

Wickham Hall Estate – Agricultural Land Assessment

In support of S62A Application
s62A/2024/0045 for:

Erection of a Solar Photovoltaic
Farm with supporting
infrastructure and battery
storage, inverters and
transformers, fencing, landscaping
works and connecting cable

at

Land at Wickham Hall Estate
Bishop's Stortford
Uttlesford
CM23 1JG



CONTENTS

1.0	INTRODUCTION	3
2.0	AGRICULTURAL PRODUCTION	3
3.0	AGRICULTURAL DIVERSIFICATION.....	5
4.0	BIODIVERSITY	6
5.0	CONCLUSIONS	6



1.0 INTRODUCTION

- 1.1 Sworders act on behalf of David Harvey, and his son Patrick Harvey, who are proprietors of the Wickham Hall Estate. The Harvey family have been farming and living at Wickham Hall since the 1930s.
- 1.2 The farm amounts to some 524 hectares of principally arable land, which extends across the adjoining areas of East Hertfordshire and Uttlesford.
- 1.3 This report has been prepared by Sworders' Planning Director, Hazel Izod BSc(Hons) MA specifically in response to the Inspector's Issues Report and request for additional information on Best and Most Versatile Agricultural Land.

2.0 AGRICULTURAL PRODUCTION

- 2.1 The crop taken from the farm is mostly a mixture of wheat, oats, barley, and lucerne, totalling some 443 hectares. Crops are harvested and stored on site at Wickham Hall, making use of a grain store and bins located to the southwest of the yard, and a larger grain store located further west, consented in 2012.
- 2.2 The holding has been truncated several times over the years, with the construction of the Bishop's Stortford A120 bypass in the late 1970s, subsequent housing developments at Bishop's Stortford North, and more recently, with the Little Hadham A120 bypass. This has resulted in a number of severed plots of land, and a reduction in productive area.
- 2.3 The solar farm, as already consented, amounts to a further reduction of around 46 hectares, and this application proposes removal of a further 33 hectares – totalling around 18% of the productive land. The income that will be received from the solar farms is essential to the long term viability of the Estate, not just to farming but to the wider management of the land.



2.4 The site of the proposed solar farm is known as Great Field. Since 2019, production has been for animal feed rather than human consumption. Regardless of the Agricultural Land Classification, the yield from Great Field, when sown with wheat or barley, has been consistently lower than the average for the Estate as a whole. The switch to lucerne since 2021, which is purely an animal feed, has seen yield meet or exceed the farm average, and yielding a much higher tonnage.

2.5 The table below illustrates crop production at Great Field since 2018, and its variance in relation to the farm average, and regional average.

	Crop	Crop use	Ton Total	Ton/ha	Farm Average	Variance	Regional average	Variance Region average
2023	Lucerne	Animal Feed	306.38	9.8	9.8	0.1	12	-3.32
2022	Lucerne	Animal Feed	381.3	12.3	10.9	1.4	12	-0.91
2021	1st year Lucerne	Animal Feed	93.98	3.0	3.5	-0.4		
2020	Spring Barley	Animal Feed	204	6.4	5.8	0.6	5.9	0.5
2019	2nd Winter wheat (Variety KWS Santiago)	Animal Feed	259	8.1	8.8	-0.7	9.2	-1.1
2018	1st Winter wheat (Variety Crusoe)	Milling Wheat	256	8.0	8.4	-0.4	8.1	-0.1

2.6 Despite the nominal grading of the land, the yield from Great Field is therefore generally lower than the regional average, and is not amongst the most productive parts of the farm. There would be no loss in production of food directly for human consumption as a result of the proposed solar farm.



3.0 AGRICULTURAL DIVERSIFICATION

- 3.1 Arable yields are of course only one consideration in the viability of the Estate as a farming business, which has been diversified over the years to support the farming income. Redundant farm buildings have been converted to a variety of commercial uses, with new permissions granted to supplement these in 2017.
- 3.2 Prior Approval was also granted for a 918sqm vertical farming unit in December 2022. Vertical farming is the practice of growing crops indoors, stacked vertically in several layers, and grown within a controlled environment using either hydroponics, aquaponics or aeroponics. This allows for a continuous 12 month growing and harvesting period, and avoids the excessive use of fertiliser and pesticides. The system also reduces water consumption by up to 98%, and is therefore a very efficient method of farming. The consented scheme is estimated to be capable of producing up to 400 tonnes of crops a year, equivalent to an external plot of 20-40 hectares.
- 3.3 The most common crops produced within vertical farms are salads, herbs and vegetables, which would otherwise be grown in warmer climates and flown to the UK. Traditional farming is also experiencing a labour shortage, whereas vertical farms are highly automated, requiring only a handful of employees to run the equipment. Vertical farming is therefore highly sustainable.
- 3.4 Vertical farming units do, however, require very high levels of energy which could be up to 1.0MW, so the existing permission will only be developed when the first solar farm comes on stream. This application therefore provides potential for further renewable energy that would make a substantial contribution to the farm income, as well as increasing the yield of food for direct human consumption.
- 3.5 More recent planning consents also include the change of use of a redundant plot of land adjacent to the A120 Little Hadham bypass as a dog exercise field, and change of use of a redundant reservoir near Hadham Hall, to a fishing lake for use by a local angling club.
- 3.6 Such diversification projects, including the proposed solar farms, are part of the Estate's long term plans to ensure its security and viability as they open up opportunities to diversity farm output, as well as directly supporting the farming income.



4.0 BIODIVERSITY

- 4.1 In addition to farmland, the Estate includes extensive blocks of woodland, mainly to the south of the A120, and Bloodhounds' Wood / High Wood which adjoins the application site. This is a Local Wildlife Site (LWS), designated on the basis of its ancient coppiced woodland and a significant maternity roost for Barbastelle (*Barbastella barbastellus*) bats.
- 4.2 The Harvey family has done much work on the farm to support nesting skylarks, and also to protect the integrity of these designated areas to strengthen the resilience of the bat roosts by enhancing the quality of adjacent foraging opportunities and connectivity between woodland parcels. Recent surveys at Stocking Wood to the south have identified over 1,000 fauna species, including 25 different species of butterfly. The significant biodiversity work, and the creation of wildlife areas are very important to the family as they build on the work that has been done on the farm to support biodiversity complementary to the farming business.
- 4.3 Continued investment in the farm and its green infrastructure can only be supported by ensuring that the Estate as a whole operates viably in the longer term. The development of solar energy is also integral to this.

5.0 CONCLUSIONS

- 5.1 In summary, Wickham Hall farm covers extensive land across the East Herts / Uttlesford border, and has been farmed by the Harvey family since the 1930s. In recent years, however, the farmland has been truncated by construction of both the A120 Bishop's Stortford bypass, and the A120 Little Hadham bypass. The Estate is also experiencing increased challenges in response to Government policies and reduced subsidies for British farming. The family have therefore sought alternative opportunities to maximise the use of their land, whilst ensuring continued viability of the farm.



- 5.2 Land at Wickham Hall is predominantly arable, and since 2019 has been farmed purely for animal feed (lucerne), rather than crops for human consumption. However, yields remain lower than the national average, despite the nominal grading of the land. Although the proposed solar farm will result in the loss of some 33 hectares of arable land, this only forms a small part of the wider farm, and will have no significant effect on overall productivity.
- 5.3 Overall, the solar farm will generate an essential income stream to secure the long term viability of Wickham Hall, not just for farming, but also for the wider management of the land, including woodlands and biodiversity.