Jacobs

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Reinventing tomorrow.

Leashaw Landslide

Progress Update

28/10/2025

Progress Update

Activities:

- Design
  - Geomorphological site walkover carried out to understand the historical and recent movement within the area of the slip, both above and below the road. The evidence suggested a relatively shallow translational slip rather than a deep seated circular failure.
  - Concept design completed to demonstrate suitability of proposed remediation scheme based on the understood translational slip. The analysis was based on a simplified ground model and analysis methods.
  - Order of Magnitude cost estimate prepared based on concept design.
  - Detailed review of ground investigation data completed from STW and that procured by DCC to develop the ground model. DCC procured ground investigation includes 12 months of groundwater monitoring. Type of solid geology (rock) varies from west to east as well as down the slope.
  - Alternative solution developed to overcome constraints imposed by utilities on previous solution developed in concept design.
  - Interrogation of Jacobs' GI database to interrogated to bring confidence on assumptions made for the gaps in data.
  - Detailed ground model ongoing for 3D finite element software analysis. The software enables consideration of multiple aspects for the design including performance of the foundations from the applied loads whilst assessing potential for small residual movements of the downslope.
  - Completion of the ground model.
  - Back analysis carried out to fill the gaps in information in the project GI.

Progress Update

Activities:

- Design
  - Detailed analysis calcs complete and under check and review.
  - Approval in Principle complete and in submission.
  - General Arrangement, Cross Section, Parapet Elevation and Micropile Longitudinal Section produced.
  - Alternative solution consisting of an anchored barrier of micropiles outlining reduced requirements for inspection, instrumentation, monitoring and maintenance has been sketched out for DCC consideration.
  - Piling Specifications drafted.
  - Earthworks Specifications being developed.

Progress Update

Activities:

- Stakeholder engagement
  - DCC have shared title plans obtained in 2022 for the various landowners in the area of the site.
  - As these records are more than three months old, Jacobs' Land & Property team has confirmed landowners in the area of the road and made initial contact on behalf of DCC.
  - An initial meeting is being arranged to start conversations regarding access and land acquisition for the new works including construction works.
  - Contact with utility owners has been established (Cadent Gas/Seven Trent Water/Gigaclear Ltd./National Grid Electricity Distribution)
  - Meetings arranged with Seven Trent Water and Cadent to understand constraints they may impose on the design and construction works to avoid diversion/service disruption.
  - Drawings capturing the new solution produced to support Jacobs' Land & Property team in conversations regarding access and land acquisition.
  - 3rd Party Land Encroachment drawing produced and shared with L&P to support discussions with landowners.

Progress Update

Next steps:

- Ongoing discussions with 3rd Party landowners to agree access for the construction works and land acquisition for the final works after development of alternative solution.
- Develop the specification in accordance with the requirements of PAS128.
- Support DCC with procurement of the PAS128 buried utility survey. PAS128 carried out by DCC own resources and passed on to Jacobs.
- Discussion with utility providers to agree constraints on design and construction to confirm position of new wall and foundations. Alternative solution developed to overcome this constraints and discussions that otherwise would have impacted the programme. Additional alternative proposals outlining reduced requirements for inspections, instrumentation, monitoring and maintenance has been sketched out for DCC consideration.
- Completion of detailed ground model including parameter assessment for robust design. Gaps in parameters identified. Jacobs' GI database interrogated to bring confidence on assumptions made for the gaps in data.
- Continuation of geotechnical design.
- Continuation of structural design.

Progress Update

Next steps:

- Development and submission of Approval in Principle for the proposed works.
- Completing CAT1 checks.
- Development and submission of Works Specifications.
- Supporting DCC with procurement of the construction works.

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Important