

# SLOPE STABILITY AND PROGRESS OF FAILURE

## Group No. 7:

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## Project Goal:

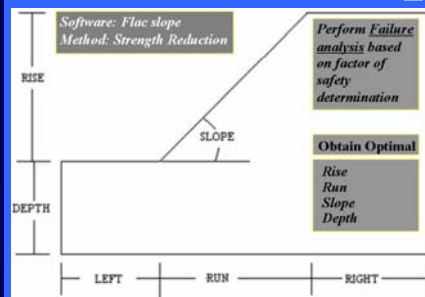
Slope failures and study of critical factors by use of physical modeling.

## Methodology:

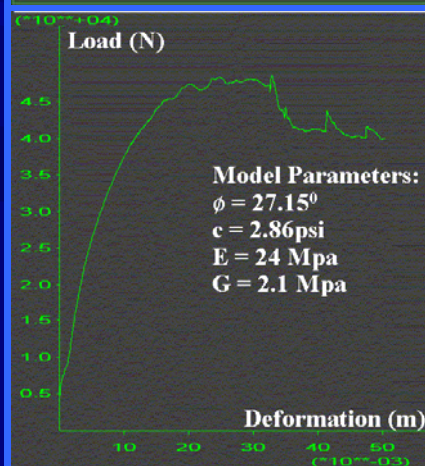
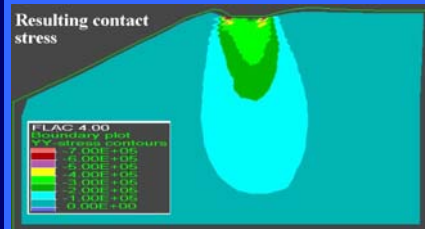
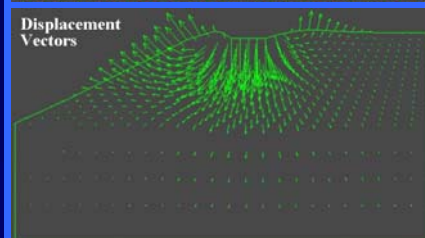
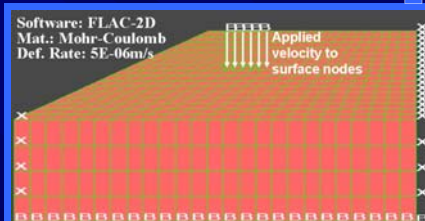
### Numerical Simulations

### Physical Model Testing

Pre-failure Analysis:  
parameters required for test,  
**Geometry Determination**



## Post-Failure Analysis

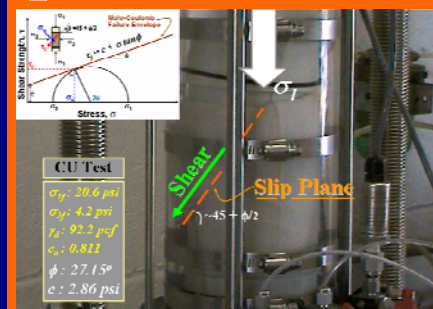


## Suggestions:

- Tests on clayey soil
- Impact of water
- Visual verification of slip plane (Plexiglas)
- Use local FS concept and surface images in identification of failure initiation and progress.



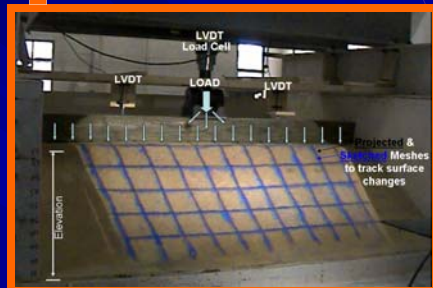
Material Properties: specific gravity, relative density, and  
**Triaxial Testing**



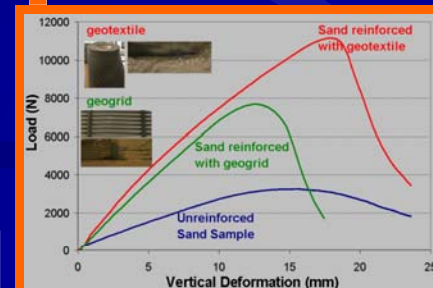
## Sample Preparation



## Slope Testing



## Typical Soil Response



## Failure Observations

Sand - surficial  
Clay - weak seam slip  
Bearing capacity dominates