U.S. Army Corps of Engineers (USACE)

# CONSOLIDATION TEST REPORT

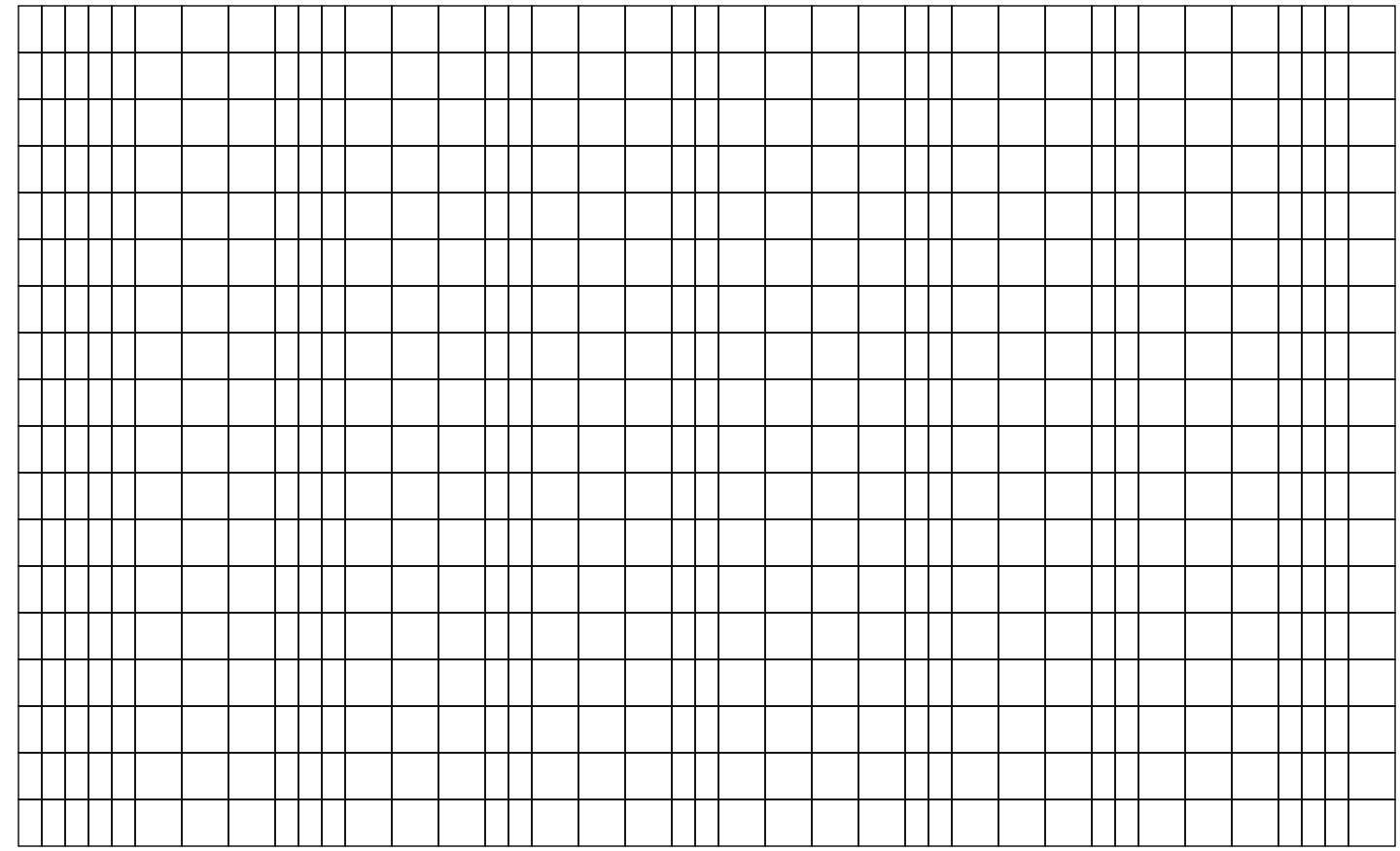
For use of this form, see EM 1110-2-1906; the proponent agency is CECW-EC.

**Purpose:** To determine the rate and magnitude of soil consolidation when the soil is restrained laterally and loaded axially

COEFFICIENT OF PERMEABILITY, $k_{20}$, CM/SEC

0.1 0.2 0.3 0.4 0.5 1 2 3 4 5 10 20 25

VOID RATIO, e



0.1 0.2 0.3 0.4 0.5 1 2 3 4 5 10 20 25

PRESSURE, p, T/SQ. FT.

| | | | |
|---|---|---|---|
| 1. TYPE OF SPECIMEN | | a. BEFORE TEST | b. AFTER TEST |
| 2. DIAMETER IN. | 3. HEIGHT IN. | 13. WATER CONTENT, $w_o$ % | $w_f$ % |
| 4. OVERBURDEN PRESSURE, po T/SQ. FT. | | 14. VOID RATIO, $e_o$ | $e_f$ |
| 5. PRECONSOL. PRESSURE, pc T/SQ. FT. | | 15. SATURATION, $S_o$ % | $S_f$ % |
| 6. COMPRESSION INDEX, $C_c$ | | 16. DRY DENSITY, yd lb/ft 3 | |
| 7. CLASSIFICATION | | 17. $k_{20}$ at $e_o$ = x10- cm/sec | |
| 8. LL | 9. $G_s$ | 18. PROJECT | |
| 10. PL | 11. $D_{10}$ | | |
| 12. REMARKS | | 19. AREA | |
| | | 20. BORING NUMBER | 21. SAMPLE NUMBER |
| | | 22. DEPTH ELEVATION | 23. DATE *(YYYYMMDD)* |