

Meeting:	General Scrutiny Committee
Meeting date:	Monday 22 March 2021
Title of report:	Fownhope Flood Repair Work
Report by:	Acting Assistant Director Highways & Transportation

Classification

Open

Decision type

This is not an executive decision

Wards affected

Backbury and Old Gore

Purpose

To review how the Fownhope flood repair works were delivered and any lessons to be learned for the future.

Recommendation(s)

That:

- (a) The committee considers the report and**
- (b) The committee submits any findings and recommendations to the executive for consideration.**

Alternative options

1. There are no alternative options.

Key considerations

Background

2. On 6 August 2020 Fownhope Parish Council wrote a letter of complaint to the council *“to express the frustration and anxiety caused by the protracted carriageways repairs to the B4224 between Fownhope and Mordiford”*. The letter concluded by saying, *“We demand that Herefordshire Council initially put this matter to the Council Scrutiny Committee and then have a full public inquiry to assess how this disaster could have been prioritised and managed significantly better both fiscally and practically”*. This Committee on 28 September 2020 agreed to include this matter in its work programme with a view to reviewing how the work was done and any lessons to be learned for the future. It was suggested that March 2021 would be a suitable time to conduct this review.

Storm Dennis – February 2020

3. Storm Dennis hit Herefordshire during the weekend of 15 and 16 February 2020, resulting in significant damage and flooding, from both runoff and river overflow, with many of the rivers reaching their highest levels in 200 years. As part of a multi-agency response and recovery group the council successfully mobilised all resources to respond to the event. The clean-up and recovery work commenced as soon as flooding had subsided with resources focussed on making safe the worst hit areas first.
4. Government declared that this storm was a major incident and made the Bellwin Scheme available to Herefordshire Council to fund the immediate action, taken from 15 February 2020 to 28 March 2020, to safeguard life or property and to prevent suffering or severe inconvenience. The council submitted a £2.528m claim to the Bellwin Scheme as costs that have been incurred across the public realm that are eligible for funding through this scheme. To date a grant payment of £1.113m has been received.
5. Of the 139 flood damage sites that were identified across the county, 72 damage sites were cleared and restored to normal use by the 28 March 2020. The scale of the damage meant that 67 sites could not be fully cleared or repaired by the end of March. Of these there were four significant schemes.
6. The B4399 Holme Lacy Causeway was badly damaged but had been returned to use. This location remains susceptible to storm damage and a permanent solution is required.
7. Instability in the banks of the flood plain to the River Wye that support the A438 at Whitney on Wye has resulted in temporary signal control being put in place, a permanent solution is required here also.
8. The B4224 road near Fownhope suffered a landslip at Lechmere Ley and a retaining wall failure at Stone Cottage. These damages required closure of the main route into the village which resulted in community severance with limited alternative access.
9. Initial assessment of what action was needed to reopen the B4224 confirmed that substantial works were required at both damage sites. In March 2020, after initial investigations, it was anticipated that these repairs were, realistically, unlikely to be completed before October 2020. However the B4224 is now expected to be reopened to traffic prior to Easter 2021 (during week commencing 29 March 2021). The reasons for this are set out within this report.

Fownhope Flood Damage

10. The landslip at Lechmere Ley caused more than a third of the carriageway to be lost due to damage from Storm Dennis. Approximately 3000 tonnes of material had to be excavated and equivalent imported to rebuild the road in layers. Before any construction

works could take place, BT fibre optic services had to be diverted. These cables serve BT customers locally and nationally and required notifying national customers. Once diversions were done, a ramp down into the works had to be constructed before excavation works could begin however the project did not require any significant design works.

11. At Stone Cottage a five metre high retaining wall collapsed due to pore water pressure from Storm Dennis run off. The retaining wall supported the B4224 carriageway and is immediately adjacent to Stone cottage. This was a complete failure of the wall which could not be repaired – a new section of wall would have to be constructed. In order to install this much of the road surface would need to be excavated to provide space to install the wall. Before any construction works can take place, the BT fibre optic services that were near the carriageway edge had to be diverted.
12. The construction of a new section of retaining wall demanded a more involved design process which included detailed geotechnical investigations including bore holes to better understand the ground make-up, which in turn, informs the design and eventual solution.
13. Survey work commenced at the Stone Cottage site on 11 March 2020 with a principal inspection of the damaged wall. Geotechnical investigations took place on 18 to 20 March 2020. A report assessing the options for the repair of the Stone Cottage Retaining Wall was produced on 23 April 2020.
14. The decision to progress flood repair works, including the repair to the damage to the B4224 at Fownhope was taken under emergency powers at section 3.7.9 of the constitution on 30 April 2020.
15. Following this an order for the construction works at Lechmere Ley (Service Order PR20-15-13) was issued to Balfour Beatty Living Places (BBLP) on 30 April 2020 and an order for the detailed design of Stone Cottage (Service Order PR20-15-14) was also issued to BBLP on this date.
16. Following the issue of these orders works commenced at Lechmere Ley on 18 May 2020 following completion of the BT cables diversion and were anticipated to take three months to complete. Works were completed within this timescale. This programme is included in Appendix A of this report.
17. Detailed design of the Stone Cottage project progressed following the issue of the service order (PR20-15-14) and the programme established at this time anticipated the completion of detailed design of Stone Cottage and the commissioning of the specialist subcontractor for the repairs at Stone Cottage for the works on 17 August 2020.
18. Following the completion of the design of the retaining wall the preferred option (based on ground conditions) was selected, this option comprised of:
 - the removal of the failed section of wall;
 - the excavation of the ground behind it to form a stable slope;
 - the nailing of that slope to the bedrock behind;
 - the rebuilding of the ground in layers with a mesh between them (reinforced earth);
 - tying this back into the soil nails;
 - rebuilding the face of the wall;
 - constructing a concrete parapet and high kerb; and finally;
 - replacing the running surface of the road.

19. Following completion of the design and subcontractor procurement, and in advance of the construction contract award for the repairs to Stone Cottage, a decision in regard to the funding for these flood damage repair works was required.
20. As no funding (other than Bellwin) had been received from central government for recovery from Storm Dennis there was a significant gap between what Bellwin provided and the cost of all necessary repairs.
21. On 23 July 2020 cabinet considered funding options and made recommendations to Council for funding of the repair works. On 4 August 2020 at an extraordinary council meeting council confirmed that the priority flood repair works project be added to the capital programme.
22. Following this the Director for Economy & Place took a decision on 22 September 2020 to progress these works to their conclusion through Annex 15 to the Public Realm Services Contract (PRSC). The proper consideration of value for money was key to this decision. The various alternative options available to the council under its Contract Procedure Rules, for the procurement of these necessary works were considered. Given the need to relieve the community of the burden from the severance imposed upon them by the necessary closure of the Fownhope road on safety grounds, all procurement routes other than the continued use of the Public Realm Services Contract were discounted. This was because openly tendering the scheme would have prolonged the length of time this road was closed. Alternative open market procurement procedures were to be taken for all other flood repair schemes, this was as there was not the same time pressure on the delivery of the repair to those other sites, when compared to Fownhope.
23. Following this an order was issued to Balfour Beatty Living Places (Service order PR20-15-6) under the Public Realm Services Contract on 29 September 2020.

Stone Cottage Construction Works

24. Having procured and commissioned their works subcontractor through competitive tender by September, BBLP began mobilisation in October 2020. The works programme established a date for substantial completion of the works and the opening of the B4224 on or around 23 February 2021, with all works completed by 9 March 2021. This programme is included in Appendix B of this report.
25. However, an issue arose in respect to the construction of part of the works, namely constructing a concrete parapet and high kerb. A solution was found, but it took more time to deliver. This saw the programmed road opening date moving to late March 2021, with all works completed by 1 April 2021. This programme is included in Appendix C of this report

Reasons for the Change in Time

26. The issue referenced in the preceding paragraph 25 was that the size of the crane required to lift precast concrete units that were designed by BBLP sub-consultants WSP to form the parapet wall and its foundations into place could not be safely located within the confines of the site without compromising the structural stability of the sections of the retaining wall immediately beyond the failed section.
27. Various solutions were explored and a cast in situ concrete solution found. That solution did not require the use of a large crane and when compared to other options presented the solution that would have least impact on programme duration; least dependency on supply chain (precast units are manufactured off site and delivery to site is subject to lead in times and demand on the supplier); and greatest opportunity for any gains made in the delivery

of the works up until the construction of the parapets to be exploited (work can start on parapet construction as soon as the prior works had been completed, whereas installation of precast units could only commence once those units have been delivered to site). The increase in time was largely due to the curing time required for the in situ concrete.

28. The reason for the delay sits in the Provider's failure to provide the services in accordance with their contract, namely when providing professional services, BBLP have failed to exercise the degree of skill, care and diligence reasonably expected when completing its designs and related works. In summary, BBLP should have identified this issue with the precast units that were part of their design sooner, consequently the programme for the works would have allowed for this and remedial work would have been avoided.

Contractual Position

29. The Public Realm Services Contract (PRSC) is a term services contract that is based on the New Engineering Contract (NEC) terms.
30. This Stone Cottage repair work has been commissioned using the Target Cost payment mechanism, which is one of the payment options available under the PRSC. As such there are four elements to consider when assessing the amount due for the works, they are the Cost of Services Provided to Date, other amounts to be paid to the Provider, amounts to be paid by or retained from the Provider; and any Disallowed Cost. Taking each of the four elements in turn.
31. **The Cost of the Services Provided to Date:** this is the total of the Defined Cost of the Services which have been carried out by the Provider during the relevant Financial Year (less payments made to the Provider during the relevant Financial Year), plus the resulting Fee. This element will need to be paid.
32. **Other amounts to be paid to the Provider:** there are no other amounts that are directly relevant to this matter.
33. **Amounts to be paid or retained from the Provider:** As this work has been commissioned using the Target Cost payment mechanism (subject to the limitations set by the share ranges in the contract, which is capped at 6% over target, meaning that across the programme of all works the maximum that the council will pay over the agreed target costs is 50% of this so 3%, BBLP have to meet the bill for anything over the 6%) if on completion of the works the Cost of the Services Provided to Date has exceeded the Target Cost, the difference between the two will be split between Employer and Provider, similarly if the Cost of the Services Provided to Date is less than the Target Cost.
34. Importantly, the Target Cost is varied via compensation events. Compensation events are typically instructed changes or as a consequence of an event happening that has been identified as being at the Employer's risk. A change in an order to accept a defective service, or a change to the Service Information which is requested by the Provider and which is required as a result of the Provider's approach to providing the Services, is not a compensation event. This point has required detailed consideration of the risk register associated with the Service Order for these works to confirm that the risk associated with the design of the parapets does not rest with the Employer (as it should not), consequently (subject to that detailed consideration) there should be no compensation event as a consequence of this particular matter.
35. **Disallowed cost:** the PRSC defines the following as Disallowed Cost:

"Disallowed Cost"

is cost which the *Service Manager* decides:

is not justified by the *Provider's* accounts and records;

should not have been paid to a Subcontractor or supplier in accordance with this contract;

was incurred only because the *Provider* did not:

- follow a process or procedure stated in his Quality Plan; or
- give an early warning notice which this contract required him to give;

and the cost of:

work or remedial action caused by the *Provider's* failure to Provide the Services in accordance with this contract;

Materials not used (after allowing for reasonable wastage) unless resulting from a change to the Service Information;

resources not used (after allowing for reasonable availability and utilisation);

preparation for and conduct of an adjudication or proceedings of the *tribunal*.

[emphasis added]

36. Further to this as Clause 22 of the PRSC, the provider is to exercise care and diligence, as follows:

- 22.1 The *Provider* carries out all Services required by this contract in accordance with:
- 22.1.1 all relevant statutory provisions;
 - 22.1.2 Good Industry Practice;
 - 22.1.3 in a good and workmanlike manner; and
 - 22.1.4 to the quality and standards specified in the Service Information.

22.2 Where in the provision of any of the Services the *Provider* is providing any professional services, the *Provider* exercises the degree of skill, care and diligence reasonably to be expected from an appropriately qualified and competent professional person holding himself out as competent to perform such services.

22.3 The *Provider* obtains approval of his design from the *Employer*, the *Service Manager* or Others where required by the Service Information and within the timescales stated in the Service Information.

[emphasis added]

37. This point has also been carefully considered as if the Employer could have expected a reasonably qualified and competent professional person to have produced a parapet design that can be lifted in place at this site, then the cost associated with the 'work or remedial action' to overcome the issue as disallowed cost and should not be paid as part of the amount due.

38. As such all costs associated with rework or optioneering etc. to identify the solution to this issue that has come about as a result of something not being done with care and diligence, are disallowed cost and should not be paid as part of the amount due.
39. The costs associated with the delivery of the solution itself should be paid as part of the Defined Cost. This including costs associated with the extended time for delivery. This as in this instance the eventual works required are what they would always have needed to be. Given the timing of when this issue was raised through early warning and then dealt with, the progress of the works was not itself halted or delayed. Instead the time actually needed to do the work was increased from that which was thought to be needed, to that which in reality it would always have needed to be, if the correct design solution had been in place in the first instance. Consequently, the matter become one of cost of the aforementioned rework alone. The sum that the council pays for the entire works will ultimately depend upon the result of the comparison between Defined Cost plus Fee and the Target Cost, less all disallowed costs.

Action Taken

40. In accordance with the contract, the cost of the remedial work to correct the provider's failure is a Disallowed Cost, as such it will be deducted from the amount due. BBLP have accepted the council's position and the quantum of the Disallowed Cost is being assessed by our Contract Management Team. Consequently, there is no formal dispute between the parties in regard to this matter at this time.
41. The cost of the works to deliver the solution will be part of the amount due. This is so because, had BBLP exercised all due skill care and diligence, then the solution arrived at would have formed part of the original works.
42. BBLP have been instructed to, so far as practicably able, 'accelerate' the completion of the works so that they complete soonest. Whilst we continue to explore all options to achieve earliest completion with BBLP, given the constraints of the site and the largely sequential nature of the works, targeted weekend working is the primary action that BBLP will take. Such acceleration is cost neutral, the cost of weekend working equating to that for the preliminary costs (site overheads) for the time saved. The completion date of 1 April 2021 includes for this acceleration.
43. Independently of the contract, apologies have been made to the community for both the council and BBLP. BBLP have also offered to engage with the parishes to explore opportunities for BBLP to support the delivery of a project or initiative for the benefit of the Fownhope & Woolhope community.
44. Finally at time of writing of this report works remain on target for completion at end of March with road reopening before 1 April 2021.
45. The Cabinet Member Infrastructure and Transport has asked the Acting Chief Executives to commission an independent review of the Fownhope Road repair projects. The review is to cover this repair project from the point of Storm Dennis floods damage to the re-opening of the road to traffic. The review scope is being drafted and will include a complete review of the delivery of the project. It will consider the flood response as well as the subsequent design and construction of the repair schemes on the B4224, it will include consideration of all engineering / technical issues associated with these schemes. The review will also include consideration of officers and member's decisions during this time and question if the council could have expedited repairs sooner. The review will be undertaken by an external body and it will to be commissioned by officers who sit outside of the Highways service to ensure true independence and objectivity.

Community impact

46. The closure of the B4224 severs the main route between the village of Fownhope and the surrounding area and Hereford and much of the North of Herefordshire. Many are using an alternative route on minor roads through the parish of Woolhope to enable access. This change in the distribution of traffic is having a negative impact on the communities of Fownhope and Woolhope in particular and increasing journey times for many when compared to the normal use of the B4224.
47. Council officers, members and Balfour Beatty Living Places, first met with local Parish Councils on 2 March 2020 to share details of the initial assessment of severe damage caused by the storm at both locations and answer questions. The council has committed to provide its realistic estimates for the duration of the repairs by 6 March following analysis of geotechnical investigations.
48. The Council and Balfour Beatty Living Places subsequently met with Fownhope Parish council at an open meeting with parishioners on the evening of 11 March 2020. Supported by Local Members, an open dialogue has been in place with parishes throughout. At the time of writing 35 progress updates have been issued to the community and key stakeholders and others through the Parish Councils.
49. Fownhope Parish Council wrote on 6 August 2020 on behalf of parishioners and business owners to express the frustration and anxiety caused by the repairs to the B4224 between Fownhope and Mordiford and the handling and management of the re-instatement of the road. Response was provided following investigation of this formal complaint, reference IAT 21037, on 8 September 2020. The parish council response on the 21 September raising some further questions and registering their appreciation that their complaint had been brought to the attention of the Scrutiny Committee. Response to the further questions were provided on 2 November 2020.
50. Further, Fownhope Parish Council wrote on 11 December 2020 claiming compensation for the financial impact of the extended closure on both residents and businesses due to negligence in this council failing to monitor and maintain the road network and to appropriately manage the repair programme resulting from the subsequent road collapse. The matter was referred to the council's insurers who responded to the parish council on 11 January 2021 advising that, a council cannot legally claim on behalf of its residents, this is too wide and vague a class of persons and a duty of care cannot be established on that basis. Furthermore, the claim which the parish council appeared to pursue is in respect to pure economic loss is not recoverable in English Law.
51. Whilst the formal diversion routes for the closure of the B4224 follow routes on A and B roads, these routes are long and consequently many drivers are using minor roads through the parish of Woolhope as their diversion route. To mitigate, weight limits and speed limits have been installed on sections of the route and the frequency of highway safety inspection has been increased, so inspection takes place at least monthly. All highway defects found have then been taken forward to repair on the basis of risk, all as the standards established by the Highway Maintenance Plan.
52. Regardless of the mitigation described, many (including some heavy goods vehicles and agricultural plant) have to use these minor roads and are legally able to do so, as these routes form part of the public highway. However, all drivers are duty bound to proceed with due care and attention.

53. As further consequence, the minor roads used as local diversion have not been available for others to work on these roads. This resulting in a secondary impact on the community in the form of the delivery of the council's plans for a broadband network in the area as part of the Fastershire project. This issue relates to connecting the network in and around Woolhope being delivered by the contracted supplier Airband which due to these minor roads being unavailable for such works cannot be progressed. Additionally the B4224 transects Airband's build between Much Marcle and Brockhampton. Here there is a need to connect areas, and the works to do this will require a closure of these minor roads. The council, as the traffic authority and highway authority cannot sanction this, as the impact on the community would be acute and to do so is considered contrary to the network management duty, as the Traffic Management Act 2004. This circumstance is delaying to delivery of the planned broadband network. These broadband works are externally funded and if unable to progress funding may be withdrawn placing broadband delivery to those communities at risk. The Fastershire project is seeking an extension to the time that this funding will be available.
54. Whilst the combined impact of the closure of the B4224 and the use by many of minor roads as alternative cannot be underestimated, the true scale of this impact has been coincident with the impact of COVID19. The true impact has undoubtedly been influenced by the pandemic. Lockdown has changed travel behaviour reducing the number of journeys for many, but not all.

Environmental Impact

55. The damage to the B4224 resulted from Storm Dennis, the repair once complete will help secure the resilience of this route to future storm damage.
56. Increased journey time for those who have to travel during the closure is having a negative impact on carbon emissions. Some who were able to travel short distances by sustainable modes of travel – walking, cycling, and public transport are less able to do so as a consequence of this enforced closure.
57. Such impacts will be best addressed by the full repair and safe reopening of the B4224 soonest.

Equality duty

58. Under section 149 of the Equality Act 2010, the 'general duty' on public authorities is set out as follows:
- A public authority must, in the exercise of its functions, have due regard to the need to -
- (a) eliminate discrimination, harassment, victimisation and any other conduct that is prohibited by or under this Act;
 - (b) advance equality of opportunity between persons who share a relevant protected characteristic and persons who do not share it;
 - (c) foster good relations between persons who share a relevant protected characteristic and persons who do not share it.
59. The public sector equality duty (specific duty) requires us to consider how we can positively contribute to the advancement of equality and good relations, and demonstrate that we are paying 'due regard' in our decision making in the design of policies and in the delivery of

services. Our providers are aware of their contractual requirements in regards to equality legislation.

Resource implications

60. The decision taken by the Council on 4 August 2020 was that £4.027m (Priority Flood Repair Works) be added to the capital programme as a new programme; and that they were funded by extended prudential borrowing. The £4.027m was made up from the following estimates:

Schemes	
Fownhope Landslip	£ 1,565,000
Fownhope Retaining Wall Collapse	£ 1,000,000
Whitney on Wye Instability	£ 500,000
Various damage Sites	£ 962,000
Total	£ 4,027,000

61. The Fownhope Landslip (Lechmere Ley) and the Fownhope Retaining Wall Collapse (Stone Cottage) have been commissioned through the Public Realm Services Contract with BBLP.
62. Spend to date: for completeness, in regard to the Fownhope Landslip, this work is complete and cost £496,501.80.
63. In regard to the Fownhope Retaining Wall Collapse. Works are ongoing and the latest forecast is as follows:

Budget Summary	8th February 2021
Construction Forecast Outturn	£ 831,657.22 *
Design Development	£ 302,054.35
Land & Legal	£ 43,951.76
Temporary Bus Service	£ 12,122.00
Total	£ 1,189,785.33

*The current sum of the Target Cost and Compensation Events is £588,709.14

64. The sum of the current forecast costs of the two Fownhope schemes is £1,686,287.13 (£1.686m) which is within the budget reported on 4 August 2020 for these two schemes of £2.565m.
65. The recommendations agreed by the committee will be sent to the executive. In considering their response an assessment of resource implications will be undertaken.

Legal implications

66. The functions of the general scrutiny committee include the powers to make reports or recommendations to the executive with respect to the discharge of any functions which are the responsibility of the executive and to make reports or recommendations to council or the cabinet on matters which affect the authority's area or the inhabitants of that area.
67. The legal issues arising here have been dealt with appropriately above.

Risk management

68. The recommendations agreed by the committee will be sent to the executive. In considering its response the executive will need to assess any risks arising from the recommendations.
69. The highway service is undertaking its own lessons learnt exercise, considering the impact of risk to project delivery to date, this as part of continuous improvement processes. Key themes for the risks identified are:
- Communications, particularly how in future equivalent circumstances, the 'expectation gap' between the timescale for proper repairs and the natural expectation that repairs can be quickly completed, can be better managed through understanding.
 - Funding, particularly in respect to access to contingency in the event that government funding is not forthcoming.
 - Value for Money, particularly to enable expediency in decision making and how value is assured across all available delivery options.
 - Resilience of supply, particularly through the availability and resilience of all delivery options.
 - Project visibility, as part of an extensive council wide programme of activity, this both in response to, and recovery from, a major storm event and as part of 'business as usual'.
 - Improved customer focus in project management, as a consequence of this changes were immediately made to project management arrangements to expedite delivery. This to ensure that there was a clearer focus on limiting the impact that any delay in project delivery was having on community, through taking all opportunities for acceleration and/or the removal of risk to time within the programme of works.
70. A further lessons learnt exercises will take place, particularly to consider the learning to be gained from the recommendations agreed by this committee.

Consultees

None

Appendices

- Appendix A - Programme 1
- Appendix B - Programme 2
- Appendix C - Programme 3

Background papers

None