3GY				
PROPOSAL:	The development of a Battery Energy Storage System (BESS), comprising a 500 megawatt (MW) battery storage facility with associated infrastructure, access and landscaping, with a connection into the Culham Jet National Grid substation.(A hard copy of the Environmental Statement can be viewed at South Oxfordshire District Council, Abbey House Abbey Close Abingdon OX14 3JE)				

Relevant legislation, guidance, policies and SPDs:

- South Oxfordshire Local Plan 2035: STRAT 6, STRAT 8, STRAT 9, ENV 1, ENV 5, ENV12, DES 1, DES 2.
- South and Vale Joint Design Guide – 2022
- South and Vale Green Infrastructure Strategy - 2017
- South Oxfordshire Landscape Assessment – November 2017
- National Planning Policy Framework (NPPF) 2023

Documents and drawings reviewed: Documents submitted by Culham Storage Limited as part of the application registered on 9 May 2024.

Conclusion

Holding objection

I have significant concerns about the landscape and visual impact of the proposals as set out in the comments and recommendations below. The current proposals would be contrary to policy ENV1 of the local plan, which seeks to protect the countryside against harmful development and to protect and where possible enhance features that contribute to the nature and quality of landscapes, including areas or features of cultural and historic value, also to policies DES1 and DES2 which require development to respect local landscape character. The proposals would result in a loss of visual openness in the Green Belt, in an area which has lost significant areas to adjacent strategic allocations, and would be detrimental to the environmental quality of remaining green belt land, contrary to local plan policy STRAT 6.

Comments

The site

The site is located immediately north of the Culham Science Centre (CSC). It is currently farmland, other than an area adjacent to an existing substation within the CSC site, south of Thame Lane. Most of the site lies within Green Belt and the northern areas are within the Grade 1 Registered Park and Garden (RPG) of Nuneham House, it also borders Nuneham Courtenay Conservation Area to the north.

There is a restricted byway along Thame Lane on the southern boundary, which forms part of the long distance Oxford Greenbelt Way, this continues as a footpath alongside the railway line west of the site, within the strategic allocation site (STRAT 9); there are attractive views over the site from the footpath, to woodland and parkland, despite the two sets of pylon lines which cross/ bound the site. A proposed footpath runs north from Thame Lane through the site and parkland. Land to the south of the site, between the railway and CSC site is allocated for employment use.

Landscape Character

The site lies largely within SODC landscape character area 2, Nuneham Courtney Ridge, and within landscape type LCT15, Parkland and Estate Farmland. This comprises the formal C18 designed parkland and associated estate land of Nuneham House. The site lies largely within the 'estate' landscape characterised by large blocks of woodland, open grassland and mature trees. The LCT has a rural, unspoilt and generally enclosed character, with strong woodland and tree cover. The site is adjacent to the CSC site, therefore the character is influenced to some extent by the adjacent development. The CSC site is within LCT 9 Institutions.

Guidelines for character area 2 include:

- *Conserve the agricultural character of Nuneham Courtenay Ridge by managing and restricting, where possible, the development of tall buildings and structures where these would adversely affect views.*
- *Safeguard, maintain and enhance and the characteristic landscape features of existing parklands (particularly at Nuneham Park) including mature trees, avenues of trees, lakes, woods and walls.*
- *Promote, where possible, the conservation of the surviving areas of permanent pasture and promote arable reversion to grassland, particularly within parklands.*
- *Promote small-scale planting of deciduous woodland blocks using locally characteristic species such as oak, ash, hazel, willows and alders.*

Comments

The proposals include three areas of development as follows:

- A connection tower to the existing power lines within the Grade 1 registered parkland, with associated substation.
- A battery storage area (BESS) comprising: 296 battery units housed in shipping containers; 37 inverter houses (12m x 9.5m x 4.05m high), all surrounded by gravel; tracks (4.5m wide) and hard standings; 2.5m weld mesh fencing to the northern and eastern boundaries and 4m high timber acoustic fence to the west and south; security cameras mounted at 4m high; electricity substation with equipment up to 9m high; attenuation lagoon; removal of Thame Lane within the site and upgrading farm track

to tarmac 4.5m wide; mounding on the western and northern boundaries up to 3m high; and hedge, tree, woodland and scrub planting

- An extension to an existing substation within the CSC site with underground cable to connection tower.

They also include an area of wildflower grassland, tree, scrub and woodland planting within the RPG.

The area of site proposed for battery storage provides a valuable transition between the registered parkland and the science centre site. The battery storage covers a considerable area and would be industrial in appearance, spreading industrial development into the countryside. Cross section A shows that the mounding proposed would not screen the inverter houses or battery units from the rising parkland to the north, almost all of which would be visible at year 1, and for some time until planting had become established, particularly in winter. This can be seen in LVIA photomontage 14. Views would extend well into the parkland, see LVIA view 17.

Whilst significant areas of mounding, and woodland, scrub and tree planting are proposed, planting would take time to become established sufficiently to screen the lower elements of the proposals, the taller elements would remain visible in the long term, as shown on the cross sections. Much of the mitigation is located within the historic parkland and the views of the heritage officer should be sought with respect to the acceptability of this, whilst the woodland proposed along the southern edge of the parkland is in a similar location to a belt of woodland shown on OS maps of 1898 - 1942, it does not replicate this, being much more informal in layout, and with the addition of mounding.

Cross section C shows the proposed connection tower, over 14m high, and associated substation with equipment over 7m high, within the Grade 1 registered parkland. This would have a significant adverse effect on the landscape character of the parkland, which would remain in perpetuity, contrary to policy ENV1 of the Local Plan which only permits development where it protects and where possible enhances features that contribute to the nature and quality of landscapes, including, '*vii) areas or features of cultural and historic value'.* The fact that there is an existing pylon route through the parkland does not make it acceptable to introduce additional intrusive features. This should not be located within the historic parkland.

Cross section B indicates that views from the west would be largely screened by mounding, however this would mean blocking current open views towards the parkland from the allocated site and the Oxford Greenbelt Way. No mounding is proposed on the southern side, the photomontage from viewpoint 4 indicates that the 4m high acoustic fence would be visible with the top of the inverter units seen above and the substation clearly visible, all remaining visible in the long term. The substation, with equipment up to 9m high, would also be visible in close proximity and intrusive from the Oxford Greenbelt Way as it runs on the northern side of the CSC site, only limited mitigation (a hedge on the southern side) is proposed. Cross section D shows that the BESS area would be open to views from the Oxford Greenbelt Way on the eastern side, in the vicinity of an existing pylon, see photomontage view 8. The Greenbelt Way is a long distance path and a valuable recreational resource, its value will increase with the new residential allocation. Although it is affected by the adjacent science centre site, there are open views from the path towards the parkland which would be replaced by open views of battery storage and a substation. Mitigation proposals alongside the path are inadequate and in places entirely lacking, with limited set back and a lack of tree planting. A considerable length of the path both west and east of the railway line would be adversely affected.

Recent permitted developments on the northern edge of the CSC site include tree planting on the boundary which will ultimately help to screen and filter views of the development within it.

In order to extend the existing substation, the proposals would remove trees which help to filter existing views into the CSC site, these would not be replaced, resulting in a detrimental effect due both to their loss and to the additional area of substation with no screening. No mitigation is proposed for this.

The site is adjacent to strategic allocations STRAT 8, Culham Science Centre, and STRAT 9, Land adjacent to Culham Science Centre; STRAT 6 notes that where the Green Belt boundary has been altered to accommodate strategic allocations, development should deliver compensatory improvements to the environmental quality and accessibility of the remaining Green Belt land. The proposals would be contrary to this aim, resulting in further loss of visually open Green Belt land and detriment to its landscape and visual quality, including when viewed from the adjacent STRAT 9 residential development site, and from the long distance Oxford Greenbelt Way, noise may also be an issue, affecting tranquillity. Whilst it is noted in the LVIA that public access would be allowed to the area of site within the RPG, I also note that it is planned to sell off excess BNG units in this area; this is unlikely to be compatible with recreational use.

LVIA

It is clear from the LVIA summary that landscape issues have not been considered in the choice of location for the proposed BESS, despite its location immediately adjacent to, and partly within, an existing grade 1 RPG, and within Green Belt. Paragraph 5 of the LVIA notes: '*The main driver for locating the BESS at this location is its proximity to an existing substation, the ability to connect to it and the value it brings with regards to increasing grid stability and efficiency.'*

The LVIA assesses the value of the area of site to be developed as a BESS as low, but it does not appear to take into account the function of the landscape in providing a transition between the parkland and the CSC site or give enough weight to its contribution to the setting of the RPG. The effect on the landscape character of the site including the area within the parkland is found to be moderate to major adverse, with a moderate adverse effect remaining after 10 years and a minor beneficial effect after 20 years (8.11). A moderate adverse effect is found to the parkland adjacent to the site at year 1 reducing to a minor benefit at year 10. The assessment separates the impact of the battery storage units from the impact of the taller elements, the additional tower and substations, however these are all part of the same development and should be considered in combination.

The LVIA concludes (paragraph 12) that the proposals would have at worst a neutral effect on visual amenity and ultimately a beneficial effect. This is not reflected in the visual assessment (Table 5) which shows a number of moderate adverse effects to views from the Oxford Greenbelt Way and the registered parkland remaining after 10 and 20 years. I am not clear how the adverse effect on view 13 reduces after 20 years when there is stated to be no mitigation here, this should presumably also remain as moderate adverse. Given the large number of long term moderate adverse effects to views from the Oxford Greenbelt Way, this should be considered as significant.

Overall I consider the adverse effects of the development to be greater than stated. I also consider the impact on the visual openness of the Green Belt to be underestimated, the site is not located within the CSC site as the planning permission quoted and the circumstances therefore very different. The site can be appreciated as an open landscape in views from a considerable length of the Greenbelt Way and from the eastern edge of the residential allocation. The development and associated mitigation will block views and tall structures will remain visible in the long term, resulting in a distinct loss of visual openness. The feasibility of using land both for recreation and as BNG units is questionable.

Recommendations

The proposed development is located in a sensitive area of countryside which provides a transition between the Culham Science Centre site and a grade 1 registered parkland, and which is entirely within Green Belt. It is adjacent to a long distance footpath which provides a valuable recreational resource and will be of increased importance due to the adjacent residential allocation. It is clear that landscape impact has not been considered in the choice of location.

Whilst there is some detrimental effect on the existing landscape character and views, due to the CSC site and existing infrastructure, this would be made worse by the proposals, particularly in the short to medium term. There could be some long term benefit to views south from the park, however the mitigation proposed to achieve this would be located within the parkland and the advice of the heritage officer should be sought with respect to the acceptability of this.

The proposals would result in a loss of visually open Green Belt land in an area which has lost significant areas to adjacent strategic allocations. It would also result in significant adverse impact to the landscape character within a registered parkland and to views from a long distance path. Mitigation is inadequate adjacent to the long distance path, with limited set back and boundaries left open or with minimal planting; noise fencing would also be intrusive.

Of significant concern are:

- The scale and industrial nature of the battery storage proposals, and the resulting adverse effects on the landscape character within the grade 1 historic parkland in the short to medium term.
- The long term adverse effects on the landscape character of the parkland due to the additional tower and substation which would be permanent; locating this within the parkland is not acceptable.
- The loss of visual amenity to the long distance footpath, which would become contained by industrial development on both sides, and inadequate mitigation.
- The loss of visually open Green Belt land.

The current proposals would be contrary to policy ENV1 of the local plan, which seeks to protect the countryside against harmful development and to protect and where possible enhance features that contribute to the nature and quality of landscapes, including areas or features of cultural and historic value, also to policies DES1 and DES2 which require development to respect local landscape character. The proposals would be detrimental to the environmental quality of remaining green belt land, contrary to local plan policy STRAT 6.

Hazel Osborne CMLI

Landscape Officer