



# TEX-140-E

Measuring Thickness of Pavement Layer



## Why

To determine the thickness of base, subbase, or subgrade when a core cannot be obtained.



## When

Specifications require Tex-140-E for layer thickness to meet the specified section(s) on plans.



## How

### Equipment

- Drill with auger bit, grubbing hoe, and other acceptable hand tools.
- Nail, blade, knife, or other suitable tool, not to exceed 3 mm (1/8 in.) in thickness and approximately 75 mm (3 in.) in length.
- Folding scale, 2 m (6 ft.) in length or other scale with 3 mm (1/8 in.) or smaller divisions.
- Depth measurement indicator, DHT No. 2238 (not to be used for pay purposes).

### Procedure

- Drill or dig a hole to penetrate the layer immediately below the layer being measured. Measure thickness layers after the finished grade (blue tops) have been obtained.
- Make a vertical groove in the side of the hole.
- Locate interface visually. When the interface is clearly defined, push a nail or blade horizontally into the interface 25 mm (1 in.)
- Measure from the defined interface or top of nail to the top of the layer being measured to the nearest 3 mm (1/8 in.) and record.
  - A straightedge or surveyor's stake may be used to place across top of hole to determine the top of layer.
- Move the nail to another location on the interface measure and record. Repeat until a total of three measurements are obtained.



## Action

1. Report the average of three measurements to the nearest 3 mm. (1/8 in) as the thickness of the pavement layer.
2. If lime or cement are used as a stabilizer in neutral or acid soils, the bottom of this layer may be emphasized by a light application of 1% phenolphthalein indicator solution. solution should be applied after the vertical groove is made and from the bottom up. Once the interface is identified, application of the solution should stop.