PERMANENT EROSION CONTROL

07/01/07

GENERAL NOTES

1. All turf establishment shall be performed meeting the requirements of Section 570 of the Standard Specifications.

2. Activities such as clearing, grading, and excavating that will disturb one or more acres of land require coverage under the Generic Permit for Stormwater Discharge from Large and Small Construction Activities from the Florida Department of Environmental Protection, and implementation of appropriate pollution prevention measures to minimize erosion and sedimentation and properly manage stormwater.

3. Confirm compatibility of wildflower with Seeding Zones.

WILDFLOWER SEEDING RATES

<table>
<thead>
<tr>
<th>Common Name (Botanical Name)</th>
<th>#1 Group</th>
<th>#2 Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black-Eyed Susan (Rudbeckia hirta)</td>
<td>2</td>
<td>15</td>
</tr>
<tr>
<td>Lance-leaf Tickseed (Coreopsis lanceolata)</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Goldenseal Tickseed (Coreopsis greggii)</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Leavenworth's Tickseed (Coreopsis leavenworthii)</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Fire Wheel (Gaillardia pulchella)</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Saffron Coreopsis (Rudbeckia mollis)</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Crimson Clover (Trifolium incarnatum)</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>Annual Phlox (Phlox drummondii)</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Moss Verbena (Verbena bonariensis)</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Leavenworth's Tickseed (Coreopsis leavenworthii)</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Fire Wheel (Gaillardia pulchella)</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Crimson Clover (Trifolium incarnatum)</td>
<td>15</td>
<td></td>
</tr>
</tbody>
</table>

Note: Wildflower seeding rates are for restoring impacted wildflower areas.

LEGEND

1. Wildflower Group #1
2. Wildflower Group #2
3. Turf (To Limit of Construction)
4. Selective Clearing And Grubbing
5. Limits Of Construction
6. Turf
7. Turf

SEEDING ZONES

ZONE I

Zone I

UNDIVIDED FLUSH SHOULDER

UNDIVIDED CURBED

DIVIDED CURBED

DIVIDED NARROW MEDIAN WITH OR WITHOUT CURBED MEDIAN

DIVIDED WIDE MEDIAN WITH OR WITHOUT CURBED MEDIAN
SHOULDER AND SLOPE TREATMENT FOR SUPERELEVATED ROADWAYS

CRITERIA FOR PAVING SHOULDER ON DIVIDED AND UNDIVIDED FACILITIES

<table>
<thead>
<tr>
<th>Design Speed</th>
<th>Degree Of Curve</th>
</tr>
</thead>
<tbody>
<tr>
<td>(mph)</td>
<td>( )</td>
</tr>
<tr>
<td>30</td>
<td>7° or Greater</td>
</tr>
<tr>
<td>40</td>
<td>6° or Greater</td>
</tr>
<tr>
<td>50</td>
<td>5° or Greater</td>
</tr>
<tr>
<td>60</td>
<td>4° or Greater</td>
</tr>
<tr>
<td>70</td>
<td>3° or Greater</td>
</tr>
</tbody>
</table>

Note: Shoulder Pavement is required on all curves meeting the criteria tabulated. For curves not meeting the criteria, shoulders are to be paved where erosion of the shoulder is evident or anticipated.

NOTES

1. These treatments are applicable to new construction, reconstruction and RRR projects. Project requirements for shoulder pavement and sodding that exceed the limits of this standard take precedence.

2. For sodding adjacent to ditches and at headwalls, see Index No. 281.

3. All front slopes steeper than 1:3 are to be sodded.

TREATMENTS FOR PROTECTION FROM CONCENTRATED ROADWAY RUNOFF EROSION AND SHOULDER RAVELING
1. **TREATMENT I**

   - **CRITERIA FOR USING TREATMENT I**
     - Project:
       - Is resurfacing, widening and resurfacing or construction of shoulder pavement
       - Is rural or is urban without curb and gutter
       - Resurfacing build-up is less than 3" or more

   - **COMPLETED SHOULDER**

2. **TREATMENT II**

   - **CRITERIA FOR USING TREATMENT II**
     - Project:
       - Is resurfacing or construction of shoulder pavement
       - Is rural or is urban without curb and gutter
       - Resurfacing build-up is 3" or more

**GENERAL NOTES**

1. **Treatment I:**
   - A. If trenching under sod is necessary to achieve the required 1" drop-off, excavated turf and topsoil are to be used for filling voids and low areas at the edge of pavement or for flushing along the edge of sod. Excess material to be uniformly distributed over the shoulder.
   - B. Payment for sod, excavation of turf and topsoil and for backfill of this material under Treatment I is to be included in the contract unit price for Performance Turf, SY. Finish Soil Layer not required.

2. **Treatment II:**
   - A. All borrow shall meet requirements for a "Select" material in accordance with Index SD5 and Section 120 of the Standard Specifications.
   - B. Borrow may be used in lieu of excavated turf and topsoil when economically feasible, however the upper 6" shall meet the requirements of Section 162 "Finished Soil Layer". There will be no additional payment for substituting borrow for excavated turf and topsoil.
   - C. When existing turf and topsoil do not meet the requirements of Section 162 "Finished Soil Layer", provide additive materials as necessary in the upper 6" to meet the requirements of Section 162. There will be no additional payment for additives.
   - D. Payment for Treatment II will be under Finished Soil Layer. Sod and other materials for turf establishment shall be paid for as Performance Turf, SY.

3. **SHOULDER OPTION 1**

   - **SHOULDER OPTION 2**

4. Special attention is to be directed to the construction of the required 1" drop-off at the edge of pavement.

5. Activities such as clearing, grading, and excavating that will disturb one or more acres of land require coverage under the Generic Permit for Stormwater Discharge from Large and Small Construction Activities from the Florida Department of Environmental Protection, and implementation of appropriate pollution prevention measures to minimize erosion and sedimentation and properly manage stormwater.

6. **Turf Establishment:**
   - A. Wildflowers destroyed by shoulder sodding and turf operations are to be reestablished under the seeding rates prescribed for permanent wildflower #2 Group shown by Table on Index 104.
   - B. All turf establishment shall be performed meeting the requirements of Section 570 of the Standard Specifications.