

**Report to:** Cabinet  
**Date of Meeting:** 21 July 2020  
**Public Document:** Yes  
**Exemption:** None  
**Review date for release** None



**Subject:** **New Feniton Flood Alleviation Scheme**

**Purpose of report:** To confirm the delay of the implementation of Phase 3 until a possession window is available in 2021. Although this risks further delay to the project, it gives time to get all funding signed off and other cost savings investigated, with the aim to have a fully funded project before committing significant funds towards a part completion.

**Recommendation:** **That Cabinet;**

- 1. Confirm the decision to postpone the delivery of Phase 3 of the flood alleviation scheme (being the newly proposed October 2020 undertrack crossing) until the whole project including phase 4 is fully funded, on the basis of an emerging cost basis contract subject to the Environment Agency confirming the availability of the additional funding as detailed in the report.**
- 2. Delegate authority to the Strategic Lead (Housing, Health and Environment) in consultation with the Strategic Lead (Governance and Licensing) to negotiate and enter into the emerging costs basis contract with Network Rail and its contractor to deliver Phase 3 once additional funding has been secured**
- 3. Agree that Phase 4 of the flood alleviation scheme (being the linking up and completing the project) be scheduled for delivery in 2021/22, to allow sufficient time to apply for further Government grants and plan and procure the project for a summer construction. A further report will detail the precise delivery date.**
- 4. That a section of phase 4 could be built this autumn to reduce some flood risk to Feniton, should the plan be viable and not incur significant additional project cost or risk.**

**Reason for recommendation:** As it stands, the project budget is only sufficient to complete Phase 3 (UTX) but insufficient to complete Phase 4, without further applications for Central Government grant money.

The application for the additional funds to realise Phase 4 will not be submitted or approved prior to the last mobilisation date (03 July 2020)

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for Network Rail to deliver the Phase 3 UTX this year. (and thus we would be committing to completing phase 4, should we complete phase 3) Indications from the Environment Agency have been positive that more funding should be available to allow Phase 4 to proceed.

Much time and effort has gone into securing the May 2020 UTX, however this was postponed due to the unknowns surrounding the Covid-19 pandemic. We understood there were no further possession windows planned in 2020, however Network Rail recently identified an October 2020 possession. This possession window would not delay our project and still allow for a 2021 construction of Phase 4. Network Rail have advised us they have no further planned possessions in FY 2020/21 so we would be looking at FY 2021/22 for the next available date. There is a good chance this would likely lead to a significant delay to Phase 4.

This project will benefit more than 70 properties in Feniton as well as providing relief from the anxiety of the ever present flood risk.

It is understood that the project is eligible for further Central Government Grant money, however this is not yet formally signed off.

Risk to EDDC is that Phase 3 is built, and if Phase 4 is not funded, the project has wasted £770k for an unconnected culvert under the railway, and offering no flood risk reduction to Feniton. Or alternately EDDC would therefore need to find another £1.5m to complete the project.

The top section of Phase 4, an attenuation pond could be built in advance of Phase 3, to offer a small reduction of flood risk to Feniton whilst we wait for full funding to be agreed, however this comes with various risks.

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**Financial implications:**

The financial details have been outlined in the report. The approach now being recommended with this scheme significantly reduces the financial risks involved in this project and is endorsed from a financial perspective.

**Legal implications:**

Legal Services have been involved in this project and this potential decision. The legal issues are covered in the report.

**Equalities impact:**

Low Impact

**Climate change:**

High Impact

The project need is linked to climate change, with more frequent flood events as a result of a warming climate. The situation will only worsen and climate change does and doing nothing should not be an option. The project will also have carbon impacts in its construction.

**Risk:**

High Risk

Financial risk to council is high. Potential to spend £770k on a UTX that will never be joined up to the rest of the culvert network, if further grant

funding is not forthcoming from the Environment Agency. Indications so far however, pending an application have been positive.

Alternately EDDC could loan the project £1.5m (the current project shortfall) at risk of it not being repaid by central government should further grant applications not be successful.

**Links to background information:**

- [Scheme Location Map - Feniton](#)
- [Public Reports Pack – 05022020 – Cabinet](#)

**Link to Council Plan:** Outstanding Place and Environment  
Outstanding Homes and Communities

**Report in full**

**1 February 2020 Cabinet Report:**

1.1 Please see February 2020 Cabinet Report, Agenda item 17 for the previous report recommending we proceed with a May 2020 Possession. It contains all the scheme background and known risks at the time. The below report will update the risks and recommendations

**2 Quick Overview**

2.1 Phase 1 and 2 largely complete, offering reduced flood risk to a handful of downstream properties. Both Phase 3 (Undertrack Railway Crossing, known as a UTX) and Phase 4 (Linking culverts with attenuation pond) are required to significantly reduce the flood risk within New Feniton. Costs for delivering Phase 1,2,3 and 4 have increased dramatically since the 2012 Project Appraisal Report (PAR) for various reasons outlined in the February 2012 report. We have been able to find additional FDGIA (Flood Defence Grant In Aid) from the Environment Agency to cover Phase 3, but not yet Phase 4. We are currently short of approximately £1.5m to complete the whole project. We are carrying out a Business Case Update Report (BCUR) to submit to the Environment Agency to apply for £1.5m shortfall of which we believe we are eligible for, however the BCUR has not been completed, submitted or approved, so we are not guaranteed this additional £1.5m.

**3 Project Funding Situation**

3.1 The Original PAR approval included funding of the scheme as follows:

3.1.1	Flood Defence Grant in Aid (Central government funding)	£380k
3.1.2	Local Levy	£300k
3.1.3	Devon County Council	£215k
3.1.4	East Devon District Council	£554k (incl. future maintenance)
3.1.5	Developer Contributions	£300k
3.1.6	Total	£1749k

3.2 The Current approved funding of the scheme as follows:

3.2.1	Flood Defence Grant in Aid (Central government funding)	£950k
3.2.2	Local Levy	£200k*

3.2.3	Devon County Council	£215k
3.2.4	East Devon District Council	£554k (incl. future maintenance)
3.2.5	Developer Contribution	£85k**
3.2.6	Parish Council Contribution	£15k***
3.2.7	Total	£2019k

\*Local Levy reduced to £200k

\*\*Majority of developer contribution lost due to planning being granted on appeal

\*\*\* Parish Council have a grant for replacement Play Park on route of our scheme. £15k of this is treated as contribution in kind, as our scheme will not reinstate their play park.

### 3.3 The proposed funding of the scheme as follows:

3.3.1	Flood Defence Grant in Aid (Central government funding)	£2529k*
3.3.2	Local Levy	£300k**
3.3.3	Devon County Council	£215k
3.3.4	East Devon District Council	£554k (incl. future maintenance)
3.3.5	Developer Contribution	£85k
3.3.6	Parish Council Contribution	£15k
3.3.7	Total	£3698k

\*£950k only approved to date. Indication is that the scheme is eligible for a further £1579k

\*\*Local Levy restored to £300k (received email on 18/11/20 recommending its approval but yet to be signed off)

### 3.4 Current Scheme forecast costs and deficits

3.4.1 Table below is representative of the current approved funding as per 3.2

Total Agreed Funding	£ 2,019,000.00
Current Spend to date	£ 927,000.00
Remaining in budget	£ 1,092,000.00
Phase 3 construction + management estimate	£ 767,035.23
Phase 4 construction + management estimate	£ 1,829,707.44
Total remaining spend	£ 2,596,742.67
<b>Current Project Deficit</b>	<b>-£ 1,504,742.67</b>

## 4 **Phase 3**

- 4.1 The first attempt for the construction of the undertrack crossing (UTX) was planned for October 2016. The UTX requires a 52 hour possession window during which time the railway cannot run. Network Rail only plan a couple of these each year.
- 4.2 During our first attempt at the UTX, EDDC were required to take unlimited liability of Network Rail damages, for example payments to train operators should a speed restriction or lone closure be required as a result of the works. Potentially this could be £4,000 per minute of overrun on the possession, which would expose EDDC to significant financial risk. As such, EDDC did not proceed with the works in October 2016.
- 4.3 There was a further attempt to complete the UTX in 2017, however it was not completed. A great degree of lobbying and involvement of MPs led to a more positive negotiation with Network Rail.
- 4.4 To mitigate financial risk to EDDC, Network Rail were asked to carry out the works for EDDC using their framework contractor, and a possession date was provisionally agreed for October 2019. However Network Rail were unhappy with the submissions from their framework contractor so postponed the works.
- 4.5 Following this attempt, a further possession window was identified for early May 2020, and both sides made progress to agree a way forward. Work to date has included a lot of negotiation over legal agreements (Basic Implementation Agreement) that constrain each party's responsibilities and liabilities, detail that Network Rail will be carrying out the works on behalf of EDDC, managing the project and the project procurement, including reviewing contractor's submissions and method statements. The work has also entailed discussions regarding logistics and discussions/preparatory works with landowners adjacent to the work site. Following successful submissions by Network Rails' framework contractors, EDDC were given the likely costs for the works. Unfortunately the costs have come back at 5-7 times larger than the original budget price (depending if an emerging price or fixed price option is chosen).
- 4.6 The May 2020 UTX was postponed due to the unknown financial and health risks involved at the start of the Covid-19 pandemic.
- 4.7 Network Rail have offered us an October 2020 possession window, which was much sooner than they had advised previously. We have not produced or submitted a BCUR to the Environment Agency, so it has not been approved. Project wise, we are in a similar financial picture to the February 2020 report, with a risk remaining that the missing additional budget required may not be approved by the Environment Agency, and EDDC may need to find up to £1.5m to complete the scheme. We however appreciate the world has changed since the February 2020 report, and the council's financial position is different.

## 5 **Further investigation planned**

- 5.1 As the current scheme was conceived in 2012, a lot has changed, and given the financial pressure, along with the additional time, it would be wise to look at other opportunities to reduce flood risk.
- 5.2 Alternate routes have been mooted to save cost and disruption, and these should be further investigated.
- 5.3 The culvert works of Phase 4 cannot be done prior to the completion of Phase 3, due to the risk of the location (and level) of Phase 3 being restricted due to unexpected ground conditions under a railway line. However the top of Phase 4, an open attenuation pond could be constructed prior to phase 3. This is estimated to cost £200k. This would flatten

the curve of peak flows entering the existing drainage network, which would lead to a small reduction of flood risk to Feniton. It would also reduce the risk of the required land increasing in value, should outline planning be granted. On completion of Phase 4, its outflow would be redirected into the new culvert.

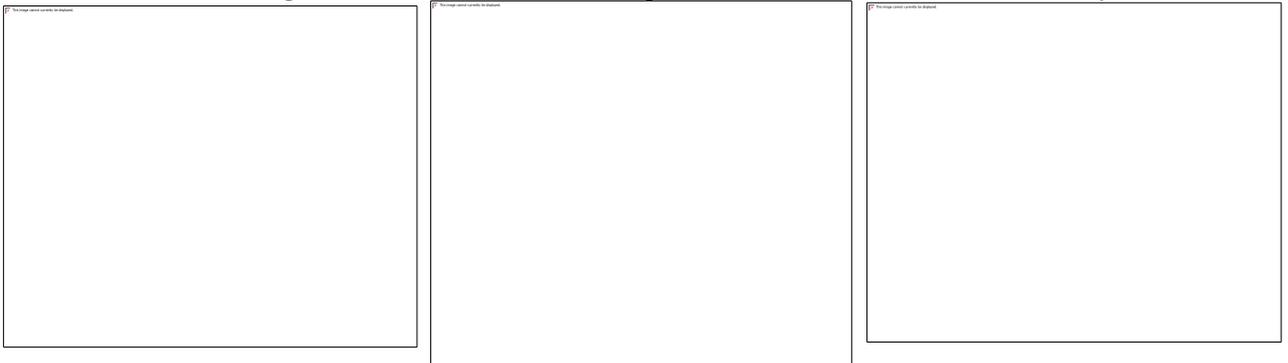
Proceeding with this option comes with the following risks which will be fully assessed before this section of works is allowed to advance

- 5.3.1 Very little time to appoint a contractor, and carry out largely earth works before the winter months.
- 5.3.2 Would need to direct award a contractor (to save procurement time) which does not offer value for money. It is also a less efficient way of construction, breaking up the scheme into smaller elements.
- 5.3.3 Land has not yet been purchased, and a tight time constraint may lead to a poor deal for EDDC
- 5.3.4 Hydraulic calculations would need to be carried out to see how much flood risk reduction would be realised.
- 5.3.5 Structure may need to be redesigned to allow it to be safely overtopped by via a spillway. The current design relies on an established grass spillway which will not have established in time for winter 2020/21
- 5.3.6 Constructing this section in advance limits options for alternate routes which could offer overall project savings
- 5.3.7 Current design includes a 20% climate change allowance, current guidance for the additional overall funding required states that 40% climate change allowance. There is a risk this attenuation pond is not large enough.
- 5.3.8 Covid-19 has not gone away. We risk increased construction costs due to higher welfare and safety requirements, but also a postponement risk should a second pandemic wave be realised.
- 5.3.9 Image below shows plan view of proposed attenuation pond.



5.4 Network Rail currently have three culverts under their railway which take water during flood events. As shown on the images below, 1 of the 3 is extremely bad condition. We are not sure Network rail are fully aware of the condition, and feel that our additional culvert would remove the need to replace the bad condition culvert. Therefore we need to explore any opportunity with network rail for them to reduce their cost to us.

5.4.1 Images of condition of existing three culverts under the railway line.



6 **Next Steps**

- 6.1 EDDC will work towards the next available possession window to deliver phase 3, likely to be 2021
- 6.2 EDDC will work on the additional grant application from central government over the summer, with the aim for Environment Agency approval in autumn 2020.

- 6.3 Assuming an early 2021 possession window, and long as additional grant money has been approved by central government, and there is space within their budget programme, we aim to deliver Phase 4 during 2021/22.
- 6.4 If further funding commitment from EDDC is required, further Cabinet and Council approval will be sought.
- 6.5 EDDC will investigate the feasibility of delivering the attenuation pond of Phase 4 in advance of this winter to reduce flood risk slightly, and risk that land values would increase should the land be earmarked for development.
- 6.6 EDDC will consult with Network Rail to request a reduction in construction costs of Phase 3, in lieu of the benefits Network Rail will enjoy to its network once the scheme is complete.

## 7 Risks

- 7.1 The largest risk is that EDDC commit to Phase 3, and no additional money is found to complete Phase 4. Leaving EDDC with an expensive unused asset under the railway, with no reduction in flood risk to the residents of Feniton, or the need to fund an additional £1.5m ourselves to justify Phase 3. The funding of phase 3 is largely from FDGIA money administered by the EA. Should Phase 3 be built, but Phase 4 never completed, the EA would likely want their money back, as homes would not have been protected. Therefore EDDC could incur a cost of up to £770k for an incomplete scheme.
- 7.2 Should Phase 3 not happen in October 2020, the largest risk is reputation damage, but it could also incur further abortive costs from Network Rail (as yet unspecified, probably their project costs at around £100k). The project has gone on for 8 years, with multiple attempts to deliver the UTX which have not happened for various reasons. Now Network Rail are in a position to complete the UTX, EDDC could be perceived to be delaying or stopping the scheme.
- 7.3 Network Rail need confirmation on proceeding with Phase 3 by 03 July 2020 to enable mobilisation of their contractors to meet the possession window.
- 7.4 We will not know if we are successful in applying for the full additional central Government money until the autumn 2020 (full review of project economics to allow funding for Phase 4/overall project budget increase). As we need to submit and have approved a full updated economics case, this will be submitted during late summer 2020. Should it be approved, we cannot guarantee which year the funds would then be available.
- 7.5 A further £85k from the Acland Park Development is currently counted as a contribution to the scheme. There is potential that this money will not be forthcoming due to the time elapsed.
- 7.6 An additional £100k of Local Levy funding potentially could not be awarded, however it has been recommended for approval.
- 7.7 Assuming the additional funding request is approved by the Environment Agency, it is reliant on there being sufficient central government funds to draw down on.
- 7.8 A land owner has had part of his orchard felled to allow Phase 3 and 4 to go ahead. Delaying the scheme means he cannot replant trees until the scheme is complete, which means further compensation may be due for every year no scheme is built.
- 7.9 Delaying Phase 3 another year could incur further abortive Network Rail costs. These should be able to be rolled on to the next possession window. Should the project be cancelled, the abortive costs could be in the region of £100k

- 7.10 Due to the original designers no longer trading there is a knowledge gap between what has been designed and what has been modelled, which requires further checks to ensure what has been designed still works, given the today's constraints.
- 7.11 The existing model only has a 20% climate change allowance built in, (as was the guidance at the time) Current guidance states 40% climate change allowance, and this needs to be applied to the design. There is a potential this will increase construction costs further, however it is understood the current design is over capacity, however we are unsure at this stage if construction costs will rise further.
- 7.12 The scheme was conceived in 2012 when the science of Natural Flood Management was not understood or required to be included as an option. Therefore a lower carbon option could be explored as an option which negates the need for a UTX and may reduce major civils. This would result in significant delay to the project and abortive costs from current design/project management.
- 7.13 Committing to Phase 3 now means we are committing to phase 4 at a later date, so other solutions such as those in paragraph 7.12 will no longer be able to be considered.
- 7.14 Future housing development as a source of income or flood risk reduction has been assessed and discounted, as it would fall outside the local plan, severely limiting CIL money that could be contributed towards the flood scheme. There is also no proposed development in Feniton at this time.
- 7.15 Feniton Parish Council has £35k of development money allocated to replace the existing playpark, however this must be spent by May 2022. (it is valued at £15k for a like for like replacement) The playpark sits on the current route of the culvert, so would need to be reinstated following the works. Should the project be delayed beyond May 2022 Feniton Parish Council may lose the money, or the project will incur further costs through playground reinstatement.
- 7.16 Should the project be cancelled before Phase 3 is built, we would need to return most of the FDGIA grant to the Environment Agency. Our current spend to date is covered by EDDC's committed contribution as well as Devon County Council's and local levy funding. It is unclear if the other two funding streams would want their money back for an incomplete project.