

SOUTH CAMBRIDGESHIRE DISTRICT COUNCIL

REPORT TO: Planning Committee

7 November 2012

AUTHOR/S: Planning and New Communities Director

S/1611/12/FL - BOURN

Construction of Solar Energy Farm to include installation of solar panels, with on-site plant and machinery, landscaping and associated works at Caxton Road, Bourn for Mr Chris Poulton

Recommendation: Approval

Date for Determination: 13 November 2012

This application has been reported to the Planning Committee at the request of the Development Control Manager.

Members will visit the site on 6 November 2012

This application constitutes major development

The application has been advertised as a Departure

Site and Proposal

1. The application site is located on agricultural land south of the village of Cambourne and to the north of Caxton Road in the Parish of Bourn. The Parish boundary is along the northern boundary of the site. It is located outside of the designated village frameworks for both Cambourne and Bourn, which are located approximately 360m to the north and 920m to the south at their closest respective points. The site has an area of approximately 13.6 hectares. Access is gained from the east to Broadway. The land is currently classed as grade 2 agricultural land. The majority of the site is within flood zone 1. However, a drain runs through the site and a small area along this drain is classified as flood zone 3b. The land is generally undulating, with Cambourne set on higher ground and land falling towards Bourn. The land also gently rises and falls west to east.
2. The western boundary of the site is a hedgerow, beyond which is a public footpath that follows the hedgerow line. The hedge is continuous although there are two obvious gaps further to the north end of the site. The majority of the hedgerow is also protected through a group Tree Preservation Order. The north boundary is a post and wire fence, beyond which is an area of wildflower meadow owned by the Wildlife Trust. A Public Bridleway runs to the north of this meadow, and is located approximately 30m from the site at its closest point. The east boundary is open and follows the path of a further drain. Land beyond is open agricultural land. The south boundary is part open and part hedgerow, predominately to the eastern section. Beyond the south boundary is further agricultural land. Mackshill Cottage, a grade II listed building sits to the northern side of Caxton Road. Bourn has two defined

Conservation Areas, both of which measure approximately 530m from the site at their closest points.

3. The full application, validated on 14 August 2012, seeks the erection of a solar energy farm to include the installation of solar panels, with on-site plant and machinery, landscaping and associated works. The proposal seeks to create a farm with an electrical output of 5MWp. This would require approximately 22,000 230W panels located on 460 metal arrays, each consisting of two rows of panels. The panels would be mounted at 30° from the ground to maximise solar gain, and would total 2.4m from the ground at the highest point. The layout would create 38/39 rows of panels across the site, all south facing. There would be a distance of between 5.3m and 6.3m between rows, depending upon the incline. Each panel will be supported by a frame piled into the ground and anchored without concrete to 1 to 1.5m in depth. The site would be linked to the existing sub-station at Caxton Road by a 300m buried cable.
4. The proposal would also include three inverter cabins. These are all proposed to be located on the southern section of the site, and would measure 3m by 7.2m, with a height of 2.5m. A 2.5m high security fence is proposed around the whole site.
5. The full application is accompanied by a Planning Statement, a Design and Access Statement, a Strategic Landscape Statement, a Biodiversity and Ecology Assessment, an Archaeological Trial Trenching Report, a Technical Inverter Data Guide and Installation Guide, a Construction Traffic Management Plan, a Flood Risk Assessment, a Noise Assessment, and a Community Statement.

Planning History

6. There has is planning history for the site itself. Members will recall the approval of solar energy farms at Chittering and Haslingfield, and a refusal to the east side of Broadway in Bourn. A further application in Croydon was withdrawn.
7. The site was subject to an Environmental Impact Assessment screening procedure. In the response dated 12 August 2012, officers concluded that the proposal does not require an Environmental Statement to be submitted.

Planning Policy

8. **Local Development Framework Development Control Policies (LDF DCP) 2007: DP/1 Sustainable Development, DP/2 Design of New Development, DP/3 Development Criteria, DP/4 Infrastructure and New Development, DP/7 Development Frameworks, NE/2 Renewable Energy, NE/4 Landscape Character Areas, NE/6 Biodiversity, NE/11 Flood Risk, NE/15 Noise Pollution, NE/17 Protecting High Quality Agricultural Land, CH/2 Archaeological Sites, CH/4 Development Within the Curtilage or Setting of a Listed Building, CH/5 Conservation Areas & TR/1 Planning for More Sustainable Travel.**
9. **Development Affecting Conservation Areas SPD** – adopted January 2009, **Trees and Development Sites SPD** – adopted January 2009, **Biodiversity SPD** – adopted July 2009, **Listed Buildings SPD** – adopted July 2009,

Landscape in New Developments SPD – adopted March 2010 & District Design Guide SPD – adopted March 2010.

10. The **National Planning Policy Framework 2012 (NPPF)** supports sustainable development. Paragraph 97 seeks Local Planning Authorities to recognise the responsibility on all communities to contribute to energy generation from renewable sources, and should have a positive strategy to promote energy from renewable sources. Paragraph 98 adds when determining applications, Local Planning Authorities should not require applicants for energy development to demonstrate the overall need and recognise small-scale projects provide a valuable contribution to cutting greenhouse emissions. Local Planning Authorities should approve the application unless material considerations indicate otherwise if its impacts are (or can be made) acceptable.
11. The NPPF advises that planning obligations should only be sought where they are necessary to make the development acceptable in planning terms, directly related to the development, and fairly and reasonably related in scale and kind to the development. It adds planning conditions should only be imposed where they are necessary, relevant to planning and to the development to be permitted, enforceable, precise and reasonable in all other aspects.

Consultations by South Cambridgeshire District Council as Local Planning Authority

12. **Bourn Parish Council** recommends approval in accordance with Policy NE/2, supporting renewable energy.
13. **Cambourne Parish Council** recommends approval. The fence is considered to provide adequate security, and any impact on views from Cambourne would be negligible.
14. The **Council's Landscape Officer** notes the site will have a significant impact on landscape character and views, particularly from the west and north. There are also clear views from residential properties along Broadway to the south. The landscape on the area has a distinct layered appearance with mature hedgerows, pockets of woodland, arable fields and meadows on the undulating land. The layering adds to the variation in landform. The site is highly visible from Cambourne, the master planning of which sought views over the area. The Strategic Landscape Statement is not considered to give an accurate representation and underplays the impacts. Proposed screening would not prevent views from certain locations especially given the time it would take to establish. Planting to the northern boundary will also obscure views of the wider landscape.
15. The **Environment Agency** notes the site sits on what is likely to be a slowly permeable calcareous clay soil. Runoff is likely to be concentrated in localised areas and linear strips. A margin of 7-10m around the site should be available parallel to any watercourse to facilitate this requirement. A condition regarding a strategic surface water drainage plan is recommended, with a number of related informatives.

16. The **County Council Definitive Map and Records Team** has no objection but point out Public Footpath No. 2 Bourn is located along the western boundary. Informatives regarding this footpath are recommended.
17. The **Cambridge Group Ramblers** do not formally object, but note negative impacts on the countryside and in particular neighbouring paths before screening fully develops. Tree planting along the Bridleway is welcomed and should be planted before the solar panels, and the hedgerow to the west should be strengthened to provide winter screening. Provision should be made for the welfare of walkers during construction works. It is asked that a compensation footpath link be provided between the Broadway in Bourn to Public Footpath No. 2 Bourn. This would allow links with Caldecote and beyond.
18. The **Local Highways Authority** objects given the lack of clarity regarding whether the access is temporary or permanent. Further details regarding visibility splays and a lorry routing agreement are proposed. They have verbally confirmed their objections could be overcome through relevant conditions.
19. The **County Council Archaeology Team** notes the site was subject to an evaluation in 2011 under a pre-application, and this revealed there was very little archaeologically within the area of development. No condition is recommended.
20. The **Council's Ecology Officer** has no objection to the proposal. There would be no impact upon Badgers or Great Crested Newts, and the creation of a wildflower meadow would be a biodiversity gain, especially when combined with the Wildlife Trust land to the north. The types of trees planted are questioned, as is the mix for the wildflower meadow, and a landscape condition is proposed. An Ecological Management Plan should be also conditioned.
21. **Natural England** notes the site does not appear to affect any statutorily protected sites. With regard to Bats, no objections are noted, whereas the findings regarding Great Crested Newts are accepted. Their conservation status is considered favourably. Standing advice is given with regard other species.

Representations by Members of the Public

22. Comments have been received from the occupiers of **8 Wether Road, Great Cambourne**, who query the levels of glare, metals to be used in the manufacturing of the panels and where they go when decommissioned, its impact upon climate change, and the benefits to others from the Feed-in Tariff. The loss of agricultural land is also questioned.
23. An objection has been received from the occupiers of **38 Caxton End, Bourn** who notes the green belt between Bourn and Cambourne would be replaced by an industrialised landscape element, and the development does not preserve or enhance the character of the local area. The Strategic Landscape Assessment is considered misleading, and contradicts the Planning Statement.

24. A further letter from an unknown address has been received, objecting on grounds of visual intrusion and the inability to fully screen the site.
25. Members will be updated on any further comments received, given the expiration of a further press notice on 6 November 2012.

Material Planning Considerations

26. The key issues to be considered for the determination of this application are the principle of development, the impact upon the surrounding countryside, the impact upon the adjacent heritage assets, the impact upon the amenity of the occupiers of the adjacent residential properties, the impact upon highway safety, the loss of agricultural land, ecology considerations, flood risk, and community benefits.

The Principle of Development

27. Policy DP/7 of the LDF DCP lists criterion that are considered acceptable forms of development outside of designated village frameworks. These are development for agriculture, horticulture, forestry, outdoor recreation and other uses which need to be located in the countryside. As per previous solar farm applications, the scheme is considered to be a departure from this policy.
28. Policy NE/2 of the LDF DCP states the District Council will grant planning permission for proposals to generate from renewable sources, subject to proposals according with Policies DP/1-DP/3 and ensuring it can be connected efficiently to the national grid infrastructure and it can be removed when facilities cease to be operational. The supporting text to the policy notes solar power can make a significant contribution to the levels of energy created by renewable sources in the District. Policies DP/1-DP/3 are overarching policies regarding sustainable development and design, and comments below relate to whether these policies would support the proposal.
29. South Cambridgeshire has greater levels of sunshine than the UK average and Policy NE/2 states that solar power can make a significant contribution to renewable energy generation. In light of this the District Council seeks to reduce the use of fossil fuels, opportunities to increase the proportion of energy, especially electricity, generated from renewable sources will be permitted unless there is clear adverse impact on the environment or amenity of the area. The Government aims to put the UK on a path to cut its carbon dioxide emissions by some 60% by 2050, and to maintain reliable and competitive energy supplies. The development of renewable energy is considered to be an important part of meeting this aim and as such, there has been greater emphasis on 'positive planning', which facilitates renewable energy developments.
30. In light of the above it is considered that subject to the other material considerations discussed below the proposed development whilst departing from Policy DP/7 should be actively encouraged.

Impact upon the Surrounding Countryside

31. The proposed development will be visible from the public domain from a number of vantage points. The applicant has submitted a Strategic

Landscape Statement, which includes photo montages of the development from nine surrounding locations.

32. The comments from the Council's Landscape Officer are noted. He notes there would be significant public views of the site from short and long range particularly from the west and north. The existing landscape is described as being layered, with horizontal lines of hedgerows, woodland, fields and meadows visible across the valley towards Bourn Brook. The proposal is considered to have a harmful impact upon the landscape giving the area to be developed and the loss of this horizontal layered landscape character. Screening would reduce the impact although it would take a number of years to mature.
33. The solar park would have a lifespan of approximately 25 years, and this is a transient figure in terms of the long-term evolution of the landscape. The scheme does not involve the removal of any structures or planting, and would allow more planting for the long term. When the site is no longer required, the land would be returned to its original state. Any landscape harm created would not therefore be substantial. The balance between overall benefits against landscape harm has allowed a number of applications in recent times, which would usually have been refused. This is particularly the case at appeal, where Inspectors are recognising the need to achieve the Government's commitment to reducing greenhouse gas emissions through the development of renewable sources.
34. Nonetheless, landscaping is still important to create some screening, and this must be appropriate to its location. The clearest public views are from the Bridleway to the north of the site. At this point the land visibly drops, but then rises again. Land also rises eastwards, giving clear views of the development in that direction from a large stretch of this Bridleway.
35. The view from the Bridleway to the north of the site would be of shadowed areas and lines where the structures stand. These would usually be dark in nature, although lines indicating different rows of panels would be visible. The applicant has provided mitigation planting in the form of a landscape plan. It is noted there is some contradiction between the planning statement and landscape plan as to what is proposed to be planted in this area. The landscape plan shows trees, whereas the statement concludes planting would not be higher than 1.5m to ensure the existing wildlife meadow receives adequate sunlight. The applicant is aware of the error, and has confirmed in writing the planting should be up to a maximum height of 2.4m to obscure the height of the nearest panel. This is considered a more favourable option as trees would obscure longer views of the surrounding countryside from the Bridleway.
36. Further planting is shown to the hedgerow to the western boundary of the site. However, this would appear to be outside of the application site. The western hedgerow does provide a good screen, although there are two gaps to the northern section that would allow clear views in. It may be necessary for some planting within the site by the western boundary in these locations. A hedgerow is proposed all the way around the east and south boundaries. This would provide good vegetation for wildlife and screen some views from respective locations.

37. Comments from the County Definitive Map and Records Team and Cambridge Group Ramblers are noted. The former notes the public footpath would be unaffected subject to informatives reminding the applicant of relevant legislation. A footpath link between Public Footpath No. 2 Bourn and Broadway is requested by the Cambridge Group Ramblers. However given the nature of proposal, this cannot be justified through this development, and any demand placed on the applicant would be unreasonable, especially given they do not have control of the land to provide such a footpath.
38. Members need to balance the landscape harm highlighted against the benefits the scheme would bring in terms of renewable energy creation. In this instance, it is officer's views that the benefits do outweigh the harm.

Impact upon the Adjacent Heritage Assets

39. The dwelling of Mackshill Cottage to the northern side of Caxton Road is grade II listed. The Council's Conservation team have been consulted on the setting of this building, but no comments have been received. There will be minimal views from Caxton Road of the building and the development, given the screening along Caxton Road. However, the development would be visible when viewed from the rear garden. The land rises to the rear of the site, and then falls into a dip to the southern boundary of the application site. It does however rise again to a higher level.
40. There would therefore be long views of the proposal from the listed building. However, given the distance involved and the proposed hedge planting, the setting of the listed building should not be unduly harmed. The proposed planting would prevent some public views of the listed building. These would be from the bridleway to the north of the site given the proposed screening. At this distance, the building is not recognisable as a heritage asset and again, no harm to the setting of the listed building would result. As noted above, the solar panels would only be in situ temporarily, although that may constitute 25 years. Some harm caused is reversible in the future, although the planting would not be removed with the panels. The proposal should not result in sufficient glare to cause any loss of amenity to surrounding properties.

Impact upon the Amenity of the Occupiers of Adjacent Residential Properties

41. The proposal would only be visible from a small number of properties in the vicinity. These include dwellings along Caxton Road, and within the village of Cambourne to the north. Both would give different impacts. From Caxton Road, the site is likely to appear as a continuous area of blue. The dwellings are far enough away that the individual panels and structure would not be identifiable. From Cambourne, the rear of the panels will be visible from rear first floor windows of some properties at the southern end of the village. From here, the rears of the structures are likely to be visible, although additional planting would mean views would be further into the site. The panels would be viewed as shadowed or dark areas, and should not be distinguishable as to their exact nature. No harm should result from the outlook of any properties despite the views.
42. The access into the site would be located opposite two dwellings along Broadway. The Construction Traffic Management Plan shows the scheme will require 260 large vehicle movements during the 20 week construction period. It is anticipated that construction work would be "generally" between the hours

of 07.00-18.30 on weekdays, and 07.00-13.00 on Saturdays. The dwellings are a significant distance from the site and should not therefore be affected by noise from construction itself. They are likely however, to be aware of the large vehicles entering and exiting the site.

Impact upon Highway Safety

43. The application is accompanied by a Construction Traffic Management Plan, which shows the access to the site from Broadway will be via the existing farm track. This would require upgrading to accommodate construction traffic, particularly at the Broadway entrance. The Local Highways Authority has objected to the scheme as submitted, but has verbally confirmed the detail could be conditioned if necessary. The proposed upgrades can be conditioned to be done as per the submitted Management Plan, and completed prior to the erection of the solar panels.
44. The Management Plan does include a routing plan, which states traffic will be routed to the A428 rather than through the villages of Bourn or Caxton. The upgraded access has been designed to ensure large vehicles leave the site northwards. The Local Highways Authority has requested a routing condition, but the detail within the Management Plan is considered sufficient.
45. The Local Highways Authority also seeks further detail with regard to the proposed vehicle-to-vehicle visibility splays. Broadway is 40mph in this area, and a usual splay should be 120m. The splays shown within the Management Plan measure 78.5m. There would appear ample space for an increase in splay given the nature of the west side of Broadway, and a condition can therefore ensure this is achieved. The Management Plan also seeks to ensure parking for workers is within the site. No details of where this would be is provided, and therefore a further condition can be added to ensure a specific area is identified. Subject to the proposed conditions described, no highway safety issues should result from the proposed development.

Loss of Agricultural Land

46. Agricultural land is classified into five grades numbered 1-5, where grade 1 is excellent quality agricultural land, and grade 5 is very poor quality agricultural land. The site is made up of grade 2 (very good quality) land, defined as "land with minor limitations which affect crop yield, cultivations or harvesting. A wide range of agricultural and horticultural crops can usually be grown but on some land in the grade there may be reduced flexibility due to difficulties with the production of the more demanding crops such as winter harvested vegetables and arable root crops. The level of yield is generally high but may be lower or more variable than grade 1"
(<http://www.defra.gov.uk/foodfarm/landmanage/land-use/documents/alc-guidelines-1988.pdf>).
47. While the proposal would require a lot of works to the land. The frames for the photovoltaic panels would need to be piled into the ground, the transformer and inverter units would be set on gravel bases, and there would be a need for an underground trench to be built for cables to run. There would be disruption to the soil during the use. However, it is considered a temporary use, albeit for potentially 25 years, after which the land can be restored back to agricultural. The proposal would not lead to the loss of very good quality agricultural land in the long term.

Ecology Considerations

48. The application would remove an area of agricultural land, the proposal seeks a wildflower meadow to be created under the panels. The comments from Council's Ecology Officer and Natural England are noted. The wildflower meadow would be located close to the existing meadow beyond the northern boundary owned by the Wildlife Trust. This creates a biodiversity gain for the area, and correct management can be positive for species such as butterflies and Skylarks. The recommended Ecological Management Plan can be conditioned to ensure the mix and management of the meadow are appropriate. Natural England has also confirmed no harm would result to Bats or Great Crested Newts.
49. The application includes a landscape plan, which itself includes proposed planting around the site. The plan shows planting proposed to supplement the existing hedge to the western boundary, a hedgerow around the other three boundaries, tree planting to the north boundary and a group of trees in the southwest corner of the site. This would all aid the screening of the site. A landscape plan can ensure more precise details are provided given concerns by the Ecology Officer of the suitability of some species, and the level of tree cover proposed to the north boundary as discussed above.
50. The application includes the provision of a security fence around the site. In its current use, the site does act as a wildlife corridor for species such as Badgers, Foxes, and Deer. The fence should ensure permeability for these species to ensure they can still easily access and pass through the site. Precise details of the fence are not provided, and this should be provided through an appropriately worded planning condition. It is also noted information within various statements differ with regard to the height of the fence. This can be clarified through the same condition, although the preferred option is believed to have a total height of 2.5m.

Flood Risk

51. The majority of the site is within flood zone 1 and considered a minimal flood risk area giving the changes in levels in the vicinity. However, the drain running through the site does create a small area of land within flood zone 3b. The comments from the Environment Agency are noted in this regard. Rainfall that would usually land on the field could land on the solar panels, and drain into linear strips given the slope of the panels. This concentration in localised area has the potential to cause some problems.
52. The Environment Agency recommends a condition seeking provision of a strategic surface water drainage plan to be agreed in writing. This should take into account soil type and run-off levels given the impermeability of panels, and any associated compaction and erosion of the surrounding soil during and after installation. A 7-10m margin should be provided to the side of the drain to allow future maintenance. Such a condition can be added to ensure appropriate detailing, along with advice to be passed on as informatives.

Community Benefits

53. The applicant has submitted a draft Unilateral Undertaking seeking to erect solar panels on appropriate buildings within Bourn in association with the Parish Council. It also provides a financial contribution to Cambourne Parish

Council to contribute to its renewable energy scheme. Members should be aware that the applicant is under no obligation to make these contributions, and it is a gesture at the applicant's discretion. The Council's Legal Team are assessing the undertaking to ensure satisfactory wording. At the time of writing, no completed undertaking has been received.

Conclusion

54. To summarise the above, the development would cause identified harm to the landscape in the local area, especially giving the change of levels opening up longer views. No other harm has been identified that could not be controlled by way of appropriate conditions. The landscape harm has been balanced against the benefits of the scheme producing renewable energy. In this instance, the benefits are considered to outweigh the harm, particularly as the development is reversible and no long term harm would result. Further planting will be required to help screen the site during its life, and this should be of an appropriate nature to not cause any harm when the panels are removed.

Other Matters

55. The comments from the County Archaeology Team are noted. Archaeology works were completed at pre-application stage and therefore there is no requirement for any further works to be sought.

Recommendation

56. Approve, subject to conditions regarding the time for implementation, approved plan numbers, precise details of the security fencing, landscape plan and its implementation, Ecological Management Plan, parking within the site, timing of deliveries, vehicle routing as per the Construction Traffic Management Plan, confirmation of vehicle-to-vehicle visibility splays, access to the site as per the approved plan only, and a strategic surface water drainage plan.
57. Informatives as recommended by the Environment Agency and the County Council Definitive Map and Records Team shall also be added

Background Papers: the following background papers were used in the preparation of this report:

- **Local Development Framework Development Control Policies 2007**
- **Development Affecting Conservation Areas SPD** – adopted January 2009, **Trees and Development Sites SPD** – adopted January 2009, **Biodiversity SPD** – adopted July 2009, **Listed Buildings SPD** – adopted July 2009, **Landscape in New Developments SPD** – adopted March 2010 & **District Design Guide SPD** – adopted March 2010.
- **National Planning Policy Framework**
- **Planning Ref Files: S/1611/12/FL**

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