

**Application No:**W13 / 0138

**Town/Parish Council:** Barford  
**Case Officer:** Emma Spandley  
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**Registration Date:**12/02/13  
**Expiry Date:**09/04/13

**22 Keytes Lane, Barford, Warwick, CV35 8EP**

Installation of a micro-hydro turbine with small control building FOR MsHealey  
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This application is being presented to Committee due to the number of objections received.

**RECOMMENDATION**

Planning Committee are recommended to grant planning permission subject to the attached conditions.

**DETAILS OF THE DEVELOPMENT**

The application proposes the installation of a micro hydro turbine and an associated control hut. The turbine will be located in an underground channel situated in the island. Water will be diverted through this channel from the weir and then returned to the river. The control hut will be located on the island adjacent to the weir.

**THE SITE AND ITS LOCATION**

The application site is an island located within the River Avon within the Barford Conservation Area and is connected to No.22 Keytes Lane by a bridge for their sole use.

The Conservation Area was designated in 1969 and included the island.

The character of the village is defined by the diversity of historic properties as well as more modern 1950s properties both listed and un listed which line the four main thoroughfares.

There are significant open areas within the Conservation Area and the character of the river frontage is one of them.

The island benefits from mature trees and shrub vegetation and has a bosky feel.

**PLANNING HISTORY**

There is no relevant planning history relating to the island.

## **RELEVANT POLICIES**

- DP1 - Layout and Design (Warwick District Local Plan 1996 - 2011)
- DP2 - Amenity (Warwick District Local Plan 1996 - 2011)
- DP3 - Natural and Historic Environment and Landscape (Warwick District Local Plan 1996 - 2011)
- DP9 - Pollution Control (Warwick District Local Plan 1996 - 2011)
- DP13 - Renewable Energy Developments (Warwick District Local Plan 1996 - 2011)
- National Planning Policy Framework
- DAP3 - Protecting Nature Conservation and Geology (Warwick District Local Plan 1996 - 2011)
- DAP8 - Protection of Conservation Areas (Warwick District Local Plan 1996 - 2011)

## **SUMMARY OF REPRESENTATIONS**

**Barford, Sherbourne & Wasperton Joint Parish Council** - No objection

**Environment Agency** - No objection

**WCC (Ecology)** - No objection

**Environmental Health** - No objections

**Public responses** - objections have been received regarding the design and siting of the control hut, the loss of trees on the island, the impact on wildlife, noise and vibration from the turbine; the affect of the character and appearance of the Conservation Area and impact on the water flow.

### **Assessment**

The main issues in the consideration of this application are:-

- The principle of the proposed development;
- The impact on the waterway and ecological issues;
- The impact on the setting of the Conservation Area;
- The impact on the amenity of neighbouring residents.

The principle of the proposed micro hydro turbine and associated control hut.

The National Planning Policy Framework states that planning plays a key role in helping shape places to secure radical reductions in greenhouse gas emissions, minimising vulnerability and providing resilience to the impacts of climate change and supporting the delivery of renewable and low carbon energy and associated infrastructure. The NPPF further states Local Planning Authorities should adopt proactive strategies to mitigate and adapt to climate change. Paragraph 95 of the NPPF states that Local Planning Authorities should actively support energy efficiency improvements to existing buildings and paragraph 97 says the Local Planning Authorities should have a positive strategy to promote energy from renewable and low carbon source, which comply with the adopted Local Plan policies.

Policy DP12 of the Warwick District Local Plan 1996 - 2011 states that the prudent use of natural resources is a key objective of the UK Sustainable Development Framework. Government guidance states that energy conservation and efficient use of energy are considerations of the Local Plan.

Policy DP13 of the Warwick District Local Plan 1996 - 2011 and the Supplementary Planning Document - Sustainable buildings, require and encourage the efficient use of energy and the use of renewable sources of energy.

It is considered that the installation of a micro hydro turbine and associated control hut is in accordance with the aforementioned policies and is acceptable in principle.

#### The impact on the waterway and ecological issues.

The National Planning Policy Framework states valued landscapes should be protected and enhanced; and development should minimise its impact on biodiversity and protect habitats and wildlife whilst Policy DP3 of the Warwick District Local Plan 1996 - 2011 states development will only be permitted which protects important natural features and positively contributes to the character and quality of its natural environment. Applications are therefore required to protect local ecology and local landscape character.

The Environment Agency are satisfied that an eel pass is being installed as part of the scheme and the basic details are acceptable. Several conditions with regards to technical details will be issued at the permit stage which is not necessary for the planning application.

The proposed details of the scheme are acceptable from a flood risk point of view. The Environment Agency have issued a Flood Defence Consent for the proposed scheme.

Part of the island is designated as part of the River Avon Local Wildlife Site (LWS), there are otter records on the river Avon and numerous records of bats, badgers and hedgehogs.

The proposed scheme will impact on a 30 metre stretch of the riverbank, proposals include cutting into and reconstructing the bank with "Cornish hedging" style stone-walling, and laying concrete slabs on the riverbed for reinforcement, both of which could potentially lead to denaturalisation of the riverbank locally. However, given the small-scale of the proposed works and the fact that the area of bank to be affected is already denaturalised as a concrete retaining wall, ecology consider it unlikely that the integrity of the LWS will be degraded long-term as a result of the works.

A Protected Species Assessment has been submitted as part of the application. Ecology agree with the findings of the report that the site is unsuitable for water voles and white-clawed crayfish, and therefore there will be no impact on these species. The report states the site has suitability for otters but, as works are localised and will only be carried out during daylight hours, ecology consider there will be no impact on these species.

Ecology had raised concerns that the proposed turbine could kill or harm fish using the river, however, ecology welcome the inclusion of fish screens in the

turbine design to minimise potential harm to fish. Ecology welcomed the inclusion of an eel pass as eels were known to use this area of water. At ecology's and the Environment Agency's request eel passes have been included within the design.

Ecology raise no objections to the proposed scheme and would welcome a condition relating to the planting of the Green roof. It is therefore considered the proposed turbine and associated works will not have a detrimental impact on ecological issues.

#### The impact on the setting and appearance of the Conservation Area.

Policy DAP8 of the Warwick District Local Plan states all development will be required to preserve or enhance the special architectural and historic interest and appearance of Conservation Areas. All development will be expected to respect the setting of the Conservation Areas.

All trees in Conservation areas are subject to controls which enable the District Council to protect the special character of the area created by the trees.

A tree application has been submitted to fell four sycamore trees, which has been approved. The main issue in the consideration of Conservation tree works applications is whether they are worthy of a Tree Preservation Order (TPO). It was considered that as there were other trees which would retain screening when viewed from neighbouring properties. It was acceptable to remove them. Therefore the removal of the trees is not subject to this application.

Turning to the impact of the proposed hydro turbine and control hut. The hydro turbine will be located in an underground channel situated on the island adjacent to the existing weir. The intake wall will use local stone and earth that will quickly encourage plant cover. The roof will be constructed as a 'green' or 'living' roof that will be covered by vegetation. The control hut will be located adjacent to the turbine, on the island. It will be constructed from cotswold stone at floor level with the upper portion of the walls being constructed of cob or rammed earth.

Historically, the island was home to a water mill, which used the water flow from the weir, which in the early 20th Century was used to provide electricity for Barford.

It is considered due to the position of the turbine adjacent to the existing weir and the materials in which the control hut will be constructed from, the proposed development will have a neutral impact on the appearance of the Conservation Area.

#### The impact on the amenity of neighbouring residents.

Policy DP9 of the Warwick District Local Plan states development will only be permitted which does not give rise to noise and water pollution.

Several readings have been submitted which show that the current decibel level of the weir on average is 90DBa and the motorway noise from the M40 is around 60DBa. The 15kw turbine produces 64 DBa noise level in a 1 metre radius when running on maximum power.

The building is considered to have a constructed element which will achieve the necessary sound attenuation of the proposed generator and Environmental Health are satisfied with the information which has been provided.

It is considered that the proposed turbine and associated control hut will not have an adverse impact on the amenity of the residents located opposite the island through increased noise and disturbance in accordance with the aforementioned policies.

### **Summary/Conclusion**

The Government actively encourages the adoption of proactive strategies to mitigate and adapt to climate change and supports a more low carbon future. To achieve a low carbon future the development of renewable energy, alongside other improvements will make a contribution. The promotion of small scale, on-site, renewable energy technology is covered within Policy DP13. Any development which generates energy from renewable resources as long as they do not have an unacceptable impact on local amenity including visual appearance & noise and the natural environment, is considered acceptable. The information submitted in support of this application has adequately address the concerns raised and therefore is in accordance with national and local policy.

### **CONDITIONS**

- 1 The development hereby permitted shall begin not later than three years from the date of this permission. **REASON:** To comply with Section 91 of the Town and Country Planning Act 1990 (as amended).
- 2 The development hereby permitted shall be carried out strictly in accordance with the details shown on the site location plan, site plan and approved drawing showing the proposed control hut submitted on 6th February 2013 and specification contained therein **REASON :** For the avoidance of doubt and to secure a satisfactory form of development in accordance with Policies DP1 and DP2 of the Warwick District Local Plan 1996-2011.
- 3 No development or other operations (including demolition, site clearance or other preparatory works) shall be commenced until adequate steps, which shall have been previously approved in writing by the local planning authority, have been taken to safeguard against damage or injury during construction works to protect the root systems, trunks and lower canopies of trees directly within proximity to the structure and along the access route for a 13. tonne tracked excavator. (In particular no excavations, site works, trenches or channels shall be cut or pipes or services laid, no fires shall be lit within 10 metres of the nearest point of the canopy of any protected tree(s); no equipment, machinery or structure shall be attached to or supported by a protected tree(s); no mixing of cement or use of other contaminating materials or substances shall take place within, or close enough to, a root protection area that seepage or displacement could cause them to enter a root protection area, or any other works be carried out in such a way as to cause damage or injury to the tree(s) by interference with their root structure and that no soil or waste shall be deposited on the land in such a position as to be likely to cause damage or injury to the tree(s).)

**REASON:** To protect those trees which are of significant amenity value to the area and which would provide an enhanced standard of appearance to the development in accordance with Policy DP3 of the Warwick District Local Plan 1996-2011.

- 4 The external materials of the control hut shall be built in cob or rammed earth, with a green or live roof as indicated on the approved drawing of the control hut. **REASON :** To ensure that the visual amenities of the area are protected, and to satisfy the requirements of Policy DP1 of the Warwick District Local Plan 1996-2011.

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