Application No:	12/3280M
Location:	QUARRY BANK MILL, QUARRY BANK ROAD, STYAL, CHESHIRE, SK9 4LA
Proposal:	Construction of a new fish & eel pass, and hydro electric power scheme adjacent to Styal Weir on the Bollin at Quarry Bank Mill
Applicant:	Tom Slater, National Trust
Expiry Date:	23-Oct-2012

## Date Report Prepared: 25 October 2012

## SUMMARY RECOMMENDATION

Approval subject to the views of the Council's Nature Conservation Officer.

## MAIN ISSUES

- Impact on the character and appearance of Styal Conservation Area and the setting of Quarry Bank Mill, Grade II\* Listed;
- Impact on the openness of the Green Belt;
- Impact on Protected Species and Protected Trees.

## **REASON FOR REPORT**

This application relates to Quarry Bank Mill, which is designated as Grade II\* Listed. Due to the nature of the proposed development it is considered appropriate for the application to be determined by Members of the Northern Planning Committee.

## DESCRIPTION OF SITE AND CONTEXT

This application relates to land positioned upstream of Quarry Bank Mill, south of Styal Weir. This is referred to as an 'island' as it is surrounded by water to the north, south and west. The site slopes steeply to the north and is largely overgrown.

The site is situated within Styal Conservation Area, an Area of Special County Value and is blanketed by the North Cheshire Green Belt.

## DETAILS OF PROPOSAL

Approval is sought for the installation of a hydro electric system to provide energy for the mill, a fish pass to enable fish to migrate up the Bollin and a temporary access road and site compound during the construction phase.

This is a partnership project between The Environment Agency and The National Trust.

## **RELEVANT HISTORY**

There is no site history relevant to the determination of this proposal.

# POLICIES

# **Regional Spatial Strategy**

- DP1 Spatial principles applicable to development management
- DP2 Promote sustainable communities
- DP7 Criteria to promote environmental quality
- DP9 Reduce emissions and adapt to climate change
- EM17 Renewable energy
- RDF2 Rural area

# **Local Plan Policy**

- BE1 High standards of design
- BE2 & BE3 Preservation of historic fabric and the character of the Conservation Area
- BE16 Development affecting the setting of a Listed Building
- NE1 Areas of Special County Value
- NE2 Protection of landscapes
- NE11 Nature conservation
- GC1 New buildings in the Green Belt
- DC1 High quality design for new build
- DC3 Protection of the amenities of nearby residents
- DC6 Circulation and access
- DC13 Noise
- DC62 Renewable energy

# **National Planning Policy Framework**

- Chapter 7 Requiring good design
- Chapter 9 Protecting Green Belt land
- Chapter 11 Enhancing the natural environment
- Chapter 12 Conserving and enhancing the historic environment

# **CONSULTATIONS (External to Planning)**

**Manchester Airport:** No objection subject to an informative to advise the applicant that a 'crane permit' should be obtained, if necessary, from Manchester Airport Airfields Operations at least 1 month in advance of requiring the use, or erection of, a crane or tall construction equipment.

Environmental Health: No objection.

English Heritage: No objection.

The society for the Protection of Ancient Buildings: No objection.

# **VIEWS OF THE PARISH / TOWN COUNCIL**

Styal Parish Council: No objection.

## **OTHER REPRESENTATIONS**

No representations have been received at the time of preparing this report.

The last date for comments expired 20<sup>th</sup> October 2012.

## **APPLICANT'S SUPPORTING INFORMATION**

This application is supported by the following documentation:

- **Design and Access Statement;** this document outlines the necessity of the scheme, an assessment of the design and scale of the structures, details of the environmental benefits, sustainability justification, flood risk, landscape and access;
- Heritage Impact Assessment; this document provides an overview of the historical context of the site. It looks at the significance of the proposal and outlines the pros and cons of five options considered prior to submission;
- Ecological Report;
- Flood Risk Assessment;
- Hydro-Electricity Scheme Noise Assessment;
- Construction Method Statement.

Full copies of each of these documents are available to view on the application file.

### **OFFICER APPRAISAL**

### Policy

Paragraph 12 of the National Planning Policy Statement (NPPF) states that the "National Planning Policy Framework does not change the statutory status of the development plan as the starting point for decision making. Proposed development that accords with an up-to-date Local Plan should be approved and proposed development that conflicts should be refused unless other material considerations indicate otherwise."

When considering the weight to be attached to development plan policies, paragraphs 214 and 215 enable 'full weight' to be given to Development Plan policies adopted under the 2004 Act. The Macclesfield Borough Council policies, although saved in accordance with the 2004 Act are not adopted under it.

Consequently following the guidance in paragraph 215 'due weight should be given to relevant policies in existing plans according to their degree of consistency with this framework (the closer the policies in the plan to the policies in the Framework, the greater the weight that may be given)'. All of the policies listed are considered consistent with those of the NPPF and should be given due weight.

## Design and Conservation

This application is a combined project comprising of a Fish Pass and a Hydro Electricity scheme. Both elements of the project have been carefully designed and considered to take account of the site and wider surroundings.

The proposed Fish Pass comprises a stepped trench set within the bank, running from the south-west to the north-east enabling fish to travel along the pass to reach the upper stretches of the Bollin. The Hydro system would sit adjacent to the Fish Pass and would comprise a submerged pipe that would lead to a turbine located on the north-eastern side of the island.

The Fish Pass and Hydro system would be served by water entering a purpose built 'intake' structure that would be constructed within the river bank on the south-western side of the island.

For the most part the Fish Pass, Hydro system and purpose built 'intake' would be either at, or below ground level and as such would be largely unobtrusive within the wider area.

The pipe serves the turbine as the water re-enters the river to the south-west. Generated electricity is to be fed back into the Mill by a submerged cable that would be below the proposed footpath running north-east from the site to the Mill building. Turbulence in the water generated by the turbine would attract fish and other creatures to the fish pass and away from the Weir.

The Turbine is to be enclosed within a building, positioned on the bank, on the southern side of the island approximately 32m east of the Weir. The building would measure approximately 5.1m above the existing water level, and approximately 3m in height when measured from the highest adjacent ground level. The site slopes steeply south to north and the structure would be positioned below the main footpath. It would sit against the backdrop of the bank and for that reason would not appear visually intrusive to views from the 'Meadow' opposite or from Quarry Bank Mill.

It is proposed to clad the building in concrete render to ensure durability taking account of the high possibility of flooding and constant spray from the Weir. Though concrete, as a material, can appear industrial; due to the proximity of the building to the water this material will age and green over in time. The use of concrete as a functional engineering requirement along the river bank would not be unique.

### Conservation

Local Plan policy BE3 comments that development will only be permitted on or adjoining a Conservation Area which preserves or enhances the character or appearance of the Conservation Area. Special attention will be paid to matters of bulk, height, materials, colour and design. Additionally, Local Plan policy BE16 advises that development which would adversely affect the setting of a Listed Building will not normally be allowed.

Historically, the 'island' acted as a viewing platform allowing uninterrupted views of the Mill and the adjacent Meadow. This is evident through photographic records. The project as a whole will re-instate the 'island' as a viewing platform of the Mill, which is to be achieved through the removal of a number of trees. Trees on the site are self seeded and are of limited value. Taking account of the historical context of the site, it is considered that these trees currently detract from the setting of the Listed d Building and their removal would not be considered unduly harmful.

Associated footpaths and handrails have been designed to be consistent with those already present on the estate and are considered appropriate.

The Council's Conservation Officer has been consulted as part of the case officer assessment and no objections or concerns have been raised.

## Ecology

Further information in respect of Protected Species was been requested following consultation with the Councils Ecologist. These details have been submitted, however to date no comments have been provided.

Any further comments will be provided as part of an update to Committee Members.

## Trees

This application is supported by an Arboriculture Report and the Councils arboriculturalist has been consulted and has provided the following comment.

The submitted report identifies the removal of a number of groups of trees within the proposed work area. These comprise of various semi mature and early Hawthorn, Ash, Rowan, Sycamore, Oak and Birch. All of these have been assessed as category C trees, which have limited contribution to the amenity and landscape character of the area. Four trees (Willow and Alder) located to the south west of the works are to be pollarded for arboricultural reasons and no objection has been raised in this respect.

Ground works would be required in order to upgrade and instate an access track. In accordance with BS5837:2012 A Method Statement should be submitted. The statement should include details of the suitability of the temporary access track to accommodate expected loads without affecting soil bulk density and the rooting environment of the retained hedgerows and trees.

The access track passes within the Root Protection Area (RPA) of two mature Oak trees. The default position in the new British standard is that all construction should be outside the RPA of trees, unless it can be demonstrated otherwise.

The proposed track also interfaces with a third mature Oak over temporary ramp. It appears that the position of the access and ram conflicts with the RPA of this Oak and it therefore needs to be demonstrated that the track and ramp will not affect the rooting environment of this particular tree.

The concerns raised by the Councils Arboricultural Officer can be addressed by condition and it is therefore considered unreasonable to refuse this application on such grounds.

### **Green Belt**

Local Plan policy GC1 states that 'within the Green Belt approval will not be given, except in very special circumstances, for the construction of new buildings unless it is for one of the following purposes:

- Agriculture and forestry;
- Essential facilities for outdoor sport and outdoor recreation;
- Limited extension/alteration of an existing dwelling;
- The replacement of an existing dwelling;
- Limited infilling within specified settlements;
- Limited affordable housing;
- Development within major development sites'.

These exceptions are not applicable in this case and the development would therefore constitute inappropriate development in the Green Belt.

Paragraph 87 of the NPPF states that 'inappropriate development is, by definition, harmful to the Green Belt and should not be approved except in very special circumstances'. Paragraph 88 goes on to advise that 'Very special circumstances' will not exist unless the potential harm to the Green Belt by reason of inappropriateness, and any other harm, is clearly outweighed.'

Whilst the proposal amounts to inappropriate development, the proposed building and engineering works will have a very limited impact on the openness of the Green Belt because of the way they are inset into and above the existing river bank. The access and site compound are for a temporary period only and therefore any harm will be limited to a 2 year period.

### Very Special Circumstances

The applicant has outlined the ecological, environmental and educational benefits of the scheme as very special circumstances which are detailed as follows:

### Ecological benefits:

Currently the weir acts as a significant barrier to the upstream movement of fish in the River Bollin. The fish pass would open up key spawning habitat in the upstream reaches of the Bollin catchment.

The Environment Agency have identified the installation of a fish and eel pass as the most suitable solution to return connectivity between the adjacent upstream and downstream reaches of the river. The aim of this project is for the Bollin to reach Good Ecological Status by 2015.

### Environmental/sustainability benefits:

In 2011 Quarry Bank Mill consumed 339.545MWh of Grid Electricity, which would produce 178 tonnes of CO<sub>2</sub>.

The proposed hydro scheme is predicted on an average year to generate 210,000 KWh of electricity. The electricity generated will be connected to the Mill. As the average production of Hydro Electric from this scheme is lower than demand during the Mill's operating times (0830 - 1800) and higher during the evening times (18.00 - 08.30) the scheme is anticipated to displace 40 - 50% of grid consumption for the property.

Surplus energy (approximately 60%) will be exported into the Grid.

It is anticipated that the Hydro Electric Scheme will reduce Quarry Bank Mill's Carbon Footprint by approximately 70 tonnes and the scheme will displace on average 110 tonnes of carbon per annum.

## Education

Quarry Bank Mill has a long standing commitment to education. A dedicated Learning Department runs a formal education programme and in 2011 the property received 29,000 school visits.

Both elements of the scheme will include on site interpretations to inform visitors about the project. The Fish Pass will include a fish counter and camera linked to imagery in the Mill. The Power House for the Hydro Electric Turbine will include a viewing window.

The scheme will give all visitors an understanding of the practicalities and issues around energy, water, self-sufficiency and the environmental impacts of properties such as Quarry Bank Mill.

The development will enhance the existing educational aspects of the Mill. It will provide an understanding of the 21<sup>st</sup> century approach to energy efficiency.

Paragraph 14 of the NPPF advises that 'At the heart of the NPPF is a presumption in favour of sustainable development, which should be seen as a golden thread running through both plan-making and decision-taking'.

Taking account of the ecological, environmental and educational benefits put forward within the applicants submission, it is considered that the benefits of the project would significantly and demonstrably outweigh any adverse impact to the Green Belt.

### Other

### Access

Access for all construction plant will be made via a temporary access track starting at Apprentice House, off Quarry bank Road. It would run along an existing access track to the east of the public car park and turning west over a public footpath (FP21), and across fields to the Old Mill Race.

The existing farm track would be un-graded by filling potholes with clean, imported stone in order to provide a smooth sunning surface. The 'new' section of the access track would involve removing the topsoil, which would be set aside to be reinstated once works are complete. Layers of clean, imported stone and geo-textile would be laid to form a smooth running surface.

Following completion of the works, the stone and any geo-textile used is to be removed and the top-soil would be re-laid. This area would then be seeded with local species and it is expected that it would recover by the end of the following growing season.

## Compound

A site compound is proposed that would be positioned in the field adjacent to the application site, to the south east. The compound is required to provide adequate and accessible welfare facilities to those working on the project, and storage facilities for machinery and materials.

The compound would be fenced and locked when unoccupied.

Though the compound and access track would be visible forms of development that would have some degree of impact on both the openness of the Green Belt and the setting of the Conservation Area; they are temporary and the field would be re-instated following completion of the development.

## CONCLUSIONS AND REASON(S) FOR THE DECISION

Approval is sought for a combined fish pass and hydro electricity scheme and associated temporary access track and compound. The scheme offers and exciting opportunity to demonstrate a modern approach to hydro power. The development would support the concept of Quarry Bank Mill and would further enhance the educational facilities already available to all visitors.

The very special circumstances outlined by the applicant are considered to significantly outweigh any harm to the Green Belt. The proposal would not be considered to detract from the setting of the Mill or the character of the wider Conservation Area.

The proposed scheme is considered to accord with relevant policies and a recommendation of approval is given, subject to further comments from the Council's Ecologist.

**RECOMMENDATION:** Approve subject to following conditions

- 1. Commencement of development (3 years)
- 2. Development in accord with approved plans
- 3. Materials as application
- 4. Construction specification/method statement
- 5. Tree protection
- 6. Access Track

