IN-PLACE DENSITY DETERMINATION - SAND-CONE METHOD

1. PROJECT		2. DATE
3. JOB NUMBER	4. TEST SITE	5. SAMPLE NUMBER

6. ADDITIONAL SPECIFICATIONS

CONVERSION FACTORS: 1 in = 2.54 cm; 1 cu ft = 1728 cu in; Unit weight of water: 1 cc = 1 gram; 1 lb = 453.6 gm; 1 cu ft = 62.4 lb

CALIBRATION OF SAND (STANDARD MATERIAL)

APPARATUS OR TARE NUMBER	UNITS						
7. WEIGHT OF APPARATUS OR TARE FILLED	Grams						
8. WEIGHT OF APPARATUS OR TARE EMPTY	Grams						
9. WEIGHT OF MATERIAL *(7 - 8)*	Grams						
10. VOLUME OF APPARATUS OR TARE	Cu ft						
11. UNIT WEIGHT OF MATERIAL *([9/453.6]/10)**	Pcf						
12. AVERAGE UNIT WEIGHT OF MATERIAL	Pcf						

CALIBRATION OF APPARATUS		TEMPLATE NUMBER	CONE NUMBER
13. INITIAL WEIGHT OF APPARATUS + SAND	Grams		
14. FINAL WEIGHT OF APPARATUS + SAND	Grams		
15. WEIGHT OF SAND IN TEMPLATE AND/OR CONE *(13 - 14)*	Grams		

VOLUME OF THE HOLE

16. INITIAL WEIGHT OF APPARATUS + SAND	Grams		
17. FINAL WEIGHT OF APPARATUS + SAND	Grams		
18. WEIGHT OF SAND RELEASED *(16 - 17)*	Grams		
19. WEIGHT OF SAND IN THE HOLE *(18 - 15)*	Grams		
20. VOLUME OF THE HOLE *([19/453.6]/12)**	Cu ft		

WATER-CONTENT DETERMINATION

TARE NUMBER					
21. WEIGHT OF WET SOIL AND TARE	Grams				
22. WEIGHT OF DRY SOIL AND TARE	Grams				
23. WEIGHT OF WATER *(21 - 22)*	Grams				
24. WEIGHT OF TARE	Grams				
25. WEIGHT OF DRY SOIL	Grams				
26. WATER CONTENT *([23/25] x 100)*	Percent				
27. AVERAGE WATER CONTENT	Percent				

UNIT-WEIGHT DETERMINATION

TARE NUMBER			
28. WEIGHT OF WET SOIL AND TARE	Grams		
29. WEIGHT OF TARE	Grams		
30. WEIGHT OF WET SOIL *(28 - 29)*	Grams		
31. WET UNIT WEIGHT *([30/453.6]/20)**	Pcf		
32. DRY UNIT WEIGHT *(31 x [100/(100+27)])*	Pcf		

33. REMARKS

* This formula contains the conversion from grams to pounds. Omit the conversion factor if the unit weight used is not grams.

34. TECHNICIAN *(Signature)*	35. COMPUTED BY *(Signature)*	36. CHECKED BY *(Signature)*