

Construction Checklist

When building a new home or adding on to your current home, there are a few important things to keep in mind. The following checklist will assist you in ensuring that the appropriate factors have been considered:

- Evaluate the Site:** Before construction begins, evaluate the entire site, mark for protection of any important trees and associated rooting zones, unique areas to be preserved, streams, wetlands, potential hydric soils, and vegetation suitable for filter strips, especially in perimeter areas. Remember to call the *Tennessee One Call* at 800-351-1111 48 hours before you dig.
- Install Perimeter Controls:** Identify the areas where sediment runoff could leave the construction site and install perimeter controls to minimize the potential for off-site sedimentation. This could include leaving a buffer strip, using silt fence, and protecting storm drain inlets.
- Build the Structures and Install Utilities:** Construct the home or addition and install utilities, including the sewage system and water well, if applicable.
- Maintain all erosion and sediment control measures:** Inspect at least once per week and after storm events. Maintain controls until construction is complete and lot is stabilized. Sweep or scrape any soil tracked onto roadways.
- Revegetate the Site:** Immediately after all outside activities are complete, stabilize the lot with seed, sod, or mulch. Redistribute the stockpiled soil, and spread to a depth of 4-6 inches over rough-graded areas. Spread mulch on newly seeded areas.
- Remove Remaining Temporary Control Measures:** Once the sod and/or vegetation is established, remove any temporary erosion and sediment control measures.

Resources:

www.knoxvilletn.gov/engineering

- Stormwater and Street Ordinance
- Land Development Manual
- BMP Manual - Includes detailed information for the following construction BMP's:
 - * Stabilized Construction Entrance
 - * Gradient Terraces & Surface Roughening
 - * Topsoil & Mulch
 - * Seeding & Sodding
 - * Trees, Shrubs, & Vines
 - * Erosion Control Matting & Geotextiles
 - * Check Dams & Silt Fence
 - * Straw Bale & Sandbag Barrier
 - * Brush or Rock Filter Berm
 - * Temporary Sediment Trap & Basin
 - * Bank Stabilization & Soil Bioengineering
 - * Diversions & Swales
 - * Channel Linings, Gabions, & Riprap
 - * Temporary Inlet & Outlet Protection
 - * Level Spreader
 - * Floating Sediment Curtain
- For additional information, please refer to the Tennessee Department of Environment & Conservation Erosion Prevention and Sediment Control Handbook at:
tnepsc.org/handbook.asp

Information for this brochure was taken in part from Erosion Control for the Homebuilder published by Summit SWCD, Erosion and Sediment Control for Homebuilders published by Lake SWCD, and

Please report illegal dumping or discharges in streams, ditches, catch basins, or streets to the City of Knoxville.
Report Water Pollution—Call 311.
Anonymous calls are welcome.

Goal Statement:

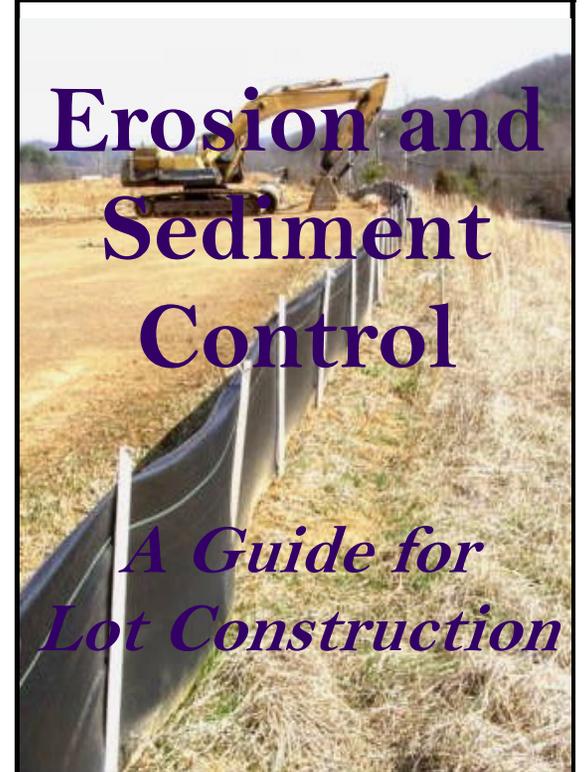
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Erosion and Sediment Control: The Key to Clean Water

Sediment is the product of erosion and the #1 pollutant in Tennessee streams and rivers by volume. Construction and other earth disturbing activities can contribute large quantities of sediment to streams.

Sediment negatively impacts water quality by degrading the habitat of aquatic organisms and fish, impeding recreational opportunities, decreasing property value, and promoting the growth of weeds and algae. Sediment accumulation in ditches, streams, and lakes reduces their capacity, thereby increasing the chance of frequent flooding.

As a result of state and federal mandates, the City of Knoxville must regulate construction sites to ensure all sediment remains on-site. Whether or not an erosion & sediment control plan is required, **all property owners are required to comply** with the provisions outlined in the *Stormwater and Street Ordinance*. The homeowner is ultimately responsible if these measures are not properly in place.

This brochure provides abbreviated versions of Best Management Practices (BMPs) for individual lot construction to ensure that all necessary measures are taken to prevent erosion and protect sediment from leaving the site and entering waterways. Contact the City for a complete set of regulations.



Best Management Practices for Individual Lot Construction

Correctly installed and maintained BMPs can help ensure that sediment generated from construction activity remains on-site. The following BMPs are commonly used for individual lot construction:

Construction Entrance

- Use to prevent tracking soil onto road
- Use 2"-3" stone
- Install during clearing phase and maintain throughout construction
- Install geotextile fabric under entrance



Sediment Barriers

- Use to trap sediment and intercept runoff
- Install prior to clearing phase
- Ensure filter fabric or silt fence is installed correctly by entrenching a portion of it in the ground and place stakes downhill
- Maintain until vegetation is established
- Do not use on steep slopes or concentrated flow areas



Sediment Cleanup

- At the end of each work day sweep or scrape soil tracked onto roads
- After storm events inspect for off-site sediment movement and repair damage to barriers
- Remove sediment that penetrated barriers and remove build-up
- Refer to IC-08 in BMP manual for proper pressure washing techniques



Rock Outlet Protection

- Use to dissipate energy from concentrated flows
- Helps prevent eroded channels downstream
- Use oversized stone appropriate for design velocities
- Install geotextile fabric under riprap



Inlet Protection

- Protect all storm water inlets- they are a direct conveyance to streams and rivers
- Install prior to clearing phase
- Filter fabric and temporary seeding are standard for inlet protection
- Must be inspected and maintained regularly



Stockpile Placement and Protection

- Build stockpiles away from critical areas such as streams, drainage ways, and storm water inlets
- Use temporary seed, such as annual rye, to stabilize pile until removed or re-graded



Re-vegetation/Surface Protection

- Use to stabilize exposed surfaces from erosion
- Use seed or sod to cover exposed soils after final grade is completed
- Seed critical areas such as drainage swales, right-of-way areas, areas near curb inlets, buffer areas along streams and wetlands
- Mulching can be used when temporary seeding is not practical and can be done in

