

**CABINET  
6<sup>TH</sup> AUGUST 2020**

**REPORT OF THE HEAD OF PLANNING, ECONOMY AND REGENERATION**

**HYDRO-MILLS PROJECT UPDATE – TIVERTON WEIR.**

**Cabinet Member(s):** Cllr Graeme Barnell

**Responsible Officer:** Mrs Jenny Clifford, Head of Planning, Economy and Regeneration

**Reason for Report:** To update Cabinet members on the development of the Tiverton Weir element of the Hydro-Mills project and to seek approval to progress the project through the planning process and for the project to be funded through the revised capital programme.

**RECOMMENDATION:**

- 1. Cabinet support the project and agree that officers proceed to submit the planning application**
- 2. Cabinet agree that officers bring the scheme forward for inclusion within the revised capital programme**

**Financial Implications:** To progress with the project will require a commitment of £815k of capital funding, which would be recovered over a 16 year period subject to the source of the funding.

**Budget and Policy Framework:** The project costs identified within this report are within the budget identified for this year (2020/21). Should there be any delay in the programme then there would need to be consideration as part of the Council's deliberations with regard to next year's budget setting as to whether parts of this budget could be rolled over. Officers continue to investigate opportunities to seek external funding support which could lower the Council's level of contribution.

The project helps to deliver aspirations of the Corporate Plan, the Economic Strategy and is consistent with our pledge under the Climate Change Declaration.

**Legal Implications:**

The project would have implications regarding lease arrangements with the owners of the weir, or in terms of purchasing the land. There may also be insurance implications which should be fully resolved. The project would be required to go through a tendering and procurement process in line with Mid Devon District Council's procurement procedures and the Public Contracts Regulations 2015. If there is excess energy from the scheme and the Council wishes to enter into a formal arrangement to sell this excess, a contract may need to be drawn up.

Whether under a lease or through full ownership, the Council will need to be mindful of the implications of the Occupiers Liability Act 1984 – in the context of risks arising from trespass on the land. For example, a person can be lawfully in a place, but become a trespasser through their failure to follow advice/warnings e.g. "no swimming". The 1984

Act imposes certain obligations on owners/occupiers of premises with regard to trespassers and their safety.

**Risk Assessment:** This is incorporated within the associated business case for the project.

**Equality Impact Assessment:** No equality impacts are anticipated.

**Impact on Climate Change:** This project will have a significant impact on the Council's climate change priorities. Hydroelectric generation is a clean, renewable energy source with one of the longest lifespans of any existing renewable technology. It should be capable of providing energy to Phoenix House for between 50 -100 years with reasonable maintenance.

The proposal will support the growth of the low carbon business sector within the District, and will act as a pilot for other hydroelectric generation projects being led by local riparian owners who have formed the local business, the Hydro Mills Group Ltd.

The project will help to raise awareness in the local community about renewable energy technologies, and will act as an educational facility for the community and local schools.

Through the delivery of the fish pass which will run alongside the hydro scheme, there will be expected improvements to the ecology of the river Exe, as it will be easier for fish and other aquatic creatures to navigate the weir.

**Relationship to Corporate Plan:** The project directly contributes towards key objectives within the Council's Corporate Plan 2020 – 24. The objectives it contributes towards include:

- Encourage retro-fitting of measures to reduce energy use in buildings
- Encourage hydro energy and wind power as "green" sources of energy, supply new policies and develop plans to decarbonise energy consumption in Mid Devon
- Promote zero carbon exemplar sites with commercial settings

## **1.0 Background**

1.1 The Hydro Mills Group was formed in late 2016 as a means of taking forward hydroelectric generation projects at public, private commercial and residential sites. This has led to collaborative work between the District Council and the Hydro Mills Group to explore opportunities to deliver schemes at a number of sites, and the group has garnered the interest of over 200 riparian land owners who are all keen to take forward schemes in the future.

1.2 Mid Devon District Council has been looking specifically at Tiverton Weir, and the potential to install a 150kW twin Archimedes screw generator system which could be connected to Phoenix House to mitigate the energy needs of the building, and to increase the amount of energy generated by the Council's existing solar PV array which can be exported.

## **2.0 Current Position – Tiverton Weir**

2.1 Over the past 18 months MDDC has spent just over £20,000 on consultancy work to gain all of the necessary licenses and permissions from the Environment Agency

(EA) to install a scheme at Tiverton Weir. These application are all submitted and dialogue is ongoing throughout the process between the consultant and the EA to gain the full permissions.

- 2.2 MDDC is now at the point where a planning application is being developed (to MDDC) so that the scheme could be constructed, with a suitable housing unit in place for the engineering equipment to be monitored and protected. Following a positive pre-application meeting in late December architectural designs have been produced for the structure and its housing, and a detailed noise survey for the site has been commissioned.

### 3.0 Timeline and Milestones

- 3.1 Given the current progress of the project, and with reaching the key milestone of the EA applications being made, the remaining stages of the process are set out as follows:

| Action  | Estimated date   |
|---|------------------|
| <b>Stage 1</b>  |                  |
| LT Decision whether or not to include project on forward plan           | February 2020    |
| Seek cabinet approval to fund project subject to planning + EA outcomes | Aug/Sep 2020     |
| <b>Stage 2</b>  |                  |
| Planning application submission   | Aug 2020         |
| EA permissions result   | Sep/Oct 2020     |
| Development of tenders with procurement                                 | Oct 2020         |
| Planning application decision   | Nov 2020         |
| <b>Stage 3</b>  |                  |
| Issuing of tenders  | Dec 2020/Jan2021 |
| Selection process (awarding of contract)                                | Feb 2021         |
| Implementation  | Mar 2021         |

- 3.2 At the end of each phase is a natural break in the project where it is expected that the project board (with representation from Leadership Team, Cabinet, and the GED team) would meet to approve moving the next phase.

### 4.0 Latest Financial Projections

- 4.1 The latest figures have been revised following the discussions with the Environment Agency. They include a significant increase in the CAPEX cost of the scheme, whereby a further £40,000 has been added for the advanced fish pass, and £100,000 for an accessible building which will sit over the scheme. The £100,000

figure is anticipated to be an upper estimate, however, it will only be once detailed designs are produced by the architects, that this element can be accurately costed. It is hoped to be revised down as this work progresses, and already includes a 10% contingency. The project is forecast to cost a total of £815,000.

- 4.2 Other changes from the original figures revolve around the FITs (Feed in Tariffs), which government ended in March 2019. This means that the value of the generated electricity is lower than it would previously have been, though the actual energy generation is not changed.
- 4.3 These changes result in an increase in the payback period. However, they still show that the scheme should have an ROI (return on investment) of at least 6.24% per annum (estimated based on current cost of scheme and value of energy produced).
- 4.4 The GED team is exploring further opportunities to bring funding into the project which would reduce the overall cost of the scheme, improving the ROI. This work will continue in parallel with the stages detailed above. However, it is recommended that Cabinet approve the full amount of funding through the revised capital programme as not doing so would mean returning to Cabinet for a further decision to be made at a later date, which could delay the process.

## **5.0 Summary**

- 5.1 The opportunity to develop a hydroelectric scheme at Tiverton Weir will help the Council to meet its carbon reduction objectives and will provide a very publicly accessible renewable development within the local community to show that the climate agenda is taken seriously. The energy generated would be greater than the energy use of Phoenix House, directly saving the local authority approximately £50,000 per annum on energy bills, and complimenting the existing solar PV system. Excess energy would be sold back to the grid through a Power Purchase Agreement with an energy supplier.
- 5.2 The project will help to attract investment from businesses operating within the green economy, and will help to support other hydro generation activities being developed collaboratively with the Hydro Mills Group, a Mid Devon based company consisting of riparian owners.
- 5.3 For Tiverton it will also create a focal point along Rotary Way (the path alongside the river Exe), helping to bridge the divide between the recognised town centre and West Exe areas. It could further lead to additional community focused activities along the riverside, including art projects and summer events.
- 5.4 A wider benefit to the project will be the expected biodiversity improvements on the river Exe, with an advanced fish pass and other measures being added to help protect and enhance the river's ecology.

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**Circulation of the Report:** Cllr Graeme Barnell

**List of Background Papers:**

**Appendix 1. Business case for the Hydro Mills Project – Tiverton Weir  
(Attached separately)**

**Appendix 2. Initial design work from Fox Architects  
(Attached separately)**