

PERCENT FLAT AND ELONGATED PARTICLES IN COARSE AGGREGATE LS-608-R30 \_\_\_\_\_

APPARATUS

1. Balance: Capacity of 5000 g ; readable to 1.0 g or less?..... \_\_\_\_\_
2. Caliper: Calibrated so ratio of opening at one end to the other is 4:1?..... \_\_\_\_\_

SAMPLE PREPARATION

1. Coarse aggregate prepared as per LS-600? ..... \_\_\_\_\_
2. Sample separated into one or more of the individual fractions indicated in Table 1? ..... \_\_\_\_\_
3. Individual fractions represent at least 5% of submitted sample?..... \_\_\_\_\_
4. Each fraction weighed to the nearest 1 g?..... \_\_\_\_\_

**Table 1 - Sample Preparation**

Coarse Aggregate Fraction		Mass (minimum) , g
Passing	Retained	
37.5	26.5	3000
26.5	19.0	2000
19.0	13.2	1250
13.2	9.5	500
9.5	6.7	200
4.75	4.75	75

TEST PROCEDURE

1. Each fraction spread out on clean, large flat surface to allow for inspection of individual particles?..... \_\_\_\_\_
2. Each fraction separated by means of calipers into: (i) flat and elongated, and; (ii) cubical particles?..... \_\_\_\_\_
3. Masses for each flat and elongated and cubicle portion weighed and recorded to nearest 1 g?..... \_\_\_\_\_
4. Calculate the % flat and elongated particles in each test fraction?..... \_\_\_\_\_

$$\% \text{ Flat and Elongated} = \frac{A}{A + B} \times 100$$

Where A = mass of flat and elongated particles  
B = mass of cubicle particles

5. Weighted average value for each fraction calculated?..... \_\_\_\_\_
6. Weighted average for as-received sample calculated?..... \_\_\_\_\_

$$\frac{\sum (\text{Fraction \% Flat \& Elongated} \times \text{Retained Grading})}{100} \dots\dots\dots$$

COMMENTS: