

Wiltshire Council

Cabinet

16 April 2024

Subject: B4069 Lyneham Banks

Cabinet Member: Cllr Nick Holder - Cabinet Member for Highways, Street Scene, and Flooding

Key Decision: Key

Executive Summary

In February 2022 the B4069 experienced a major land slip at Lyneham Banks which resulted in the road having to be closed to traffic. A length of about 90 metres of road was displaced and moved by up to 25 metres downhill, making the road impassable.

The movement of the landslip slowed towards the end of 2022 when it was considered safe to carry out a detailed ground investigation of the road and the wider area. This involved 31 boreholes, 21 trial pits, sampling, and the installation of devices to monitor water levels and ground movement. The survey was carried out with the co-operation of the adjoining landowners who provided access to their land for the surveys.

The indications are that the landslip occurred within a layer of weathered clay at a depth of between 2 and 4 metres. It is likely that the failure resulted from a combination of factors, including an existing weakness at a historic landslip location which may have been re-activated, increased groundwater flows following recent storms, and increased loading because of earth moving operations in connection with an adjacent development.

Various options have been considered with the assistance of ground engineering specialists and quantity surveyors from Atkins under the highways consultancy contract. The preferred option is to construct a retaining wall using bored piles and ground anchors to stabilise the hillside and the road, with drainage to control the groundwater flows in the scheme area.

This would be the quickest and least expensive option to reopen the road and it would have the least environmental impact, however it would still be a major construction project costing in the region of £5 million and the road would be expected to be opened towards the end of 2024.

Tenders have been invited for the scheme, and the detailed scoring and financial information on the bids are contained in a confidential report to be considered in **Part 2** of this meeting.

Proposals

Cabinet is asked to approve the appointment of the contractor detailed in the exempt appendix for construction of the B4069 Lyneham Banks scheme.

The proposal is to be considered as a **Part 2** Item at this meeting.

Reason for Proposals

- 1) There is a need to repair the B4069 at Lyneham Banks which has been closed because of a major landslip,
- 2) The temporary road closure has caused significant disruption to road users, residents, and businesses, and the road should be reopened to traffic,
- 3) Various options have been considered and a retaining wall offers the best and most cost-effective means of stabilising the ground and reinstating the road,
- 4) The future stability of the road needs to be ensured by carrying out substantial works on land adjoining the road to ensure suitable drainage and to stabilise the ground and support the road.
- 5) A suitably experienced contractor is required to carry out the works and tenders have been returned and assessed and a preferred contractor has been identified.

Parvis Khansari
Corporate Director, Place

Wiltshire Council

Cabinet

16 April 2024

Subject: B4069 Lyneham Banks

Cabinet Member: Cllr Nick Holder - Cabinet Member for Highways, Street Scene, and Flooding

Key Decision: Key

Purpose of Report

1. To award a contract for repairs required to the B4069 at Lyneham Banks.

Relevance to the Council's Business Plan

2. The Council's Business Plan 2022 to 2032 sets out themes for Thriving Economy, Resilient Society, Sustainable Environment and Empowered People. The following objectives are particularly relevant to the current proposals:
 - a. We have vibrant well-connected communities,
 - b. We ensure decisions are evidence-based,
 - c. We take responsibility for the environment,
 - d. We are on the path to carbon neutral (net zero),
 - e. We are safe.
3. The temporary closure of the B4069 at Lyneham Banks for safety reasons is having an adverse impact on local communities and businesses, and there is a need to reopen the road.

Background

4. The B4069 between Lyneham and Chippenham is the most direct route between Royal Wootton Bassett and Chippenham. In February 2022 the B4069 experienced a major land slip at Lyneham Banks which resulted in the road having to be temporarily closed to traffic.
5. The hillside at Lyneham Banks is known to be unstable and landslips have previously affected the B4069, most notably in June 1981 following which major repairs were carried out by the County Council.
6. The road has been monitored frequently over the years to ensure that any cracks and deformation because of ground movement do not result in an unsafe road surface. Sections of the road have been resurfaced as required to keep it safe and seal the surface to reduce the risk of water ingress and further land slips. Work has sometimes been needed annually because of cracking or movement of the road surface.
7. The landslip in February 2022 was first noticed when trees adjacent to the road began to lean and the carriageway started to deform. The rate of deformation soon

accelerated, and material from uphill started to spill onto the road, reducing its available width.

8. Temporary traffic signals were installed on the B4069 to enable shuttle working of traffic over the damaged section, but it soon became apparent that the road was sliding downhill to such an extent that it would have to be closed to traffic for safety reasons.
9. The hillside continued to move slowly during the following weeks. Eventually a length of about 90 metres of road was displaced and moved by up to 25 metres downhill. The carriageway surface broke into sections and became impassable as the road continued to move slowly over several months.

Main Considerations for the Council

Road closure and traffic diversions

10. Prior to the landslip the B4069 was carrying over 5,500 vehicles per weekday, and over 35,000 vehicle movements per week. The signed diversion route for traffic between Royal Wootton Bassett and Chippenham because of the closure is via the A3102 through Calne to the A4.
11. The length of the diversion route between Lyneham and Chippenham is 13 miles compared to the previous 9.4 miles, and some drivers have been choosing to use shorter routes on the unsuitable minor lanes in the area instead, with consequent damage to road surfaces and verges, and with associated safety concerns.
12. Some traffic continued to use the B4069 route after the closure by taking the minor road through Bradenstoke and Clack Hill to bypass the closed section of road. It became apparent that the volume of traffic attempting to use this narrow road was unsuitable as vehicles were often unable to pass each other, resulting in congestion, particularly in the peak periods.
13. Following discussions with the Parish Councils and local Council members, traffic management measures were introduced in November 2022 on some of the minor roads in the area. This included a restriction to allow only one-way traffic northbound on Clack Hill.
14. The closure of the B4069 has had an adverse impact on businesses and agricultural operations in the area and has affected residents not only because of the inconvenience but also because of the increased volume of traffic using minor roads in the area. Weight limits and speed limits have been introduced but damage is being caused to the verges of some of the minor roads where vehicles cannot pass each other easily, and consequently repairs are having to be carried out.

Ground Investigations

15. There was information available from previous ground investigations and studies in the area, but it was important that these should be augmented by a ground investigation focussed on the location of the current failure as there were indications of local variations in ground conditions in the area.
16. During 2022 surveys using drones were carried out by Atkins, the council's highways consultant, to monitor the ground movement. When it became safe to do so towards the end of the year, a ground investigation was carried out involving 31 boreholes, 21

trial pits, material sampling, and the installation of devices to monitor water levels and ground movement. This work was carried out with the co-operation of the adjoining landowners who provided access to their land for the surveys.

17. We now have a better understanding of the local geology. Lyneham airfield is on a plateau comprising a layer of limestone underlain by clay. The clay on the hillside to the north at Lyneham Banks has a layer of less stable weathered material overlaying the firmer clay. This shows evidence of historic failures and previous landslips.
18. The upper limestone layer is generally porous, whereas the clay beneath it does not readily absorb water. There is a tendency for groundwater to emerge from the limestone and run downhill through the weathered clay, where it can act as a lubricant for existing weaknesses in the material or increase water pressure which can contribute to or trigger a landslide.

Building Works adjacent to the road

19. Prior to the landslide, building works were taking place on the land immediately to the south of the road. Planning permission had been granted on 15th July 2019 (19/00670/FUL) for the demolition of an existing dwelling, garage, workshop and the erection of a detached two storey dwelling, garage with associated works.
20. The permission includes conditions that no development should commence on site until the trees to be retained have been enclosed by protective fencing, and no vehicle, plant, temporary building or materials, including raising and or, lowering of ground levels, shall be allowed within the protected areas.
21. It was noted that the original dwelling and garage/workshop were demolished without consent, and a new dwelling and garage were being constructed on built up land, and in the wrong place, with large amounts of spoil containing broken roof tiles, bricks and other detritus being imported. This was contrary to the conditions, and there was no valid Building Regulations application.
22. The works included the removal of trees and vegetation and the importation of fill material, which potentially increased the loading at the location of the historic failure. The planning application did not indicate that any substantial earthworks were proposed, and there does not appear to have been any testing or calculations carried out by the owners prior to the placing of that material.
23. The developer stopped work after the landslide started. The Council's Planning Enforcement Officer advised the owner's agent on 2nd March 2022 that any recommencement would result in a Temporary Stop Notice being issued at the first available opportunity after any works recommenced. There has been no further substantial works on the site by the developer since then, and there is no valid planning permission for the works undertaken on the site.

The February 2022 Landslip

24. The indications are that the February 2022 landslide occurred within the weathered clay and was at a depth of between 2 and 4 metres. The location of the major slip appears to coincide closely with a similar historic event, which suggests that there was an established weakness which may have been susceptible to failure and that an old landslide was re-activated.

25. The landslide occurred after a period of heavy rain and adverse weather, which included three named storms. An increase in groundwater flows may have affected an existing slip plane, increasing the likelihood of a failure occurring. The previously recorded landslips in the area, in June 1981 and a recent smaller landslide to the west of the major landslide on 5th January 2023, also happened after periods of heavy rainfall.
26. The frequent resurfacing of sections of the B4069 road indicates that there was settlement or displacement of material over many years prior to the 2022 landslide. This was apparent from the depth of materials, including concrete slabs possibly placed during repairs or improvements during the second world war, which were exposed as the road collapsed.
27. The hillside at Lyneham banks is known to be unstable and evidence suggests that there has been gradual movement of the ground for many years, with the occasional major landslide occurring, especially in wet weather.
28. It is likely that the February 2022 landslide resulted from a combination of factors:
 - a. the existing weakness at a historic landslide location,
 - b. increased groundwater flows following recent storms and
 - c. increased loading because of earth moving operations in connection with the adjacent development.
29. The indications are that the stability of the area is very sensitive to change in slope profile and groundwater conditions and this risk needs to be managed within any proposed slope management or remediation scheme. The potential remedial works are complicated by the presence of waste material some of which is contaminated and disposing of this could add significantly to the cost of works.

Proposed Works

30. Options for reinstating the B4069 have been considered, including reviewing whether the road does need to be reopened. However, the Council has a duty as Highway Authority to repair the road and not to do so could result in a legal challenge and a legal notice has already been served.
31. The closure has had an adverse impact on residents and businesses and there is clearly a local desire to have the road reopened. During the flooding in January the closure of the B4069 between Sutton Benger and Christian Malford caused problems for residents of Christian Malford because the alternative route via Lyneham Banks was not fully available.
32. Rebuilding the road on the ground as it is now would not be feasible because it is not stable. It is necessary to carry out major civil engineering works to stabilise the hillside and provide a suitable foundation for the road construction and to install suitable drainage to control the surface and groundwater.
33. Various options have been considered with the assistance of ground engineering specialists and quantity surveyors from Atkins under the highways consultancy contract. The main options have been examined in more detail (See **Appendix 1**). These were:
 - excavation of the existing ground and replacement with imported fill,

- soil stabilisation by treating the ground,
 - construction of a retaining wall,
 - construction of bridges to span the landslip area.
34. Removing the slipped material and replacing with suitable fill material would cost twice as much as a retaining wall because of the high cost of removing and disposing of material and the presence of some contaminated material.
 35. The use of soil stabilisation techniques would be similar in cost to a retaining wall solution but may not be as robust in the longer term because it may not deal with all the potential failure planes deeper in the weathered material.
 36. A multi-span bridge to span the area of the landslip is not considered to be a feasible solution to remediate the landslip. It would have an extremely large deck structure and associated abutment foundations, and intermediate pier foundations would be located within the landslip itself, and potentially subject to high lateral forces. This would necessitate large, piled foundations, which would be more difficult to construct on an active landslip, and would be a more expensive solution.
 37. A bridge structure would not address the underlying landslip failure currently impacting the land to the north and south of the B4069 which is a safety risk to the public and potentially to the properties of adjacent landowners. It is considered necessary to address these risks.
 38. The preferred option is to construct a retaining wall to support the road and stabilise the hillside. This option would be the quickest, least expensive and have the least environmental impact. It would however be a major construction project costing in the region of £5 million and taking several months to complete.
 39. The retaining wall would have an in-situ reinforced concrete capping beam supported on a single row of 600 mm diameter bored concrete piles. The capping beam will be 1,000 mm wide and 1,500 mm deep and structurally connected to the piles and to tension micropiles to provide additional lateral support to the retaining wall. The wall would be below ground with only a small part of it above ground to enable future inspection and maintenance.
 40. The works would include extensive surface water drainage and ground works both uphill and downhill from the road, which would need to be protected from future disturbance and have access for maintenance. The drainage would be mainly by filter drains, pipes and ditches which would discharge into existing ditches and minor water courses. Some works would be required to ensure the watercourses can accommodate the flows.
 41. It would be desirable to remove some material from the hillside, especially the tipped material uphill from the road, to reduce the loading which could increase the risk of a further ground failure. The remains of the old road would also be removed and potentially crushed for reuse in the works. It is proposed to reprofile the land downhill from the road to remove the undulations caused by the slip as this would enable the land to continue to be used for grazing where appropriate. The scheme would include tree, hedge, and landscape planting to help replace some of that lost in the land slip.
 42. The ground conditions limit the size and type of vehicles and equipment that can be used in some locations, and this has been considered in the design and will be taken

into consideration in the contractor's working methods, choice of plant and processes to carry out the works safely.

43. In order to implement the scheme, additional land and rights outside the highway boundary are being acquired for the installation of a substantial drainage system to reduce the risk of future failure. Negotiations have been opened with the landowners to seek access and acquire the required land by agreement, but to ensure delivery and to avoid potential delays it is proposed to use the council's statutory powers if necessary.
44. Planning permission for the proposed works has been applied for and the timing of the works may depend on its successful progress through the planning approval procedures.
45. It is anticipated that works would start in summer 2024, with the road being reopened towards the end of the year, subject to weather and progress of the works. Most of the construction will be carried out in the summer when weather conditions are more likely to be favourable. Some advance vegetation clearance has already been undertaken to allow surveys to be completed and to facilitate the timely implementation of the works.
46. During the main works the opportunity will also be taken to carry out drainage, stabilisation, and other works on other sections of the B4069 where surface cracking and movement has been detected. Monitoring of the road has been taking place during the closure and some areas of movement have been noted. This is fairly typical for this section of the road and remediation measures will be required alongside the main works to reduce the risk of further major failures and allow the route to be reopened.

Public Engagement

47. Since the landslip and the road closure, a series of online Teams meetings have been held with the local council members and the representatives of the Parish Councils. These focussed on the temporary traffic management arrangements and diversion routes, and following these discussions speed limits, weight restrictions and signing changes were made on various roads in the area.
48. A series of newsletters have been issued to provide updates on the ground investigation, design and traffic management measures. There is a scheme webpage at:

<https://www.wiltshire.gov.uk/highways-b4069-lyneham-banks>
49. A webinar was held on 24th April 2023 to explain the situation and the options which were being explored to reopen the road. The questions raised at the webinar were mainly in connection with the timing of the proposed works and the adverse effects of diverting traffic on the minor roads. The questions and presentation are included on the scheme webpage.
50. When the construction starts further newsletters will be published, the webpage will continue to be updated and information will be provided to the local communities, which is likely to include a meet the contractor event or webinar.

Procurement

51. Consideration was given to procurement options, which were assessed against criteria for time (speed or certainty of completion date), cost (price level and cost certainty),

and quality (functionality and performance). They were assessed in the knowledge that the scheme has been developed to a good level of detail with design drawings, quantities and estimated costs prepared.

52. The traditional contract approach was preferred as this procurement method is suitable for this type of scheme as the scope and design have been well developed so that bidders have a good understanding of what work is required. This approach has recently been followed for other major improvement schemes which were all delivered successfully. It is expected to provide time predictability and good cost certainty for the current works.
53. A single-stage procurement exercise has been undertaken with the tender assessment based on Price (60%) and Quality (40%). This approach is something that the market is familiar with and is often used.
54. Supplier engagement was undertaken by a webinar presentation to potential bidders on the 14 December 2023. The main aim of the exercise was to proactively engage with potential suppliers and inform them of the opportunity, and to offer the opportunity for feedback from the market regarding the procurement approach and strategy being adopted.
55. The market engagement presentation attracted interest from 11 potential suppliers, including major national contractors, medium sized organisations, and local suppliers. It appeared to be well received and it seems that the contract would be attractive to bidders. Detailed comments were received from one contractor and two others requested visits to inspect the site, and others subsequently requested the opportunity to visit.

Procurement Process

56. The procurement was advertised on Find a Tender Service (FTS). The tenders were invited using the single stage open procedure based on the NEC4 form of contract. All the documents were made available to the potential bidders to allow them to fully understand the requirements and make an informed decision regarding whether to complete and submit a bid.
57. The tender documents were published on 5 January 2024 for return by 8 March 2024. As well as the full package of design drawings and an activity schedule to be priced, there was a questionnaire which required information on the suppliers' policies, capacity, and capability. There were specific questions asking for examples of previous schemes, delivery, and commercial management.

Tender Process During the tender period clarification questions were received from bidders, which were answered. From the questions received it was apparent that the bidders had a good understanding of the requirements of the contract. A total of 10 contractors made accompanied visits to the site during the tender period.

58. At the close of the tender period on 7 March 2024 there had been 9 tenders received.

Tender Assessment

59. The received tenders were reviewed and assessed in accordance with the methodology set out in the tender documentation, which set out the tender assessment process based on Price (60%) and Quality (40%) (see **Appendix 2**).

60. The total score for the Quality evaluation was broken down into the following elements:
- Q1 Organisation, Key People and Delivery - 21%
 - Q2 Programme and project risks - 33%
 - Q3 Construction Process – 20%
 - Q4 Social Value - 16%
 - Q5 Minimising Carbon/ Climate Emergency - 10%
61. The bidders had to provide information on their proposed staffing, resources sub-contractors and approach to delivery, including an organogram which showed linkages to stakeholders and the Council.
62. An indication of the proposed outline programme for the works had to be provided, with a narrative to describe the proposed resourcing phasing and key construction processes.
63. The bidders were requested to set out how they would communicate with local communities and the social value commitments that they were prepared to make when delivering the project.
64. Bidders were asked to set out what measures they would implement to minimise the climate/carbon impact project, and how this may have influence and impact beyond the delivery of the scheme.
65. The Quality of the bids was assessed and scored by a panel of council and consultant staff who have extensive experience of the type of work proposed to be undertaken through the contract. The scores awarded for each question could range from 5 for an excellent response, which exceeds the requirements, to 0 for an unacceptable one that does not meet the requirement.
66. The Price element representing 60% of the overall score consisted of two elements:
- Tendered Total of the Prices - 51%
 - Compensation Event Scenarios - 9%
67. The tendered total was based on the activity schedule of the work to be undertaken, and three Compensation Event scenarios were used to assess the contractors submitted fees to be paid in the event of variations to the work.

Assessment of Bids

68. All of the bids were considered and assessed in line with the tender documentation. Quality and price scores were combined in accordance with the 60/40 Price/Quality proportions to obtain an overall score for each bidder.
69. The tender assessment process recognised the vital importance of delivering cost-effective works but also acknowledged the importance of the quality of the work to be carried out by the contractor. The robust process applied to the tender assessment has enabled a preferred bidder to be identified for the contract.
70. The full details of the results of the assessments are described in the **Part 2** item to be considered at this meeting.

Next Stages

71. Following a decision to award the contract there will be a ten-day standstill period during which other tenderers may make a legal challenge to the award of the contract.
72. Subject to the outcome of the decision by Cabinet, and assuming no legal challenges are received, the intention is to complete the legal processes to award the contract and for the contractor to mobilise the necessary resources as soon as possible, subject to the necessary planning and land permissions being in place.
73. A communications strategy will be developed with the contractor to ensure that residents and businesses are kept informed regarding the proposed start and progress during the works. It is intended that a 'meet the contractor' event or webinar will be held prior to the start of the main works, and the dedicated webpage will provide updates on progress.

Safeguarding Implications

74. The proposal is for the repair and construction of a road and is not considered to have any safeguarding implications.

Public Health Implications

75. Landslides can have serious consequences and can result in fatalities or injuries as well as damage to property. Prompt action to ensure the safety of the public was taken at Lyneham Banks as soon as the landslip became apparent.
76. The B4069 initially had temporary traffic control, but as the road continued to deteriorate in condition it had to be closed to traffic for safety reasons. It was appreciated that this would cause serious disruption and inconvenience for road users, residents, and businesses, but safety was the priority.
77. The site became the subject of local interest and soon attracted visitors and media coverage. It was particularly attractive to skateboarders as it provided a challenging obstacle course. Consequently, the security of the site had to be improved for safety reasons with additional fencing to prevent any public access to the road.
78. The use of other minor roads in the area as unsigned and unofficial diversion routes has had potential safety implications because of the increased volume and speed of traffic and the nature of the lanes which are generally narrow with limited visibility. There are safety benefits in reopening the B4069 as it would provide a better route for this traffic.
79. The reinstatement of the road will be carried out using working methods which aim to reduce the risk of further landslips and hazards for road users and residents.
80. The tender evaluation process has included an assessment of the contractor's health and safety policies and procedures before award of the contract.

Procurement Implications

81. The initial geotechnical advice in connection with the landslip was provided by Atkins under the Council's Highway Consultancy contract, and a specialist team was assembled to implement the ground investigation and subsequent design work. The Council has framework contracts in place for various specialist services, and these were used to procure the ground investigation.

82. The Council's Procurement Team has been actively involved in the procurement for process for the proposed works and has monitored the procurement and tender assessment to ensure they are carried out properly and to reduce the risk of a legal challenge at a later stage.
83. The procurement has followed a single stage process. The relevant notices and procedures have been complied with. The scope and details of the contract considered several factors, including the type of work required and the need to make the contract attractive to bidders by managing risks and providing a procurement process that is easily understood, clear and fair.
84. The detailed scoring and financial information on the tender assessment are contained in a confidential report to be considered in **Part 2** of this meeting.

Equalities Impact of the Proposal

85. The proposals involve the reinstatement of a road which has had to be temporarily closed because of a landslip and is not considered to require an Equality Impact Assessment.

Environmental and Climate Change Considerations

86. The frequency of landslips does appear to be increasing nationally, particularly after periods of heavy rainfall. The increase in storms and severe weather events associated with climate change could lead to an increase in these incidents.
87. The landslip at Lyneham Banks occurred shortly after three named storms. The increase in groundwater in the layer of weathered clay probably contributed to the failure. Ensuring adequate drainage to avoid a repeat of the situation has been an important design consideration.
88. The scheme has been developed to build resilience into the highway infrastructure. The choice of materials and construction processes has been made considering the whole life implications and the need to provide a durable and resilient highway network.
89. The carbon impact has been considered in assessing the scheme options. The removal and transport of large volumes of material and the import of fill material will be kept to the minimum with the preferred option as this will reduce the transport carbon implications.
90. With the type of work required at Lyneham Bank there is currently limited scope for reducing the carbon impact of many of the construction processes because of the limited choice of suitable materials, equipment, and processes currently available, but the carbon impacts of the bidders' policies and proposals were taken into account in assessing the tenders for the contract.

Workforce Implications

91. There are no significant workforce implications with this proposal and there are no TUPE implications. The construction work will be carried out by external contractors under the supervision of the Council's Major Highway Projects team supported by staff provided through the Highways Consultancy Contract.

92. The opportunity will be taken to provide site experience to Council staff, especially apprentices, as a large scheme of this type enables experience to be gained in a wide range of construction methods which would not be possible on smaller schemes. This will contribute to staff development and improving capability.
93. Some support from other disciplines has been required, including legal, land valuation and environmental aspects and further requirements will continue to be reviewed as the construction proceeds.

Risks that may arise if the proposed decision and related work is not taken

94. Not proceeding with the reinstatement of the road would result in continuing traffic delays, increased journey lengths and times, and could result in a legal challenge, as well as an increased risk of vehicle collisions because of traffic using unsuitable roads. The disruption to business and residents would continue.
95. Businesses have been disrupted by loss of passing trade and longer journey times. Agricultural operations have been affected by the closure as some movements have had to use other roads and longer routes. This would continue in the event of the works not being undertaken.
96. Delaying the start of works would be expected to result in increased costs because of inflation and it is unlikely to result in reduced prices in the current circumstances with uncertainty about future inflation.

Risks that may arise if the proposed decision is taken and actions that will be taken to manage these risks

97. In view of the complex slip planes within the weathered material and because of the disturbance caused by the ground movement, there is a risk of the need for some additional ground treatment being identified during construction, which could have cost implications. The adopted design for the scheme, the detailed ground survey and testing, the use of competent designers and contractors, and an identified risk allowance in the estimate should reduce the main risks associated with the construction stage.
98. Monitoring ground movements and groundwater levels are ongoing. If further monitoring reveals additional zones of movement, the ground model may need to be revised, and further remedial measures may need to be considered. However, it is considered that the preferred option presents a robust solution that should be able to be amended to cope with any minor changes to the observed conditions.
99. The proposed scheme would stabilise the road at the location of the landslip and the opportunity will be taken to address other locations where movement has been identified but other sections of the road may be subject to movement in the future. Stabilisation works on much longer lengths of the road would be very expensive and are not considered to be justified based on the current information, but repairs will be made where required and the situation will continue to be monitored.
100. The award of the contract and the start of works will depend on the necessary planning, land arrangements and other approvals being in place. Any delay to finalising these issues could delay the start of works, but current indications are that a summer start on construction is realistic.

101. A contributory factor to the landslip appears to have been high rainfall following storms, so there is a possibility that adverse weather could affect the construction programme. This could lead to the temporary suspension of the work, with consequent time and cost implications. The project programme and resource levels will be managed and adjusted as necessary to reduce this risk.
102. During the construction works the contractor's performance will be managed using suitably experienced supervising staff, performance milestones and key performance indicators to ensure that the project is delivered to the required quality and programme. The potential safety issues are appreciated, and comprehensive site supervision and contract management will be put in place to manage those risks.
103. Increasing workloads in the public and private sectors, and national skills shortages, could cause resource issues which could affect scheme delivery. The appointment process that has been followed for the contract award should reduce these risks.

Financial Implications

104. The construction of a retaining wall is considered to offer the most cost-effective means of reinstating the B4069, and it would require less maintenance than the other options. The scheme cost estimate of £5 million includes contingency and inflation allowances typical for a scheme of this complexity, as well as supervision costs.
105. The possibility of obtaining additional funding from DfT has been explored and representations were made to them, but the indications are that additional funding would not be available and that legal action against third parties would be unlikely to be successful. It was therefore considered prudent to make financial provision for these works.
106. Consideration has been given to a range of funding options for these works. The full cost of the construction is not recommended to be taken from the Structural Maintenance capital budget in 2024/25 as the impact would be too significant on other road maintenance schemes in one year, especially in view of the recent winter damage to the roads and drainage systems across the county.
107. Borrowing for the £5m constructions costs would have revenue implications of circa £0.280m per year for 50 years from 2025/26 based on a forecast interest rate of 3.6%. This revenue impact would need to be captured as part of 2024/25 Budget Setting and compensating savings or cost reductions identified to cover the pressure, which could adversely affect routine highway maintenance or other service delivery.
108. An alternative would be to top slice £1m every year for 5 years from the annual Structural maintenance capital grant and fund in 2024/25 by other unapplied grants. The impact of this would be that £5m less maintenance would be undertaken over the 5 years, which has particular risks in view of road conditions and winter damage.
109. Community Infrastructure Levy is not a viable option as the scheme is not bringing forward or supporting new development.
110. The Council receives commuted sum payments from developers towards the future maintenance costs of infrastructure which is adopted by the council and thereafter becomes the council's responsibility. The commuted sums can be used to rectify any design or construction defects that become apparent after the maintenance period has

ended, but in some cases, it has been used to contribute to the cost of other improvement schemes where maintenance funding would otherwise have been used. This is on the understanding that the maintenance liabilities which it would have funded remain and may have to be paid for out of future maintenance budgets.

111. It has been prudent to ensure that the commuted sums pot remains large enough to meet potential liabilities resulting from issues with developer provided infrastructure. However, in recent years there has been a limited call on the fund, mainly because of the effective supervision of developers’ designs and construction, and consequently the fund has increased considerably. As of 31st January 2024, the balance for highway commuted sums stood at £3,505,596.65, and it is proposed to use the majority of this to fund the Lyneham Banks works.

112. It is proposed that funding for the scheme should be provided from:

Source	Funds	Comments
Highways Maintenance Budget 2024/25	£1,000,000	To be allocated in next year’s budget
Additional Highways Capital Funding	£1,000,000	Identified in budget proposal
Commutated Sums	£3,000,000	Could be increased if funding available
Total	£5,000,000	

113. This funding package will enable works to commence in 2024/25 for completion later in the year.

Legal Implications

114. The Council’s legal services team became involved as soon as the landslip occurred and have provided advice during the development of the scheme.

115. The Council is the local highway authority and has a duty to maintain the highways network and related infrastructure. Failure to reopen the road could result in a legal challenge, and a legal notice has already been received. The cost of repairs is unlikely to be a valid reason to fail to reopen the road.

116. The proposed scheme will reinstate the highway capacity and improve the safety of the network and will be carried out under the provisions of the Highways Act 1980 and related legislation. The reinstatement of the road and the associated works to stabilise the adjacent land requires work outside of the highway boundary on adjacent private land, and the agreement of the landowners or statutory powers will be used to enable the works to proceed.

Overview and Scrutiny Engagement

117. A briefing on the contents of this report will be given to the chair of the Environment Select Committee and any comments will be reported to this meeting.

Options Considered

118. Not proceeding with the reinstatement of the road is not considered appropriate because of the disruption to the road network caused by the road closure, the possibility of a legal challenge if not reopened, the effects of the closure on residents and businesses, and the safety and environmental implications of the displaced traffic.

119. Delaying the start of construction would mean that the existing disruption and disturbance would continue, and it would be likely to result in increased costs because of inflation when the scheme does proceed.
120. The development of the current scheme has considered a range of options including importing fill material, soil stabilisation treatment, piling, and a bridge. Consideration was also given to the drainage and road construction aspects. It was concluded that the currently proposed retaining wall would be the best approach overall and would offer good value for money and ensure timely delivery of the scheme.
121. Extending the retaining wall to cover a longer length of road was considered but would not be justified because of the high cost and the substantially lower risk of a major failure on those sections of roads in the current circumstances. Instead, localised repairs and works will be undertaken at other sections of the road showing signs of cracking and deformation. Consideration may need to be given to further works in the future if the monitoring indicates serious causes for concern, but in the current circumstances the priority is to reopen the road as soon as possible.

Conclusions

122. The landslide on the B4069 at Lyneham Banks has had a major impact on the highway network and has caused significant disruption to local residents and businesses. There is a need to reinstate the road for legal, practical and safety reasons.
123. The ground investigations and surveys undertaken last year have provided sufficient information to enable a feasible scheme to be designed to stabilise the hillside and reinstate the road.
124. A robust procurement process has been undertaken to ensure an appropriate contractor is appointed for the construction of the B4069 Lyneham Banks scheme.
125. The most advantageous tender for the Council, taking into account quality and price, has been identified in accordance with the procurement procedures. The results of the assessment to identify the preferred bidder are described in detail in the **Part 2** item to be considered at this meeting.

Samantha Howell – Director, Highways and Transport

Report Author: Stephen Wilson, Head of Major Highway Projects,
stephen.wilson@wiltshire.gov.uk

Appendices

Appendix 1 – Summary of Options Considered
Appendix 2 – Tender Assessment process

Background Papers

None