To: Regional Engineers

From: Jack A. Elston

Subject: Special Provision for Mechanically Stabilized Earth Retaining

Walls

Date: April 18, 2025

This special provision was developed by the Central Bureau of Materials to clarify that lifting devices in mechanically stabilized earth (MSE) panels need to be galvanized. It also adds an Illinois Modified test procedure for fine and coarse aggregates used in MSE wall select fill to achieve the required friction angle in accordance with Article 522.09(b)(4). It has been revised to require a pre-installation meeting, clarify offset dimensions, and add panel joint tolerances as developed in a FHWA/IDOT Joint Process Review.

This special provision should be inserted into contracts requiring permanent or temporary mechanically stabilized earth (MSE) retaining walls.

The districts should include the BDE Check Sheet marked with the applicable special provisions for the August 1, 2025 and subsequent lettings. The Project Coordination and Implementation Section will include a copy in the contract.

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MECHANICALLY STABILIZED EARTH RETAINING WALLS (BDE)

Effective: August 1, 2023 Revised: August 1, 2025

Add the following to Article 522.02 of the Standard Specifications:

"(s) Metal Hardware Cast into Concrete......1006.13"

Revise the first paragraph of Article 522.09(b)(1) of the Standard Specifications to read:

"(1) General. At least seven calendar days prior to the start of installation, the Contractor shall meet with the Engineer, supplier, consultants, and subcontractors involved in any part of the MSE wall installation or inspection to outline procedures and ensure proper construction of the wall."

Revise Article 522.09(b)(5)(a.)(2.) of the Standard Specifications to read:

"2. The maximum allowable offset between adjacent panels shall be 3/4 in. (19 mm)."

Add the following as Article 522.09(b)(5)(a.)(5.) to the Standard Specifications:

"5. The width of each panel joint shall be within 1/4 in. (6 mm) of that shown on the plans."

Revise the second sentence of Articles 1003.07(d) and 1004.06(d) of the Standard Specifications to read:

"The Illinois Modified AASHTO T 296 test with pore pressure measurement may be used in lieu of AASHTO T 236."

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