
From: Simon Jones – Corporate Director of Growth, Environment and Transport

To: Peter Osborne, Cabinet Member for Highways & Transport

Subject: Cliff Collapse – Road of Remembrance, Folkestone

Decision no: 26/00011

Key Decision: Yes – Involves expenditure greater than £1m and affects 2 Electoral Divisions

Classification: Unrestricted

Past Pathway of report: N/A

Future Pathway of report: Cabinet Member Decision

Electoral Division: John Baker – Folkestone West
Mary Lawes – Folkestone East

Is the decision eligible for call-in? Yes

Summary:

On 27 January 2024, a major landslip of trees and soil occurred from a cliff north of the Road of Remembrance, blocking the road. The road remains closed and there is a risk of further significant collapses with the potential to damage the road itself.

The report describes the unique complexities and challenges involved with this collapse, and explains how the authority proposes to stabilise the cliff to protect this historic road and enable it to be safely re-opened for public use. As part of that, it is necessary to seek a key decision to progress the delivery of necessary engineering works.

Recommendation(s):

The Cabinet Member for Highways and Transport is asked to agree the proposed decision as detailed in the attached Proposed Record of Decision document (Appendix A).

1. Introduction

1.1 The Road of Remembrance is an historically important road linking the Leas and harbour areas of Folkestone. It has been closed for over two years to protect road users. During that time, officers have carried out site and other

investigations, in order to understand geological, stability, legal, risks and other issues, and to carry out a detailed options appraisal given the ongoing risk to the road itself.

- 1.2 The proposed engineering works are necessary to protect the road from further damage and to safely re-open this important road, and to reduce the risk of harm to residents and damage to properties at the top of the cliff and those who may choose to ignore formal closure of the road below.

2. Key Considerations

- 2.1 The Road of Remembrance has been closed for a prolonged period, and will remain so unless action is taken to stabilise the cliff above. It is an historically important road, central to the character of Folkestone and a vital link between the Leas and harbour areas.
- 2.2 The cliff is very unstable and there is a high risk of further significant collapses which may cause structural damage to the road itself.
- 2.3 There are legal risks around liability and, potentially, corporate manslaughter should there be further significant collapses that cause loss/harm.

3. Background

- 3.1 After the collapse occurred, we immediately closed the road on safety grounds to protect the public from further landslips, before removing trees and soil. The road itself remains closed since it would not be safe to re-open it given the risk of further collapses of the cliff above.
- 3.2 Whilst the road itself did not appear to need repair at that time, we were concerned about the risk of the road being damaged and taken out of service if further collapses of the cliff above were to occur, especially since the road itself is on top of a further cliff below. As such, we worked as quickly as possible to get to the point where we could stabilise the cliff above so far as that is possible without substantive engineering works.
- 3.3 A lot of technical and complex work has been carried out on site to understand cliff stability, any future risk to the road itself and what work would be necessary to protect the road and safely re-open it. Ground investigation works to assess the condition of the cliff have included:
 - topographic surveys
 - WW2 bunker survey, including a private property cellar at the top of the cliff
 - Ground Penetration Radar (GPR) survey (non-invasive method of mapping underground features)
 - geotechnical surveys of the cliff face to assess condition
 - boreholes to identify makeup of ground twenty metres below the surface
 - Cone Penetration Tests (CPT) which test the strength of the ground.
- 3.4 This has been an unplanned, complex situation, made more difficult by encountering a variety of unexpected challenges that we have had to overcome. These include:

- further landslips
- discovery of a protected species within the cliff, leading to in-depth ecology surveys
- archaeology teams needing to be present on site after Anglo Saxon remains were found
- protection of a war bunker that sits within the site
- close proximity of private properties at the top of the cliff
- an unexploded ordnance survey given the risk from WW2 bombs

Land ownership

3.5 The failed cliff is neither KCC-owned land nor part of the publicly maintainable highway. Normally, in these circumstances, we would seek to persuade any landowner to take necessary action to stabilise their land, so that it did not present a hazard to highway users or a risk of damage to the road itself. We investigated ownership and discovered that the registered land title owner died in 2007 without a will. Officers have established that there is no prospect of potential descendants being able to stabilise the cliff themselves or of KCC recovering any costs from them after completing any stabilisation works ourselves.

Geological considerations

3.6 We have obtained expert technical advice specifically on the geological stability of the cliff which is a key factor in this matter. Of particular concern is the top of the cliff is now near vertical with an overhang, which presents an extremely high risk condition, indicative of advanced instability and a significant risk of toppling or rotational failure. In addition, further down, the cliff continues to be saturated as a result of groundwater conditions, with the extensive presence of tension cracks.

3.7 The expert advice we have received concludes that:

- Further Landslips: High likelihood of continued and potentially larger-scale cliff failures, including rotational slips and shallow translational slides, exacerbated by the near-vertical, overhanging profile.
- Toppling Failure: Significant risk of sudden detachment and collapse of the near-vertical overhanging cliff sections, posing an extreme hazard, particularly given the unpredictable behaviour of groundwater within the cliff.
- Erosion: Ongoing degradation of the cliff face due to rainfall, fluctuating groundwater pressures and weathering, exacerbating instability, particularly upper sections.
- Groundwater Pressure Build-up: Persistent or increased pore water pressure within the cliff, reducing soil strength and acting as a key trigger for failure, with the cliff's stability being highly sensitive to seasonal variations in groundwater.

4. Options considered and dismissed, and associated risk

4.1 KCC has carried out a detailed options analysis. The following options were considered.

Option 1 - Do nothing

In reality, 'doing nothing' means keeping the Road of Remembrance closed for a lengthy period or permanent basis.

Further collapses, especially during the wetter and colder months of the year, will happen. The cliff has no structural support. That poses a risk to the structural integrity of the road itself and also to human life, since we can never fully prevent people (particularly children) from ignoring the road closure below.

Further collapses, particularly if they were larger in scale and/or involved the toppling over of the part or all of the overhanging crest at the top of the cliff, would also make any engineering solution more extensive and more costly. The solution would have to be redesigned with additional site investigations necessary. There is also a significant risk to properties at the top of the cliff. In one area, it is only a hedge four metres from a building that is holding the crest of the cliff together. In extremis, part of this building could fall onto the road below.

Given the structural instability and high likelihood of further collapses, some serious, this option would continue to pose a risk to those that ignore the road closure, fencing and warning signs, to occupants of properties above, and to the road itself, and so cannot be recommended.

Option 2 - Implement temporary/interim measures that fall short of full cliff stabilisation that may enable the road to be fully or partially re-opened

Officers have carefully considered whether there any other possible physical measures that could be put in place to enable the Road of Remembrance to be re-opened or partly opened, for example for one-way traffic or pedestrian/cyclist use. They have looked at whether concrete blocks/barriers and/or catch-fencing placed at the bottom of the cliff or on the road surface would provide sufficient protection for road users in the event of any further landslips.

Given the expert advice we have received on the geological instability of the cliff, we have reluctantly concluded that there is nothing we could put in place that would give us sufficient confidence that it would be safe for KCC to re-open the road to any public use. Concrete blocks and/or fencing would likely be sufficient for small landslips and rockfalls, but not for anything larger such as that outlined above. A key issue here is the difficulty of predicting the severity and mass of any potential collapse, making it very challenging to design a solution that would enable officers to have enough confidence to conclude that they could safely recommend re-opening the road. As such, this approach cannot be recommended.

Option 3 – Implement a fully designed and technically approved engineering solution to stabilise the cliff and re-open the road

Our fully designed, technical solution includes the installation of 974 stainless steel soil nails, an erosion control mat, and a mesh facing to reinforce the failed cliff. It also involves the installation of drainage assets to redirect groundwater from the cliff face to the base of the cut. At the top of the cliff, the design

involves a four metre high crest using soil nails and a shotcrete facing, ensuring that nearby properties retain their gardens and their properties are safely away from the edge. The cost of this solution is around £5m.

It is not possible to only carry out certain elements of this design in isolation since each element - matting, soil nails, weather protection and shotcrete at the crest - are necessary and complement each other in order to operate in a safe manner when completing the works, to sufficiently stabilise the cliff, and to enable the Road of Remembrance to be safely re-opened.

We have considered whether there are any other engineering design solutions such as retaining walls and other structures that could stabilise the cliff and enable the Road of Remembrance to be safely re-opened, but none would cost less than the soil nail solution, and they would take longer to deliver.

This designed solution is recommended as it would safely stabilise the cliff, remove the serious hazards posed by the exposed cliff, remove the risk of damage to the road itself, and enable the road to be safely re-opened.

Option 4 – Option 3 with a reduced design life

The Option 3 solution is the minimum designed to obtain structures and other technical approvals. We have explored whether it would be possible to change or lessen the design in any way. No changes were identified, save potentially using galvanised nails and fittings instead of stainless steel saving around £250k. However, this would significantly reduce the design life by as much as two-thirds or more. This lesser design would not have technical approval, and so cannot be recommended.

5. Discussion

- 5.1 The proposal is to proceed with the works designed and costed in Option 3. Funding is discussed in the following section of this report.
- 5.2 If the key decision is taken, we will deliver the works through our existing Road Asset Renewal Contract with GW Highways, since this contract has both appropriate contract provision and financial capacity. GW Highways and their sub-contractor have appropriate expertise and experience to deliver a project of this nature.
- 5.3 We are currently reviewing the design and costings and liaising with our supply chain and ecologists to plan delivery of these works. We are also working on necessary legal agreements. We are currently working towards mobilising on site in May with a view to starting works in the following months. The length of works is uncertain at this stage, but the current estimate is that it may take up to eleven/twelve months to complete the stabilisation works.

6. Financial Implications

- 6.1 Unexpected emergency costs of this magnitude are not something that Highways and Transportation (H&T) can reasonably be expected to absorb. Doing so, for this and future events, would result in a significant reduction in

preventative highway maintenance with the consequential knock-on effect of more highway defects that we would need to reactively repair at higher cost.

- 6.2 The estimated cost of the necessary works is around £5m. KCC's capital budget for 2026/27, approved Full Council on 12th February, included funding for Category 1 significant unfunded highway risks (of which the Road of Remembrance collapse is one). Folkestone and Hythe District Council has also indicated it will be contributing to the cost of these works and an amount is yet to be agreed.

7. Legal implications

- 7.1 KCC does not have any *specific* legal duties in statute to stabilise the cliff itself. However, given KCC's duty to maintain the highway under s41 of the Highways Act 1980 and the likelihood that the cliff's instability may put the road out of repair, the proposed works are necessary to protect the road from structural damage. It is also likely that, given events so far, there may be a public law expectation that KCC will stabilise the land. It is likely that KCC would be held liable for any damage/injury that occurred in the event of a further collapse, especially given the strength of expert technical advice about cliff instability and the likelihood of significant further collapses. Though highly theoretical, there are also potential corporate manslaughter considerations.

8. Equalities implications

- 8.1 An Equalities Impact Assessment has been carried out, and concluded that no protected groups are disproportionately affected by the proposed works. It was, however, identified that *not* carrying these works (and therefore the road remained closed for a prolonged period) could disproportionately affect disabled people given the length of alternative routes between The Leas and harbour areas.

9. Data Protection Implications

- 9.1 A DPIA is not required for this decision or proposed works. There are no foreseen data protection implications.

10. Other corporate implications

- 10.1 It is not considered that this decision will have further corporate implications to other Directorates within KCC.
- 10.2 Kent's highways are a key enabler of all services and all economic activity that takes place in Kent and therefore contribute significantly to all of the Council's strategic aims. The proposed works to stabilise the cliff, protect the Road of Remembrance and safely re-open it, given the historic and local importance of this road, will contribute significantly to local regeneration and economic growth.

11. Governance

- 11.1 Under the officer scheme of delegation, should the recommended decision be progressed, the Corporate Director for Growth Environment and Transport will

make decisions for the ongoing delivery of the scheme, in consultation with the Cabinet Member for Highways and Transport.

12. Conclusions

- 12.1 Expert technical advice has concluded that there is a high risk of cliff instability and further potentially large-scale collapses, particularly in respect of the overhanging top of the cliff, but also weakness lower down the cliff caused by saturation. Legal advice has concluded that KCC will likely be held liable by the courts in respect of any claim for damage or injury that occurs as a result of any further collapse, and that there is a theoretical risk of corporate manslaughter prosecution.
- 12.2 Various options have been considered, but it is recommended to proceed with a fully designed engineering design to stabilise the cliff to eliminate the risk of further significant collapses, remove legal risks and safely re-open the road, so that it can contribute to the economic wellbeing of Folkestone. The proposed works are to be funded by KCC H&T capital budget with a contribution from Folkestone and Hythe District Council partners, and delivered through existing contractual arrangements.

Recommendation(s):

The Cabinet Member for Highways and Transport is asked to agree the proposed decision as detailed in the attached Proposed Record of Decision document (Appendix A).

10. Background Documents

- 10.1 Equality Impact Assessment

11. Appendices

Appendix A – PROD
Appendix B - EqIA

12. Contact details

Report Author: Alan Casson Job title: Strategic Asset Manager Telephone number: 03000 413563 Email: alan.casson@kent.gov.uk	Director: Andrew Loosemore Job title: Interim Director of Highways and Transport Telephone number: 03000 411652 Email: andrew.loosemore@kent.gov.uk
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