

CONSTRUCTION PROJECT EROSION AND SEDIMENT CONTROL

All land-disturbing activities undertaken on private and public lands in Alachua County must meet erosion and sediment control standards. The site owner and contractor are responsible for ensuring compliance with the minimum standards that apply to his/her activities.

DANGER



Sediments from soil erosion clog fish gills and smother invertebrate organisms, cutting off their oxygen supply, and disrupting the food web.



Turbid water prevents sunlight penetration and disrupts aquatic plants' photosynthetic process. Some fish depend on these plants for protection.



During storm events, high water velocities and sediments scour and destabilize creek channels.



Storm water contains toxic contaminants including metals, petroleum products, and harmful bacteria.



Stormwater transports nutrients into our waters that can lead to algal blooms and excessive plant growth.

STOP WORK

The City of Gainesville

has enacted Land Development Code 30-311(a) to address storm water plan violations. Violations "that present an imminent risk to the environment, ...may issue a cease and desist order for any and all development on the site related to the permit."

Alachua County Water Quality Code

Chapter 77 (Ordinance 02-27) prohibits non-storm water discharges into storm water management systems, which includes most roads.

The Water Quality Code specifically addresses land disturbing activities and construction projects:

SECTION 11. EROSION AND SEDIMENTATION CONTROL

Erosion and sedimentation control BMPs shall be implemented at all excavations within incorporated and unincorporated Alachua County. The selected erosion and sedimentation BMPs shall provide equal or better protection than those found in the current edition of "The Florida Stormwater, Erosion, and Sedimentation Control Inspector's Manual", compiled by the Florida Department of Environmental Protection.



Only Rain Down the Drain!

The Storm Drain System

was built to collect and transport rain to prevent flooding in urban areas. In most areas, anything that flows or is discharged into the storm drain system goes directly into local creeks without any treatment.

Erosion and Sediment Control Vendors

ACF Environmental

2831 Cardwell RD
Richmond, VA 23234
800-448-3636
www.acfenvironmental.com

American Excelsior Company

850 Avenue H East
Arlington, TX 76011
800-777-7645
www.curlex.com

Applied Polymer Systems, Inc.

519 Industrial DR
Woodstock, GA 30189
678-494-5998
www.siltstop.com

The BMP Store

2831 Cardwell RD
Richmond, VA 23234
800-644-9223
www.thebmpstore.com

Central Builder Supplies of Gainesville

6800 NW 22nd ST
Gainesville, FL 32653
352-372-1111
www.cbslbm.com

Dandy Products, Inc.

PO Box 1980
Westerville, OH 43086-1980
800-591-2284
www.dandyproducts.com

Fabco Industries

631-393-6024
www.fabco-industries.com

Home Depot

7107 NW 4th BLVD
Gainesville, FL 32607
352-332-7440
www.homedepot.com

Lowe's

3500 SW Archer RD
Gainesville, FL 32607
352-376-9900
www.lowes.com

Mat, Inc.

12402 Highway 2
Floodwood, MN 55736
888-477-3028
www.soilguard.com

R.H. Moore & Associates, Inc.

7834 Depot Lane
Tampa, FL 33637
800-988-0200
www.rhmooreassociates.com

United Rentals

3540 NE Waldo RD
Gainesville, FL 32609
352-377-1051
www.unitedrentals.com

Whitecap Construction Supply

11416 NW HWY 441
Gainesville, FL 32653
352-372-4181

Consultants for E&S Controls

AMEC

352-332-3381

Brown and Cullen, Inc.

352-375-8999

CHW, Inc.

352-331-1976

Eng-Denman & Associates

Contact: Sergio Reyes
352-373-3541

Environmental Consulting and Technology, Inc.

Contact: Jeffery Wahl
352-332-0444

Geohydro Consultants

Contact: John Herbert
352-371-5553

Jones Edmunds and Associates, Inc.

352-377-5821

MCH Engineering

Contact: Matthew Hermann
352-359-6527

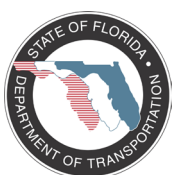
Universal Engineering Sciences, Inc.

Contact: Keith Butts
352-372-3392

Water & Air Research

Contact: Carter Belvin
352-372-1500

Alachua County Environmental Protection Department provides this list for informational purposes. Reference to any specific commercial products, process, or service by trade name, trademark, manufacturer, or otherwise, does not constitute or imply its endorsement, recommendation, or favoring by the Alachua County Environmental Protection Department. You may call 352-264-6809 to be added to the vendor list.



E & S

CONTROL PLAN BMPs

CONSTRUCTION ENTRANCE:

Off site tracking is an invitation to inspectors! A construction entrance to minimize vehicle off site tracking of sediments is required. A gravel, #1, 50' x 12' rock pad at the construction entrance is effective in preventing off site tracking into the public right of way. After time, top dressing with additional rock may be necessary. Sweeping the roadway may also be required to keep sediments out of the road and gutter.

PERIMETER CONTROLS:

Placement of perimeter controls, to prevent sediments from leaving the project site, should be installed prior to any land disturbing activities.

SITE STABILIZATION:

After earth is disturbed or exposed, stabilization of the site should be employed to minimize runoff potential. Do not leave areas bare and unprotected. Temporary or permanent seeding with fast growing grasses and mulching, can be utilized to reduce erosion.

SEDIMENT CONTROLS:

Structural controls are also typically needed to keep sediments on site. Earthen dikes, silt fences, sediment basins, or sediment traps are examples of this type of control. These methods divert runoff, filter out sediments, and reduce runoff velocity so sediments can naturally settle out.

FLOATING TURBIDITY BARRIERS:

These geotextile materials are placed in the water body, as a last resort and in conjunction with other E&S BMPs, to reduce the transport of sediment from up-slope land disturbances. These devices are not intended to impound or dam water, they should **not** be installed across the channel flow, but should be parallel to flow.

INSPECTION AND MAINTENANCE:

Structural controls require documented inspection, maintenance, and documentation after every half inch rain event or once a week (whichever occurs first) to ensure proper performance. Authorize or assign an individual to manage and maintain compliance with the E&S control plan. Be sure the person has the authority and resources to ensure that control measures are adequate for site conditions.

Information and Training: Become an FDEP certified inspector. The inspector's training program is a FREE two-day class which follows the curriculum provided in the Florida Storm Water, Erosion, and Sedimentation Control Inspector's Manual. www.dep.state.fl.us/water/nonpoint/erosion

STOCKPILES:

Soil and material stockpiling must be done with care. Stockpiles should not be located near water bodies or storm drains. Silt fencing can be used around stock piles. Plastic covers can be used to minimize rainfall erosion.

DEWATERING ACTIVITIES:

Disposal of water is the critical part of dewatering and may require a Water Management District permit. Water pumped from a sump hole generally has high sediment loads and must be treated prior to discharge. Turbid water must be impounded to allow particles to settle out or infiltrate into the soil. Chemical products (flocculating agents) can be used to enhance particle aggregation and speed up the settling of particles.

CONCRETE WASH:

Install a dedicated concrete wash out area to control runoff and prevent sloppy or careless wash practices on your job site.

EQUIPMENT MAINTENANCE AND REPAIR:

Confine maintenance, repair, and fueling activities to a specifically designated area. Locate such areas to reduce the likelihood of accidental release reaching water conveyance systems or water bodies. If temporary fuel tanks are used, consider placing them inside a bermed area lined with plastic to prevent spills from contaminating soils.

PROJECT SEQUENCING:

Planning the project calendar and the sequencing of tasks in the correct order is essential to remain in compliance. Always have as little exposed area as possible. Existing vegetation is free erosion control! Pay attention to the local rainfall patterns. In Florida, the highest historical monthly rainfall averages occur in June through September, and March.

STORM DRAIN INLET:

Storm drain inlet protection is required for operational systems. Sediment laden water cannot enter the system without treatment or filtration to remove sediments. Inlets can be protected with gravel filled sand bags, natural fiber socks / gutter buddies or similar material. Maintenance (removal of accumulated sediments) is needed to maintain storm flows and reduce flooding.

SILT FENCING:

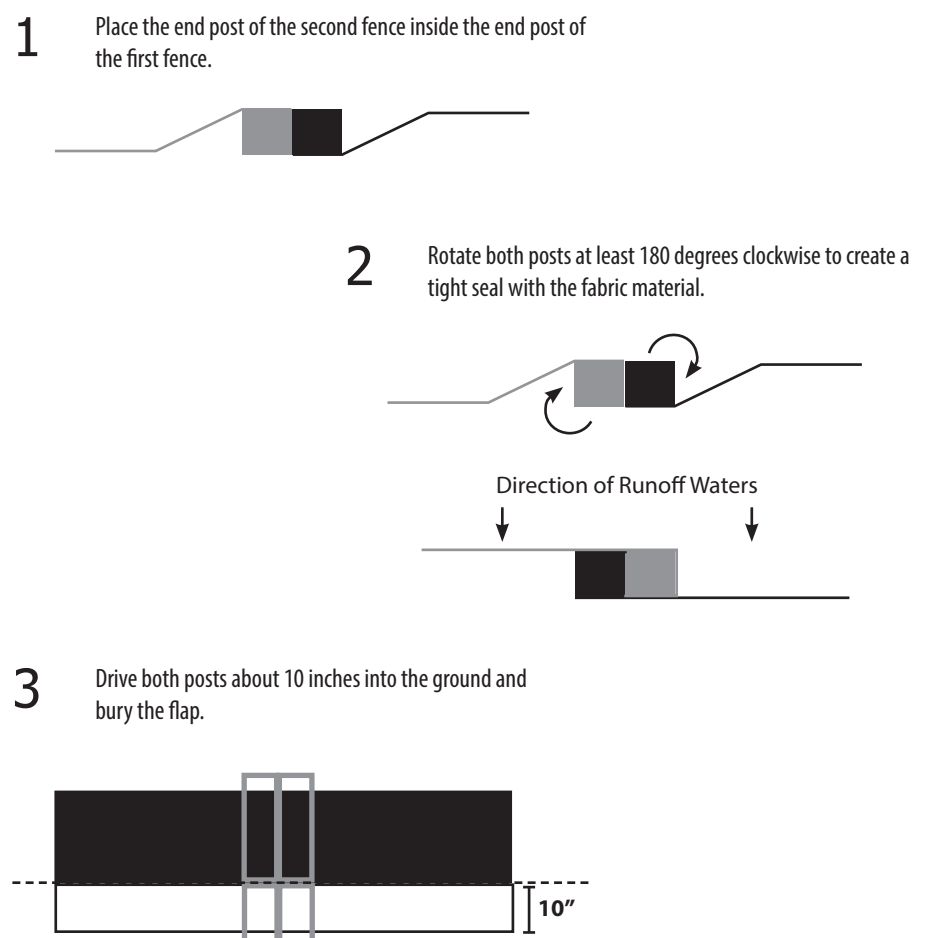
Silt fencing is the most common sediment control method. Unfortunately, it is too often installed incorrectly, not maintained properly, and left out too long where the fence deteriorates and becomes ineffective.

- Silt fencing should never be used in streams, ditches, or swales where flows may exceed one cubic foot per second.
- Fencing shall be inspected after each rainfall and needed repairs made immediately. Document your inspections to show regulators you are in compliance.
- Sediment deposits should be removed routinely and never allowed to reach higher than one half of the fence height.



Wrap and Roll

This is the best method for joining rolls of silt fencing. Follow the directions below to eliminate gaps and weak links in your silt fence.



Properties with a slope, especially near water bodies, may require a double row of silt fencing to ensure sediment capture and control. Wire fencing as backing for the silt fence can add strength and enhance the fence effectiveness under high loads.

MATERIAL AND CHEMICAL STORAGE:

Solvents, paints, cements, bonding agents, fuels, etc. have a high potential to cause water pollution. Manage and store these products carefully. Label containers and keep them sealed to minimize spillage. Don't allow empty containers to be washed where water enters a storm water conveyance system or water body. Monitor compliance by sub contractors to prevent careless and sloppy practices from creating compliance problems at your site.