

This past winter the sieve analysis of combined aggregate was investigated. This study was given No. 26 by the Central Laboratory. The purpose of this work was to try and develop a sieve analysis procedure for combined aggregate which is less time consuming and has the same accuracy as the method described in I.M. 304.

In an attempt to use a variety of aggregates for this investigation, a request was made to each District Materials Office to obtain at least 3 different combined aggregate samples in their respective districts. At the same time it was also requested that the field technician test these samples, prior to submitting them to the Central Laboratory. The field technician was instructed to test each sample as described in method I.M. 304 and also by a modified AASHTO T27 method which will be identified in the report as Method A.

The modified AASHTO Method A was identical to T27 with the exception that a smaller sample is used for testing.

The field technicians submitted the samples, test results and also comments regarding the modified AASHTO procedure. The general comments of the modified AASHTO procedure were: The method was much simpler to follow; however, it took about the same amount of time so there was no real advantage.

After reviewing AASHTO T27, T164, I.M. 304 and Report No. FHWA-RD-77-53 another test method was purposed. Report No. FHWA-RD-77-53 is a report prepared by FHWA from data they gathered concerning control practices and shortcut or alternative test methods for aggregate gradation.

A second test method was developed which also was very similar to AASHTO T27. The test procedure for this method is attached and is identified as Method B.

The following is a summary of test results submitted by the Field Technicians and obtained by the aggregate section of the Central Laboratory.