



Livingston County Drain Commissioners Office

Soil Erosion and Sedimentation Control Division

Under the Provisions of Part 91 of Act 451 as Amended 2001
2300 E. Grand River Ave., Suite 105, Howell, MI 48843
Phone 517-546-0040 / Fax 517-545-9658
www.co.livingston.mi.us/drain

Soil Erosion & Sedimentation Control Technical Specifications

General Requirements

In order to comply with the Provisions of Part 91 of Act 451 as Amended, those undertaking earth disturbing projects are required to maintain approved soil erosion control measures and to permanently stabilize the disturbed soil within five (5) calendar days of achieving final grade (R323.1709(5)).

Permits and Waivers are good for a period of two years from the date of issuance and cannot be extended. Permits require a final inspection prior to the expiration of the Permit. Please call our office to schedule your final inspection within seven (7) days of achieving permanent stabilization.

WAIVERS ARE SUBJECT TO THE FOLLOWING REQUIREMENTS - On sites that front a paved road: Silt fence is required behind the curb or roadside ditch as described in Section 1, and a coarse aggregate tracking mat is required as described in Section 3. These requirements are the same as for Permits.

Temporary Controls

1. SILT FENCE: A silt fence is a temporary control measure consisting of fence posts, a support system, and a geotextile filter fabric to prevent soil particles suspended in water from leaving the construction site.

For new home or similar size construction (Permit or Waiver): In subdivisions silt fence may not be required at the back or sides of the site when circumstances allow; but it is always required behind the curb or road side ditch where the site fronts a paved road, and must to be inspected. Outside of subdivisions, there are two circumstances where silt fence installation can be waived behind the curb or road side ditch of the site: where the front of the house (or construction of a similar size structure) is a full 200' from the road or ditch; or where the site drops off from the road in such a manner to limit ingress/egress to the proposed driveway area where the coarse aggregate tracking mat has been installed.

Design Criteria: The LCDC requires that silt fence be a minimum of three feet high for all licensed builders. Silt fence should be installed as shown in **Figure 1** which includes:

- Installing along a contour line on a slope of equal elevation.
- Not installing in an area of concentrated flow.
- Installing with the geotextile fabric attached to the fence posts on the uphill side, toward the disturbed soil.
- Excavating a 6" x 6" anchor trench and burying the tail of the geotextile fabric with the backfill compacted up against it.

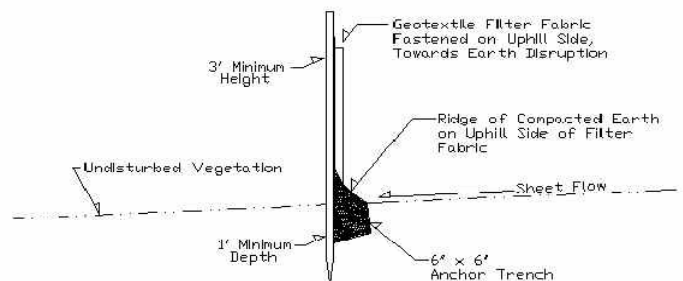
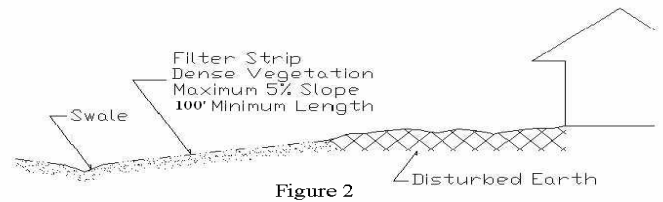


Figure 1

Maintenance Requirements: You are required to maintain your silt fence during the duration of the construction project until permanent stabilization has been achieved. This can be achieved by the following:

- Perform frequent inspections to assure that silt fence is firmly entrenched and in good working condition. **At a minimum**, inspect after each major storm or run-off event.
- Remove accumulated sediment when it is equal to approximately 25% of the fence height.
- Remove any damaged, torn, or knocked down silt fence and replace immediately.
- Remove silt fence when the site has been permanently stabilized.

2. FILTER STRIPS: A filter strip is an area of dense vegetation used for removing sediment from runoff water. This can be existing healthy vegetation or something you plant and grow. All filter strips must be approved by the LCDC.



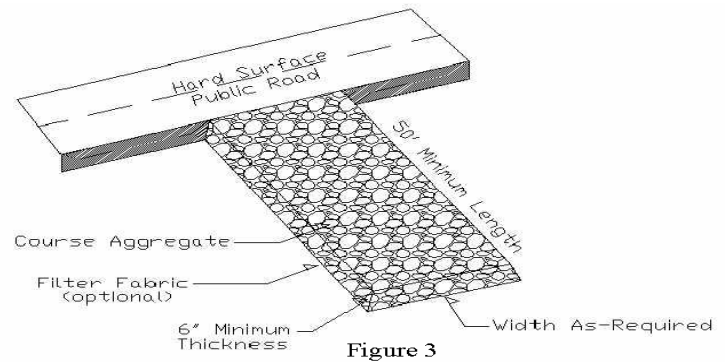
Design Criteria: Used for areas of sheet flow only. Is insufficient by itself in areas of concentrated flow such as a ditch or swale. They are not a substitute for other upland treatment practices. See **Figure 2** for details, which includes:

- Land form of the filter area must allow equipment operation for mowing and maintaining the vegetation.
- Wetlands are not to be used as filter strips.

Maintenance Requirements: Vegetation of the filter strip must be maintained in a vigorous growing condition; fertilize as needed. Minimize concentrated flow within the strip area. If concentrated flow occurs, repair and reconstruct the strip to restore sheet flow.

- Remove settled solids as much as possible prior to directing flow to the strip.
- An accumulation of sediment (max. 6") that prevents the strip from performing as intended must be removed.
- Inspect and repair on a seasonal basis and after major storm and run-off events.

3. COARSE AGGREGATE TRACKING MAT: The purpose of a tracking mat is to make a driveway of coarse aggregate (1"-1½") which prevents vehicles from carrying mud from the work site onto a roadway. The coarse aggregate for the tracking mat must have been delivered to the site prior to the initial inspection. Whether you have obtained a Permit or a Waiver, if the site fronts a paved road, regardless of whether in a subdivision or not, the absence of the tracking mat or tracking mat material is a violation.



Design Criteria: Tracking mat must be installed for work sites where vehicles exit onto a paved road. See **Figure 3** for details which includes:

- Coarse aggregate must be spread a minimum of 6" thick with optional filter fabric beneath the aggregate.
- A minimum of 50' long to allow an adequate distance for mud to fall off vehicles when leaving the site. A minimum width of 12' is suggested for most sites.
- Place where contractors will use it, and restrict access to the site so all vehicles entering and leaving will drive over the mat.

Maintenance Requirements:

- Maintain a minimum of 6" of coarse aggregate.
- **Clean or refresh with more coarse aggregate as needed to prevent mud from being carried onto the road.**
- Clean/sweep the roadway if mud is tracked onto it from your work site.

Permanent Site Soil Stabilization

The objective of permanent soil stabilization is to leave the site erosion-free using maintenance-free methods at the end of construction activities. Generally, a site is deemed permanently stabilized once sufficient vegetation has been re-established to prevent off-site sedimentation.*

Methods of Permanent Stabilization: (The following can be used in combination)

- Establishment of grass or other vegetative cover via seed and mulch.
- Installing sod or planting other vegetative cover.
- Installation of driveways, sidewalks, and other permanent hard-scapes.

* This is meant to be a general guideline and is subject to site inspection. Inspectors may require additional measures if the measures implemented by the Permittee are not sufficient to prevent erosion. Acceptance of permanent site stabilization will be on a case-by-case basis. Full compliance with the law would involve permanently stabilizing all disturbed areas upon achieving final grade. However, as many builders are the Permittees, not the long-term owners of the sites, property transfers often occur prior to landscaping.