



Department of Public Works

**Single Family Residential
Erosion/Sediment Control Standards**

Construction sites in Fairway, KS, regardless of size, are regulated to ensure Best Management Practices (BMPs) are installed and maintained to prevent sediment and other pollutants from leaving the site. Lack of erosion and sediment control BMPs can allow large quantities of sediment and other pollutants to leave a site and enter local streams, lakes and rivers. This packet contains plans and practices appropriate for residential building lots. It is not intended to address all circumstances.

CONTRACTOR RESPONSIBILITIES

- The permit holder is responsible for the on-going maintenance of all lot specific erosion and sediment control devices.
- It is critical that sediment not be allowed to invade the storm sewer system. Should any mud or other debris find its way to the street, the contractor shall take immediate steps to have it removed.
- Periodic inspection shall be whatever is deemed necessary to ensure that erosion and sediment control measures are functioning as designed. Should any of the erosion control devices collapse, tear, decompose or become ineffective they should be replaced immediately. Any other problems noted during these inspections shall be corrected promptly.
- The temporary construction entrance provides a place for parking vehicles off-street and a spot where material can be off-loaded. The intent of the requirement is to provide a stable surface for parking vehicles where mud and other debris is not likely to be tracked onto the street. Proper maintenance of the area is required until such time as a permanent driveway can be put in place.
- If the utilities are installed after BMP's have been put in place, the permit holder is responsible for control of erosion and sediment during the construction process and they are responsible to ensure that all BMP devices are reinstalled per the original design.

INSPECTIONS - CITY

- Inspections will ensure that proper placement and installation of erosion and sediment control measures are in place.
- The first inspection will occur prior to the permit being issued. If the permit holder fails to install the proper erosion and sediment control measure, this will result in the permit not being issued.
- Standard items to be checked are; protection of adjacent lots, grading/excavating, and that stockpiles are stabilized. If BMP's are not installed in the correct location and/or not installed correctly, the site may fail inspection.
- There will be situations that fall outside of the norms. City inspectors will be available to discuss erosion and sediment control measures for any lot. If you have questions or concerns, please call the Public Works Department at (913)722-2822.

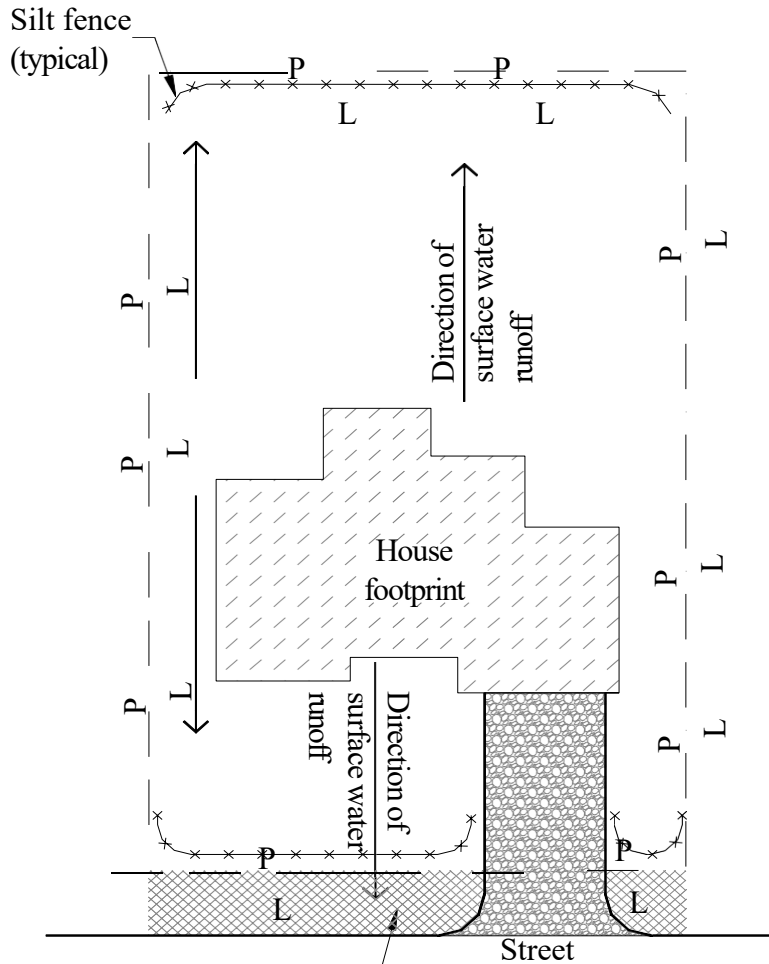
BEST MANAGEMENT PRACTICES (BMP)

Examples include but are not limited to sediment fence, waddles, straw mat and seed.

- **Perimeter Controls** – BMPs are installed along back of curb and along the lot line of adjacent properties which are downhill and receive runoff from permitted lot. BMPs are maintained to ensure proper function, including repair or replacement of torn, degrading, missing or otherwise ineffective materials. Sediment deposits around BMP's are removed as necessary to provide adequate protection. Following sidewalk installation, BMPs are moved to the back of sidewalk to prevent sediment from reaching the sidewalk.
- **Lot Access** – Required for each individual lot. A surface suitable for parking and unloading that prevents the tracking of mud and rock onto the street is installed. A minimum depth of 6 inches of aggregate is suggested. All vehicles that access the lot shall use the construction entrance. Restrict other access if necessary, to prevent tracking onto the street.
- **Inlet Protection** – BMPs are in place and functioning for both area inlets and curb inlets along street. Maintenance includes removal of sediment following each rain event and replacement of failing materials. Do not allow sediment to enter inlet during maintenance.
- **Stockpiles** – Stockpiles are protected to prevent sediment from reaching the street and adjacent properties. Stockpiles are located away from street and property lines.
- **Intermediate Control** – Long or steep drainage paths have intermediate or interior BMPs installed to help slow the flow of runoff. Failure of perimeter controls due to the force of runoff often determines the need for intermediate controls.
- **Other Pollutants** – Dewatering is done in such a manner as not to deposit sediment offsite or cause erosion. Trash and debris are contained. All waste water, including concrete washout, is properly disposed of. Materials and chemicals are properly stored

Single Family Lot Erosion Control Plan

This sample plan represents a typical single-family lot. Users of this plan must make their own assessment (or seek professional advice) as to the conditions and drainage patterns of individual sites. These conditions should determine the selection and location of appropriate BMPs.



An erosion control mat will be placed on the entire ROW (optional)

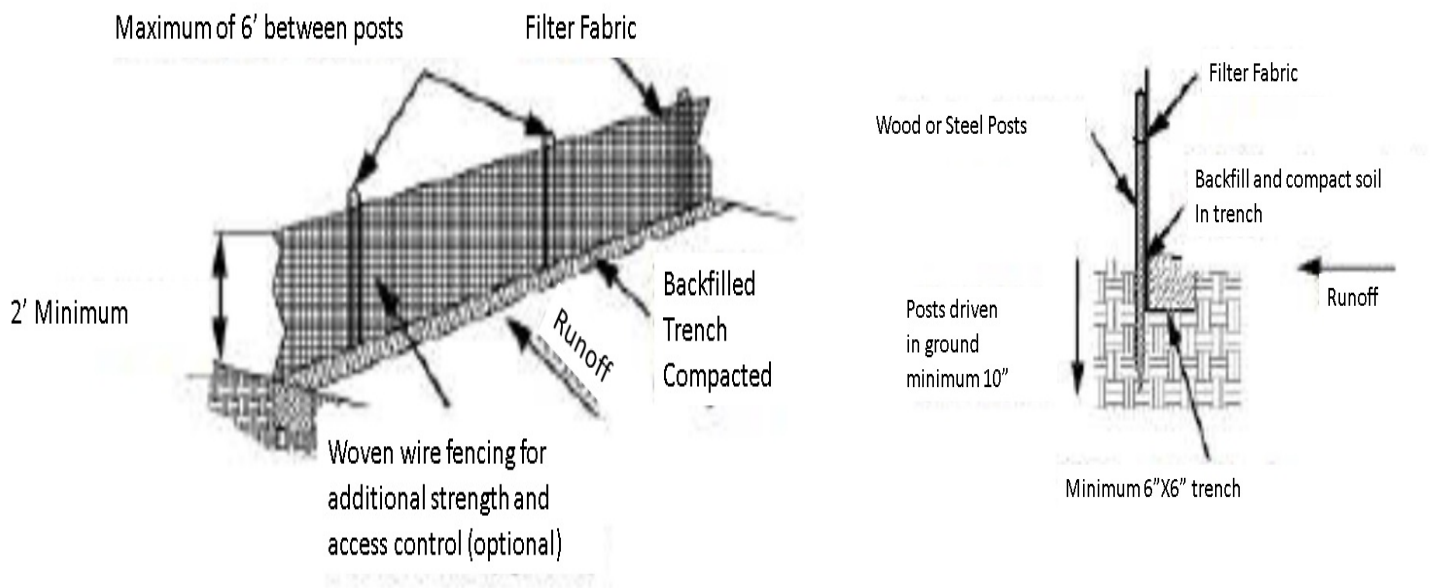
- × × × × Silt fence
- Gravel construction entrance
- Direction of surface water runoff
- Erosion control mat

Perimeter Controls

Silt Fence

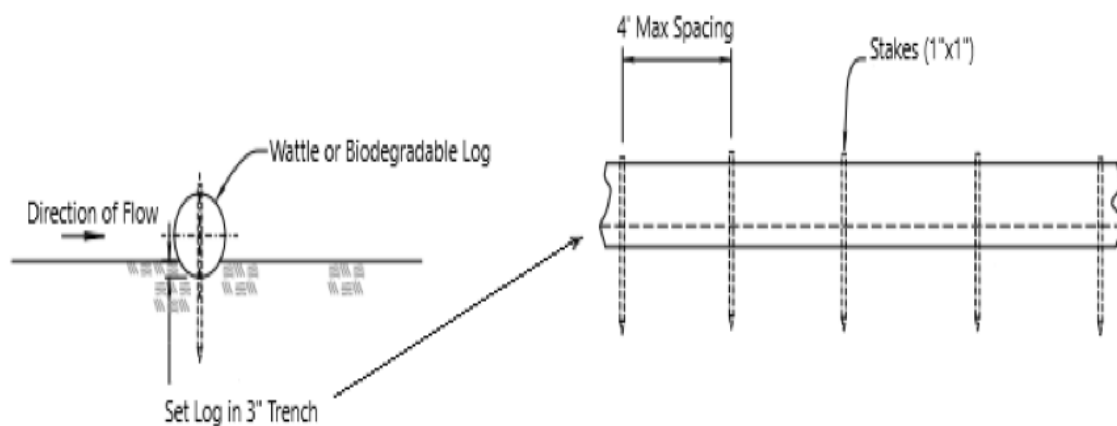
- Turn ends of silt fence uphill to capture runoff.
- Post must be installed on the downslope side and a maximum of 6' apart.
- Post must be 2" x 2" hardwood or 1 lb/linear foot steel.
- Overlap to next stake when joining two sections.
- Place the bottom 1' of fabric in a 6" trench lapping towards the upslope. Backfill with compacted earth or gravel.
- Remove accumulated sediment to maintain capacity and reduce stress on fence.

This sample of silt fence represents a typical installation with the minimum allowable requirements. Installation should follow the manufacturer's recommendations.



Straw Wattles

- Turn ends of straw wattle uphill to capture runoff.
- The wattle is to be set in a 3" deep trench and backfilled.
- At a minimum, 1"x 1" stakes are to be used to secure the wattle to the ground.
- The stake must be 24" long and driven into the ground a minimum of 12".
- Spacing on the stakes per manufacturer's instructions, with a 4' max spacing.
- Remove accumulated sediment to maintain capacity and reduce stress on wattle.



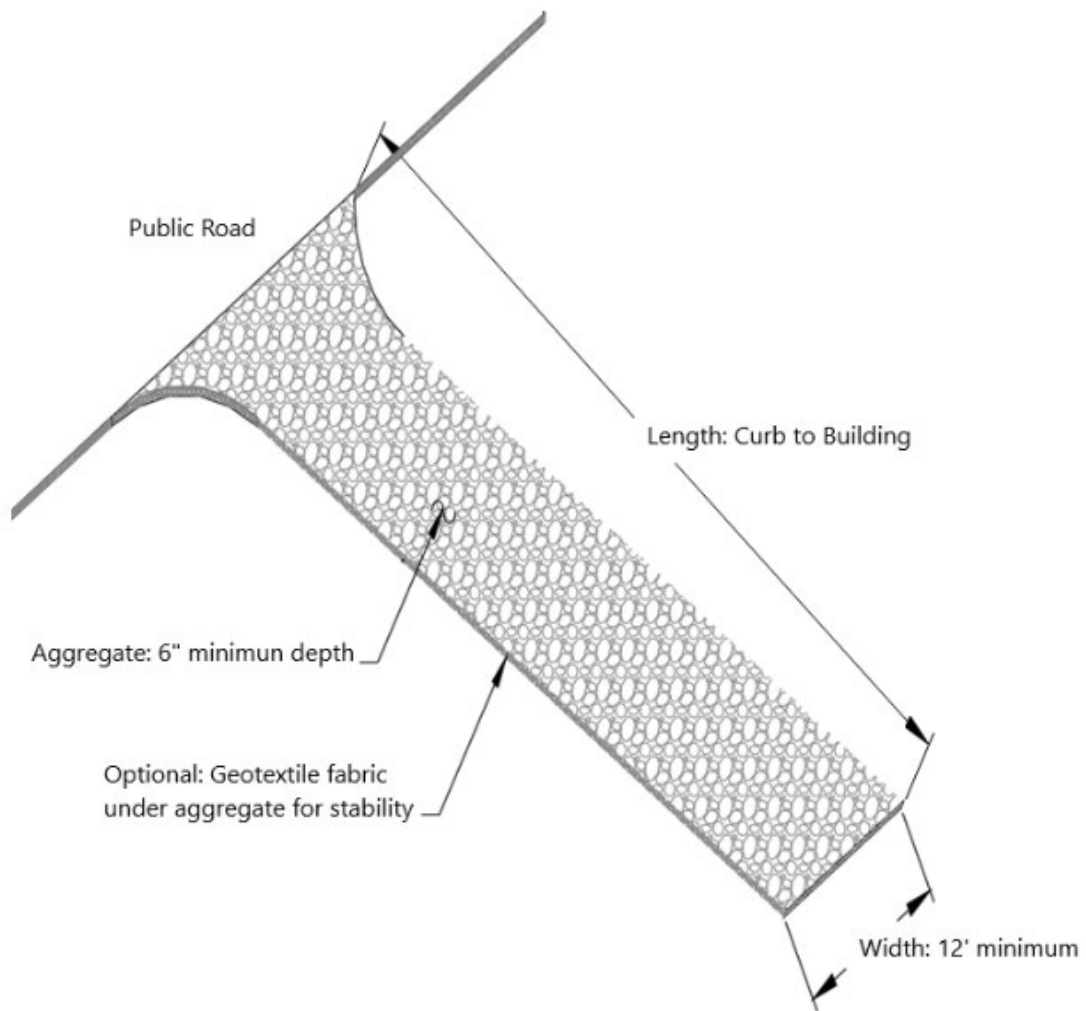
Other Alternatives

- Compost logs, silt dikes, grass buffers and mulch are good alternatives to silt fence, reducing erosion and filtering sediment.
- They are appropriate for perimeter control on most individual building lots.
- Installation of these manufactured products should follow the instructions provided with the product by the manufacturer.
- Straw bales are not an approved form of erosion control.

Lot Access

Minimum Requirements

- Aggregate size: 3/4" or larger
- Thickness: 6" minimum
- Width: 12' minimum
- Length: Curb to Building
- Geotextile fabric- fabric may be used in wet conditions to provide stability



Inlet Protection

- Many products are available for inlet protection.
- Regular maintenance of all inlet BMPs is critical to prevent localized flooding and to prevent sediment from entering the stormwater system.
- Area inlets can be protected with a stabilized buffer and wattle placed in front or by wrapping the inlet with reinforced silt fence.
- Curb inlets can be protected with a manufactured product or clean gravel placed in a non-biodegradable bag.

