Procedure Checklist
AASHTO T-27 Sieve Analysis of Fine and Coarse Aggregate

Item		P	F	NA
1.	Obtain correct sample size by AASHTO T 248.			
2.	Dry the test sample to constant mass.			
3.	Nest appropriate sieves in order of decreasing size.			
4.	Place sample on to sieve.			
5.	Agitate sieves by hand or mechanical methods.			
6.	Do not overload any individual sieve - use guard sieves or test sample in increments.			
7.	For mixtures of coarse and fine aggregates, the minus 4.75 mm (No. 4) sieve materials may be sieved in increments or a properly split smaller sample may be sieved.			
8.	Sieve until not more than 0.5% by mass of the total sample passes a given sieve with 1 minute of agitation (typically 7 to 10 minutes).			
9.	Determine the mass of material retained on each sieve to nearest 0.1%.			
10.	Total the mass of all individual increments and check that it is within 0.3% of the mass of the original sample.			
11.	If sample was previously washed (AASHTO T11), add the mass of material passing 75-µm (No. 200) sieve determined by washing to the mass of material passing by dry sieving.			
12.	Calculate percentages passing each sieve to nearest 0.1% on the basis of the total mass of the initial dry sample.			
13.	Calculate fineness modulus and report to nearest 0.01			
14.	Report results to nearest 1%.			

Remarks:

Comparison Criteria:

Table 1 Precision

	Total % of Material Passing		Acceptable Range of 2 Results (d2s), %
Coarse Aggregate: Multilaboratory Precision	<100	≥95	1.0
	<95	≥85	3.9
	<85	≥80	5.4
	<80	≥60	8.0
	<60	≥20	5.6
	<20	≥15	4.5
	<15	≥10	4.2
	<10	≥5	3.4
	<5	≥2	3.0
	<2	0	1.3
Fine Aggregate: Multilaboratory Precision	<100	≥95	0.6
	<95	≥60	2.2
	<60	≥20	4.0
	<20	≥15	3.1
	<15	≥10	2.1
	<10	≥2	1.8
	<2	0	0.9

Date: _____ Technician: _____ IA Observer: _____

Technician's E-mail Address: _____

Employer's/ Supervisor's E-mail Address: _____