SWP3 Amendment Log

Project Name: Massillon Eastside Elementary School
Site Area: 16± Acres disturbance

Amendment No.	Description of the Amendment	Date of Amendment	Amendment Prepared By

SWP3 Grading and Stabilization Activities Log

Project Name: Massillon Eastside Elementary School
Site Area: 16± Acres disturbance

Date Grading Activity Initiated	Description of Grading Activity	Date Grading Activity Ceased Indicate temporary or permanent	Data When Stabilization Measures are Initiated	Description of Stabilization Measure and Location

Corrective Action Log

Project Name: Massillon Eastside Elementary School
Site Area: 16± Acres disturbance

Inspection Date	Inspector Name	Description of Corrective Action Needed (From Inspection Report)	Corrective Action Taken	Date Action Taken

SWP3 Inspection Report Log

Project Name: Massillon Eastside Elementary School
Site Area: 16± Acres disturbance

Inspection #	Name of Inspector	Date of Inspection	Rain Event	Type of Corrective Action Required
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				

– PLAN PREPARED BY –

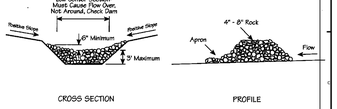
LEWIS LAND PROFESSIONALS INC.

LEWIS LAND PROFESSIONALS — CIVIL ENGINEERING LAND SURVEYING
8691 WADSWORTH ROAD SUITE 100
WADSWORTH, OH 44281 (330) 335-8232

OHIO811.org Before You Dig

22-070 EROSION DETAILS.DWG

Specifications for
Check Dam



Specifications for Check Dam

1. The check dam shall be constructed of 4–5–in.–diameter stone, placed so that it completely covers the width of the channel.

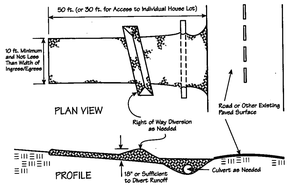
2.: The top of the check dam shall be constructed so that the center is approximately 6 in. lower than the outer edges, so water will flow across the center and not around the ends.

3. The maximum height of the check dam at the center of the weir shall not exceed 3 ft.

4. Spacing between dams shall be as shown in the plans or by the following table:

Check Dam Spacing				
Dam Height (ft.)	Channel Slope			
	< 5 %	5–10 %	10–15 %	15 – 20 %
1	65 ft.	30 ft.	20 ft.	15 ft.
2	130 ft.	65 ft.	40 ft.	30 ft.
3	200 ft.	100 ft.	65 ft.	50 ft.

Specifications for
Construction Entrance



Specifications for Construction Entrance

1. Stone Size — Two–inch stone shall be used, or recycled concrete equivalent.

2. Length–The construction entrance shall be as long as required to stabilize high traffic areas but not less than 50 ft. (except on single residence lot where a 30–ft. minimum length applies).

3. Thickness–The stone layer shall be at least 6 in. thick.

4. Width — The entrance shall be at least 10 ft. wide, but not less than the full width at points where ingress or egress occurs.

5. Bedding–A geotextile shall be placed over the entire area prior to placing stone. It shall have a Grab Tensile Strength of at least 200 lb. and a Mullen Burst Strength of at least 190 lb.

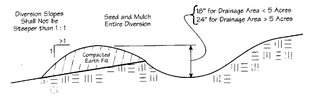
6. Culvert — A pipe or culvert shall be constructed under the entrance if needed to prevent surface water flowing across the entrance from being directed out onto paved surfaces.

7. Water Bar — A water bar shall be constructed as part of the construction entrance if needed to prevent surface runoff from flowing the length of the construction entrance and out onto paved surfaces.

8. Maintenance — Top dressing of additional stone shall be applied as conditions demand. Mud spilled, dropped, washed or tracked onto public roads, or any surface where runoff is not checked by sediment controls, shall be removed immediately. Removal shall be accomplished by scraping or sweeping.

9. Construction entrances shall not be relied upon to remove mud from vehicles and prevent off–site tracking. Vehicles that enter and leave the construction–site shall be restricted from muddy areas.

Specifications for
Temporary Diversion



Specifications for Temporary Diversion

1. Diversion shall be compacted by traversing with tracked earth–moving equipment.

2. Diversions shall not be breached or lowered to allow construction traffic to cross; instead the top width may be made wider and side slopes made flatter than specified above.

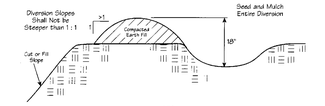
Temporary Diversion Stabilization Treatment

Diversion Slope	< 2 ac.	2 – 5 ac.	5 – 10 ac.
0–3%	Seed and Straw	Seed and Straw	Seed and Straw
3–5%	Seed and Straw	Seed and Straw	Matting
5–8%	Seed and Straw	Matting	Matting
8–20%	Seed and Straw	Matting	Engineered

Note: Diversions with steeper slopes or greater drainage areas are beyond the scope of this standard and must be designed for stability.
Seed, straw and matting used shall meet the Specifications for Temporary Seeding, Mulching and Matting.

3. Diversions shall be stabilized with vegetation and check dams or the following treatments:

Specifications for
Temporary Diversion Above Steep Slopes

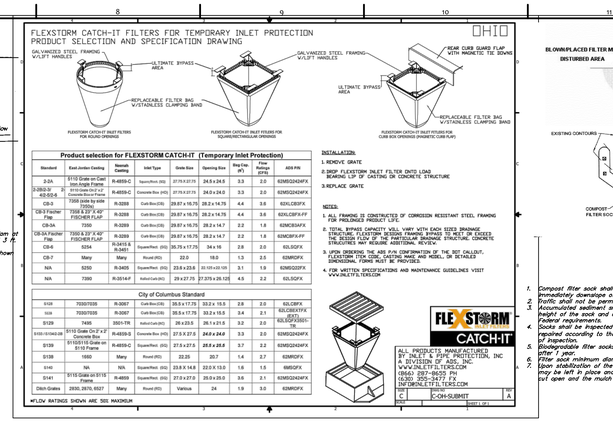


Specifications for Temporary Diversion Above Steep Slopes

Diversions for the temporary protection of cut or fill slopes shall be installed in accordance with the following criteria for drainage areas of 5 acres or less. Larger areas require a diversion design.

1. Diverted runoff shall outlet onto a stabilized undisturbed area, settling pond, or into a drop structure.

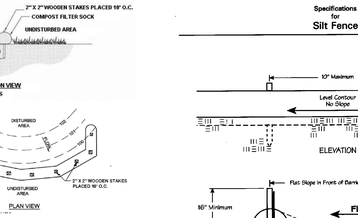
2. Diversions shall be compacted by traversing with tracked earth–moving equipment and stabilized with seed and mulch.



Product selection for FLEXSTORM CATCH-IT (Temporary Inlet Protection)							
Standard	East Jordan Casting	Neenah Casting	Inlet Type	Grate Size	Opening Size	Dep Cap (ft³)	Flow Capacity (CFS)	ADS P/N
2-2A	5110 Grate on Cast Iron Angle Frame	R-4859-C	Square/Rect. (SQ)	27.75 X 27.75	24.5 x 24.5	3.3	2.0	62MSG24DHFX
2-2B(2-3/ 4-5/6-8	5110 Grate On 2'x2' Concrete Box	R-4859-C	Concrete Box (PC)	27.75 X 27.75	24.0 x 24.0	3.3	2.0	62MSG24DHFX
CB-3	7358 Grate by with 7350x3	R-3288	Curb Box (CB)	29.87 x 16.75	29.2 x 14.75	4.4	3.6	62XLCB63FX
CB-3 Fischer Flap	7358 & 23" X 40" FISCHER FLAP	R-3289	Curb Box (CB)	29.87 x 16.75	29.2 x 14.75	4.4	3.6	62XLCB63F-FF
CB-3A	7350	R-3289	Curb Box (CB)	29.87 x 16.75	29.2 x 14.7	2.2	1.8	62MCB63AFX
CB-3A Fischer Flap	7350 & 23" X 40" FISCHER FLAP	R-3289	Curb Box (CB)	29.87 x 16.75	29.2 x 14.7	2.2	1.8	62MCB63F-FF
CB-6	5254	R-3415 & Neenah R-3501	Curb Box (CB)	35.75 x 17.75	34 x 16	2.8	2.0	60LSQ5FX
CB-7	Many	Many	Round (RD)	22.0	18.0	1.3	2.5	62MRQ7FX
N/A	5250	R-3405	Square/Rect. (SQ)	23.6 x 23.6	21.125 x 21.125	3.1	1.9	62MSQ22FX
N/A	7390	R-5614-P	Vertical Curb (VC)	29 x 27.75	27.375 x 26.125	4.5	2.2	60LSQ5FX
City of Columbus Standard								
S128	7030/7035	R-3067	Curb Box (CB)	35.5 x 17.75	33.2 x 15.5	2.8	2.0	60LCB9FX
S129	7030/7035	R-3067	Curb Box (CB)	35.5 x 17.75	33.2 x 15.5	3.4	2.1	60LCB9EFX(7030) 60LCB9DFX(7035)
S129	7495	3501-TR	Vertical Curb (VC)	39 x 23.5	26.1 x 21.5	3.2	2.0	60LVC9DFX-TR
S433-S1/S442-08	5110 Grate On 2' x 2' Concrete Box	R-4859-C	Concrete Box (PC)	27.5 X 27.5	24.0 x 24.0	3.3	2.0	62MSG24DHFX
S139	S1/S5/S10 Grate on S1/S7 Frame	R-4859-C	Square/Rect. (SQ)	27.5 x 27.5	23.5 x 23.5	3.7	2.2	62MSG24DHFX
S138	1550	Many	Round (RD)	22.25	20.7	1.4	2.7	62MRQ7FX
S140	N/A	N/A	Square/Rect. (SQ)	23.8 X 14.8	22.2 X 13.0	1.6	1.9	6MSQ7FX
S141	S1/S5 Grate on S1/S7 Frame	R-4859	Square/Rect. (SQ)	27.0 x 27.0	25.0 x 25.0	3.6	2.1	62MSG24DHFX
Dblin Grates	2830, 2870, 6527	Many	Round (RD)	Various	24	1.9	3.0	62MRQ7FX

#FLOW RATINGS SHOWN ARE 50% MAXIMUM

Specifications for
Compost Filter Sock



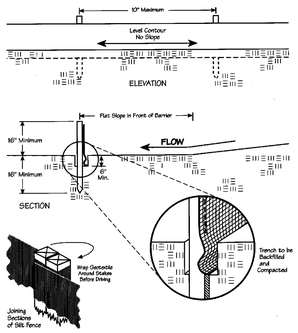
Specifications for Compost Filter Sock

1. *Compost filter sock shall be placed at existing grade. Stakes may be installed immediately downslope of the sock if so specified by the manufacturer.*
2. *Traffic shall not be permitted to cross filter socks.*
3. *Accumulated sediment shall be removed when it reaches half the above ground height of the sock and disposed of off site in accordance with Local, State and Federal regulations.*
4. *Socks shall be inspected weekly and after each runoff event. Damaged socks shall be repaired according to the manufacturer's specifications or replaced within 24 hours of inspection.*
5. *Biodegradable filter socks shall be replaced after 6 months; photodegradable socks after 1 year.*
6. *Filter sock minimum diameter is 12 inches.*
7. *Upon stabilization of the tributary to the sock, stakes shall be removed. The sock may be left in place and vegetated or removed. In the later case, the mesh shall be cut open and the mulch spread as a soil supplement.*

STORM WATER POLLUTION PREVENTION NOTES

1. *THIS CONTRACT DRAWING DOCUMENT SHALL BE MADE AVAILABLE ON–SITE AT ALL TIMES AND PRESENTED UPON REQUEST. ADDITIONAL EROSION AND SEDIMENTATION CONTROL MEASURES MAY BE REQUESTED BY A SOIL AND WATER*
2. *ALL EROSION AND SEDIMENT CONTROL PRACTICES SPECIFIED ON THIS PLAN SHALL CONFORM WITH DETAILS AND SPECIFICATIONS OUTLINED IN THE OHIO DEPARTMENT OF NATURAL RESOURCES BOOKLET, "RAINWATER AND LAND*
3. *SILT FENCE, AND SEDIMENT PITS SHALL BE USED AROUND ALL NEW STORM INLETS TO CONTROL SOIL EROSION.*
4. *EROSION CONTROL MEASURES MUST BE PROVIDED AROUND ALL DIRT STOCKPILES AND OTHER TEMPORARILY DISTURBED AREAS AS DIRECTED BY THE ENGINEER.*
5. *IF UNFORESEEN EROSION IS ENCOUNTERED DURING CONSTRUCTION, ADDITIONAL EROSION CONTROL MEASURE'S SHALL BE PROVIDED, AS DIRECTED BY THE ENGINEER, OR SOIL AND WATER REPRESENTATIVE AT THE CONTRACTOR'S EXPENSE.*
6. *TEMPORARY SEDIMENTATION AND EROSION CONTROL MEASURES MUST BE INSPECTED AND LOGGED FOR SOIL AND WATER REPRESENTATIVE'S INSPECTION WEEKLY AND AFTER RAIN EVENTS.*
7. *ALL UTILITY COMPANIES MUST COMPLY WITH ALL STORM WATER POLLUTION PREVENTION MEASURES AS DEFINED ON THIS STORM WATER POLLUTION PREVENTION PLANS.*

Specifications for
Silt Fence



Specifications for Silt Fence

1. Silt fence shall be constructed before upslope land disturbance begins.

2. All silt fence shall be placed as close to the contour as possible so that water will not concentrate at low points in the fence and so that small swales or depressions which may carry small concentrated flows to the silt fence are dissipated along its length.

3. To prevent water ponded by the silt fence from flowing around the ends, each end shall be constructed upslope so that the ends are at a higher elevation.

4. Where possible, silt fence shall be placed on the flattest area available.

5. Where possible, vegetation shall be preserved for 5 ft. (or as much as possible) upslope. If the silt fence, or vegetation in front of it, shall be removed, vegetation shall be replanted during the installation of the silt fence.

6. The height of the silt fence shall be a minimum of 16 in. above the original ground surface.

7. The silt fence shall be placed in a trench cut a minimum of 6 in. deep. The trench shall be cut with a trencher, cable laying machine, or other suitable device which will ensure an adequately uniform trench depth.

8. The silt fence shall be placed with the stakes on the downslope side of the geotextile and so that 8 in. of cloth are below the ground surface. Excess material shall lay on the bottom of the 6–in.–deep trench. The trench shall be backfilled and compacted.

9. Seams between section of silt fence shall be overlapped with the end stakes of each section wrapped together before driving into the ground.

10. Maintenance — Silt fence shall allow runoff to pass only as diffuse flow through the geotextile. If runoff overtops the silt fence, flows under or around the ends, or in any other way becomes a concentrated flow, one of the following shall be performed, as appropriate: 1) The layout of the silt fence shall be changed, 2) Accumulated sediment shall be removed, or 3) Other practices shall be installed.

Criteria for Silt Fence Materials

1. Fence Posts–The length shall be a minimum of 32 in. long. Wood posts will be 2–by–2–in. hardwood of sound quality. The maximum spacing between posts shall be 10 ft.

2. Silt Fence Fabric (see chart below):

Fabric Properties	Values	Test Method
Grab Tensile Strength	90 lb. minimum	ASTM D 1682
Mullen Burst Strength	190 psi minimum	ASTM D 3786
Slurry Flow Rate	0.3 gal./min./ft² maximum	US Std. Sieve CW–02215
Equivalent Opening Size	40–80	
Ultraviolet Radiation Stability	90.% minimum	ASTM–G–26

Specifications for Temporary Diversion Above Steep Slopes

Diversions for the temporary protection of cut or fill slopes shall be installed in accordance with the following criteria for drainage areas of 5 acres or less. Larger areas require a diversion design.

1. Diverted runoff shall outlet onto a stabilized undisturbed area, settling pond, or into a drop structure.

2. Diversions shall be compacted by traversing with tracked earth–moving equipment and stabilized with seed and mulch.

Specifications for
Permanent Seeding

SITE PREPARATION

1. A subsoiler, plow or other implement shall be used to reduce soil compaction and allow maximum infiltration. (Maximizing infiltration will help control both runoff rate and water quality.) Subsoiling should be done when the soil moisture is low enough to allow the soil to crack or fracture. Subsoiling shall not be done on slip–prone areas where soil preparation should be limited to what is necessary for establishing vegetation.

2. The site shall be graded as needed to permit the use of conventional equipment for seedbed preparation and seeding.

3. Resod shall be applied where needed to establish vegetation.

SEEDBED PREPARATION

1. Lime–Agricultural ground limestone shall be applied to acid soil as recommended by a soil test. In lieu of a soil test, lime shall be applied at the rate of 100 lb./1,000 sq. ft. or 2 tons/ac.

2. Fertilizer — Fertilizer shall be applied as recommended by a soil test. In lieu of a soil test, fertilizer shall be applied at a rate of 12 lb./1,000 sq. ft. or 500 lb./ac. of 10–10–10 or 12–12–12 analysis.

3. The lime and fertilizer shall be worked into the soil with a disk harrow, spring–tooth harrow, or other suitable field implement to a depth of 3 in. On sloping land the soil shall be worked on the contour.

SEEDING DATES AND SOIL CONDITIONS

Seeding should be done March 1 to May 31 or Aug 1 to September 30. These seeding dates are ideal but, with the use of additional mulch and irrigation, seedings may be made any time throughout the growing season. Tillage/Seedbed preparation should be done when the soil is dry enough to crumble and not form ribbons when compressed by hand. For winter seeding, see the following section on dormant seeding.

DORMANT SEEDINGS.

1. Seedings shall not be planted from October 1 through November 20. During this period the seeds are likely to germinate but probably will not be able to survive the winter.

2. The following methods may be used for "Dormant Seeding":

** From October 1 through November 20, prepare the seedbed, add the required amounts of lime and fertilizer, then mulch and anchor. After November 20, and before March 15, broadcast the selected seed mixture. Increase the seeding rates by 50% for this type of seeding.*

** From November 20 through March 15, when soil conditions permit, prepare the seedbed, lime and fertilize, apply the selected seed mixture, mulch and anchor. Increase the seeding rates by 50% for this type of seeding.*

** Apply seed uniformly with a cyclone seeder, drill, cultipacker seeder, or hydro–seeder (slurry may include seed and fertilizer) on a firm, moist seedbed.*

** When feasible, except when a cultipacker type seeder is used, the seedbed should be firmed following seeding operations with a cultipacker, roller, or light drag. On sloping land, seeding operations should be on the contour where feasible.*

MULCHING

1. Mulch material shall be applied immediately after seeding. Seedings made during optimum seeding dates and with favorable soil conditions and on very flat areas may not need mulch to achieve adequate stabilization. Dormant seeding shall be mulched.

2. Materials

** Straw — If straw is used it shall be unrotted small–grain straw applied at the rate of 2 tons/ac. or 90 lb./1,000 sq. ft. (two to three bales). The mulch shall be spread uniformly by hand or mechanically so the soil surface is covered. For uniform distribution of hand–spread mulch, divide area into approximately 1,000–sq.–ft. sections and spread two 45–lb. bales of straw in each section.*

** Hydroseeders–If wood cellulose fiber is used, it shall be used at 2,000 lb./ac. or 46 lb./1,000 sq. ft.*

** Other — Other acceptable mulches include mulch mattings applied according to manufacturer's recommendations or wood chips applied at 6 tons/ac.*

3. Straw Mulch Anchoring Methods

Straw mulch shall be anchored immediately to minimize loss by wind or water.

** Mechanical–A disk, crimper, or similar type tool shall be set straight to punch or anchor the mulch material into the soil. Straw mechanically anchored shall not be finely chopped but, generally, be left longer than 6 in.*

** Mulch Nettings–Nettings shall be used according to the manufacturer's recommendations. Netting may be necessary to hold mulch in place in areas of concentrated runoff and on critical slopes.*
not need mulch to achieve adequate
** Asphalt Emulsion–Asphalt shall be applied as recommended by the manufacturer or at the rate of 160 gal./ac.*

** Synthetic Binders — Synthetic binders such as Acrylic DLR (Agri–Tac), DCA–70, Petroset, Terra Tack or equal may be used at rates recommended by the manufacturer.*

** Wood Cellulose Fiber — Wood cellulose fiber binder shall be applied at a net dry weight of 750 lb./ac. The wood cellulose fiber shall be mixed with water and the mixture shall contain a maximum of 60 lb./100 gal. of wood cellulose fiber.*

IRRIGATION

1. Permanent seeding shall include irrigation to establish vegetation during dry or hot weather or on adverse site conditions as needed for adequate moisture for seed germination and plant growth.

2. Excessive irrigation rates shall be avoided and irrigation monitored to prevent erosion and damage from runoff.

Specifications for
Permanent Seeding

Seed Mix	Seeding Rate lb./ac. lb./1,000 sq.ft.		Notes:
General Use			
Creeping Red Fescue	20–40	1/2–1	
Domestic Ryegrass	10–20	1/4–1/2	
Kentucky Bluegrass	10–20	1/4–1/2	
Tall Fescue	40		
Dwarf Fescue	40		
Steep Banks or Cut Slopes			
Tall Fescue	40		
Crown Vetch	10	1/4	
Tall Fescue	20	1/2	Do not seed later than August.
Flat Pea	20	1/2	
Tall Fescue	20	1/2	Do not seed later than August.
Road Ditches and Swales			
Tall Fescue	40		
Dwarf Fescue	90	2 1/4	
Kentucky Bluegrass	5		
Lawns			
Kentucky Bluegrass	60	1 1/2	
Perennial Ryegrass	40	1 1/2	
Kentucky Bluegrass	60	1 1/2	
Creeping Red Fescue	40	1 1/2	For shaded areas

Note: Other approved seed species may be substituted.

Specifications for
Maintenance of Permanent Seeding

1. Permanent seeding shall not be considered established for at least 1 full yr. from the time of planting. Seeded areas shall be inspected for failure and vegetation reestablished as needed. Depending on–site conditions, it may be necessary to irrigate, fertilize, overseed, or reestablish plantings in order to provide permanent vegetation for adequate erosion control.

Maintenance for Permanent Seedings
Fertilization and Mowing

Mixture	Formula	lb./ac.	lb./1,000 ft.sq.	Time	Mowing
Creeping Red Fescue Ryegrass Kentucky Bluegrass	10–10–10	300	12	Fall, yearly or as needed	Not closer than 3"
Tall Fescue	10–10–10	500	12		Not closer than 4"
Dwarf Fescue	10–10–10	500	12		Not closer than 2"
Crown Vetch Fescue	0–20–20	400	10	Spring yearly following establishment, every 4–7 years	Do not mow
Flat Pea Fescue	0–20–20	400	10		Do not mow

Note: Following soil test recommendations is preferred to fertilizer rates shown above.

2. Maintenance fertilization rates shall be established by soil test recommendations or by using the rates shown in the following table.

Specifications for
Temporary Seeding

Temporary Seeding Species Selection

Seeding Dates	Species	Lb./1,000 ft.sq	Per Ac.
March 1 to August 15	Oats	2	2 bushel
	Tall Fescue	1	40 lb.
	Annual Ryegrass	1	40 lb.
	Perennial Ryegrass	1	40 lb.
	Tall Fescue	1	40 lb.
	Annual Ryegrass	1	40 lb.
August 16 to November 1	Rye	3	2 bushel
	Tall Fescue	1	40 lb.
	Annual Ryegrass	1	40 lb.
	Wheat	3	2 bushel
	Tall Fescue	1	40 lb.
	Annual Ryegrass	1	40 lb.
	Perennial Ryegrass	1	40 lb.
	Tall Fescue	1	40 lb.
	Annual Ryegrass	1	40 lb.

November 1 to Spring Seeding use mulch only, according practices or dormant seeding.

Note: Other approved seed species may be substituted.

1. Structural erosion– and sediment–control practices such as diversions and sediment traps shall be installed and stabilized with temporary seeding prior to grading the rest of the construction–site.

2. Disturbed areas, which will remain unworked for a period of 14 days or greater, shall be stabilized with seeding and mulching, or other appropriate means within 7 days after the last disturbance. Disturbed areas within 50 ft. of a stream or wetland that remain for more than 14 days shall have temporary erosion control measures, including but not limited to seeding and mulching, applied within 2 days. Disturbed areas that have reached final grade shall be stabilized within 7 days of reaching final grade.

3. The seedbed should be pulverized and loose to ensure the success of establishing vegetation. However, temporary seeding shall not be postponed if ideal seedbed preparation is not possible.

4. Soil Amendments—Applications of temporary vegetation shall establish adequate stands of vegetation which may require the use of soil amendments. Soil tests should be taken on the site to predict the need for lime and fertilizer.

5. Seeding Method–Seed shall be applied uniformly with a cyclone seeder, drill, cultipacker seeder, or hydroseeder. When feasible, seed that has been broadcast shall be covered by raking or dragging and then lightly tamped into place using a roller or cultipacker. If hydroseeding is used, the seed and fertilizer will be mixed on–site and the seeding shall be done immediately and without interruption.

MULCHING TEMPORARY SEEDING

1. Applications of temporary seeding shall include mulch which shall be applied during or immediately after seeding. Seedings made during optimum seeding dates and with favorable soil conditions and on very flat areas may not need mulch to achieve adequate stabilization.

2. Materials:

** Straw — If straw is used, it shall be unrotted small–grain straw applied at the rate of 2 tons/ac. or 90 lb./1,000 sq. ft. (two to three bales). The mulch shall be spread uniformly by hand or mechanically so the soil surface is covered. For uniform distribution of hand–spread mulch, divide area into approximately 1,000–sq.–ft. sections and spread two 45–lb. bales of straw in each section.*

** Hydroseeders — If wood cellulose fiber is used, it shall be used at 2,000 lb./ac. or 46 lb./1,000 sq. ft.*

** Other — Other acceptable mulches include mulch mattings applied according to manufacturer's recommendations or wood chips applied at 6 tons/ac.*

3. Straw mulch shall be anchored immediately to minimize loss by wind or water.

Anchoring Methods:

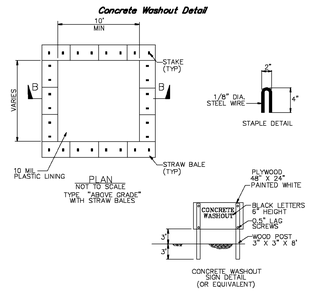
** Mechanical — A disk, crimper, or similar type tool shall be set straight to punch or anchor the mulch material into the soil. Straw mechanically anchored shall not be finely chopped but, generally, be left longer than 6 in.*

** Mulch Nettings–Nettings shall be used according to the manufacturer's recommendations. Netting may be necessary to hold mulch in place in areas of concentration runoff and on critical slopes.*

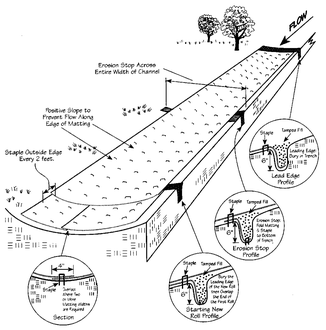
** Asphalt Emulsion — Asphalt shall be applied as recommended by the manufacturer or at the rate of 160 gal./ac.*

** Synthetic Binders — Synthetic binders such as Acrylic DLR (Agri–Tac), DCA–70, Petroset, Terra Tack or equal may be used at rates recommended by the manufacturer.*

** Wood–Cellulose Fiber–Wood–cellulose fiber binder shall be applied at a net dry weight of 750 lb./ac. The wood–cellulose fiber shall be mixed with water and the mixture shall contain a maximum of 50 lb./100 gal.*



Specifications for
Matting



Specifications for Matting

1. Material — Excelsior matting shall be 48 in. wide and weigh an average of 0.75 lb./sq. yd. or greater. Jute matting shall be 48 in. wide and weigh an average of 1.2 lb./yd or greater. Matting made of other material and providing equal or greater stabilization than the above may be substituted.

2. Site Preparation–After the site has been shaped and graded, a seedbed shall be prepared that is relatively free of foreign objects such as rocks and clods larger that 1.5 in. in diameter. The site shall be prepared to ensure that the matting has good soil contact and the matting will not "bridge" or "tent" over obstructions.

3. Matting shall be held in place as recommended by the manufacturer as adequate for the site conditions or with sod staples. Sod staples are U–shaped wire staples used for fastening sod, jute or excelsior matting and are 8 in. in total length. The crown shall be 1 in. wide. Sod staples shall be No. 11 gauge or heavier and be 6–10 in. in length. In loose or sandy soils longer staples shall be used.

4. Planting–Lime and fertilizer shall be used according to the recommendation of a soil test or the seeding plan. Seed according to the matting manufacturer's recommendations; or, for excelsior matting, seed area to be protected before installation or, when using jute matting, apply half the seed before and half the seed after installation.

5. Matting shall be installed as specified by the manufacturer as appropriate for the site conditions or the following procedure may be used:

** After the site is prepared and erosion stops are installed, start laying the mat from the top of the slope or channel and unroll the matting allowing 4–in. overlaps at the edges.*

** Secure the matting by burying the top ends in a trench 6 in. deep and staple the folded ends to the bottom of the trench. Backfill and tamp firmly to the established grade.*

** Staple matting every 12 in. across the width beginning at the edges and every 2 ft. in rows the entire length of the matting. Every other row of staples running the length of the matting should be staggered.*

** To join two rolls together, cut a trench to anchor the end of the new roll and secure it the same as the top roll. Overlap the end of the previous roll 18 in. over the new roll. Continue to staple as described above.*

** When using excelsior matting, the plastic netting shall be on top of the good soil contact and the matting will not "bridge" or "tent" over obstructions.*

6. Erosion stops shall be used where recommended by the matting manufacturer and on areas specified where high–erosion potential may cause undermining and gullies to form beneath the matting.

** Erosion stops shall be made of strips of matting placed in narrow trenches 6–12 in. deep that cover the full cross section of the channel. They shall be spaced according to the manufacturer's recommendations or by the following: –1.3 ft. down the channel from each point of entry of concentrated flow; –at points where change in gradient or direction of channel occurs, and –on long slopes at spacing from 20–100 ft. depending upon the erodibility of the soil, velocity and volume of flow.*

** Erosion stops shall extend beyond the channel liner to the full design width of the channel, this will check any rills that might form outside or along the edge of the channel lining.*

** Erosion stops shall be constructed with 6 in. deep trench, stapled to the bottom of the trench, backfilled and tamped firmly to conform with the cross section of the channel.*

** If seeding has been done prior to installation of erosion stops, reseed disturbed areas prior to placement of channel liner.*

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