U.S. Army Corps of Engineers (USACE)
CONSOLIDATION TEST

For use of this form, see EM 1110-2-1906; the Proponent agency is CECW-EC.

 $\ensuremath{\textbf{Purpose}}$  : The purpose of this form is to document consolidation tests.

Project:									
Boring No.: Sample or Specimen No.:									
				Class	ification				
			Before Test				After Test		
			Specimen			Trimmings		Specimen	
Tare No.			Ring and Plates						
/eight In Grams	Tare Plus Wet Soil								
	Tare Plus Dry Soil								
	Water	Ww	Wwo				W <sub>wf</sub>		
	Tare	_							
>	Dry Soil	Ws							
	Water Content	w	w <sub>o</sub>				W <sub>f</sub>		
Consolidometor No.					Area of s	pecimen, A, sq cm			
Weight of ring, g			Height of		Height of	specimen, H, in.			
Weight of plates, g			Sp gr of s		solids, G s				
Height of solids (inches), $H_s = W_s/(A \times G_s \times Y_w)$									
Original height of water (inches), $H_{WO} = W_{WO}/(A \times \Upsilon_W)$									
Final height of water (inches), $H_{wf} = W_{wf}/(A \times Y_w)$									
Net change in height of specimen at end of test (inches), $\Delta H$									
Height of specimen at end of test (inches), $H_f = H - \Delta H$									
Void ratio after test, $e_0 = (H - H_s)/H_s$									
Void ratio after test, $e_f = (H_f - H_S)/H_S$									
Deg	Degree of saturation before test, $S_0 = H_{WO}/(H - H_S)$								
Degree of saturation after test, $S_f = H_{Wf}/(H_f - H_S)$									
Dry	Dry density before test (lbs/cf), $\Upsilon_d = W_s/(H \times A) \times 62.4/2.54$								
Remarks									
rechnician ( <i>Last, First Mi</i> )				b. Date		c. Technician's Signature			
Computed By (Last, First Mi)				b. Date		c. Computed By Signature			
Checked By (Last, First Mi)				b. Date		c. Checked By Signature			