The Manual for Erosion and Sediment Control in Georgia

Transition Period

The Manual for Erosion and Sediment Control in Georgia has been revised and revisions will become effective January 1, 2014. Revisions include the addition of new Best Management Practices (BMPs), as well as benchmark standards for most new and existing BMPs. The benchmarks are a result of data collected from standardized testing procedures which were approved by the GSWCC and completed on randomly selected products and practices.

The GSWCC recognizes the need for a transition period to allow individuals time to understand and begin implementing the new requirements. This will also allow manufacturers time to have their products tested and to qualify for the GSWCC Approved Products List.

As part of this transition period, for a one year period, beginning January 1, 2014 and ending December 31, 2014, GSWCC will recognize both the GDOT Qualified Products List (QPL) and the GSWCC Approved Products List (APL), which will affect the following BMPs:

1. **Sediment Barriers (Sd1)**
   - If the design professional chooses to utilize the GDOT QPL-36 the sediment barrier(s) shown on the plan must continue to be labeled using the appropriate coding symbol(s) (Sd1-A, Sd1-B, or Sd1-C) and the respective detail(s) must be provided.
   - If the design professional chooses to use the GSWCC APL the sediment barrier(s) shown on the plan must be labeled using the appropriate new coding symbol(s) (Sd1-S or Sd1-NS), and the appropriate detail(s) and worksheet(s) must be provided.

2. **Slope Stabilization (Ss)** (formerly Mb)
   - Plans may use any product listed on GDOT QPL-49 for matting, GDOT QPL-62 for blankets, and the GSWCC APL for Slope Stabilization. Regardless of which list is used the plan must be labeled Ss.

3. **Channel Stabilization**
   - The codes for channel stabilization have changed, Ch-V is now Ch-1, Ch-Rp is now Ch-2 and Ch-C is Ch-3. The velocities associated with these categories have not changed. Plans shall be labeled with the new codes.

In addition to adding new practices, GSWCC has made modifications to the following BMPs:

1. **Polyacrylamide (PAM)** is no longer a stand-alone BMP. PAM now falls under the new BMPs Tackifiers (Tac) or Flocculants/Coagulants (Fl-Co) specifications,
depending on its application. The appropriate coding symbol shall be used on the Plan.

2. **Check dam (Cd)**
   The check dam specification has remained the same except for a change to the straw bale installation method, and the addition of the compost filter sock. If straw bales are being used, the new installation method shall be used.

3. **Inlet Sediment Traps (Sd2)**
   All BMPs approved for appropriate Inlet Protection (Sd2) in the previous Manual (Fifth Edition), including both paved and unpaved applications, may be utilized by design professionals and allowed by plan reviewers during the transition period.

   If a new practices is being used (i.e., Seep Berm (SpB), Skimmer (Sk), or Turbidity Curtain (Tc)), the design professional must follow the requirements as specified in the Manual (Sixth Edition). This includes, but is not limited to, using appropriate coding symbols, details and calculations as required.

**The Plan Review Process**

The following procedures shall be used for review of ES&PC Plans:

Any plans received on or after January 1, 2014 which were designed and dated prior to January 1, 2014 may utilize the products and practices as specified in the previous Manual (Fifth Edition). These may include previously approved plans with revisions, plans which had not been previously approved but were in the review process, or new plan submittals created prior to 2014.

Any plans received on or after January 1, 2014, which are designed in and dated 2014 are to utilize the new Manual (Sixth Edition). With the exception of the items noted above.

Plans should not be denied solely for minor inconsistencies, such as incorrect codes (i.e. Mb instead of Ss or PM instead of Tac or Fl-Co). However, the reviewer should note all inconsistencies on the plan review sheet.

If the Plan is deficient in other areas, the minor inconsistencies should be included in the reasons for denial.

Please contact the Ben Ruzowicz or Lauren Zdunczyk at 706-552-4474 for clarification.
Sediment Barrier

SILT FENCE

Like hay or straw bales, silt fence is designed to retain sediment transported by sheet flow from disturbed areas. Silt fence performs the same function as hay or straw bales, allows a higher flow rate, and is usually faster and cheaper to install. Approved silt fence fabrics are listed in the Georgia Department of Transportation Qualified Products List #36 (QPL-36). See Table 6-20.5 for current Georgia DOT silt fence specifications.

Where all runoff is to be stored behind the fence (where no stormwater disposal system is present), maximum slope length behind a silt fence shall not exceed those shown in Table 6-20.2. The drainage area shall not exceed 1/4 acre for every 100 feet of silt fence.

Type A Silt Fence

This 36-inch wide filter fabric shall be used on developments where the life of the project is greater than or equal to six months.

Type B Silt Fence

Though only 22-inches wide, this filter fabric allows the same flow rate as Type A silt fence. Type B silt fence shall be limited to use on minor projects, such as residential home sites or small commercial developments where permanent stabilization will be achieved in less than six months.

Type C Silt Fence

Type C fence is 36-inches wide with wire reinforcement. The wire reinforcement is necessary because this fabric allows almost three times the flow rate as Type A silt fence. Type C silt fence shall be used where runoff flows or velocities are particularly high or where slopes exceed a vertical height of 10 feet.

Provide a riprap splash pad or other outlet protection device for any point where flow may top the sediment fence. Ensure that the maximum height of the fence at a protected, reinforced outlet does not exceed 1 ft. and that support post spacing does not exceed 4 ft.

Silt Fence

The manufacturer shall have either an approved color mark yarn in the fabric or label the fabricated silt fence with both the manufacturer and fabric name every 100 feet.

The temporary silt fence shall be installed according to this specification, as shown on the plans or as directed by the engineer. For installation of the fabric, see Figures 6-20.4, 6-20.5, and 6-20.6 respectively.

Post installation shall start at the center of the low-point (if applicable) with remaining posts spaced 6 feet apart for Type A and B silt fences and 4 feet apart for Type C silt fence. While Type A and B silt fences can be used with both wood and steel posts, only steel posts shall be used with Type C silt fence. For post size requirements, see Table 6-20.3. Fasteners for wood posts are listed in Table 6-20.4.

Along stream buffers and other sensitive areas, two rows of Type C silt fence or one row of Type C silt fence backed by haybales shall be used.
MAINTENANCE

Sediment shall be removed once it has accumulated to one-half the original height of the barrier. Filter fabric shall be replaced whenever it has deteriorated to such an extent that the effectiveness of the fabric is reduced (approximately six months). Temporary sediment barriers shall remain in place until disturbed areas have been permanently stabilized. All sediment accumulated at the barrier shall be removed and properly disposed of before the barrier is removed.

<table>
<thead>
<tr>
<th>Post Size</th>
<th>Minimum Length</th>
<th>Type of Post</th>
<th>Size of Post</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type A</td>
<td>4’</td>
<td>Soft wood</td>
<td>3” dia. or 2x4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Oak</td>
<td>1.5” x 1.5”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Steel</td>
<td>1.3lb./ft. min.</td>
</tr>
<tr>
<td>Type B</td>
<td>3’</td>
<td>Soft wood</td>
<td>2” dia. or 2x2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Oak</td>
<td>1” x 1”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Steel</td>
<td>.75lb./ft. min.</td>
</tr>
<tr>
<td>Type C</td>
<td>4’</td>
<td>Steel</td>
<td>1.3lb./ft. min.</td>
</tr>
</tbody>
</table>

Fasteners For Wood Posts

<table>
<thead>
<tr>
<th></th>
<th>Gauge</th>
<th>Crown</th>
<th>Legs</th>
<th>Staples/Post</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wire Staples</td>
<td>17 min.</td>
<td>3/4” wide</td>
<td>1/2” long</td>
<td>5 min.</td>
</tr>
<tr>
<td></td>
<td>Gauge</td>
<td>Length</td>
<td>Button Heads</td>
<td>Nail/Post</td>
</tr>
<tr>
<td>Nails</td>
<td>14 min.</td>
<td>1”</td>
<td>3/4”</td>
<td>4 min.</td>
</tr>
</tbody>
</table>

Note: Filter fabric may also be attached to the post by wire, cord, and pockets.
This is only applicable during the transition period, January 1, 2014 thru December 31, 2014

**SIDE VIEW**

**FRONT VIEW**

**NOTE:**
Use 36" D.O.T. approved fabric.
Use wood or steel posts

**SILT FENCE - TYPE A**
This is only applicable during the transition period, January 1, 2014 thru December 31, 2014

NOTE:
Use 22" D.O.T. approved fabric.
Use wood or steel posts

SILT FENCE - TYPE B
NOTE:
Use 36" D.O.T. approved fabric.
Use steel posts.- only

SILT FENCE - TYPE C
<table>
<thead>
<tr>
<th>TYPE FENCE</th>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tensile Strength (Lbs. Min.) (1) (ASTM D-4632)</td>
<td>Warp - 120</td>
<td>Warp - 120</td>
<td>Warp - 260</td>
</tr>
<tr>
<td></td>
<td>Fill - 100</td>
<td>Fill - 100</td>
<td>Fill - 180</td>
</tr>
<tr>
<td>Elongation (% Max.) (ASTM D-4632)</td>
<td>40</td>
<td>40</td>
<td>40</td>
</tr>
<tr>
<td>AOS (Apparent Opening Size) (Max. Sieve Size) (ASTM D-4751)</td>
<td>#30</td>
<td>#30</td>
<td>#30</td>
</tr>
<tr>
<td>Flow Rate (Gal/Min/Sq. Ft.) (GDT-87)</td>
<td>25</td>
<td>25</td>
<td>70</td>
</tr>
<tr>
<td>Ultraviolet Stability (2) (ASTM D-4632 after 300 hours weathering in accordance with ASTM D-4355)</td>
<td>80</td>
<td>80</td>
<td>80</td>
</tr>
<tr>
<td>Bursting Strength (PSI Min.) (ASTM D-3786 Diaphragm Bursting Strength Tester)</td>
<td>175</td>
<td>175</td>
<td>175</td>
</tr>
<tr>
<td>Minimum Fabric Width (Inches)</td>
<td>36</td>
<td>22</td>
<td>36</td>
</tr>
</tbody>
</table>

(1) Minimum roll average of five specimens.

(2) Percent of required initial minimum tensile strength.