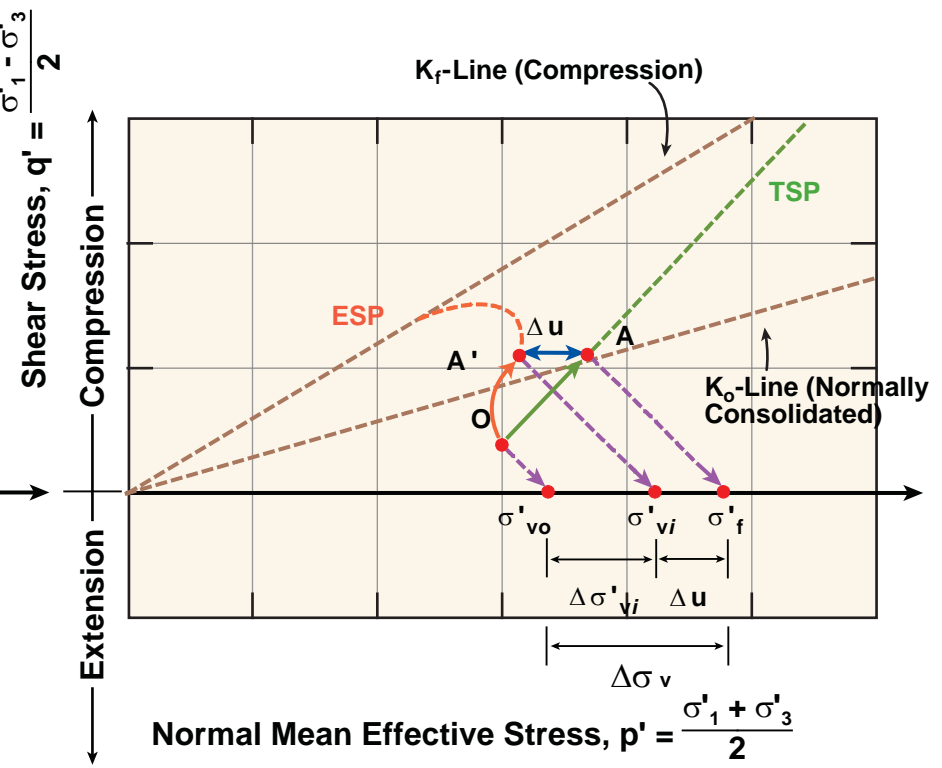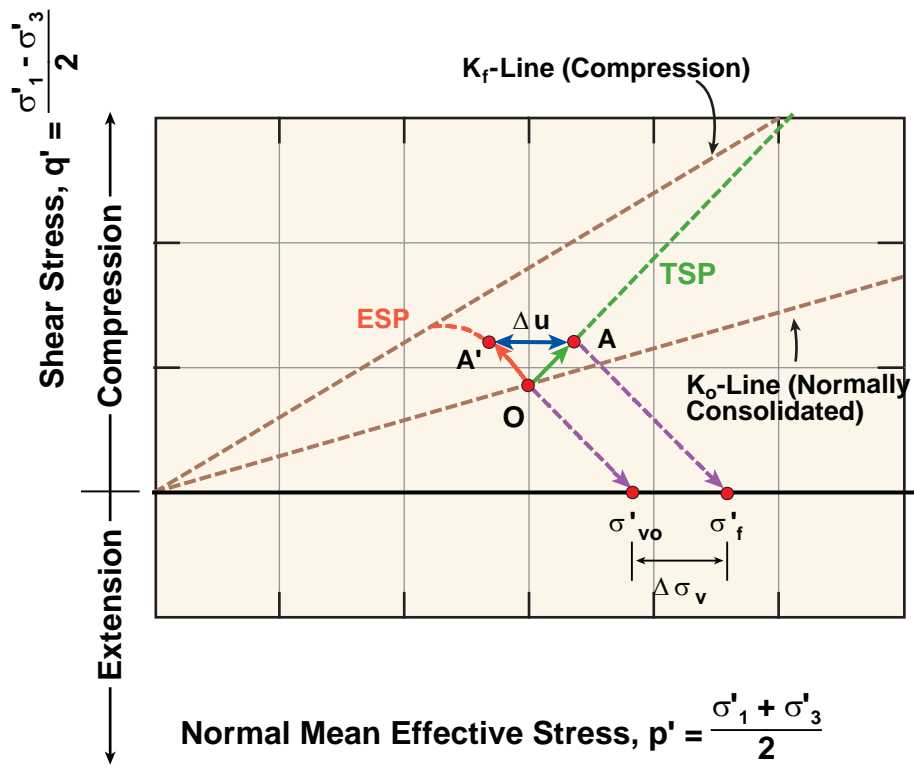**1. Normally Consolidated Clay; A = 1.0**

$$\Delta u = \Delta\sigma_3 + A(\Delta\sigma_1 - \Delta\sigma_3)$$

$$\Delta u = \Delta\sigma_1 = \Delta\sigma_v$$

$$\mu = 1.0$$

2. Overconsolidated Clay; A < 1.0

$$\Delta u < \Delta\sigma_v$$

$$\Delta\sigma'_{vi} > 0$$

$$\mu < 1.0$$

K_f-Line (Compression)

TSP

ESP

Δu

A

A'

O

K_o-Line (Normally Consolidated)

σ'_{vo}

σ'_f

$\Delta\sigma_v$

Shear Stress, q' = $\dfrac{\sigma'_1 - \sigma'_3}{2}$

Compression

Extension

Normal Mean Effective Stress, p' = $\dfrac{\sigma'_1 + \sigma'_3}{2}$

K_f-Line (Compression)

TSP

ESP

Δu

A

A'

O

K_o-Line (Normally Consolidated)

σ'_{vo}

σ'_{vi}

σ'_f

$\Delta\sigma'_{vi}$

Δu

$\Delta\sigma_v$

Shear Stress, q' = $\dfrac{\sigma'_1 - \sigma'_3}{2}$

Compression

Extension

Normal Mean Effective Stress, p' = $\dfrac{\sigma'_1 + \sigma'_3}{2}$

FIG_161 : The Skempton-Bjerrum Correction Factor for Consolidation Settlements Overconsolidated Soil

W:\Infrastructure\Geotech\UC Berkeley 2008 Seminar\Final Figures\07 TEST FILL (146-165)\FIG_161