

**BEDFORD
13527**

January 27, 2011

SPECIAL PROVISION

AMENDMENT TO SECTION 209 – GRANULAR BACKFILL

Item 209.5 – Granular Backfill for MSE Walls

Add to Description:

1.2 Granular Backfill for MSE Walls shall meet the material requirements contained herein and shall be used within the MSE Wall reinforced zone as indicated in the plans, or other locations as shown in the plans, or as directed.

Add to Materials:

2.3 Granular Backfill for MSE Walls shall conform to the material requirements of Section 304 for Crushed Stone (Fine Gradation) and the following additional requirements:

2.3.1 Plasticity Index. The Plasticity Index as determined by AASHTO T 90, shall not exceed 6.

2.3.2 Soundness. The material shall be substantially free of shale or other soft, poor durability particles. The material shall have a magnesium sulfate soundness loss of less than 30 percent after four cycles, as determined by AASHTO T 104.

2.3.3 Electrochemical Requirements

2.3.3.1 Electrochemical Requirements for Inextensible Reinforcement. The backfill material shall conform to the following electrochemical requirements for inextensible reinforcement.

| Property | Requirement | Test Methods |
|-------------|---|----------------------------|
| Resistivity | Minimum 3000 ohm-cm, at 100% saturation | AASHTO T 288 ASTM G 57 |
| pH | Acceptable Range 5-10 | AASHTO T 289 ASTM G 51 |
| Chlorides* | Maximum 100 ppm | AASHTO T 291 ASTM D 512 |

| | | |
|-----------|-----------------|----------------------------|
| Sulfates* | Maximum 200 ppm | AASHTO T 290 ASTM D 516 |
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*If the minimum resistivity exceeds 5000 ohm-cm, at 100% saturation, the need for testing of chlorides and sulfates is waived.

2.3.3.2 Electrochemical Requirements for Extensible Reinforcement. The acceptable range of pH for High Density Polyethylene (HDPE) extensible reinforcement shall be as defined in 2.3.3.1

2.3.3.3 The Contractor shall furnish to the Engineer a certificate of compliance certifying that the select granular backfill material complies with this section of the specifications. A copy of all test results performed by the Contractor, which are necessary to assure compliance with the specifications, shall also be furnished to the Engineer. Backfill not conforming to this specification shall not be used without the written consent of both the Engineer and the wall supplier.

Add to Construction Requirement:

3.2 The construction requirements for Granular Backfill for MSE Walls shall be as provided in Section 592.