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# ALDOT-440 CONTRACTOR'S METHOD OF MEASURING WIDTH and THICKNESS OF TRAFFIC STRIPE and TRAFFIC CONTROL LEGENDS and MARKINGS

# 1. Scope

1.1. This test method covers the procedure for determining the thickness and width of traffic stripe (paint and thermoplastic) and the thickness of traffic control legends and markings (paint and thermoplastic).

# 2. Applicable Documents

2.1. Alabama Department of Transportation Standard Specifications

# 3. Apparatus

- 3.1. Micrometer capable of measuring to the nearest 0.001 (thousandths) of an inch. (fig.1, & fig. 2)
- 3.2. Wet Film Thickness Gage having a range of 1- 80 mils (0.001" 0.080")
- 3.3. Tape Measure

#### 4. **Sampling**

4.1. Measurements shall be taken at each checkpoint area as defined by Section 2 of ALDOT-439, Contractor's method for retroreflectivity measurement of traffic marking materials.

### 5. Procedure

- 5.1 Thermoplastic Material
  - 5.1.1 Measurements shall be taken directly on the pavement at the beginning of the traffic stripe and again at each mile point along the traffic stripe and at least every three locations of legends and markings.
  - 5.1.2 Measure the stripe thickness to the nearest thousandths (0.001) of an inch with a bridge type micrometer(fig.1) for

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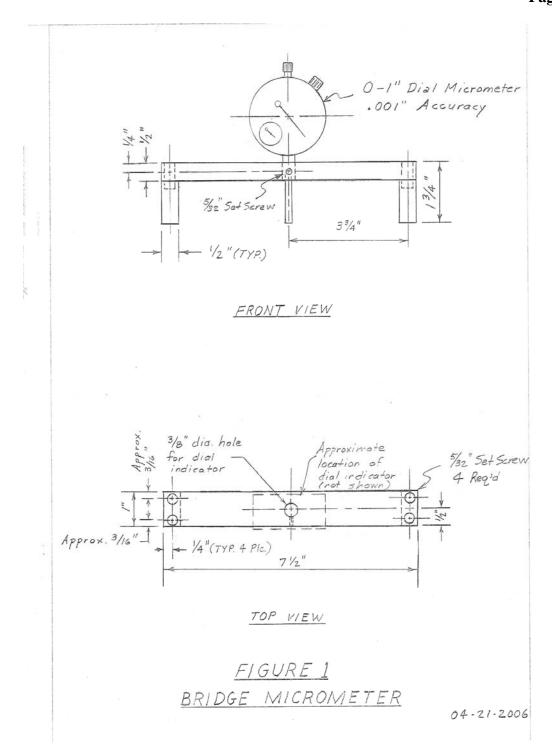
- edge lines and a cantilever type micrometer (fig.2) for centerlines and markings and legends.
- 5.1.3 For edge lines place the bridge type micrometer across the line and measure the thickness to the nearest 0.001". For centerlines place the cantilever type micrometer on the flat surface of the pavement beside the centerline stripe on the same side of the crown of the road that the stripe is on.
- 5.1.4 On open grade friction course care must be taken to place the micrometer on as smooth a spot as possible to take the readings.
- 5.1.5 Measure the width of the stripe and legends and markings with a tape measure to the nearest (0.1) inch.
- **5.1.6** Record the measurement of the thickness and the width of the traffic stripe at the point of measurement.

#### 5.2 Paint Material

- 5.2.1 The wet film thickness of paint shall be taken at each one mile point along the traffic stripe line and at least every three locations of legends and markings. The following procedure shall be used to check the wet film thickness of paint:
- 5.2.2 Place gage on wet film at 90° angle (perpendicular) to the pavement.
- 5.2.3 Press gage into film.
- 5.2.4 Withdraw gage and note deepest tooth having paint on it and next higher tooth that is not coated. The wet film thickness lies between these two readings.
- 5.2.5 Clean gage in any suitable solvent immediately after use.

#### 6. **Reporting**

6.1. Report the measurement of the thickness, the width and location of the traffic stripe on form BMT 195, Contractor's Daily Report Traffic Stripe. Record the thickness, the width and location of traffic control legends and markings on form BMT-195.



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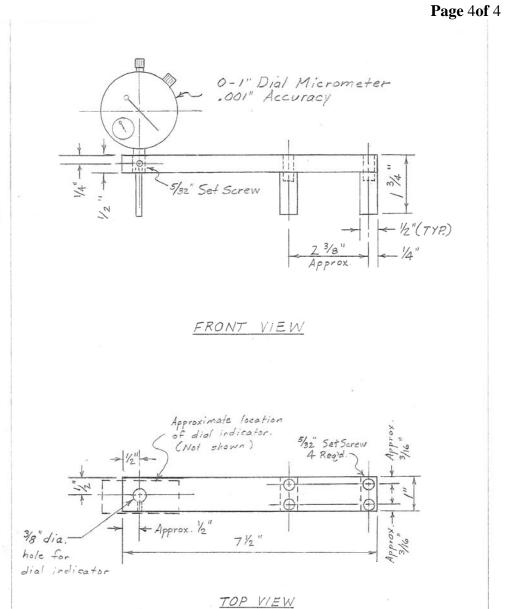


FIGURE 2

CANTILEVER MICROMETER