Updated: 8/26/2020

QUICK REFERENCE

MECHANICALLY STABILIZED EARTH (MSE) WALL AGGREGATE SAMPLING AND TESTING PROCEDURES

https://connect.ncdot.gov/resources/Materials/MaterialsResources/Mechanically%20Stabilized%20Earth%20Wall%20Aggregate%20Sampling%20and%20Testing%20Procedures.pdf

Do you have an MSE wall on your project?	If yes **and** sample required per table below, RE office and aggregate supplier shall contact the Materials and Tests Unit Aggregate QC/QA Engineer (Chris Whitley) as soon as the aggregate source is known. The initial acceptance sampling for each wall will be performed by the Materials and Tests Unit at the quarry per the sampling method described in the procedures.
Is your MSE Wall larger than 3,000 yd^3?	If yes **and** sample required per table below, project personnel, certified as NCDOT Aggregate QC/QA Sampling Technicians or as NCDOT Aggregate QC/QA Sampling and Testing Technicians, will take a project verification sample after the first 3,000 yd^3 are delivered per the sampling method described in the procedures.

Note: In the rare instance where the wall contains both geosynthetic and steel in the same wall, the scenario resulting in harsher test requirements shall be followed.

Scenarios

		Coarse Aggregate				Fine Aggregate	
Aggregate Source Location		**Coastal Plain* Source**		**Non-Coastal Plain Source**		**All Sources**	
Reinforcement / Connector Type		**Steel**	**Geosynthetic**	**Steel**	**Geosynthetic**	**Steel**	**Geosynthetic**
Electrochemical	**Sample required?**	**Yes**	No	No	No	**Yes**	No
	Tested For	Table 2	N/A	N/A	N/A	Table 1	N/A
pH	**Sample required?**	**Yes**	**Yes****	No	**Yes****	**Yes**	**Yes**
	Tested For	Table 3	Table 3	N/A	Table 3	Table 3	Table 3
Physical Testing	**Sample needed?**	No, however sources must participate in the Department's Aggregate QC/QA Program				No, however sources must participate in the Department's Aggregate QC/QA Program	
	Gradation	57***, 57M***, 67 or 78M				1S, 2S, 2MS, 4S or Class III Type 3	

* Coastal Plain as defined by Sub article 1018-2(B)(1) of the NCDOT Standard Specifications

** Not Common

***Not to be used with geosynthetic