North Carolina Department of Transportation  
Division of Highways  
Field and A.A.S.H.T.O. Density Determinations

Contract: ____________________  County: ____________________  Date: ____________  Test No: _________

Test Location & Type  
(Sta; Lane)  (Rdwy. or Shldr.)  (Embank., Subg., or Base)

Dist. from C/L; Rt or Lt  (Dist. below Subg. Elev.)

<table>
<thead>
<tr>
<th>Random No.</th>
<th>Random (Calculations)</th>
<th>Length</th>
<th>Width</th>
<th>Random No. x Length</th>
<th>Random no. x Width</th>
<th>Station</th>
<th>Offset</th>
</tr>
</thead>
</table>

Random Test Site Location Calculations

Road Density Determination

Volume of Hole: 2nd Reading: ________________
1st Reading: ________________
(In-Place Vol.) Difference: ________________ ft³

Wet Density: ________________ Wet Wt. Soil (g) / Volume x 453.6

% Moisture: ________________ Wt. Wet Soil (g)

Wt. Dry Soil (g) = ________________ [Wt. Water (g) / Wt. of Dry Soil (g)] x 100 = ________________ % (moisture)

Wt. Water (g) = ________________

Dry Density: ________________ Wet Density / [100 + % moisture] x 100

Volumetric Test (short test only)

Empty Mold & Collar: ________________
Mold w/Soil: ________________
Compacted Vol. of Soil: ________________ ft³

Wet Density: ________________ Wet Wt. Soil (g) / Volume x 453.6

% Moisture: ________________ Wt. Wet Soil (g)

Wt. Dry Soil (g) = ________________ [Wt. Water (g) / Wt. of Dry Soil (g)] x 100 = ________________ % (moisture)

Wt. Water (g) = ________________

Dry Density: ________________ Wet Density / [100 + % moisture] x 100

A.A.S.H.T.O. Density Determination

Wet Density: ________________ Wet Wt. Soil (g) x 30 / 453.6

% Moisture: ________________ Wt. Wet Soil (g)

Wt. Dry Soil (g) = ________________ [Wt. Water (g) / Wt. of Dry Soil (g)] x 100 = ________________ % (moisture)

Wt. Water (g) = ________________

Dry Density: ________________ Wet Density / [100 + % moisture] x 100

Percent Compaction

<table>
<thead>
<tr>
<th>Dry Road Density</th>
<th>Dry A.A.S.H.T.O. Density</th>
<th>Compacted Vol. of Soil</th>
</tr>
</thead>
</table>

x 100 = ________________ %

*Print Name Legibly w/HiCAMS No.: ____________________________________________________

Signatures

*Certified Technician: _____________________________________________________________

Resident Engineer: _______________________________________________________________

*By providing this data under my signature and/or HiCAMS certification number, I attest to the accuracy and validity of the data contained on this form and certify that no deliberate misrepresentation of test results, in any manner, has occurred.