Public Report
Cabinet

Committee Name and Date of Committee Meeting
Cabinet – 17 November 2025

Report Title
Catcliffe and Treeton Flood Alleviation Scheme

Is this a Key Decision and has it been included on the Forward Plan?
Yes

Strategic Director Approving Submission of the Report
Andrew Bramidge, Strategic Director of Regeneration and Environment

Report Author(s)
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Ward(s) Affected
Rother Vale

Report Summary
As a result of the heavy rainfall in October 2023 (Storm Babet), Catcliffe and Treeton Villages suffered severe flooding from the River Rother. As part of the Lead Local Flood Authority (LLFA) duties, a Section 19 flood investigation was carried out by the Council. Contained in the Section 19 report were “Catcliffe and Treeton next steps” which identified three options the Council could investigate to help reduce the risk of future flooding in this area.

Whilst flood risk management of main rivers is the responsibility of the Environment Agency (EA), the Council recognises the devastation and hardship experienced by residents affected by flooding and has engaged its staff in evaluating these three options. Following the initial evaluation, there is a key area of focus emerging for the Council in relation to seeking to alter the existing bridge on Treeton Lane to improve the flow path of the River Rother, which has been supported by a Capital investment commitment by the Council of £6m. In parallel to progressing further work on this option, the Council will continue to explore the development of upstream storage of storm water through working with the Environment Agency and neighbouring local authorities.

Initial hydraulic modelling of the Bridge alteration shows that a reduction in the thickness of the existing bridge deck at Treeton Lane can improve conveyance in the River Rother. This proposal would see the existing bridge removed and replaced with a new one built to modern design standards, allowing a greater distance between the bridge deck and the river.

Recommendations

That Cabinet:

1. Note the progress to date and the next steps in the Catcliffe and Treeton Flood Alleviation Scheme.

2. Delegate authority to the Strategic Director of Regeneration and Environment to enter into contract with a design and build partner, in consultation with the Cabinet Member for Street Scene and Green Spaces and the Section 151 Officer.

List of Appendices Included

Appendix 1 Equality Impact Assessment
Appendix 2 Climate Impact Assessment

Background Papers
None

Consideration by any other Council Committee, Scrutiny or Advisory Panel
None

Council Approval Required
No

Exempt from the Press and Public
No

Catcliffe & Treeton Flood Alleviation Scheme

1. Background

1.1 In October 2023, Storm Babet brought prolonged and intense rainfall across England, resulting in widespread flooding throughout the Rotherham Borough. Among the worst affected areas were the villages of Catcliffe and Treeton, where the River Rother overtopped its banks, inundating residential properties, infrastructure, and public spaces.

1.2 The flooding event occurred overnight, prompting the Council and emergency services partners to carry out door-to-door evacuations in Catcliffe during the early hours of 21st of October. Aerial photographs taken the following morning revealed the extensive scale of the flooding, with large sections of the villages submerged under water.

1.3 The severity of the incident led to significant disruption for residents, many of whom were displaced from their homes and faced considerable damage to property and belongings. In response to the incident, Rotherham Metropolitan Borough Council, acting as the Lead Local Flood Authority (LLFA), initiated a formal investigation under Section 19 of the Flood and Water Management Act 2010. This investigation aimed to identify the contributing factors to the flood event, assess the roles of relevant risk management authorities, and outline the actions taken or proposed to mitigate future flood risk.

1.4 The Council also launched a series of community engagement initiatives, including public meetings and the publication of the Section 19 Flood Investigation Report, to ensure transparency and support for affected residents. These efforts have informed the development of targeted flood alleviation measures, with Catcliffe and Treeton identified as priority areas for intervention

1.5 In the immediate aftermath of the flooding, the Council mobilised a significant emergency response to support affected communities. Council teams were on-site , monitoring river levels and coordinating with emergency services and the Environment Agency to manage evacuations and mitigate risks. The clean-up operation was extensive, with approximately 40 staff deployed in the days and weeks following the flood to assist residents with lifting and disposing of damaged items. At its peak, 36 skips were distributed across impacted areas and replenished regularly, with Council staff working through weekends to meet demand. In addition to these efforts, the Council supported the implementation of the Government's Property Flood Resilience Repair Grant Scheme, which provided up to £5,000 per eligible household or business to fund measures that improve resilience against future flooding events. This Scheme formed part of the wider Flood Recovery Framework triggered nationally in response to Storm Babet and was administered locally in accordance with Department for Environment, Food & Rural Affairs (DEFRA) guidance.

1.6 The River Rother has overtopped the flood defences in Catcliffe on three occasions since 2000.

November 2000 Floods

- Over 90 dwellings in Catcliffe were flooded during the exceptional rainfall event in November 2000.
- The River Rother rose 1.3 metres higher than the highest level expected by the Environment Agency at that location.

June 2007 Floods

- Reports indicate that up to 250 homes in Catcliffe were flooded when the River Rother overflowed due to intense rainfall.
- This event was part of the wider South Yorkshire floods, which were among the worst in the region's history.

In Storm Babet (October 2023):

- 140 residential dwellings and 5 businesses flooded internally in Catcliffe.
- 8 residential dwellings flooded internally in Treeton.
- 3 strategic roads in Catcliffe & Treeton flooded.

1.7 In its budget for 2025-26, the Council has committed substantial capital investment to flood alleviation measures in the worst-affected areas of Catcliffe and Treeton. A total of £6 million has been allocated across the 2025–2029 Capital Programme to support the design and construction of the replacement bridge at Treeton Lane.

2. Key Issues

2.1 The current cost estimate for the design and construction of the replacement bridge at Treeton Lane is approximately £6 million. This estimate is based on preliminary design and benchmarking against similar flood alleviation infrastructure projects. It is important to acknowledge that large-scale civil engineering schemes, particularly those involving flood mitigation and regulatory oversight, are subject to a range of external variables that can significantly influence final costs.

2.2 Experience from comparable projects has shown that over a five-year delivery timeframe, factors such as construction inflation, changes in material costs, unforeseen ground conditions, and evolving regulatory requirements can contribute to substantial cost increases. Additionally, the involvement of external approval bodies, including the Environment Agency and other statutory consultees (such as the Planning Authority), may introduce programme delays or design modifications that carry financial implications. For this reason, additional allocation has been built into the approved budget for the scheme.

2.3 One of the key delivery risks associated with the Treeton Lane bridge replacement scheme is the limited availability of suitably qualified contractors with experience in complex flood alleviation and bridge infrastructure projects.

The specialist nature of the works, particularly the integration of hydraulic design, environmental mitigation, and structural engineering means that the pool of contractors capable of delivering such schemes to the required standards is relatively small.

2.4 To mitigate this risk and maintain momentum within the programme, the Council is prioritising early contractor engagement. Securing a design and build contractor at the earliest opportunity will be critical to ensuring continuity between the design and construction phases, enabling more efficient planning, risk management, and coordination with regulatory bodies such as the Environment Agency.

2.5 Early engagement will also allow the contractor to contribute valuable insights during the design development stage, helping to refine construction methodologies, identify potential constraints, and optimise the programme for delivery. Subject to approvals, the procurement process is expected to conclude with contract award in Quarter 3 of the 2025/26 financial year, positioning the project for a timely transition into detailed design and mobilisation. In order to continue to progress at pace, this report seeks a delegation to the Strategic Director for Regeneration and Environment to award the contract, following a procurement process, in consultation with the Cabinet Member for Street Scene and Green Spaces and the Section 151 Officer.

2.6 This proactive approach reflects the Council's commitment to delivering the scheme within the targeted timeframe, while recognising and addressing the challenges inherent in sourcing specialist delivery partners.

3. Options considered and recommended proposal

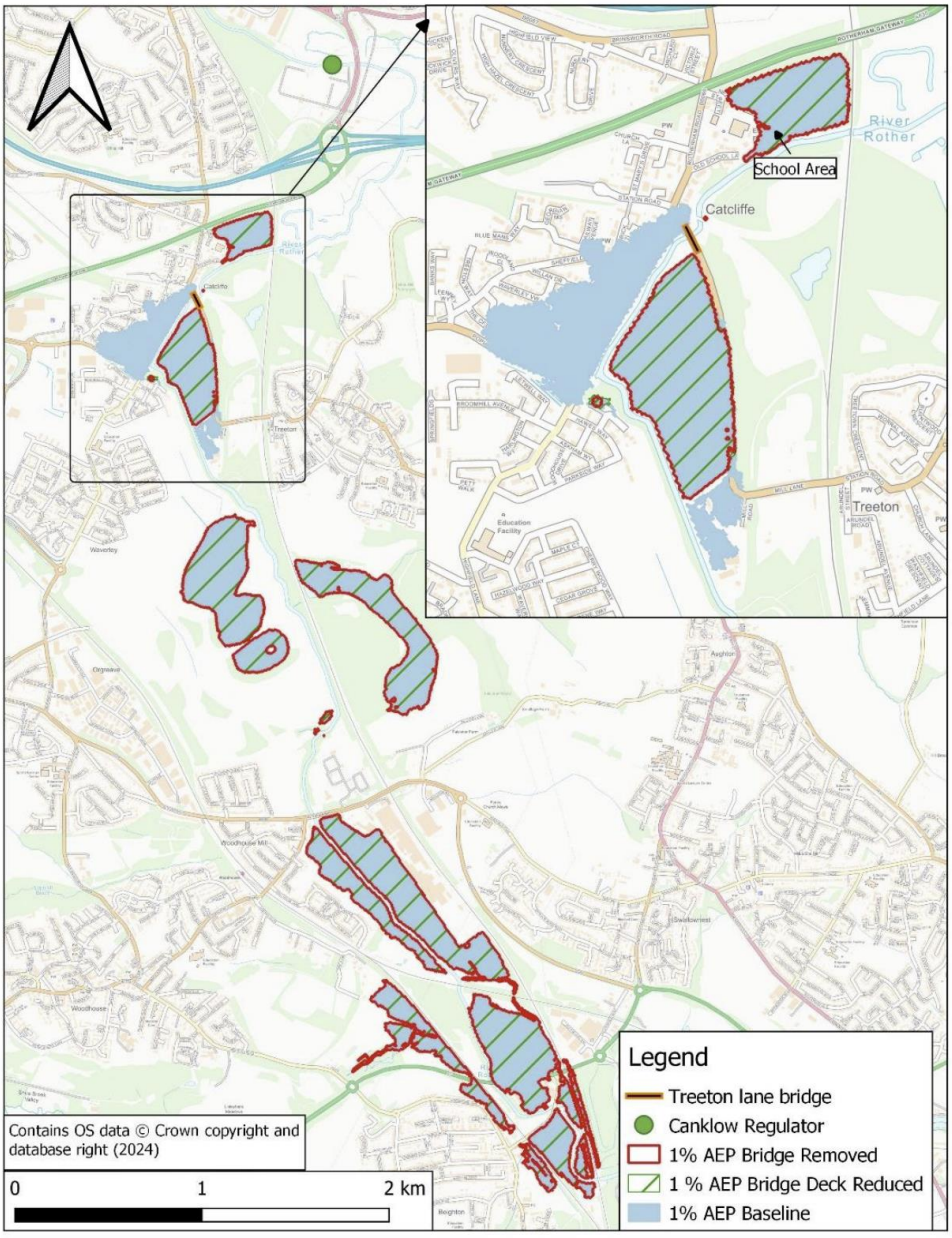
3.1 Following the flooding incident in October 2023 (Storm Babet), Rotherham Council undertook a comprehensive review of potential measures to reduce the risk of future flooding in the communities of Catcliffe and Treeton. As part of its commitment to delivering a long-term and effective solution, the Council allocated funding to support both the design and construction phases of the preferred solution.

3.2 To ensure transparency and community involvement, a series of public engagement events were organised, chaired by the local Member of Parliament. These sessions provided an opportunity for residents to review and discuss the proposed options, with particular focus on the preferred solution outlined below.

3.3 **Preferred Option: Improving Downstream Conveyance**
A detailed study was commissioned to assess how downstream conveyance within the River Rother could be improved, specifically focusing on the hydraulic impact of the existing Treeton Lane bridge. The investigation included advanced hydraulic modelling, which demonstrated that the current bridge structure significantly restricts river flow during high water events.

3.4 The modelling results indicated that reducing the thickness of the bridge deck would enhance conveyance and reduce upstream flood risk. Consequently, the preferred solution involves the removal of the existing bridge and its replacement with a new structure designed to modern engineering standards. The new bridge will feature an increased clearance between the deck and the river channel, thereby improving flow capacity and reducing the likelihood of future flooding.

3.5 Hydraulic modelling has demonstrated that the proposed reduction of the bridge deck by 900mm effectively eliminates the risk of flooding during a 1 in 200-year return period event. Additional scenarios were assessed, including the permanent removal of the bridge structure; however, these alternatives did not provide any measurable improvement in the standard of flood protection when compared to the 900mm deck reduction option. The modelling results indicate that the selected approach provides an optimal balance between engineering feasibility and flood mitigation performance.



3.6 The above diagram shows that with a reduction in the bridge deck or the bridge being removed, no property flooding would occur for a 1% Annual Exceedance Probability (AEP); the blue shading is the baseline of the hydraulic model. The options for removing the bridge and reducing the bridge deck are hatched in green with a red outline. The model report shows all flooding will remain within the river level and designed flood storage areas.

3.7 This option has been selected as the most technically and environmentally effective approach and, following Council approval of a £6m Capital Investment for both design and build, awarded in the 2025/26 budget, is now being progressed into the detailed design and delivery stages.

3.8 To progress the Scheme, the Council is currently seeking the necessary approvals to appoint a design and build contractor. This procurement approach is intended to streamline delivery by integrating design and construction under one contractor, thereby improving coordination and reducing programme risk. Subject to approval, it is anticipated that the contract will be awarded in Quarter 4 of the 2025/26 financial year, enabling mobilisation and commencement of detailed design shortly thereafter.

3.9 To secure design approvals, various 3rd party design approvals will be required from the Environment Agency before works can commence. Previous experience has demonstrated this can be a lengthy procedure.

3.10 It is believed that in-channel foundation works will need to be delivered during the summer months to take advantage of lower river levels. The new bridge structure will be fabricated off-site and lifted into position, which should streamline installation and reduce dependency on weather conditions. However, this is a complex Scheme with numerous factors to coordinate and consider.

3.11 For this reason, the Council is seeking a Design and Build Contractor to help mitigate risks to the Council which may arise from a change of contractors between these critical stages. This builds on the Council's experience of delivering other significant flood mitigation scheme such as the Canal Barrier and Ickles Lock. The project will require specialist expertise.

3.12 The Council is ambitious in aiming to deliver the Scheme within three years to seek to protect residents and properties as quickly as possible, but experience suggests that a five-year timeline may be more realistic.

4. Consultation on proposal

4.1 The Council held two public meetings that were chaired by the local Member of Parliament; both were very well attended. The bridge scheme was discussed at the meeting and received widespread support from the local community. Further to these events, two community drop in sessions have been held with member so the Council in attendance to allow residents the opportunity to discuss the Scheme or any concerns in a one-to-one environment.

4.2 On 9 May 2025, a formal consultation was held with representatives from the Environment Agency to proactively identify and address any potential regulatory or environmental constraints that could impact the progression of the design phase. The purpose of this engagement was to ensure that all relevant statutory requirements and environmental considerations are fully integrated into the project from the outset, thereby reducing the risk of delays or non-compliance at later stages.

4.3 During the meeting, a collaborative approach was adopted to review the scope of the proposed works and assess any areas where environmental sensitivities may arise. As a result of these discussions, initial agreements were reached regarding the specific environmental permits that will be required to support the development. Furthermore, the Environment Agency provided guidance on key environmental aspects that must be incorporated into the design, including mitigation measures, ecological enhancements, and water management strategies.

4.4 This early engagement has laid a strong foundation for ongoing collaboration with the Environment Agency throughout the lifecycle of the project. It also demonstrates a commitment to responsible and sustainable design practices, ensuring that environmental obligations are met in a timely and efficient manner.

4.5 In addition to external stakeholder engagement, consultation has also been undertaken with the internal structures team to support the development of the bridge design specification. This collaborative effort has been instrumental in refining the technical requirements and ensuring that the proposed design aligns with both engineering standards and project objectives.

4.6 The input provided by the Structures Team has contributed significantly to the completion of a robust and comprehensive specification, which will form the basis of the tendering documentation. Their expertise has helped to address key structural considerations, including load capacity, material selection, and construction methodology, thereby enhancing the overall quality and feasibility of the design.

4.7 This internal coordination reflects a multidisciplinary approach to project delivery and ensures that the design is both technically sound and commercially viable as it progresses into the procurement phase.

5. Timetable and Accountability for Implementing this Decision

5.1 The anticipated delivery timeframe for the Scheme is between three to five years starting in 2025 with a completion date of 2028 to 2030. While the Council is committed to delivering the project as efficiently as possible with an ambitious target of completion within three years, previous experience with complex flood alleviation schemes suggests that a longer programme may be required. This is particularly relevant where coordination with external regulatory bodies, such as the Environment Agency, is necessary to secure environmental approvals and technical consents.

5.2 To progress the Scheme, the Council is currently seeking the necessary approvals to appoint a design and build contractor. This procurement approach is intended to streamline delivery by integrating design and construction under a single contract, thereby improving coordination and reducing programme risk. Subject to approval, it is anticipated that the contract will be awarded in Quarter 3 of the 2025/26 financial year, enabling mobilisation and commencement of detailed design shortly thereafter. This investment will not only address a key hydraulic constraint within the River Rother but also contribute to long-term community resilience and infrastructure modernisation in a flood-prone area.

6. Financial and Procurement Advice and Implications

6.1 On 5 March 2025, Council approved a £6m capital investment for the Catcliffe Village (River Rother) Flood Alleviation Scheme, as part of the Budget and Council Tax Report 2025-26. The scheme is funded by Council borrowing and is profiled from 2025/26 to 2028/29.

6.2 The procurement activity detailed in this report will be undertaken in compliance with relevant procurement legislation, namely the Public Contracts Regulations 2015 (PCR15), as the route to market identified is a call-off via a framework procured under PCR15 is proposed.

7. Legal Advice and Implications

7.1 Under s.6(7) Flood and Water Management Act 2010, the Council is designated as the Lead Local Flood Authority for the Borough. Pursuant to Section 19 of the Act, Lead Local Flood Authorities must investigate significant local flooding events and publish their findings. The replacement of the bridge on Treeton Lane as set out the report is a recommended outcome of those investigations.

8. Human Resources Advice and Implications

8.1 There are no direct Human Resources implications arising from the recommendations contained in this report.

9. Implications for Children and Young People and Vulnerable Adults

9.1 This severe flooding affected many families including those with children and some vulnerable adults. Reducing the risk of flooding will have a positive impact on those affected or at risk in future events.

10. Equalities and Human Rights Advice and Implications

10.1 As noted within the appendix, the Equality Impact Assessment confirmed full implications will be investigated as design process is undertaken. The report is to note scheme progress to date,

11. Implications for CO2 Emissions and Climate Change

11.1 As noted within the appendix, full implications will be investigated as design process is undertaken. The report is to note scheme progress to date.

12. Implications for Partners

12.1 The delivery of the proposed scheme may require planning approval and will require approval from the Environment Agency. The works will take place in River Rother channel, and this will include environmental mitigation (e.g., fish passes, habitat restoration) and permit approval. The full implications will be investigated as the design progresses.

12.2 The highway network will be affected by the replacement of the existing road bridge on Treeton Lane. The vehicle connectivity between Catcliffe and Treeton Villages will be interrupted. It is hoped that an alternative pedestrian route can be offered, during the construction period.

13. Risks and Mitigation

13.1 The delivery of a major civil engineering project in a river channel will be challenging. The design of the proposed scheme will need to address geotechnical, hydraulic, and structural complexities. The project will be design and delivered by experienced industry leading consultants and contractors to mitigate the risk to the Council.

The tender process will provide assurance regarding the estimated design and delivery cost to reduce scheme delivery risk.

13.2 The project will be design and delivered by experienced industry leading consultants and contractors to mitigate the risk to the Council of any unforeseen ground conditions such as riverbed instability, or extreme weather can delay or complicate construction

14. Accountable Officers

Richard Jackson, Head of Highways and Flood Risk

Approvals obtained on behalf of Statutory Officers: -

	Named Officer	**Date**
Chief Executive	John Edwards	28/10/25
Strategic Director of Finance & Customer Services (S.151 Officer)	Judith Badger	23/10/25
Assistant Director of Legal Services (Monitoring Officer)	Phil Horsfield	21/10/25

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