

March 1, 2007

Following is an updated version of the ecology mix specifications. This differs from the 2006 HRM in that the specifications for Perlite, dolomite, and gypsum have been changed to remove some ambiguity that was present. Note that there is a single crushed rock size gradation.

**Table RT.07.2. Ecology-mix.**

| Amendment   | Quantity   |          |                    |         |            |                             |             |     |             |        |            |       |             |      |              |       |                             |    |                       |      |                      |
|---|--|----------|--------------------|---------|------------|-----------------------------|-------------|-----|-------------|--------|------------|-------|-------------|------|--------------|-------|-----------------------------|----|-----------------------|------|----------------------|
| <p><b>Mineral Aggregate</b><br/>           Crushed screenings 3/8 inch to #10 sieve<br/>           Crushed screenings shall be manufactured from ledge rock, talus, or gravel, in accordance with Section 3-01 of Standard Specifications for Road, Bridge, and Municipal Construction (2002), which meets the following test requirements:</p> <table data-bbox="186 646 779 709"> <tr> <td>Los Angeles Wear, 500 Revolutions</td> <td>35% max.</td> </tr> <tr> <td>Degradation Factor</td> <td>30 min.</td> </tr> </table> <p>Crushed screenings shall conform to the following requirements for grading and quality:</p> <table data-bbox="186 814 682 1018"> <tr> <td>Sieve Size</td> <td>Percent Passing (by weight)</td> </tr> <tr> <td>1/2" square</td> <td>100</td> </tr> <tr> <td>3/8" square</td> <td>90-100</td> </tr> <tr> <td>U.S. No. 4</td> <td>30-56</td> </tr> <tr> <td>U.S. No. 10</td> <td>0-10</td> </tr> <tr> <td>U.S. No. 200</td> <td>0-1.5</td> </tr> </table> <table data-bbox="186 1024 600 1087"> <tr> <td>% fracture, by weight, min.</td> <td>75</td> </tr> <tr> <td>Static stripping test</td> <td>Pass</td> </tr> </table> <p>The fracture requirement shall be at least one fractured face and will apply to material retained on the U.S. No. 10 if that sieve retains more than 5 percent of the total sample.<br/>           The finished product shall be clean, uniform in quality, and free from wood, bark, roots, and other deleterious materials.<br/>           Crushed screenings shall be substantially free from adherent coatings. The presence of a thin, firmly adhering film of weathered rock shall not be considered as coating unless it exists on more than 50 percent of the surface area of any size between successive laboratory sieves.</p> | Los Angeles Wear, 500 Revolutions                          | 35% max. | Degradation Factor | 30 min. | Sieve Size | Percent Passing (by weight) | 1/2" square | 100 | 3/8" square | 90-100 | U.S. No. 4 | 30-56 | U.S. No. 10 | 0-10 | U.S. No. 200 | 0-1.5 | % fracture, by weight, min. | 75 | Static stripping test | Pass | <p>3 cubic yards</p> |
| Los Angeles Wear, 500 Revolutions   | 35% max.   |          |                    |         |            |                             |             |     |             |        |            |       |             |      |              |       |                             |    |                       |      |                      |
| Degradation Factor  | 30 min.  |          |                    |         |            |                             |             |     |             |        |            |       |             |      |              |       |                             |    |                       |      |                      |
| Sieve Size  | Percent Passing (by weight)                                |          |                    |         |            |                             |             |     |             |        |            |       |             |      |              |       |                             |    |                       |      |                      |
| 1/2" square   | 100  |          |                    |         |            |                             |             |     |             |        |            |       |             |      |              |       |                             |    |                       |      |                      |
| 3/8" square   | 90-100   |          |                    |         |            |                             |             |     |             |        |            |       |             |      |              |       |                             |    |                       |      |                      |
| U.S. No. 4  | 30-56  |          |                    |         |            |                             |             |     |             |        |            |       |             |      |              |       |                             |    |                       |      |                      |
| U.S. No. 10   | 0-10   |          |                    |         |            |                             |             |     |             |        |            |       |             |      |              |       |                             |    |                       |      |                      |
| U.S. No. 200  | 0-1.5  |          |                    |         |            |                             |             |     |             |        |            |       |             |      |              |       |                             |    |                       |      |                      |
| % fracture, by weight, min.   | 75   |          |                    |         |            |                             |             |     |             |        |            |       |             |      |              |       |                             |    |                       |      |                      |
| Static stripping test   | Pass   |          |                    |         |            |                             |             |     |             |        |            |       |             |      |              |       |                             |    |                       |      |                      |
| <p>Perlite:</p> <ul data-bbox="186 1444 893 1564" style="list-style-type: none"> <li>• Horticultural grade, free of any toxic materials</li> <li>• Size gradation: at least 70% retained by US Sieve No. 18 and no more than 10% smaller than that which passes through US Sieve No. 30</li> </ul>  | <p>1 cubic yard per 3 cubic yards of mineral aggregate</p> |          |                    |         |            |                             |             |     |             |        |            |       |             |      |              |       |                             |    |                       |      |                      |
| <p>Dolomite: <math>\text{CaMg}(\text{CO}_3)_2</math> (calcium magnesium carbonate)</p> <ul data-bbox="186 1617 893 1707" style="list-style-type: none"> <li>• Horticultural grade, free of any toxic materials</li> <li>• Size gradation: that which passes through US Sieve No. 8 and is retained by US Sieve No. 16</li> </ul>  | <p>10 pounds per cubic yard of perlite</p>                 |          |                    |         |            |                             |             |     |             |        |            |       |             |      |              |       |                             |    |                       |      |                      |
| <p>Gypsum: Non-calcined, agricultural gypsum <math>\text{CaSO}_4 \cdot 2\text{H}_2\text{O}</math> (hydrated calcium sulfate)</p> <ul data-bbox="186 1791 893 1881" style="list-style-type: none"> <li>• Horticultural grade, free of any toxic materials</li> <li>• Size gradation: that which passes through US Sieve No. 8 and is retained by US Sieve No. 16</li> </ul>  | <p>1.5 pounds per cubic yard of perlite</p>                |          |                    |         |            |                             |             |     |             |        |            |       |             |      |              |       |                             |    |                       |      |                      |