Temporary Exposed Soil Stabilization:
Rolled Erosion Control Products
Flow Chart Decision Matrix

Start Here

Determine time of year with exposed soil

Is it Winter or frozen soil conditions?

Yes

No

Determine location of potential erosion

Is the area a ditch or area of concentrated flows?

Yes

Go to Matrix Chart A Concentrated Flows

No

Is the area a slope?

Yes

Go to Matrix Chart B Turf/Shoot Reinforcement Blankets & Mats

No

Is the area around ponds, above wetland diversions, or Curb?

Yes

Apply Category 3B (wood fiber, natural net)

No

Is the area less than 6:1 (25%)?

Yes

Apply Category 3 A (sandy ber)

No

Is the slope less than 3:1 (35%)?

Yes

Apply Category 3B (wood fiber)

No

Is the slope less than 2:1 (50%)?

Yes

Apply Category 4 A (Straw/coconut)

No

Is the slope length less than 150 ft horizontal?

Yes

Apply Category 4 B (Wood fiber)

No

Is the slope length less than 100 ft horizontal?

Yes

Apply Category 4 B (Wood fiber)

No

Is the slope length less than 50 ft horizontal?

Yes

Apply Category 4 B (Wood fiber)

No

Is the slope length less than 300 ft horizontal?

Yes

Apply Category D (no netting)

No

Determine desired functional longevity of HECP

Erosion Prevention less than 6 weeks

Yes

Install slope or cover area blanket shown in the Plan

No

Erosion Prevention less than 3 months

Yes

Can the snow be removed (backhoe, dozer)?

Yes

No

Install rock aggregate, straw mulch

Erosion prevention less than 12 months

Yes

No

Erosion Prevention greater than 24 months or permanent soil/plant reinforcement?

Yes

Go to Matrix Chart B Turf/Shoot Reinforcement Blankets & Mats

No

Erosion Prevention greater than 6 months or 1.5:1 (67%)?

Yes

No

Is the slope length less than 1:1 (100%)?

Yes

No

Determine slope steepness

Is the slope less than 6:1; urban or wildlife section?

Yes

No

Is the slope length less than 8 feet long and a wildlife nesting area?

Yes

No

Apply Category 00 (no stitching)

Is the slope less than 4:1 (25%)?

Yes

No

Is the slope length less than 300 ft horizontal?

Yes

No

Determine soil exposure length limits

Do not install Blanket without a slope break or terrace to 300 ft or less

Apply Category 3A (sandy loam) or 3B (all other soil types)
Determine desired functional longevity of HECP

Erosion prevention less than 12 months

Is the conveyance designed, or ready for permanent stabilization?

Yes

No

Are shears less than 2 lbs/ft² or velocities less than 5 ft/s?

Yes

No

Are shears less than 3.5 lbs/ft² or velocities less than 7 ft/s?

Yes

No

Apply TRM Category 1

Are shears less than 5 lbs/ft² or velocities less than 9 ft/s?

Yes

No

Apply TRM Category 2

Are shears less than 7 lbs/ft² or velocities less than 12 ft/s?

Yes

No

Apply TRM Category 3

Are shears less than 12 lbs/ft² or velocities less than 18 ft/s?

Yes

No

Apply TRM Category 4

Contact OES

Determine drainage area and ditch gradient

Is the drainage area less than 5 acres, and less than 3%?

Yes

No

Is the drainage area less than 10 acres, and less than 5%?

Yes

No

Is the drainage area less than 15 acres, and less than 7%?

Yes

No

Is the drainage area less than 20 acres, and less than 9%?

Yes

No

Determine soil organic matter and textural type

Is the soil granular for future curb?

Yes

No

Are the soils low in organic matter (< 2 percent)?

Yes

No

Are the soils low in sand, small aggregate (< 0.375 inches)?

Yes

No

Are the soils high in clay (> 15 percent)?

Yes

No

Are the soils high in silt (> 35 percent)?

Yes

No

Apply PAM to soil

Install aggregate liner, fiber reinforced poly sheathing, or geotextile

Is there concern of organic contamination of grading soil?

Yes

No

Are the soils high in organic matter (< 2 percent)?

Yes

No

Are the soils low in organic matter (< 2 percent)?

Yes

No

Are the soils high in clay (> 5 percent)?

Yes

No

Apply Category 3B (wood fiber)

Apply Category 3B (wood fiber) (a)

Apply Category 4B (Wood fiber) (b)

Apply Category 4A (Straw/coconut)

Erosion Prevention greater than 24 months or overwinter?

Yes

No

Erosion Prevention less than 24 months or overwinter?

Yes

No

Apply Category 6A, B, C

Protective liner, fiber reinforced poly sheathing, or geotextile

Are the soils high in organic matter (< 2 percent)?

Yes

No

Are the soils high in sand, small aggregate (< 0.375 inches)?

Yes

No

Are the soils high in silt (> 35 percent)?

Yes

No

Apply PAM to soil

Install aggregate liner, fiber reinforced poly sheathing, or geotextile

Is there concern of organic contamination of grading soil?

Yes

No

Are the soils high in organic matter (< 2 percent)?

Yes

No

Are the soils low in organic matter (< 2 percent)?

Yes

No

Are the soils high in clay (> 5 percent)?

Yes

No

Apply Category 3B (wood fiber)

Apply Category 3B (wood fiber) (a)

Apply Category 4B (Wood fiber) (b)

Apply Category 4A (Straw/coconut)

Erosion Prevention greater than 24 months or overwinter?

Yes

No

Erosion Prevention less than 24 months or overwinter?

Yes

No

Apply Category 6A, B, C

Protective liner, fiber reinforced poly sheathing, or geotextile

Are the soils high in organic matter (< 2 percent)?

Yes

No

Are the soils high in sand, small aggregate (< 0.375 inches)?

Yes

No

Are the soils high in silt (> 35 percent)?

Yes

No

Apply PAM to soil

Install aggregate liner, fiber reinforced poly sheathing, or geotextile

Is there concern of organic contamination of grading soil?

Yes

No

Are the soils high in organic matter (< 2 percent)?

Yes

No

Are the soils low in organic matter (< 2 percent)?

Yes

No

Are the soils high in clay (> 5 percent)?

Yes

No

Apply Category 3B (wood fiber)

Apply Category 3B (wood fiber) (a)

Apply Category 4B (Wood fiber) (b)

Apply Category 4A (Straw/coconut)

Erosion Prevention greater than 24 months or overwinter?

Yes

No

Erosion Prevention less than 24 months or overwinter?

Yes

No

Apply Category 6A, B, C

Protective liner, fiber reinforced poly sheathing, or geotextile

Are the soils high in organic matter (< 2 percent)?

Yes

No

Are the soils high in sand, small aggregate (< 0.375 inches)?

Yes

No

Are the soils high in silt (> 35 percent)?

Yes

No

Apply PAM to soil

Install aggregate liner, fiber reinforced poly sheathing, or geotextile

Is there concern of organic contamination of grading soil?

Yes

No

Are the soils high in organic matter (< 2 percent)?

Yes

No

Are the soils low in organic matter (< 2 percent)?

Yes

No

Are the soils high in clay (> 5 percent)?

Yes

No

Apply Category 3B (wood fiber)

Apply Category 3B (wood fiber) (a)

Apply Category 4B (Wood fiber) (b)

Apply Category 4A (Straw/coconut)

Erosion Prevention greater than 24 months or overwinter?

Yes

No

Erosion Prevention less than 24 months or overwinter?

Yes

No

Apply Category 6A, B, C

Protective liner, fiber reinforced poly sheathing, or geotextile

Are the soils high in organic matter (< 2 percent)?

Yes

No

Are the soils high in sand, small aggregate (< 0.375 inches)?

Yes

No

Are the soils high in silt (> 35 percent)?

Yes

No

Apply PAM to soil

Install aggregate liner, fiber reinforced poly sheathing, or geotextile

Is there concern of organic contamination of grading soil?

Yes

No

Are the soils high in organic matter (< 2 percent)?

Yes

No

Are the soils low in organic matter (< 2 percent)?

Yes

No

Are the soils high in clay (> 5 percent)?

Yes

No

Apply Category 3B (wood fiber)

Apply Category 3B (wood fiber) (a)

Apply Category 4B (Wood fiber) (b)

Apply Category 4A (Straw/coconut)