Report to	**Partnerships Scrutiny Committee**
Date of meeting	**3rd April 2025**
Lead Member	**Cllr. Barry Mellor, Lead Member for Environment & Transport**
Head of Service	**Paul Jackson, Head of Highways & Environmental Services**
Report author	**Andy Raynor – Risk & Asset Manager / Paul Jackson, Head of Highways & Environmental Services / Tony Ward, Corporate Director: Environment & Economy**
Title	**Pont Llannerch**

1. What is the report about?

1.1. This report is about the project to replace Pont Llannerch.

2. What is the reason for making this report?

2.1. The 2nd stage of the project, i.e. the detailed design stage, has been completed, and some challenges and risks have been identified which would benefit from Scrutiny to assist in terms of agreeing the next steps.

3. What are the Recommendations?

3.1. That the Committee considers the report and the presentation summarising the detailed design stage, attached at Appendix A, and provides feedback to be considered by the Project Team and Cabinet when determining the next steps.

3.2. That Scrutiny Committee confirms that it has read, understood, and taken account of the Well-being Impact Assessment, which can be viewed at Appendix B.

4. Report details

4.1. Following the collapse of Pont Llannerch during Storm Christoph in January 2021, Highways & Environmental Services has been working on a project to build a replacement bridge. The project was split into three stages: Optioneering, Detailed Design, and Construction, and has now reached the end of the Detailed Design stage. The detailed design stage has been a complicated and lengthy process and has raised some significant challenges.

4.2. The main challenge has been consideration of the foundations required for a new bridge. This discussion has been complicated because Pont Llannerch was located above a freshwater aquifer which is within a layer of weathered sandstone, and also because Dŵr Cymru Welsh Water (DCWW) have a freshwater abstraction site situated directly next to where the old bridge was situated. This aquifer and freshwater abstraction site provide water to around 85,000 homes in the region. The freshwater aquifer and water abstraction asset are therefore extremely important to a significant number of DCWW customers, and we would need to ensure that we did not compromise these assets when building a new bridge.

4.3. A preferred design using raft foundations was chosen because raft foundations work by distributing load over large areas of ground. However, significant risks still exist because construction would still require sheet piling – essentially drilling into the rock below where the foundations would sit. This drilling creates a risk of compromising the assets.

4.4. Provisional ground investigations at the optioneering stage determined that this weathered sandstone sat between 12 and 36 metres below ground level and extends as far upstream as Ruthin. Further ground investigations during the detailed design stage show the water level to be as close as 10 metres beneath ground level.

4.5. There is a standard for assessing the predicted scour depth of a bridge and this shows that all 10m of the riverbed gravels in this location will erode in future. Therefore, to protect a new bridge, and to ensure it is not undermined, the newly constructed sheet pile curtain containing the new raft foundation would need to be drilled / driven into the area beneath where the foundations are placed, and this would penetrate the weathered section of sandstone in which the aquifer sits.

4.6. Drilling into the aquifer has the potential to compromise water quality at the DCWW abstraction point at Llannerch Park. Compromising the site will present a risk of supply loss to 85,000 DCWW customers. The project team have been working closely with DCWW throughout the Detailed Design Stage, and the DCWW view is that risk assessments have failed to provide suitable evidence that this drilling work would not introduce risk to this important asset.

4.7. Denbighshire County Council (DCC) and DCWW have worked closely during the detailed design stage to ensure that any potential works to replace the bridge both meet modern day design, safety and construction standards and do not pose any risk to that freshwater drinking supply serving around 85,000 households. Unfortunately, no design solution has been found that removes the risk to these assets.

4.8. The Detailed Design Stage has therefore concluded that it is not possible to construct a new bridge without the required foundations penetrating the weathered section of sandstone. The likelihood of construction causing a fissure and compromising the assets cannot be known with any certainty. However, what is known, is that the impact of this occurring is very high indeed.

4.9. DCWW have stated that drilling into the aquifer would ultimately create a pathway for the risk of water supply contamination, and that compromising the aquifer local to the abstraction point could lead to several factors related to risk and safeguarding for their customers. An introduction of significant risk associated to the water supply has the potential to introduce a public health risk with wide reaching consequences. DCWW have also stated that rectifying an issue created by drilling into the ground will not be straight forward and would be extremely costly to resolve. In fact, DCWW have stated that it may not even be feasible to repair it if we were to drill a physical pathway into the aquifer. For these reasons, DCWW have assessed construction of the bridge to be a high-risk activity.

4.10. Every possible engineering solution for the construction of a new bridge has been considered, with DCC exhausting the optioneering and designing the most viable option for replacing the bridge. In particular, the foundation design details process has been extensively considered, but no assurances can be provided that the water assets will not be compromised, leading to a loss of water supply in the area.

4.11. The Welsh Government (via the Resilient Roads Fund) have now supported DCC to invest almost £1.5m to consider and design the most viable option for replacing Pont Llannerch. However, it has not been possible to design a replacement bridge without creating an unknown level of risk to the water supply in the region.

4.12. The Council must therefore now decide whether it is feasible and appropriate to move the project to the construction stage.

5. How does the decision contribute to the Corporate Plan 2022 to 2027: The Denbighshire We Want?

5.1. Replacing Pont Llannerch, in partnership with Welsh Government, is identified as an ambition within the “Prosperous Denbighshire” theme of the Corporate Plan.

6. What will it cost and how will it affect other services?

6.1. The estimated cost of the potential replacement bridge that has been designed is between £8m and £10m. If the Council decided to proceed to the construction stage of the project, the first task would be to establish a detailed cost breakdown to enable an application for funding to be submitted to Welsh Government. DCC could choose to provide match-funding for the project or could request up to 100% of the funding to come from Welsh Government.

7. What are the main conclusions of the Well-being Impact Assessment?

7.1 Not building the bridge will have an impact on the connectivity between the communities either side of the river but will remove the potential environmental impact of any construction work and allow for the maintenance of the current tranquillity of the area. If a decision is made to not build the bridge, the intention would be to try and reduce this connectivity impact by improving the alternative local highway routes in the area. Building the bridge would improve local transport links and restores the connectivity between communities however, it creates significant risk to the local water supply and the local environment.

8. What consultations have been carried out with Scrutiny and others?

8.1. Consultation with the local community initially took place to gauge local views as to the importance of replacing the bridge. The overwhelming view of those who responded was that DCC should strive to replace the bridge. There have also been two public meetings in the community where most attendees made the same point.

8.2. Extensive discussions have taken place with DCWW regarding the conclusion of the detailed design stage. The view of DCWW is summarised in paragraph 4.9.

9. Chief Finance Officer Statement

9.1. The Council, with support from WG, has explored and exhausted all options to design a replacement bridge in recognition for how important the bridge is to affected communities. Costs to date incurred are considerable at £1.5m. The conclusion reached that there is no possible way of building a replacement bridge without the risk of disturbing the water supply to 85,000 homes and businesses in the wider region.

10. What risks are there and is there anything we can do to reduce them?

10.1. The risks of building a replacement bridge are covered in this report and Appendix A. The risk is that the water supply for approximately 85,000 homes is disrupted or contaminated, with no known means of rectifying that problem. The view of our Insurance & Risk Manager (who has had discussions with insurers) is that it will not be possible to obtain a policy to insure DCC against the risk of compromising these assets. The only blanket policy we currently have which is relevant is our public liability which covers us for damage to a third party's property up to a maximum of £50m. However, this is for 'accidental' damage and in this situation we would be proceeding in the full knowledge of the potential risk of drilling and the possible impact it could have. It is therefore the view of our Insurance & Risk Manager that insurers would not see this as accidental damage and the policy would not operate. It would be seen as a business decision of the Council to proceed knowing the risks and therefore would be for the Council to deal with the consequences.

10.2. There is a risk that any decision to stop the project will lead to negative media coverage and reputational damage.

11. Power to make the decision

11.1. s111 Local Government Act 1972.

11.2. Scrutiny's powers with respect of this matter are set out in Section 21 of the Local Government Act 2000 and in Sections 7.1 to 7.4 of the Council's Constitution.