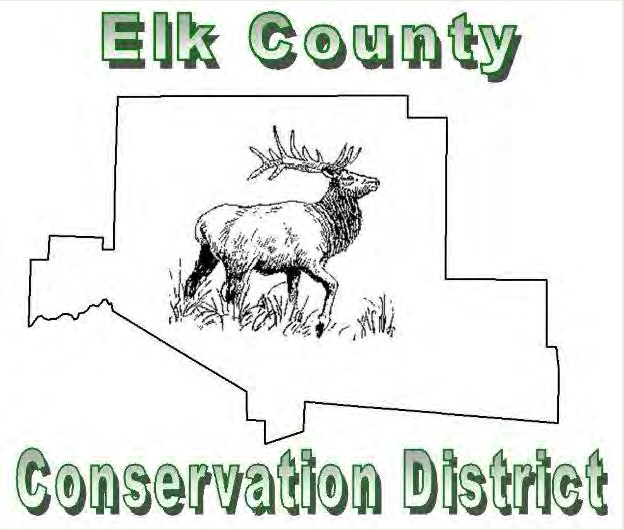
Best Management Practices (BMPs)



BMPs

- Best management practices are generally structural devices used to minimize erosion and movement of sediment.

- Best management practices can also be non-structural practices such as limiting disturbed areas.

pennsylvania

DEPARTMENT OF ENVIRONMENTAL PROTECTION

EROSION AND SEDIMENT POLLUTION CONTROL PROGRAM MANUAL

FINAL

Technical Guidance Number
363-2134-008

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BUREAU OF WATERWAYS ENGINEERING AND WETLANDS
DIVISION OF WETLANDS, ENCROACHMENT AND TRAINING

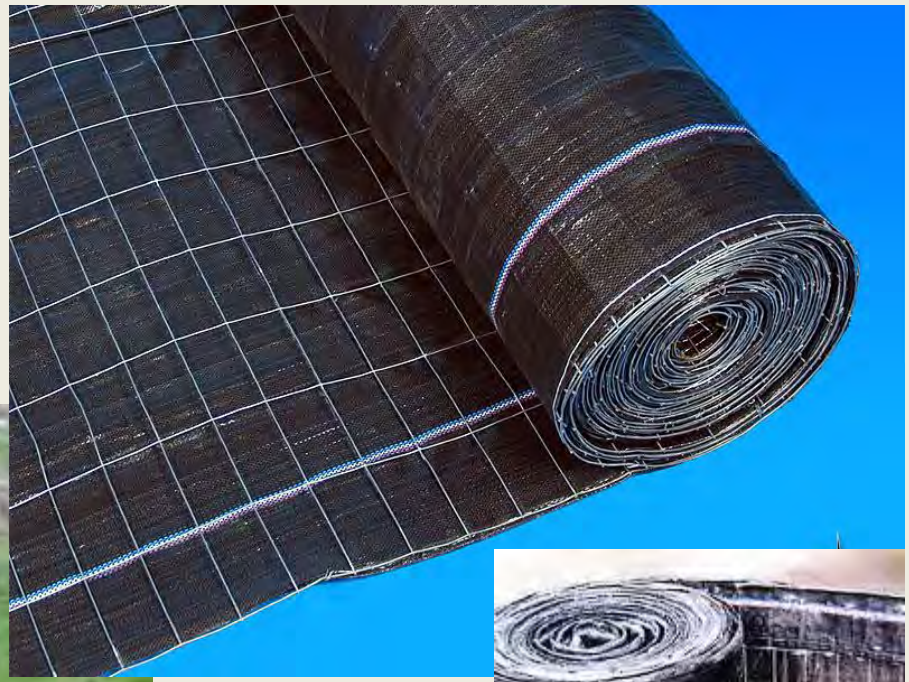
Typical Best Management Practices (BMPs) for Smaller Projects

- Filter Fabric Fence (Silt Fence)
  - Different Sizes
- Compost Filter Socks
  - Different Sizes
- Straw Bale Barriers
- Rock Construction Entrance
- Rock Aprons / Energy Reducers
- Temporary Stabilization (Seed & Mulch)

Filter Fabric Fence (Silt Fence)

Standard 18” Filter Fabric Fence (Silt Fence)

30” Reinforced Filter Fence

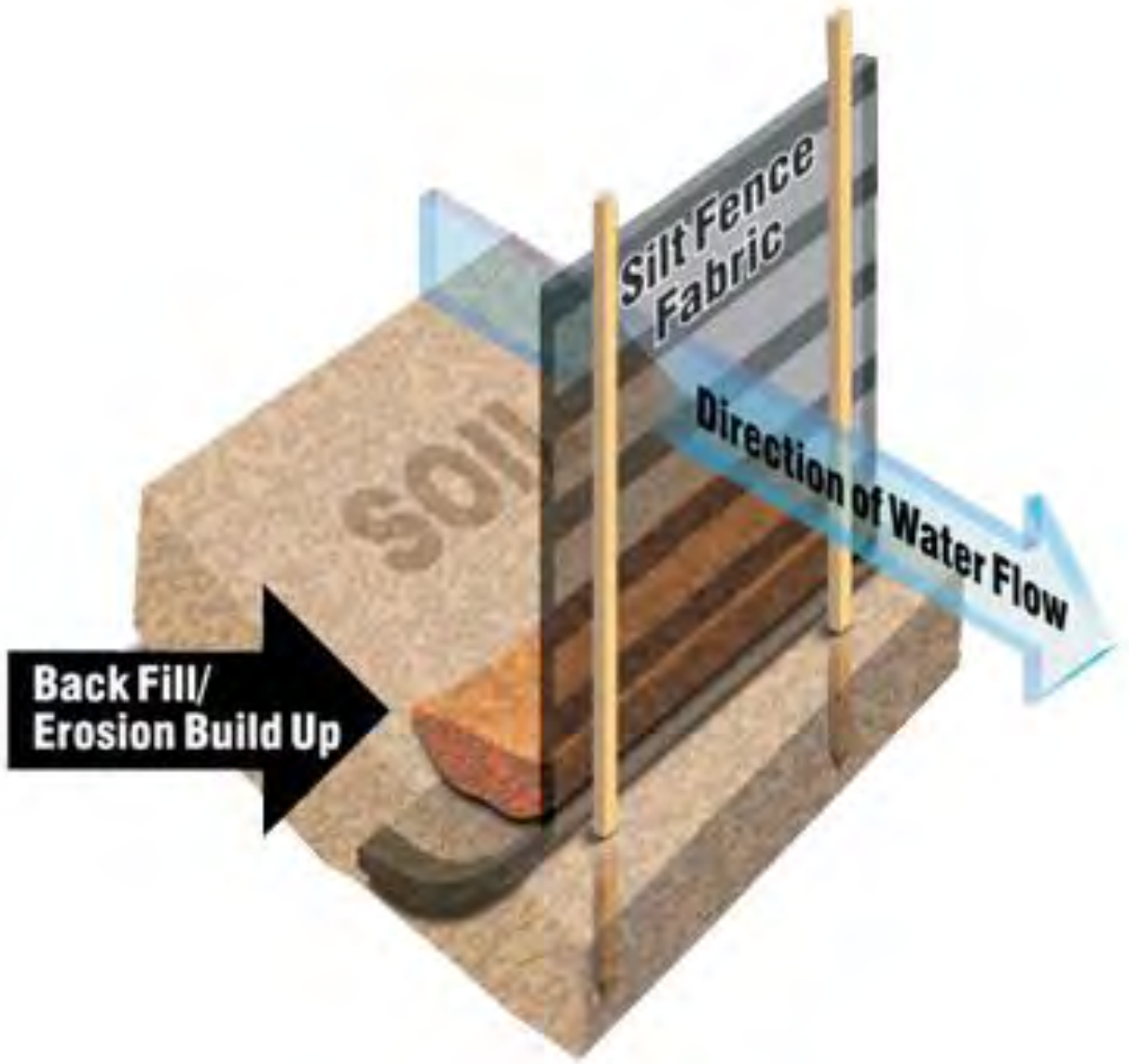


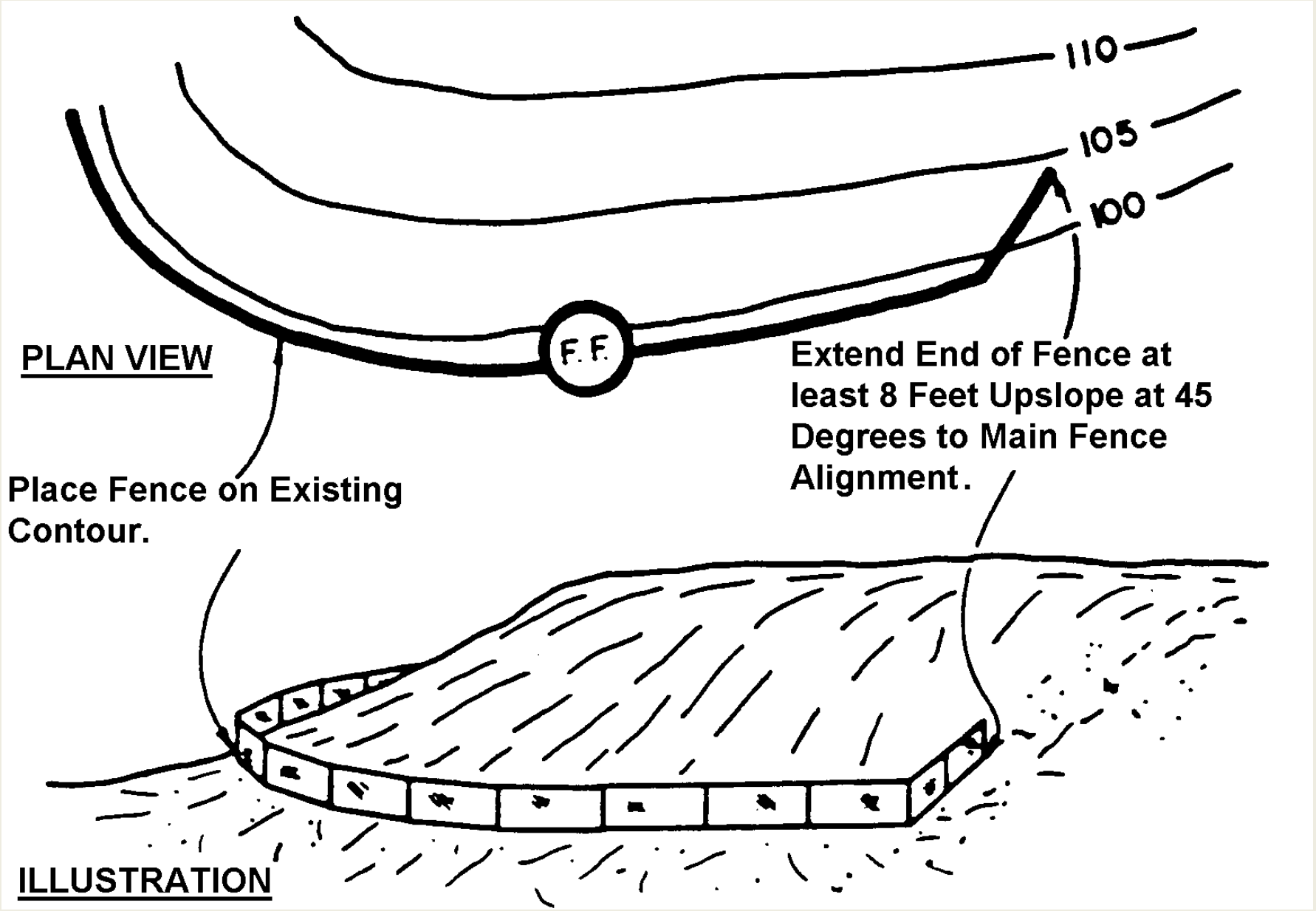
Super Silt Fence

Not All Filter Fence is Created Equal

Filter Fence
Keys to Success

- Proper sizing
- Proper trenching of the bottom
- Support posts on the downslope side
- Install parallel to the contour
- Angle ends upslope 45 degrees
- Proper joining of two ends
- Maintenance & Replacement


Silt Fence
Fabric
Direction of Water Flow
Back Fill/
Erosion Build Up


110
105
100
F.F.
PLAN VIEW
Extend End of Fence at least 8 Feet Upslope at 45 Degrees to Main Fence Alignment.
Place Fence on Existing Contour.
ILLUSTRATION

Mechanical Installation

Old Fashion Installation

Compost Filter Socks
(Silt Socks)
(Silt Soxx)

Compost Filter Socks

- Advantages Over Filter Fence
  - Ease of Installation
    - (no earth disturbance required)
  - Ease of Maintenance
  - Biodegradable / Photodegradable
  - More Versatile
- Various Sizes
  - 8” through 32” sock sizes
  - 8” sock not acceptable on commercial sites

Compost Filter Sock

Filter Sock Installation

Pre-filled socks can be installed by hand

Sock being installed with a blower

Can Be Installed In Difficult Areas

Not All Socks Are Created Equal

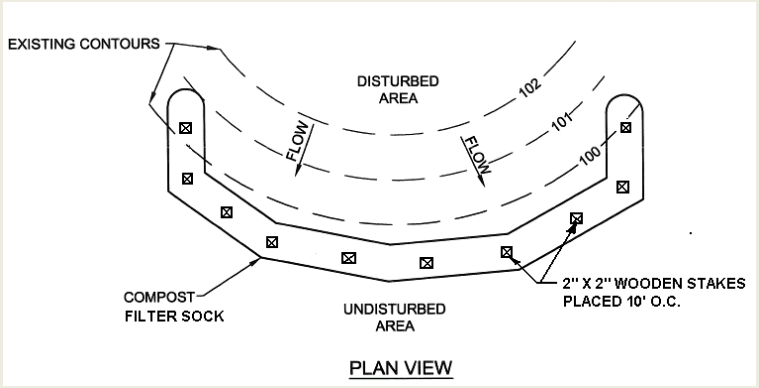
- Differences in Compost Material
  - Compost vs Wood Chips

Compost

Wood Chips

Compost Filter Socks
Keys to Success

- Proper Sizing
- Proper Installation
- Proper Material
- Proper Locations
- Maintenance & Replacement
- Know the Limitations



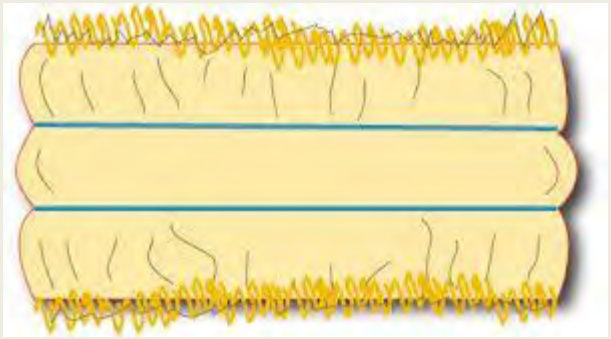
Versatility of Compost Filter Socks

- Can be installed in area of concentrated flow
- Socks can be stacked
- Much more versatile than filter fence
    - Inlet protection
    - Dewatering areas
    - Sediment traps
    - Bank stabilization

Versatility of Filter Socks

Versatility of Filter Socks

Straw Bale Barriers

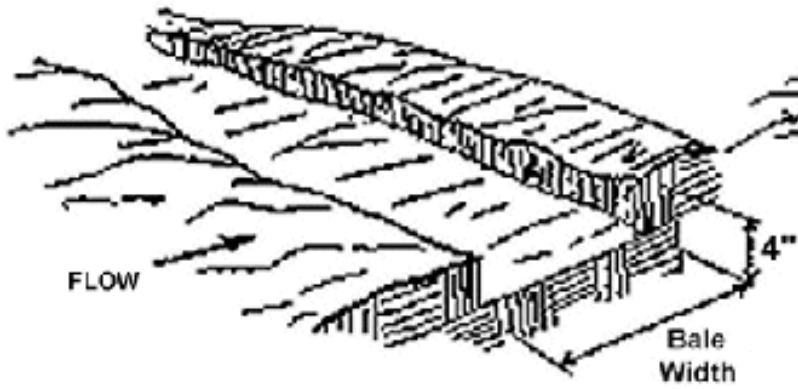


Straw Bale Barriers

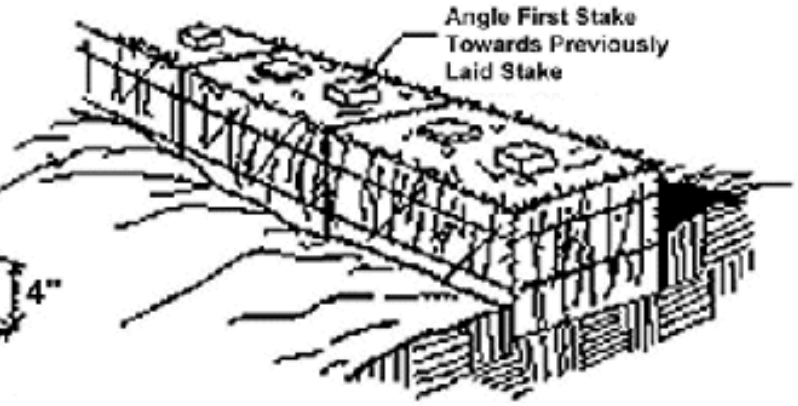
Straw Bale Barriers

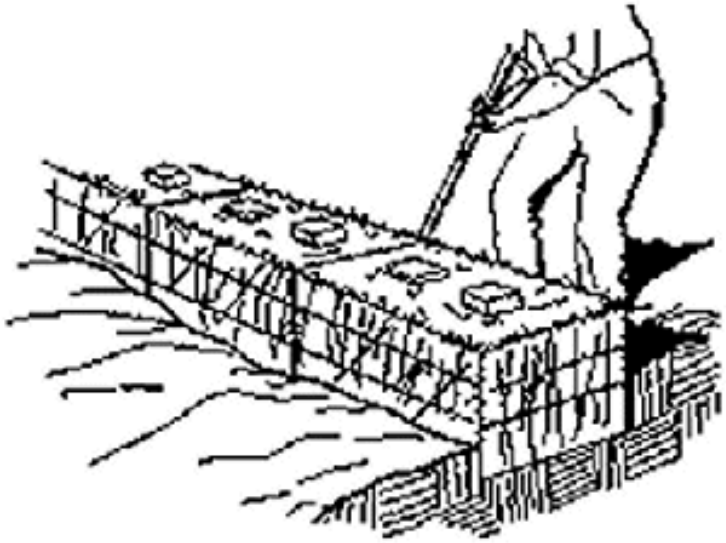
- Advantages
  - Accessibility of straw bales
  - Biodegradable
- Disadvantages
  - Improper installation
  - Degrade quickly (3 months)
  - Poor filters
  - Labor intensive
  - Not very versatile

1. Excavate the Trench

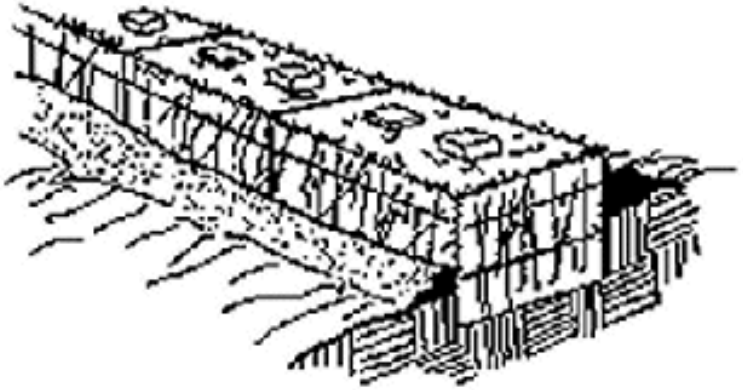


2. Place and Stake Straw Bales





3. Wedge Loose Straw Between Bales



4. Backfill and Compact the Excavated Soil

Straw Bale Barriers