

ARROW VALLEY PARK SAFETY IMPROVEMENTS

Relevant Portfolio Holder	Cllr Brandon Clayton, Portfolio Holder for Environmental Services Cllr Mike Rouse, Portfolio Holder For Leisure and Culture
Portfolio Holder Consulted	Yes
Relevant Head of Service	Guy Revans
Ward(s) Affected	Abbey, Winyates, Lodge Park, Greenlands & Matchborough.
Ward Councillor(s) Consulted	
Key Decision / Non-Key Decision	Yes

1. SUMMARY OF PROPOSALS

This report sets out the background to the proposed improvement works to the weirs in the Arrow Valley Park to provide safety and biodiversity improvements and the funding arrangements required to implement these works.

2. RECOMMENDATIONS

The Executive Committee is asked to **RECOMMEND** the following:-

- 1. The council agrees to additional capital funding of £35,000 in 2019/2020 in addition to the £180K already included in the Medium Term Financial Plan for the proposed improvement works to the weirs in the Arrow valley Park; and**

to RESOLVE, subject to Recommendation 1 being approved that:

- 2. Authority be delegated to the Head of Environmental and Housing Property Services to procure the works at each of the sites.**

3. KEY ISSUES

Financial Implications

- 3.1 Currently all the costs around the project are all based on estimates, the costs generated for each of the identified sites are based on figures provided by an external quantity surveyor. The “other” costs have been estimated (except the technical designs, which are being procured by the EA).
- 3.2 To implement the preferred option at each of the four sites, the total cost of works is approximately £312,000 as well as associated additional costs of

£75,000. The estimated overall cost of all the works (including designs) is just below £440,000, due to other contributions highlighted, the cost to the council is estimated at approximately £215,000. Table 1 below shows a summary of the financial breakdown.

Table 1 - Current best estimated financial figures

Summary of Total Project Costs			
Site Costs		Funding Available	
New Meadow Weir	£ 100,442.54	Network Rail Contribution	£ 20,000.00
Broad Ground Road Weir	£ 115,328.44	Partnership Underspend	£ 13,500.00
Five Tunnels	£ 35,955.10	EA 18/19 FY Underspend	£ 50,000.00
Papermill Weir	£ 26,749.00		
Abbydale	£ 34,000.00	Unsecured Funding	
		Small Habitats Contribution	£ 141,500.00
Other Costs		RBC Capital Bid	£ 215,000.00
Technical Designs	£ 50,000.00	Total	£ 440,000.00
Interpretation	£ 5,000.00		
Watching Breifs	£ 20,000.00		
CDM Co ordination	£ 30,000.00		
PM Costs	£ 20,000.00		
Exc Abbydale & Design	£ 278,475.08		
Extra Costs Total	£ 75,000.00		
Total	£ 353,475.08	Total Project Cost	£ 437,475.08

3.3 There are a number of potential savings that are anticipated as a result of the proposed works:-

- Freeing up staff resources required for checking safety equipment. Since rescue equipment and signage were installed in 2014 there has been a requirement for staff to check this is in place. In 2018, 103 staff visits were made to check throw lines at paper mill and five tunnels sites. The burden of these inspections is also disproportionately required during summer months when park use is typically greater. Following completion of works this safety equipment would be removed.
- Sites which are assessed at high and increased risk under the RoSPA risk assessment method are re assessed ever year. A reduction in the risk classification means that sites can be assessed ever three years instead of annually.

3.4 There is currently no provision in existing budgets to finance this proposed work. It has been included within the council's Medium term Financial plan, however money for this work would have to be borrowed and the associated longer term

impact on council finances to consider. There would not be a requirement to transfer money from any existing reserves.

- 3.5 As indicated in table 1 and paragraph 3.2 the overall cost to the council of works is around 50% of the total cost. Obviously while there is still a significant contribution required by the council, funding from other sources results in considerably more benefit being delivered for the council's investment.
- 3.6 There are limited other options which can be implemented to deliver the same safety improvements. There have already been suitable fencing and signage implemented at sites to reduce risks as far as possible. However it not possible to further reduce the risk, as scored by the ROSPA risk asset methodology, unless physical alterations are made to sites to sites as outlined in paragraph 3.10.
- 3.7 Proposed works would be procured following the councils standard rules. There would be no special arrangements required for this work. From an asset management perspective, one of the main aims of work is to remove engineered assets to reduce burden of managing and maintaining these assets.

Legal Implications

- 3.8 There are no specific legal implications arising out of the bid for funding for this project.

Background / Service Implications

- 3.9 In March 2014, a young man drowned in the weir pool at Paper Mill Weir located in the North of Arrow Valley Park (AVP). This event has driven a fundamental review of the approach to water safety by Redditch Borough Council (RBC). The council commissioned The Royal Society for the Prevention of Accidents (RoSPA) to undertake a complete review of the River Arrow corridor as it passes through the AVP area. The report scores the various riparian locations in terms of their risk and highlighted multiple sites through the park which were classified as at high and increased risk from a water safety perspective.
- 3.10 The RoSPA review made 10 key recommendations, all but one of which have been actioned and implemented. The remaining outstanding recommendation was that structural changes should be made to address the significant safety concerns at sites assessed as having high and increased levels of risk. In practice this involves implementation of several key physical changes at these sites: -
- Reducing the channel depth,
 - Removing weirs which cause dangerous recirculating currents,
 - Re-landscaping the banks to provide gentler slopes,
 - Removing or reducing free boards to discourage jumping into the river.

- 3.11 Implementation of these activities has presented significant challenges, mainly around the cost of required work as well as development of proposals which are acceptable to all interested parties. Two of the sites identified are located in the Bordesley Abbey Scheduled Ancient Monument (SAM), where there are strict controls on what physical changes can be made by Heritage England.
- 3.12 Beside the safety improvements, there are a series of additional ecological and morphological benefits for the river which would be delivered as a result of these changes. This has led to the establishment of a partnership, in 2015, between RBC and the Environment Agency (EA), who have a strong joint interest in seeing these additional benefits delivered. The EA has provided technical and financial input needed for the design and planning of the practical redevelopment works. The partnership has to date provided approximately £85k of funding, which has been primarily directed into establishing a preferred solution at each of the five weir structures identified.
- 3.13 The improvement of safety at weir sites goes hand in hand with the improvements of the habitat and ecology of the river. There are existing good quality pockets of aquatic habitat on the Arrow. The separation of this habitat by weir structures is a major contributing factor to the Arrow currently being classified as “moderate” ecologically under the Water Framework Directive (WFD); this is despite the river being classified as good and high for fish and invertebrates respectively. Therefore, the river has the potential to support a “good” classification ecologically and the fragmentation of the river habitat is one of the major factors preventing this being achieved.
- 3.14 The weir structures also limit the flow of silt and constrain natural hydrological processes, which in combination with the straightened sections of the river, results in a lack of structural diversity and undermine the river’s ability to achieve its ecological potential. If proposed works are delivered it will result in significant improvements in the habitat and ecological value of the Arrow in Redditch as well as aesthetic improvements to the river.

Project Aims

- 3.15 The overall aim of the project is to implement safety improvement works at five separate sites identified: -
- Five Tunnels Weir
 - Paper Mill Weir
 - Abbydale Weir
 - New Meadow Weir
 - Broad ground Weir

Project Outcomes

- 3.16 The anticipated outcomes of the project include:
- Improved water safety and safer access to the river banks for the general public,
 - Reduced burden of liabilities, required inspection and maintenance of structures to the LA,
 - Improvements to habitat and biodiversity value of the Arrow in the Redditch district
 - Follow-up risk assessments of each of the weir sites to record safety improvements,
 - Provision of fixed and interactive interpretative information on the ecological benefits of the scheme to improve public understanding and deliver enhanced public engagement,
 - Improved the aesthetics of the river and AVP area through removal of large engineered structures.
- 3.17 Procuring these works and managing the relationship with a successful contractor will require a significant time commitment from one, or a more modest commitment from multiple officers within the council. Development of this work has been undertaken by NWWM, EA and RBC officers. From NWWM's perspective this is largely outside the paid service provided to RBC. If NWWM's on going involvement is on the basis of similar time commitments there would need to be a contribution from RBC to NWWM for this increased officer time.
- 3.18 Paragraphs 3.9 to 3.12 provide the back ground and context for this work. It is also important to consider that this work is closely aligned with one of the council's core strategic purposes, which is to keep the public realm safe. Clearly this proposed work will be in accordance with this purpose. While the council has been working on this issue for several years there are no previous executive level decisions which are relevant here. Previous work that has been done has been at an officer and managerial level.
- 3.19 There has been a series of supporting information and surveys that have been completed and commissioned by the partnership to support the design and planning stages of this work. This includes:-
- A preferred design for each site
 - Topographical Surveys
 - Depth and Velocity Surveys at sites
 - Water Level Monitoring Data
 - Service Search Information
 - Consultation with stakeholders and the public

Customer / Equalities and Diversity Implications

There are no equalities or diversity implications of this project.

4. RISK MANAGEMENT

- 4.1 The potential risks around this proposed work are similar to those anticipated with any civil engineering project. For example, these are around site health and safety, works over running or costs increasing due to some unforeseen problem. The secured European Structural Investment Fund (ESIF) also presents several risks. Delivery of ESIF projects are claimed back in arrears meaning the council will need to completely finance sites then claim back the 40% contribution from the ESIF on an agreed basis (i.e. quarterly or site by site). There is also a time expiration of when funds can be claimed, which is November 2020 so if works are delayed then there is a risk contribution funds can not be claimed.
- 4.2 There is also an on going public safety risk associated with these structures that will continue to exist if works are not undertaken. The proposed works would reduce the risks around weir sites however there is an inherent risk around sites and the wider river environment that can not be completely eliminated.
- 4.3 These risks would be managed by ensuring that there is sufficient planning and collation of background information produced. For example, a lot of the risk around delays and over spend on the engineering work can be mitigated by detailed survey and having a realistic programme of works in place with allowances for delays built in. It would also be ensured there is a detailed and prescriptive specification for works at each site to allow the contractor appointed to accurately programme works within the available time.
- 4.4 Due to the length and scale of works they would need to comply with Construction Design Management (CDM) Regulations.
- 4.5 This work would reduce risk of future negative publicity as a result of any future injuries or fatalities.
- 4.6 Disruption or delay to this work at one or more sites would mean there would be no associated ecological benefits delivered.

5. BACKGROUND PAPERS

RoSPA Report

6. KEY

This is an optional extra and may be particularly useful if you have used a number of acronyms throughout the report.

RBC (Redditch Borough Council)

EA (Environment Agency)

NWWM (North Worcestershire Water Management)

CDM (Constructions, Design & Management Regulations)

RoSPA (Royal Society for the Prevention of Accidents)

ESIF (European Structural Investment Fund)

AVP (Arrow Valley Park)

WFD (Water Framework Directive)

River Morphology - The shapes and form of river channels and how they change in dimension and direction over time.

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