

Collapse Characteristics after Application of Reinforcement Method in Tunnel Construction in Large-scale Fault Zone

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ABSTRACT

In order to ensure good driving performance, it is designed to maintain a straight line road shape in the highway. In order to straighten the road line, tunnel construction will inevitably increase rapidly in mountainous terrain. Especially, in the area where large-scale single-layer clay exists, NATM tunnel construction is difficult to secure stability during tunnel excavation by existing design and construction method. In this study, it is to analyze the causes and countermeasures of the collapse and excessive displacement in the area where large - scale fault clay is exists. Thus, in order to straighten the road line, tunnel construction will inevitably increase rapidly in mountainous terrain. Especially, in the area where large-scale single-layer clay exists, NATM tunnel construction is difficult to secure stability during tunnel excavation by existing design and construction method. In this study, it is to analyze the causes and countermeasures of the collapse and excessive displacement in the area where large - scale fault clay is exists.



Fig. 1 Collapse of tunnel in a large-scale fault clay zone

REFERENCES

1. Korea Expressway Corp. (2005), " Collapse causes and countermeasures of Tunnel in large-scale fault clay area"

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