# Minnesota Department of Transportation Schedule of Independent Assurance Sampling and Testing For use on qualifying IA projects

All testers and monitors must complete at least one documented Independent Assurance inspection per test type annually on projects that meet minimum material quantity requirements. Arrangements must be made with District Materials Engineer for scheduling IAST visits to comply with project requirements. All rates and tests may be adjusted as directed by the District Materials Engineer.

For more information, refer to the most current version of the MnDOT IA manual online at http://www.dot.state.mn.us/materials/labiast.html

Test type / Procedure	Minimum Project Quantity (Note 1)	Minimum Project Split Sample Frequency
Material Sampling and Splitting	$\geq$ 2,000 yd <sup>3</sup> (CV) Aggregate Base	
	$\geq$ 10,000 yd <sup>3</sup> (CV) Granular material	
Aggregate Gradation	$\geq$ 2,000 yd <sup>3</sup> (CV) Aggregate Base	1 per project (QA) (Note 2)
	$\geq$ 10,000 yd <sup>3</sup> (CV) Granular material	
DCP and / or LWD	$\geq$ 2,000 yd <sup>3</sup> (CV) Aggregate Base	
	$\geq$ 10,000 yd <sup>3</sup> (CV) Granular material	
	$\geq$ 50,000 yd <sup>3</sup> (CV) Non-Granular material	
	$\geq$ 7,000 yd <sup>2</sup> Full Depth Reclamation (FDR)	
Nuclear Density Gauge	$\geq$ 2,000 yd <sup>3</sup> (CV) Aggregate Base	
	$\geq$ 10,000 yd <sup>3</sup> (CV) Granular material	
	$\geq$ 50,000 yd <sup>3</sup> (CV) Non-Granular material	
	$\geq$ 7,000 yd <sup>2</sup> CIR, CCPR, & SFDR	
Sand Cone, Proctor Curve or Proctor	$\geq$ 2,000 yd <sup>3</sup> (CV) Aggregate Base	
Procedure	$\geq$ 10,000 yd <sup>3</sup> (CV) Granular material	
	$\geq$ 50,000 yd <sup>3</sup> (CV) Non-Granular material	

A. Grading and Base, and Reclamation Construction Items

#### B. Concrete Construction Items

Test type / Procedure	Minimum Project Quantity (Note 1)	Minimum Plant Split Sample Frequency
Material Sampling and Splitting	$\geq 100 \text{ yd}^3 \text{ Concrete}$	1 gradation sample every plant laboratory set
Aggregate Gradation (Coarse and Fine)		up or at least once per year. (QA/QC) (Note 2)
Aggregate Moisture		
Air Content		
Slump or Spread		
Cylinder or Beam (fabrication)		
Temperature		

#### B. Concrete Construction Items (continued)

Test type / Procedure	Minimum Project Quantity (Note 1)	Minimum Plant Split Sample Frequency
Unit weight (paving only)	≥ 3500 yd <sup>3</sup> Paving Concrete	
P200 (paving only)	$\geq$ 3500 yd <sup>3</sup> Paving Concrete	

### C. Bituminous Construction Items

Test type / Procedure	Minimum Project Quantity (Note 1)	Minimum Plant Split Sample Frequency
Material Sampling and Splitting	$\geq$ 500 tons Bituminous	
Mixture Properties	$\geq$ 500 tons Bituminous	1 Sample per project and/or 1 sample per plant
Bulk Specific Gravity (GMM)		every 3 months or when production exceeds
Max Specific Gravity (GMB)		100,000 tons. (Note 2)
Percent Binder (IGN Oven or chemical)		
Gradation		
CAA and FAA		
Core Density	$\geq$ 500 tons bituminous	

## Notes:

(1) The Independent Assurance Inspector should observe each individual tester or monitor performing the required sampling and testing during regular project activities, or in the District Laboratory.

The tester is defined as the individual who actually performs the test. The monitor is defined as the individual who watches the tester perform the test.

(2) The Random Sampling Method samples will be tested in the field or District Laboratory.

The Independent Assurance Inspector should document the testers and monitors:

- 1. Randomly selecting sampling locations.
- 2. Ensuring all samples and testing equipment is in a safe working order and has required calibration performed.
- 3. Performing the specified sampling, splitting and testing procedures with appropriate equipment.
- 4. Properly documenting field test results and labeling the sample as "Independent Assurance Sample".
- 5. The IA companion sample may be tested in the District Laboratory. All Independent Assurance samples must be tested using different equipment and personnel from QA/QC testing.