

EROSION & SEDIMENT POLLUTION CONTROL NOTES:

- A. GENERAL EROSION AND SEDIMENT CONTROL GUIDELINES
1. A COPY OF THIS PLAN SHALL BE KEPT AVAILABLE FOR INSPECTION ON THE CONSTRUCTION SITE AT ALL TIMES THROUGH THE TERMS OF THE PROJECT.
2. THE INTENT OF THIS PLAN/NARRATIVE IS TO INDICATE GENERAL MEANS OF COMPLIANCE WITH THE REQUIREMENTS OF THE RULES AND REGULATIONS OF CHAPTER 102 OF THE PENNSYLVANIA CLEAN STREAMS LAW. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO IMPLEMENT THESE METHODS PLUS ADDITIONAL METHODS AS MAY BE NECESSARY BECAUSE OF THE CONDITIONS CREATED BY LOCALIZED CONDITIONS, AND/OR CONSTRUCTION PROCEDURES IN ORDER TO ASSURE COMPLIANCE WITH APPLICABLE LAW. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN ALL SEDIMENT AND EROSION CONTROL FACILITIES SO THAT THEY PERFORM AS REQUIRED BY LAW.
3. IF SOIL MATERIAL OR SOIL IS REMOVED FROM THE SITE THE CONTRACTOR SHALL PREPARE AND SUBMIT TO THE APPROPRIATE CONSERVATION DISTRICT AN EROSION AND SEDIMENTATION CONTROL PLAN FOR THE SITE WHICH WILL RECEIVE THE SOIL MATERIAL.
- B. GENERAL SEDIMENT AND EROSION CONTROL METHODS/PROCEDURES
1. IN ALL CASES, THE SMALLEST PRACTICAL AREA OF STABLE LAND SURFACE SHALL BE DISTURBED.
2. ALL RELATED SEDIMENT AND EROSION CONTROL FACILITIES SHALL BE IN PLACE AND CAPABLE OF FUNCTIONING AS INTENDED PRIOR TO EARTH-MOVING ACTIVITY WITHIN THEIR CONTRIBUTING WATERSHED AREAS.
3. UTILITY EXCAVATIONS SHALL BE OPEN ONLY LONG ENOUGH TO PROPERLY INSTALL AND INSPECT ALL UNDERGROUND FACILITIES IN ACCORDANCE WITH APPLICABLE SPECIFICATIONS.
4. EXCAVATED MATERIAL (SPOIL) SHALL BE PLACED UP SLOPE FROM THE EXCAVATION WHENEVER POSSIBLE. RUNOFF FROM SPOIL PILES SHALL BE DIRECTED THROUGH A SEDIMENT FILTER STRUCTURE AND DISCHARGED IN A NON-EROSIVE MANNER.
5. Dewatering equipment discharge shall be directed onto a stabilized surface so that erosion does not occur. Discharges shall be directed through a sediment filter structure and discharged in a non-erosive manner.
6. BACKFILLED EXCAVATIONS SHALL BE RESTORED TO ORIGINAL TYPE OF COVER AND GRADE AS PER SPECIFICATIONS. SEEDING SHALL BE DONE ACCORDING TO SCHEDULE FOR PERMANENT SEEDING. TEMPORARY STABILIZATION IS REQUIRED FOR ANY AND ALL ERODIBLE/SOLUBLE AREAS AND MATERIALS TO BE EXPOSED.
7. LAWN AREAS SHALL BE FINISHED GRADED WITH 6-INCHES OF TOPSOIL UNLESS OTHERWISE NOTED. POST-INSTALL DRAINAGE SHALL BE MAINTAINED AWAY FROM ALL STRUCTURES. NO ISOLATED LOW SPOTS SHALL BE CREATED.
8. CONSTRUCTION ACCESS INTO UNPAVED AREAS FROM PAVED AREAS OR STREETS (PUBLIC OR PRIVATE) SHALL BE VIA A STABILIZED CONSTRUCTION ENTRANCE.
9. SEDIMENT SPILLED, DROPPED OR TRACKED ONTO PAVED SURFACES SHALL BE REMOVED IMMEDIATELY.
10. AT THE END OF EACH WORKING DAY, ANY SEDIMENT TRACKED OR CONVEYED ONTO A PUBLIC ROADWAY WILL BE REMOVED AND RE-DEPOSITED ONTO THE CONSTRUCTION SITE. REMOVAL CAN BE COMPLETED THROUGH USE OF MECHANICAL OR HAND TOOLS, BUT MUST NEVER BE WASHED OFF THE ROAD BY USE OF WATER.
11. SEDIMENT REMOVED FROM THE E&SP CONTROLS & FACILITIES SHALL BE DISPOSED OF IN LANDSCAPED AREAS OUTSIDE OF STEEP SLOPES, WETLANDS, FLOODPLAINS OR DRAINAGE SWALES AND IMMEDIATELY STABILIZED OR PLACED IN TOPSOIL STOCKPILES. AN E&S PLAN SHALL BE SUBMITTED TO THE CONSERVATION DISTRICT FOR ALL OFF-SITE SPOIL AREAS.
12. ALL PUMPING OF SEDIMENT-LADEN WATER SHALL BE THROUGH A DIRT BAG FILTRATION DEVICE, OR EQUIVALENT SEDIMENT REMOVAL FACILITY, OVER NON-DISTURBED VEGETATED AREAS. DISCHARGE POINTS SHOULD BE ESTABLISHED TO PROVIDE FOR MAXIMUM DISTANCE TO ACTIVE WATERWAYS.
13. SHOULD UNFORESEEN EROSION CONDITIONS DEVELOP DURING CONSTRUCTION, THE CONTRACTOR SHALL TAKE ACTION TO REMEDY SUCH CONDITIONS AND TO PREVENT DAMAGE TO ADJACENT PROPERTIES AS RESULT OF INCREASED RUNOFF AND/OR SEDIMENT DISPLACEMENT. STOCKPILES OF WOOD CHIPS, HAY BALES, CRUSHED STONE AND OTHER MULCHES SHALL BE IN READINESS TO DEAL IMMEDIATELY WITH EMERGENCY PROBLEMS OF EROSION.
14. A COPY OF THIS EROSION AND SEDIMENTATION CONTROL REPORT AND PLANS MUST BE POSTED AT THE CONSTRUCTION SITE.
15. STOCKPILE HEIGHTS MUST NOT EXCEED 35'. STOCKPILE SLOPES MUST BE 2:1 OR FLATTER.
16. ANY DISTURBED AREA ON WHICH ACTIVITY HAS CEASED MUST BE STABILIZED IMMEDIATELY. DURING NON-GERMINATING PERIODS, MULCH MUST BE APPLIED AT THE RECOMMENDED RATES. DISTURBED AREAS WHICH ARE NOT AT FINISHED GRADE AND WHICH WILL BE RE-DISTURBED WITHIN ONE YEAR MAY BE STABILIZED IN ACCORDANCE WITH TEMPORARY SEEDING SPECIFICATIONS. DISTURBED AREAS WHICH ARE EITHER AT FINISHED GRADE OR WILL NOT BE RE-DISTURBED WITHIN ONE YEAR, MUST BE STABILIZED IN ACCORDANCE WITH PERMANENT SEEDING SPECIFICATIONS.
17. DIVERSION CHANNELS, SEDIMENTATION BASINS, SEDIMENT TRAPS, AND STOCKPILES MUST BE STABILIZED IMMEDIATELY.
18. STABILIZATION OF ALL AREAS PROTECTED BY INTERIM CONTROL MEASURES/FACILITIES SHALL BE TO THE PERMANENT STRUCTURAL CONDITION OR 70% UNIFORM PERENNIAL VEGETATION BEFORE THE INTERIM MEASURES/FACILITIES CAN BE REMOVED.
19. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE D.E.P. REGULATIONS RELATING TO SOLID WASTE DISPOSAL/RECYCLING.
- C. MAINTENANCE OF SEDIMENT AND EROSION CONTROL FACILITIES
1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ALL EROSION AND SEDIMENT POLLUTION CONTROL MEASURES. IF EROSION CONTROL MEASURES FAIL OR OTHER EROSION PROBLEMS ARISE, THE CONTRACTOR SHALL TAKE IMMEDIATE ACTION TO CORRECT AND ELIMINATE THEM BEFORE THEY DEVELOP INTO UNMANAGEABLE PROBLEMS.
2. UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENT BMP'S MUST BE MAINTAINED PROPERLY. MAINTENANCE MUST INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENT BMP'S AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, REGRADING, RESEEDING, REMULCHING AND RENETTING MUST BE PERFORMED IMMEDIATELY. IF EROSION AND SEDIMENT CONTROL BMP'S FAIL TO PERFORM AS EXPECTED, REPLACEMENT BMP'S OR MODIFICATIONS OF THOSE INSTALLED WILL BE REQUIRED. ANY AREAS DISTURBED BY REMOVAL OF CONTROLS SHALL BE REPAIRED, STABILIZED AND PERMANENTLY SEEDED.

PCSWM OPERATION AND MAINTENANCE SCHEDULE

1. THE PROPERTY OWNER SHALL OWN, MAINTAIN AND BE RESPONSIBLE FOR ALL STORMWATER MANAGEMENT AND PERMANENT BMP FACILITIES THAT ARE LOCATED OUTSIDE OF STREET RIGHT-OF-WAYS AS PROPOSED ON THIS POST CONSTRUCTION STORMWATER MANAGEMENT PLAN.
2. THE OWNER SHALL CONDUCT A VISUAL INSPECTION OF ALL STORMWATER MANAGEMENT AND PERMANENT BMP FACILITIES AT LEAST ONCE EVERY THREE MONTHS AND IMMEDIATELY AFTER STORM EVENTS. SUCH VISUAL EXAMINATION SHALL AT LEAST INVOLVE AN EXAMINATION OF THE STORMWATER COLLECTION, CONVEYANCE AND DETENTION/BMP FACILITIES FOR DEBRIS DEPOSITION (SUCH DEBRIS MAY INCLUDE, BUT SHALL NOT BE LIMITED TO AGGREGATE MATERIAL, LEAVES, GRASS CLIPPINGS, SOIL, AND TRASH), AND AN EXAMINATION OF THE STORMWATER DETENTION/BMP FACILITY FOR SOIL AND STRUCTURAL SETTLEMENT, DEPRESSIONS, SINKHOLES, SEEPS, STRUCTURAL CRACKING, ANIMAL BURROWS, EXCESSIVE VEGETATION, CLOGGING, EROSION AND FOUNDATION MOVEMENT.
3. THE OWNER SHALL REMOVE ANY ACCUMULATION OF DEBRIS AND REPAIR ANY DAMAGE TO THE STORMWATER MANAGEMENT AND PERMANENT BMP FACILITIES. REPAIRS SHALL BE MADE USING MATERIAL THAT MEETS OR EXCEEDS THE SPECIFICATIONS PROVIDED ON THE PLANS.
4. IN ACCORDANCE WITH THE NPDES PERMIT, THE OWNER IS REQUIRED TO MAINTAIN A RECORD OF ALL INSPECTIONS, REPAIRS AND MAINTENANCE ACTIVITIES ASSOCIATED WITH THE STORMWATER MANAGEMENT AND PERMANENT BMP FACILITIES AT THIS PROJECT SITE. THE OWNER SHALL IMMEDIATELY NOTIFY THE MUNICIPALITY AND THE CONSERVATION DISTRICT PRIOR TO INITIATING ANY MAJOR REPAIR ACTIVITIES (SUCH AS REPAIRS THAT MAY BE REQUIRED AS A RESULT OF SETTLEMENT, SINKHOLES, SEEPS, STRUCTURAL CRACKING OR FOUNDATION MOVEMENT).
5. THE OWNER SHALL ALSO COMPLY WITH ANY OTHER MAINTENANCE NOTES THAT MAY BE ON THESE PLANS.

- D. RESTORATION OF PLANTING AREAS
1. IF EARTH DISTURBANCE OCCURS DURING THE MONTHS OF NOVEMBER THROUGH MARCH, THEN AROOSTOOK WINTER RYE SHALL BE APPLIED TO DISTURBED AREAS AS A TEMPORARY SEED MIXTURE. IF STABILIZATION CANNOT BE ACHIEVED WITH AROOSTOOK WINTER RYE, THEN MULCH WITH TACKIFIER SHALL BE APPLIED TO DISTURBED AREAS. MULCH SHALL BE CLEAN OAT OR WHEAT STRAW AND SHALL BE APPLIED AT THE RATE OF 3 TONS PER ACRE. TACKIFIER SHALL BE APPLIED TO THE MANUFACTURER'S APPLIED RATE. AREAS THAT LOSE THE MULCH COVER SHALL BE REMULCHED.
2. FINAL RESTORATION SHALL BE PERFORMED NO LATER THAN THE START OF THE NEXT PLANTING SEASON FOLLOWING CONSTRUCTION. THE PLANTING SEASON SHALL BE AS ESTABLISHED BY THE U.S. AGRICULTURAL SERVICE FOR THE AREA OF CONSTRUCTION.
3. TOPSOIL SHALL BE FREE FROM SUBSOIL, BRUSH, WEEDS, OR OTHER LITTER, CLAY LUMPS AND STONES, BUT MAY CONTAIN DECAYING VEGETABLE MATTER AS IS PRESENT IN GOOD TOPSOIL.
4. PRECAUTIONS SHALL BE EXERCISED AS NECESSARY TO CONFORM WITH LAWS RELATING TO EROSION AND SEDIMENT CONTROL.
5. SEED SHALL BE NOT MORE THAN TWO (2) YEARS OLD. GERMINATION TESTS OF SEEDS SHALL BE MADE NOT MORE THAN SIX (6) MONTHS PRIOR TO SEEDING. SEED THAT HAS BECOME WET, MOLDY, OR OTHERWISE DAMAGED SHALL NOT BE USED.
6. ALL SEED MIXTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO SEEDING.
7. THE CONTRACTOR SHALL BE RESPONSIBLE TO PRODUCE A STAND OF GRASS IN ALL SEEDED OR SODDED AREAS. EROSION, DROUGHT, OR ANY OTHER CONDITION ENCOUNTERED SHALL NOT RELIEVE THE CONTRACTOR OF THIS REQUIREMENT.

SEEDING NOTES: TEMPORARY

MULCH – CLEAN OAT OR WHEAT STRAW SHALL BE FREE FROM MATURE SEED-BEARING STALKS OR ROOTS OR PROMOTED OR NOxious WEEDS AS DEFINED BY THE PENNSYLVANIA SEED ACT OF 1947. APPLY AT A RATE 3 TONS PER ACRE. PRECAUTIONS SHALL BE TAKEN TO STABILIZE THE MULCH UNTIL THE VEGETATIVE COVER IS ESTABLISHED.

SEED MIXTURE SHALL BEAR A GUARANTEED STATEMENT OF ANALYSIS AND SHALL BE COMPOSED OF THE VARIETIES FOLLOWING AND MIXED IN THE PROPORTIONS SPECIFIED.

TEMPORARY SEED MIXTURE	BY WEIGHT PROPORTION	PURITY MINIMUM	GERMINATION MINIMUM
KENTUCKY 31 TALL FESCUE	75%	95%	80%
RYEGRASS OR RED FESCUE	25%	95%	80%

THREE-PERCENT REDTOP MAY BE ADDED TO THE LAWN MIXTURE ON SLOPE AREAS OR FOR LATE SPRING OR LATE FALL SEEDING.

TEMPORARY SEEDING SHALL BE APPLIED AT THE RATE OF ONE (1) POUND PER THOUSAND (1,000) SQUARE FEET.

ALL AREAS TO BE SEEDED SHALL BE LOOSENEED TO A DEPTH OF AT LEAST TWO INCHES BY MECHANICAL MEANS.

MULCH SEEDED AREAS IMMEDIATELY AFTER SEEDING.

LIMESTONE AND FERTILIZER SHALL BE APPLIED UNIFORMLY TO AREAS TO BE SEEDED, AND WORKED INTO THE SOIL TO A DEPTH OF 2".

LIMESTONE – PULV. AG.
LIMESTONE – 50 LBS./1000 S.F.
FERTILIZER – 10–20–20
FERTILIZER – 5 LBS./1000 S.F.

SEEDING – SEED ALL DISTURBED AREAS WITH THE TEMPORARY SEED MIXTURE. SEEDING SHALL OCCUR MARCH 15–JUNE 15 OR AUGUST 15–OCTOBER 15, UNLESS OTHERWISE DIRECTED BY THE ENGINEER. MULCH (HAY OR STRAW) SHALL BE APPLIED AT A RATE OF 3 TONS PER ACRE DURING THE NON-GERMINATING PERIOD OF OCTOBER 15–MARCH 15.

SEEDING NOTES: PERMANENT

ALL TOPSOIL SHALL BE LOOSENEED TO A DEPTH OF AT LEAST 4". ALL OBJECTIONABLE MATERIAL LARGER THAN 2" SHALL BE REMOVED.

LIMESTONE AND FERTILIZER SHALL BE APPLIED UNIFORMLY TO AREAS TO BE SEEDED, AND WORKED INTO THE SOIL TO A DEPTH OF 6".

LIMESTONE – PULV. AG.
LIMESTONE – 6 TONS PER ACRE
FERTILIZER – 10–20–20
FERTILIZER – 500 LBS. PER ACRE

WILDLIFE MIX SEED SHALL BE BROADCAST AT THE RATE AND KIND INDICATED BELOW:

CANADA WILD RYE (ELYMUS CANADENSIS) – 20%; BIG BLUESTEM (ANDROPOGON GERARDII) – 20%; CUP PLANT (SILPHIUM PERFORLIATUM) – 20%; INDIANGRASS (SORGHASTRUM NUTANS) – 20% AND WINGSTEM (VERBESINA ALTERNIFOLIA) – 20%.

SEED ANNUAL RYEGRASS AT 15 LBS./ACRE ALONG WITH WILDLIFE MIX. THIS WILL PROVIDE TEMPORARY COVER AND ACT AS A NURSE CROP UNTIL THE WILDLIFE MIX BECOMES ESTABLISHED.

FLOOD PLAIN WILDLIFE MIX:

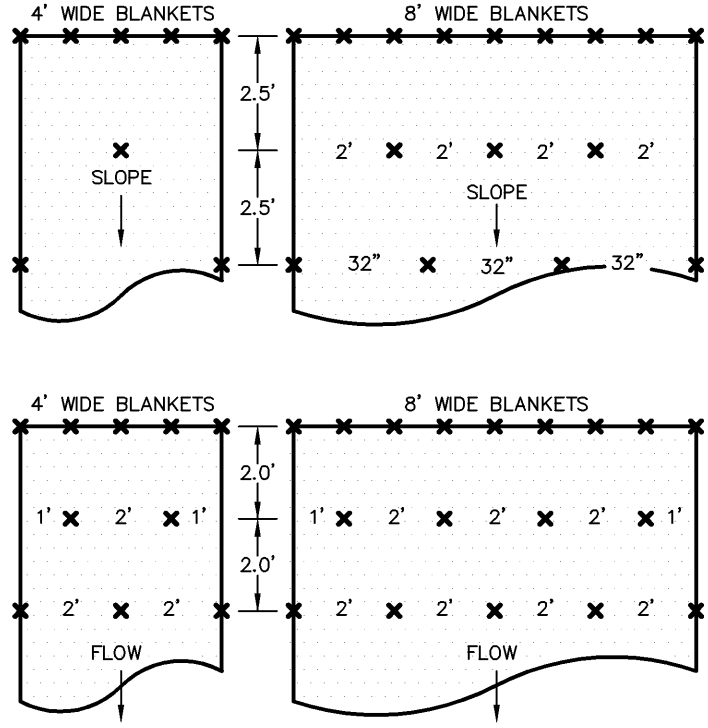
ANDROPOGON GERARDII	BIG BLUESTEM	15%
SILPHIUM PERFORLIATUM	CUP PLANT	10%
ELYMUS CANADENSIS	CANADA WILD RYE	10%
PANICUM CLADESTINUM	TOGA DEERTONGUE	10%
ELYMUS VIRGINICUS	VIRGINIA WILD RYE	10%
SORGHASTRUM NUTANS	INDIANGRASS	10%
PERISTEMON DIGITALIS	BEARD-TONGUE	5%
VERBESINA ALTERNIFOLIA	WINGSTEM	5%
BIDENS CONNATA	BEGGAR-TICKS	4%
RATIBIDA CONNATA	GREY-HEADED CONEFLOWER	4%
ELYMUS VILLOSI	EASTERN BLUE WILD RYE	3%
RUDBECKIA HIRTA	BLACK-EYED SUSAN	2%
VERNONIA NOVEBORACENSIS	IRONWEED	2%
EUPATORIUM FISTULOSUM	JOE-PYE WEED	2%
PANICUM VIRGATUM	SWITCHGRASS	2%
MONARDA FISTULOSA	WILD BERGAMOT	2%
ZIZIA AUREA	GOLDEN ALEXANDERS	1%
ASTER NOVAE-ANGLIAE	NEW ENGLAND ASTER	1%
SOLIDAGO RUGOSA	ROUGH STEMED GOLDENROD	1%
DESMODIUM CANADENSE	SHOWY TICK TREFOIL	1%

AVAILABLE AT:
EARNST CONSERVATION SEEDS
9006 MERCER PIKE
MEADVILLE, PA 16335
*ORDER BY PHONE (800) 873-3321 *BY FAX (814) 336-5191
*BY E-MAIL: earnstseeds@earnstseed

SEED ANNUAL RYEGRASS AT 15 LBS./ACRE ALONG WITH FLOOD PLAIN WILDLIFE MIX. THE ANNUAL RYEGRASS WILL SERVE AS A "NURSE CROP" AND PROVIDE TEMPORARY COVER UNTIL THE WILDLIFE MIX BECOMES ESTABLISHED.

CONSTRUCTION SEQUENCE

- CONTACT THE SCHUYLKILL CONSERVATION DISTRICT TEN DAYS PRIOR TO START OF CONSTRUCTION AT (570) 622-1555
- INSTALL STABILIZED CONSTRUCTION ENTRANCE AND FILTER SOCK AS SHOWN.
- STRIP AND STOCKPILE TOPSOIL FROM SITE AS REQUIRED.
- CLEAN AND GRUB SITE.
- BEGIN CONSTRUCTION BY STARTING AT LOWEST END OF SITE & GRADING IN PONDS. STABILIZE IMMEDIATELY. STOCKPILE TOPSOIL & SEED IMMEDIATELY.
- INSTALL STORMSEWER BEGINNING AT EW-1 AND WORKING UPSTREAM.
- STABILIZE ALL DISTURBED AREAS OUTSIDE OF WETLANDS AND SEDIMENTATION POND WITH "FLOOD PLAIN WILDLIFE MIX" SEEDING.
- AFTER ENTIRE SITE IS STABILIZED, REMOVE FILTER SOCK AND ALL OTHER EROSION CONTROL MEASURES.
- SEED, MULCH AND MAINTAIN ANY REMAINING EXPOSED AREAS WITH PERMANENT GRASS SEEDING.
- UNTIL SUCH TIME AS THE SITE IS PERMANENTLY STABILIZED, ALL EROSION AND SEDIMENTATION CONTROLS MUST BE MAINTAINED IN WORKING ORDER. MAINTENANCE MUST INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENTATION CONTROLS AFTER EACH STORM EVENT AND ON A WEEKLY BASIS.



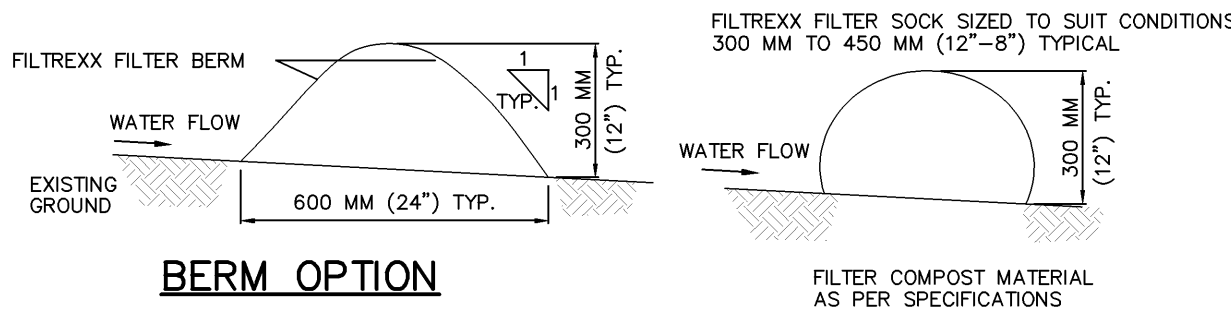
SLOPES

- NOTES:
- USE 1.5 – 2.0 STAPLES (8x2x8 11 ga. WIRE)/YD
 - INSTALL THE BLANKET VERTICALLY OR HORIZONTALLY.
 - USE 12" STAPLE SPACING ON STARTER ROW.
 - USE 6" SIDE SEAM AND 2" END SEAM OVERLAP.
 - USE 8" STAPLE LENGTH
 - USE 6" ANCHOR TRENCH AT TOP OF SLOPE.
 - START 3' OVER GRADE BREAK AND TRENCH.

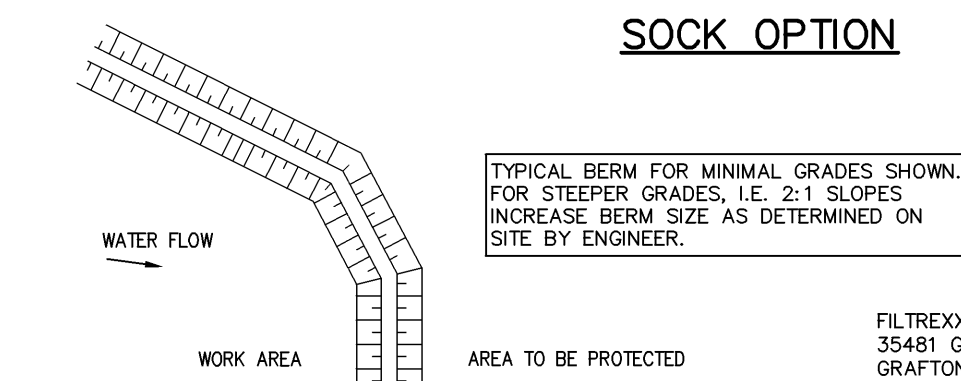
CHANNELS

- NOTES:
- USE 2.5 – 3.0 STAPLES (8x2x8 11 ga. WIRE)/YD
 - UPSTREAM BLANKET SHOULD OVERLAP DOWNSTREAM BLANKET A DISTANCE OF 12" IN A "SHINGLE" FASHION AND BURY THE FINISHED TOE AT LEAST 6"
 - USE 12" STAPLE SPACING ON STARTER ROW.
 - USE 6" SIDE SEAM AND 2" END SEAM OVERLAP.
 - USE 8" STAPLE LENGTH
 - USE 6" TRANSVERSE ANCHOR TRENCH AT 50' INTERVALS.
 - START 3' OVER GRADE BREAK AND TRENCH.

CURLEX 1 INSTALLATION DETAIL



BERM OPTION

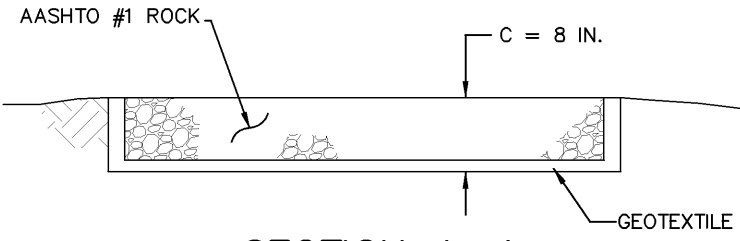
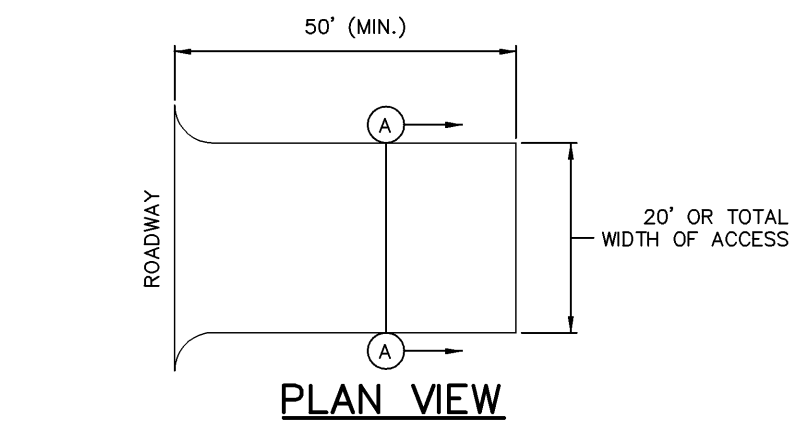


SOCK OPTION

TYPICAL BERM FOR MINIMAL GRADES SHOWN FOR STEEPER GRADES, I.E. 2:1 SLOPES INCREASE BERM SIZE AS DETERMINED ON SITE BY ENGINEER.

- NOTES:
- INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
 - DO NOT SCALE DRAWINGS.
 - ALL MATERIAL TO MEET FILTERREXX SPECIFICATIONS.
 - THE CONTRACTOR SHALL MAINTAIN THE COMPOST FILTER BERM IN A FUNCTIONAL CONDITION AT ALL TIMES AND IT SHALL BE ROUTINELY INSPECTED.
 - WHERE THE BERM REQUIRES REPAIR, IT WILL BE ROUTINELY REPAIRED.
 - THE CONTRACTOR SHALL REMOVE SEDIMENTS COLLECTED AT THE BASE OF THE BERM WHEN THEY REACH 1/3 OF THE EXPOSED HEIGHT OF THE BERM, OR AS DIRECTED BY THE ENGINEER.
 - THE COMPOST FILTER BERM WILL BE DISPERSED ON SITE WHEN NO LONGER REQUIRED, AS DETERMINED BY THE ENGINEER.
 - CONTRACTORS NOTE: FOR PRODUCT AND PURCHASING INFORMATION VISIT www.PROTECTmarketsite.com REFERENCE NUMBER 486-005

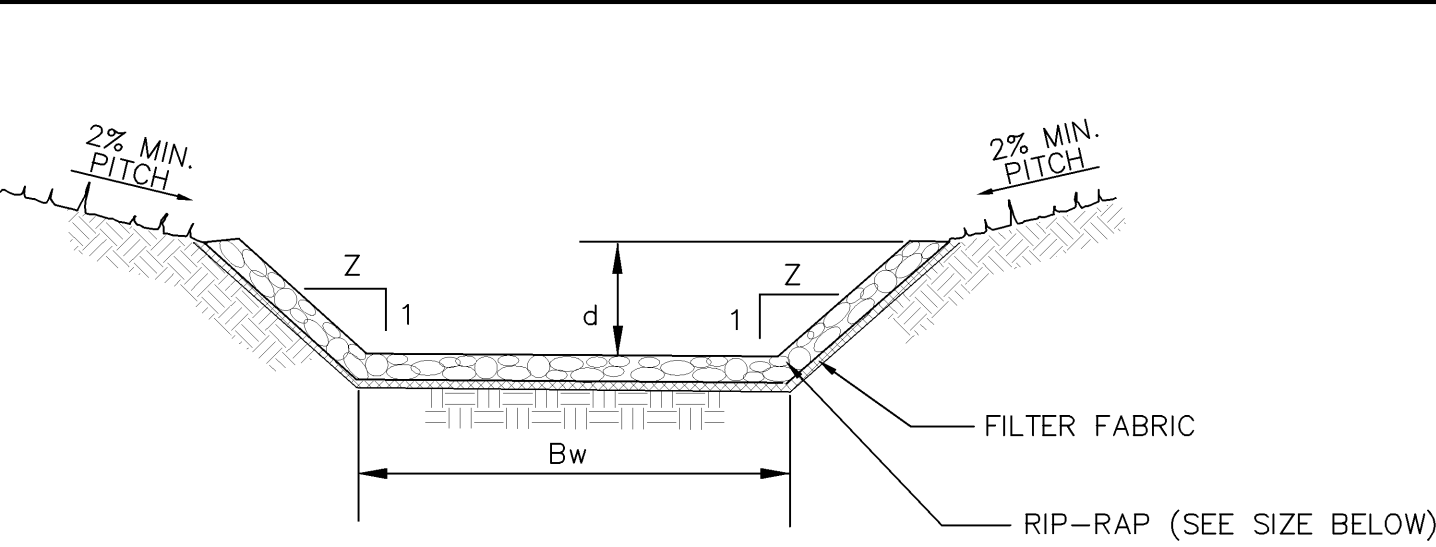
FILTERREXX FILTERSOCKS™ / FILTER BERMS



SECTION A-A

MAINTENANCE: ROCK CONSTRUCTION ENTRANCE THICKNESS SHALL BE CONSTANTLY MAINTAINED TO THE SPECIFIED DIMENSIONS BY ADDING ROCK. A STOCKPILE SHALL BE MAINTAINED ON SITE FOR THIS PURPOSE. AT THE END OF EACH CONSTRUCTION DAY, ALL SEDIMENT DEPOSITED ON PAVED ROADWAYS SHALL BE REMOVED AND RETURNED TO THE CONSTRUCTION SITE.

ROCK CONSTRUCTION ENTRANCE



SWALE	Bw	d	Z	MIN. SLOPE	MAX. SLOPE	EROSION PROTECTION
1	4'	1'	2	7%	7%	R-6 RIP RAP, 36" THICK

RIP-RAP SWALE DETAIL

NOT TO SCALE
SW/00013

PUMPED WATER FILTER BAGS – FILTER BAGS MAY BE USED TO FILTER WATER PUMPED FROM DISTURBED AREAS PRIOR TO DISCHARGING TO WATERS OF THE COMMONWEALTH. THEY MAY ALSO BE USED TO FILTER WATER PUMPED FROM THE SEDIMENT STORAGE AREAS OF SEDIMENT BASINS.

THE PUMPING RATE SHOULD BE DETERMINED BY THE CONTRACTOR BASED UPON ACTUAL AMOUNT OF GROUNDWATER ENCOUNTERED DURING CONSTRUCTION. PUMPING RATES WILL VARY DEPENDING ON THE SIZE OF THE FILTER BAG, AND THE TYPE AND AMOUNT OF SEDIMENT DISCHARGED TO THE BAG.

FILTER BAGS SHOULD BE INSTALLED ACCORDING TO THE DETAILS SHOWN BELOW.

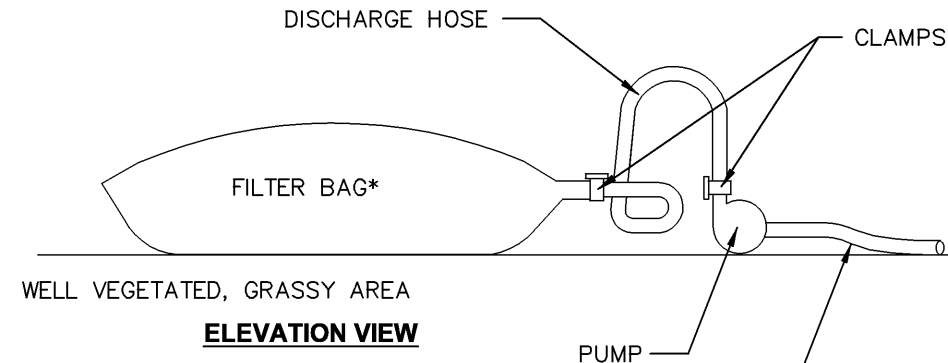
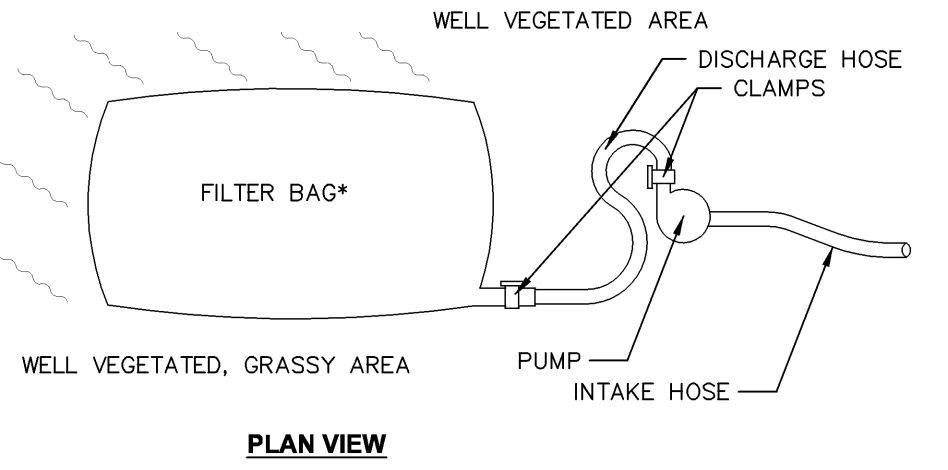
FILTER BAGS SHALL BE MADE FROM NON-WOVEN GEOTEXTILE MATERIAL SEWN WITH HIGH STRENGTH, DOUBLE STITCHED "J" TYPE SEAMS. THEY SHALL BE CAPABLE OF TRAPPING PARTICLES LARGER THAN 150 MICRONS.

A SUITABLE MEANS OF ACCESSING THE BAG WITH MACHINERY REQUIRED FOR DISPOSAL PURPOSES MUST BE PROVIDED. FILTER BAGS SHALL BE REPLACED WHEN THEY BECOME 1/2 FULL. SPARE BAGS SHALL BE KEPT AVAILABLE FOR REPLACEMENT OF THOSE THAT HAVE FAILED OR ARE FILLED.

BAGS SHALL BE LOCATED IN WELL-VEGETATED (GRASSY) AREA, AND DISCHARGE ONTO STABLE, EROSION RESISTANT AREAS. WHERE THIS IS NOT POSSIBLE, A GEOTEXTILE FLOW PATH SHALL BE PROVIDED. BAGS SHALL NOT BE PLACED ON SLOPES GREATER THAN 5%.

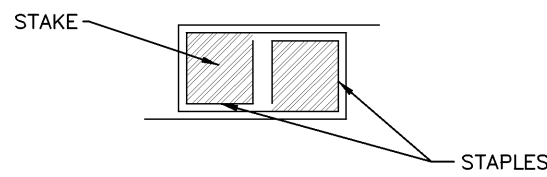
THE PUMP DISCHARGE HOSE SHALL BE INSERTED INTO THE BAGS IN THE MANNER SPECIFIED BY THE MANUFACTURER AND SECURLY CLAMPED.

THE PUMPING RATE SHALL BE NO GREATER THAN 750 GMP OR 1/2 THE MAXIMUM SPECIFIED BY THE MANUFACTURER, WHICHEVER IS LESS. PUMP INTAKES SHOULD BE FLOATING AND SCREENED.

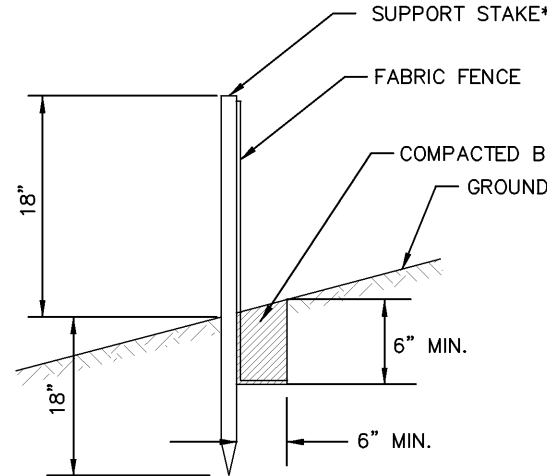


PUMPED WATER FILTER BAG

NO SCALE



JOINING FENCE SECTIONS



WHERE ENDS OF FILTER FABRIC COME TOGETHER, THEY MUST BE OVERLAPPED, FOLDED AND STAPLED TO PREVENT SEDIMENT BYPASS. THE TOE ANCHOR MUST BE BACKFILLED AND COMPACTED TO A DENSITY EQUAL TO THE SURROUNDING SOILS.

* STAKES SPACED @ 8' MAXIMUM. USE 2" X 2" WOOD OR EQUIVALENT STEEL STAKES.

FILTER FABRIC FENCE MUST BE PLACED AT LEVEL EXISTING GRADE. BOTH ENDS OF THE BARRIER MUST BE EXTENDED AT LEAST 8 FEET UP SLOPE AT 45 DEGREES TO THE MAIN BARRIER ALIGNMENT.

SEDIMENT MUST BE REMOVED WHEN ACCUMULATIONS REACH 1/2 THE ABOVE GROUND HEIGHT OF THE FENCE.

ANY SECTION OF FILTER FABRIC FENCE WHICH HAS BEEN UNDERMINED OR TOPPED MUST BE IMMEDIATELY REPLACED WITH A ROCK FILTER OUTLET. SEE STANDARD CONSTRUCTION DETAIL #18.

STANDARD FILTER FABRIC FENCE (18" HIGH)

NOT TO SCALE
ES/00019

FOR REVIEW ASSOCIATES BY:		SURV. CHIEF: FELDBOOK NO. DATA COLLECTOR		MANAGER: CLAYTON BUBECK, P.E.		CLIENT: SCHUYLKILL HEADWATERS ASSOCIATION, INC.		ABANDONED MINE DRAINAGE REMEDIATION PROJECT FOR THE OTTO DISCHARGE		SCHUYLKILL HEADWATERS ASSOCIATION, INC. SITE DETAILS	
		DESIGN BY: CEB/PGD		CHWD BY: CEB/PGD		P.O. BOX 138 POTTSVILLE, PA 17901 (570) 385-2122		3920 Columbus Ave., Lancaster, PA 17603 Phone (717) 394-3721 • Fax (717) 394-1063 Email: retire@retire.com Website: www.retire.com		REILLY TOWNSHIP	
		DRAWING REFERENCE: N:\02\02034-01\CADD (211 leawp)\Drawing\02023401-detailed.dwg		XREFS: 02023401-b [N:\02\02034-01\CADD (211 leawp)\Drawing\02023401-b.dwg] 02023401-c [N:\02\02034-01\CADD (211 leawp)\Drawing\02023401-c.dwg] 02023401-d [N:\02\02034-01\CADD (211 leawp)\Drawing\02023401-d.dwg]		SCALE: NO SCALE		DATE: MAY 22, 2003		SHEET NO. 6 OF 7	
		REVISED PLAN SCHEME		DATE		NO		DWG. NO. 02-04234-001		BIDDING DOCUMENTS	