



## Examenskod ACEX10



## **Title: The effect of embankment substance on slope stability**

**Slope stability and settlement problems on Highway design projects arise from not only soil profile but also the quality of fill material. During the construction stage, using cohesive fill can trigger slope stability problems. Failure creates a risky situation for traffic and entails additional construction costs.**

The project is a combination of literature study and back analyses of slope stability-settlement problems to investigate collapse of Karasu, Turkey Highway. According to back calculations using available SPT and laboratory data, soil stabilization problem can be solved with grouting methods (DSM). The project can be written in English.

### **Literature recommendation:**

- Bruce M.E.C., Berg R.R., Collin J.G., Filz G.M., Terashi M., Yang D.S., Federal Highway Administration design manual: deep mixing for embankment and foundation support, FHWA-HRT-13-046, Federal Highway Administration, Washington, DC, 2013.

### **Target group of students**

Civil Engineering

### **Group size**

3-6

### **Special requirements**

**BOM355**

### **Suggestion from**

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### **Can the project be duplicated?**

Yes