

## Development of landslide damage reduction technology under road construction

### [ Point ]

In this research, we aimed obtaining basic reference material regarding operation method of landslide 3D stability analysis, and examined the cost reduction effect and safety change by introducing 3D stability analysis, production of stability analysis program, which can consider inter column force, necessary research amount for 3D stability analysis. As a result, we clarified that there were many cases of 10 ~ 20% cost reduction by introducing 3D stability analysis, and many cases if the designed principal section of measure construction by 3D analysis, is assessed by with 2D simplified method. The safety rate will be 0.00 ~ 0.10 lower, the 3D program has the same characteristics as 2D safety rate formula, which is base of it, and space among the research points is advisable to take more than 10 points on vertically and horizontally.

Keyword : landslide 3D stability analysis, cost reduction, safety rate, research amount