1109

APPLICATION FOR SITE PLAN APPROVAL

Owner of record: AMERICAN SCHOOL FOR THE DEAF

Address of owner: 139 No. MAIN ST. W. HARTFORD, CT 06107-1269

Property Location: Tax Map 24 Lot 2 Land Records: Vol. 120 Page 923

Acreage: 10.7 Zone: RR1

Site Plan Requirements:

Soil Erosion and Sediment Control Measures: SILT FENCE, CONSTRUCTION ENTRANCE

Conservation Commission Approval, if applicable: APPROVED 5/26/26

Historic District Commission Approval, if applicable: N/A

Approval From TAHD: PENDING WPCA: _____ BHC: _____

If applicable, boundaries of flood plain, aquifer protection zone, Housatonic River District, or Historic District should be on Site Plan.

Additional Remarks: _____

Owner's Signature: _____ Date: _____

Applicant's Signature and Title: Lloyd Johannesen Engineer/AGENT

Applicant's address and phone number: P.O. BOX 726 CANAAN, CT

860-824-1400

Filed at Planning and Zoning Commission Office: _____, 2001
Date of next regular Commission meeting: _____
Date of approval or denial of plan: _____

A decision on a site plan submitted as part of a zoning permit application shall be rendered within 65 days after receipt of the plan at a regular meeting of the Commission. The applicant may request extensions of the decision period, not to exceed two further 65-day periods.

CONSTRUCTION NARRATIVE

1.1 PURPOSE AND DESCRIPTION OF THE PROJECT:
INSTALL SEPTIC SYSTEM REPAIR SYSTEMS FOR TWO EXISTING BUILDINGS ON SITE, REPLACE EXISTING STEEP GRAVEL DRIVEWAY WITH SHALLOWER SLOPED DRIVE MEETING TOWN STANDARDS

1.2 THE TOTAL AREA OF THE LOT IS 10.735 ACRES
THERE ARE NO WETLANDS ON SITE. THE LAKE IS ACROSS THE ROAD

1.3 THE PROJECT INCLUDES TWO SEPTIC SYSTEM REPAIRS AND CONSTRUCTING A NEW DRIVEWAY THAT MEETS THE TOWNS STANDARDS.

1.4 THE ANTICIPATED START DATE FOR THE PROJECT IS JUNE 2026, WITH A COMPLETION DATE OF AUGUST 2026. (DATES ARE SUBJECT TO CHANGE.)

1.5 2024 CONNECTICUT GUIDELINES FOR SOIL EROSION & SEDIMENT CONTROL ARE TO BE CONSIDERED A PART OF THESE PLANS.

2.0 CONSTRUCTION SEQUENCE:

1. OBTAIN ALL NECESSARY PERMITS.
2. CONTACT CALL-BEFORE-YOU-DIG (1-800-922-4455) TO MARK OUT LOCATION OF ALL EXISTING UTILITIES ON AND ADJACENT TO SITE.
3. INSTALL EROSION CONTROL MEASURES (2 DAYS)
4. REMOVE TOPSOIL AS REQUIRED. (1 WEEK)
5. INSTALL SEPTIC SYSTEMS (2 WEEKS)
6. INSTALL NEW DRIVEWAY (2 WEEKS)
7. FINAL GRADE DISTURBED AREAS (1 WEEK)
8. TOPSOIL, SEED AND MULCH ALL DISTURBED AREAS. (1 WEEK)
9. REMOVE SEDIMENTATION AND EROSION CONTROL MEASURES ONLY AFTER ALL AREAS ARE STABILIZED AND WHEN IT IS AUTHORIZED BY THE TOWN OF SALISBURY.
10. THE PERSON RESPONSIBLE FOR THE PROPER IMPLEMENTATION OF THE DESIGN AND/OR FIXING ANY POTENTIAL PROBLEMS IS THE OWNER.

5-3-2 TEMPORARY SEEDING (TS)

SELECT GRASS SPECIES APPROPRIATE FOR THE SEASON AND SITE CONDITIONS FROM FIGURE TS-2 BELOW.
SEED WITH A TEMPORARY SEED MIXTURE WITHIN 7 DAYS AFTER THE SUSPENSION OF GRADING WORK IN DISTURBED AREAS WHERE THE SUSPENSION OF WORK IS EXPECTED TO BE MORE THAN 30 DAYS BUT LESS THAN 1 YEAR. SEEDING OUTSIDE THE OPTIMUM SEEDING DATES GIVEN IN FIGURE TS-2 MAY RESULT IN EITHER INADEQUATE GERMINATION OR LOW PLANT SURVIVAL RATES, REDUCING EROSION CONTROL EFFECTIVENESS.
INSTALL NEEDED EROSION CONTROL MEASURES SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, SEDIMENT BASINS AND GRASSED WATERWAYS IN ACCORDANCE WITH THE APPROVED PLAN.
GRADE ACCORDING TO PLANS AND ALLOW FOR THE USE OF APPROPRIATE EQUIPMENT FOR SEEDBED PREPARATION, SEEDING, MULCH APPLICATION, AND MULCH ANCHORING. ALL GRADING SHOULD BE DONE IN ACCORDANCE WITH THE APPROVED PLANS.
LOOSEN THE SOIL TO A DEPTH OF 3-4 INCHES WITH A SLIGHTLY ROUGHENED SURFACE. IF THE AREA HAS BEEN RECENTLY LOOSENED OT DISTURBED, NO FURTHER ROUGHENING IS REQUIRED. SOIL PREPARATION CAN BE ACCOMPLISHED BY TRACKING WITH A BULLDOZER, DISCING, HARROWING, RAKING OR DRAGGING WITH A SECTION OF CHAIN LINK FENCE. AVOID EXCESSIVE COMPACTION OF THE SURFACE BY EQUIPMENT TRAVELING BACK AND FORTH OVER THE SURFACE. IF THE SLOPE IS TRACKED, THE CLEAT MARKS SHALL BE PERPENDICULAR TO THE ANTICIPATED DIRECTION OF THE FLOW OF SURFACE WATER.
APPLY GROUND LIMESTONE AND FERTILIZER ACCORDING TO SOIL TEST RECOMMENDATIONS (SUCH AS THOSE OFFERED BY THE UNIVERSITY OF CONNECTICUT SOIL TESTING LABORATORY OR OTHER RELIABLE SOURCE). SOIL SAMPLE MAILERS ARE AVAILABLE FROM THE LOCAL COOPERATIVE EXTENSION SYSTEM OFFICE.
IF SOIL TESTING IS NOT FEASIBLE ON SMALL OR VARIABLE SITES, OR WHERE TIMING IS CRITICAL, FERTILIZER MAY BE APPLIED AT THE RATE OF 300 POUNDS PER ACRE OR 7.5 POUNDS PER 1,000 SQ. FT. OF 10-10-10 OR EQUIVALENT. ADDITIONALLY, LIME MAY BE APPLIED USING RATES GIVEN IN FIGURE TS-1.

FIGURE TS-1 SOIL TEXTURE VS. LIMING RATES

SOIL TEXTURE	TONS / ACRE OF LIME	LBS / 1,000 SQ. FT. OF LIME
CLAY, CLAY LOAM AND HIGH ORGANIC SOIL	3	135
SANDY LOAM, LOAM, SILT LOAM	2	90
LOAMY SAND, SAND	1	45

APPLY SEED UNIFORMLY BY HAND, CYCLONE SEEDER, DRILL, CULTIPACKER TYPE SEEDER OF HYDROSEEDER AT A MINIMUM RATE FOR THE SELECTED SEED IDENTIFIED IN FIGURE TS-2. INCREASE SEEDING RATES BY 10% WHEN HYDROSEEDING.
TEMPORARY SEEDINGS MADE DURING OPTIMUM SEEDING DATES SHALL BE MULCHED. NOTE WHEN SEEDING OUTSIDE OF THE OPTIMUM SEEDING DATES, INCREASE THE APPLICATION OF MULCH TO PROVIDE 95%-100% COVERAGE.
INSPECT SEEDED AREA AT LEAST ONCE A WEEK AND WITHIN 24 HOURS OF THE END OF A STORM WITH A RAINFALL AMOUNT OF 0.5 INCHES OR GREATER FOR SEED AND MULCH MOVEMENT AND RILL EROSION. WHERE SEED HAS MOVED OR WHERE SOIL EROSION HAS OCCURRED, DETERMINE THE CAUSE OF THE FAILURE. BIRD FEEDING MAY BE A PROBLEM IF MULCH WAS APPLIED TOO THINLY TO PROTECT SEED. RE-SEED AND RE-MULCH. IF MOVEMENT WAS THE RESULT OF WIND, THEN REPAIR EROSION DAMAGE (IF ANY), REAPPLY SEED AND MULCH AND APPLY MULCH ANCHORAGE. IF FAILURE WAS CAUSED BE CONCENTRATED RUNOFF, INSTALL ADDITIONAL MEASURES TO CONTROL WATER AND SEDIMENT MOVEMENT, REPAIR EROSION DAMAGE, RE-SEED AND RE-APPLY MULCH WITH ANCHORING OR USE TEMPORARY EROSION CONTROL BLANKET.
CONTINUE INSPECTIONS UNTIL THE GRASSES ARE FIRMLY ESTABLISHED. GRASSES SHALL NOT BE CONSIDERED ESTABLISHED UNTIL A GROUND COVER IS ACHIEVED WHICH IS MATURE ENOUGH TO CONTROL SOIL EROSION AND TO SURVIVE SEVERE WEATHER CONDITIONS (APPROXIMATELY 80% VEGETATIVE SURFACE COVER).

NO INVASIVE PLANT SPECIES WILL BE ALLOWED IN TEMPORARY SEED MIXES.

STOCKPILE MANAGEMENT

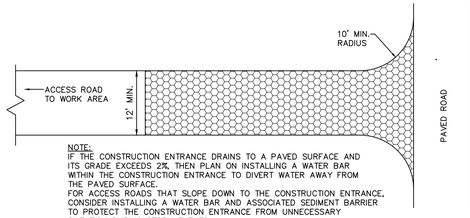
STOCKPILE MANAGEMENT OF TOPSOIL AND OTHER TYPES OF ERODIBLE SOILS IS NECESSARY TO PREVENT UNNECESSARY DAMAGE RESULTING FROM EROSION OF STOCKPILE MATERIAL. LOCATE STOCKPILES SO THAT NATURAL DRAINAGE IS NOT OBSTRUCTED. ATTEMPT TO MAXIMIZE THE DISTANCE OF STOCKPILES FROM WETLANDS, WATERCOURSES, DRAINAGE WAYS, AND STEEP SLOPES. WHEN THE STOCKPILE IS DOWN GRADIENT FROM A LONG SLOPE, DIVERT RUNOFF WATER AWAY FROM OR AROUND THE STOCKPILE. INSTALL A GEOTEXTILE SILT FENCE OR HAY BALE BARRIER AROUND THE STOCKPILE AREA APPROXIMATELY 10 FEET FROM THE PROPOSED TOE OF THE SLOPE.
THE SIDE SLOPES OF STOCKPILED MATERIAL THAT IS ERODIBLE SHOULD BE NO STEEPER THAN 2:1. STOCKPILES THAT ARE NOT TO BE USED WITHIN 30 DAYS NEED TO BE SEEDED AND MULCHED IMMEDIATELY AFTER FORMATION OF THE STOCKPILE. THE SEED MIX USED DEPENDS UPON THE STOCKPILED MATERIAL AND THE LENGTH OF TIME IT IS TO REMAIN STOCKPILED. INFORMATION GATHERED FROM SOIL BORINGS AND SOIL DELINEATIONS CAN BE USED TO PLAN THE TYPE OF SEED AND ANY SOIL AMENDMENTS THAT ARE APPROPRIATE FOR THE STOCKPILE. AFTER THE STOCKPILE HAS BEEN REMOVED, THE SITE SHOULD BE GRADED AND PERMANENTLY STABILIZED.
IF A STOCKPILE IS LOCATED OFF-SITE, LOCAL ZONING APPROVAL MAY BE REQUIRED. IN ADDITION TO THE ABOVE CRITERIA, STOCKPILES THAT ARE LOCATED OFF-SITE REQUIRE A CONSTRUCTION ENTRANCE PAD INSTALLED AT THAT SITE. DEPENDING ON THE VOLUME OF TRAFFIC, THE INSTALLATION OF "TRUCK CROSSING" SIGNS AND SWEEPING OF THE ROADWAY MAY ALSO BE NECESSARY.

FIGURE PS-2 SELECTING SEED MIX TO MATCH NEED

AREA TO BE SEEDED	MIXTURE NUMBER (1) MOWING DESIRED	MIXTURE NUMBER (1) MOWING NOT REQUIRED
BORROW AREAS, ROADSIDES, DIKES, LEVEES, POND BANKS AND OTHER SLOPES AND BANKS A) WELL OR EXCESSIVELY DRAINED SOILS (2) B) SOMEWHAT POORLY DRAINED SOIL (2) C) VARIABLE DRAINAGE SOILS (2)	1, 2, 3, 4, 5 OR 8 2 2	5, 6, 7, 8, 9, 10, 11, 12, 16 OR 22 5 OR 6 5, 6 OR 11
DRAINAGE DITCH AND CHANNEL BANKS A) WELL OR EXCESSIVELY DRAINED SOILS (2) B) SOMEWHAT POORLY DRAINED SOILS (2) C) VARIABLE DRAINAGE SOILS (2)	1, 2, 3 OR 4 2 2	9, 10, 11 OR 12
DIVERSIONS A) WELL OR EXCESSIVELY DRAINED SOILS (2) B) SOMEWHAT POORLY DRAINED SOILS (2) C) VARIABLE DRAINAGE SOILS (2)	2, 3 OR 4 2 2	9, 10 OR 11
EFFLUENT DISPOSAL		5 OR 6
GRAVEL PITS (3)		26, 27 OR 28
GULLIED AND ERODED AREAS		3, 4, 5, 8, 10, 11 OR 12
MINESPOIL & WASTE, AND OTHER SPOIL BANKS (IF TOXIC SUBSTANCES & PHYSICAL PROPERTIES NOT LIMITING) (3)		15, 16, 17, 18, 26, 27 OR 28
SHORELINES (FLUCTUATING WATER LEVELS)		5 OR 6
SKI SLOPES		4 OR 10
SOD WATERWAYS AND SPILLWAYS	1, 2, 3, 4, 6, 7 OR 8	1, 2, 3, 4, 6, 7 OR 8
SUNNY RECREATION AREAS (PICNIC AREAS AND PLAYGROUNDS OR DRIVING AND ARCHERY RANGES, NATURE TRAILS)	1, 2 OR 23	
CAMPING AND PARKING, NATURE TRAILS (SHADED)	19, 21 OR 23	
SAND DUNES (BLOWING SAND)	25	
WOODLAND ACCESS ROADS, SKID TRAILS AND LOG YARDING AREAS		9, 10, 16, 22 OR 26
LAWNS AND HIGH MAINTENANCE AREAS	1, 19, 21 OR 29	

(1) THE NUMBERS FOLLOWING IN THESE COLUMNS REFER TO SEED MIXTURES IN FIGURE PS-3. MIXES FOR SHADY AREAS ARE UNDERLINED (INCLUDING MIXES 20 THROUGH 24).
(2) SEE COUNTY SOIL SURVEY FOR DRAINAGE CLASS. SOIL SURVEYS ARE AVAILABLE FROM THE COUNTY SOIL AND WATER CONSERVATION DISTRICT OFFICE.
(3) USE MIX 26 WHEN SOIL PASSING A 200 MESH SIEVE IS LESS THAN 15% OF TOTAL WEIGHT. USE MIX 26 & 27 WHEN SOIL PASSING A 200 MESH SIEVE IS BETWEEN 15 AND 20% OF TOTAL WEIGHT. USE MIX 26, 27 AND 28 WHEN SOIL PASSING A 200 MESH SIEVE IS ABOVE 20% OF TOTAL WEIGHT.

EROSION CONTROL DETAILS

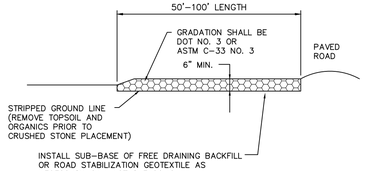


NOTE:
IF THE CONSTRUCTION ENTRANCE DRAINS TO A PAVED SURFACE AND ITS GRADE EXCEEDS 2%, THEN PLAN ON INSTALLING A WATER BAR WITHIN THE CONSTRUCTION ENTRANCE TO DIVERT WATER AWAY FROM THE PAVED SURFACE.
FOR ACCESS ROADS THAT SLOPE DOWN TO THE CONSTRUCTION ENTRANCE, CONSIDER INSTALLING A WATER BAR AND ASSOCIATED SEDIMENT BARRIER TO PROTECT THE CONSTRUCTION ENTRANCE FROM UNNECESSARY SILTATION DURING STORM EVENTS.

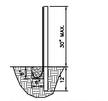
5-12-2 CONSTRUCTION ENTRANCE DETAIL (CE)
NOT TO SCALE

1. EXCAVATE 4" DEEP TRENCH WIDE ENOUGH FOR HAY BALES TO SIT IN
2. SET HAYBALES 4" DEEP INTO DISTURBED EXCAVATION AREA.
3. HAYBALES SHALL BE STAKED IN PLACE WITH MIN. 2 STAKES PER BALE.
4. ANGLE FIRST STAKE IN EACH BALE TOWARD PREVIOUSLY STAKED HAYBALE TO FORCE THE BALES TOGETHER.
5. FILL ANY GAPS BETWEEN THE BALES WITH HAY OR STRAW TO PREVENT WATER FROM ESCAPING BETWEEN THE BALES.
6. BACKFILL THE HAYBALE TRENCH WITH THE EXCAVATED TRENCH MATERIAL. TAMP TO COMPACT THE SOIL

5-11-30 HAYBALE BARRIER DETAIL (HB)
NOT TO SCALE

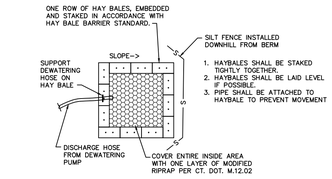


5-12-2 CONSTRUCTION ENTRANCE DETAIL (CE)
NOT TO SCALE

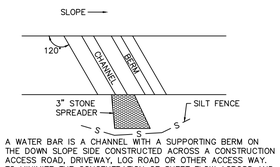


1. EXCAVATE 6"X6" TRENCH ON THE UPSLOPE SIDE OF THE FENCE LOCATION.
2. DRIVE SUPPORT POSTS ON THE DOWN SLOPE SIDE OF THE TRENCH TO A DEPTH OF AT LEAST 12" INTO ORIGINAL GROUND.
3. POSTS MAY BE ANGLED UPHILL TO OVER COMPENSATE FOR ANY SAGGING IN FENCE DUE TO PRESSURE FROM BUILT UP SEDIMENT.
4. STAPLE OR SECURE GEOTEXTILE TO THE POSTS PER MANUFACTURERS RECOMMENDATIONS SUCH THAT 6" OF FABRIC LIES IN THE TRENCH.
5. BACKFILL THE TRENCH WITH THE EXCAVATED TRENCH MATERIAL OVER THE FABRIC. TAMP TO COMPACT THE SOIL

5-11-35 GEOTEXTILE SILT FENCE DETAIL (GSF)
NOT TO SCALE



5-13-7 PUMPING SETTLING BASIN DETAIL (PSB)
NOT TO SCALE



A WATER BAR IS A CHANNEL WITH A SUPPORTING BERM ON THE DOWN SLOPE SIDE CONSTRUCTED ACROSS A CONSTRUCTION ACCESS ROAD, DRIVEWAY, LOG ROAD OR OTHER ACCESS WAY. TO MINIMIZE THE CONCENTRATION OF SHEET FLOW ACROSS AND DOWN SLOPING ROADWAYS AND ACCESS WAYS, OR SIMILAR SLOPING AND UNSTABLE AREAS, AND TO SHORTEN THE CONTINUOUS FLOW LENGTH WITHIN A SLOPING RIGHT-OF-WAY. FROM THE BOTTOM OF THE CHANNEL TO THE CREST OF THE BERM THE MINIMUM VERTICAL DISTANCE IS 9 INCHES AND THE MAXIMUM DISTANCE IS 18 INCHES.
SIDE SLOPES ARE 2:1 OR FLATTER, ADJUST THE SIDE SLOPES TO ACCOMMODATE VEHICLE CLEARANCE AND WHEEL BASE REQUIREMENT.
MINIMUM BASE WIDTH OF THE BERM IS 6 FEET.
SPAN THE WATER BAR COMPLETELY ACROSS THE ACCESS WAY OR ROADWAY.
SPACING OF WATER BARS IS BASED ON SLOPE PER TABLE BELOW

SLOPE OF ACCESS WAY	MAX. SPACING OF WATER BARS
1%	400'
2%	245'
5%	125'
10%	78'
15%	58'

5-7-6 WATER BAR DETAIL (WB)
NOT TO SCALE

FIGURE TS-2 TEMPORARY SEEDING RATES AND DATES

SPECIES (4)	SEEDING RATES (LBS) /ACRE	SEEDING RATES (LBS) /1,000 SF.	SEED DEPTH (2) OPTIMUM (INCHES)	OPTIMUM SEEDING DATES (1) 3/1	4/1	5/1	6/1	7/1	8/1	9/1	10/1	PLANT CHARACTERISTICS
				3/15	4/15	5/15	6/15	7/15	8/15	9/15	10/15	
ANNUAL RYEGRASS LOLIUM MULTIFLORUM	40	1.0	0.5									MAY BE ADDED IN MIXES. WILL MOW OUT OF MOST STANDS.
PERENNIAL RYEGRASS LOLIUM PERENNE	40	1.0	0.5									USE FOR WINTER COVER. TOLERATES COLD AND LOW MOISTURE.
WINTER RYE SECALE CEREALE	120	3.0	1.0									QUICK GERMINATION AND HEAVY SPRING GROWTH. DIES BACK IN JUNE WITH LITTLE REGROWTH.
OATS AVENA SATIVA	86	2.0	1.0									IN NORTHERN CT, WILL WINTER KILL WITH THE FIRST KILLING FROST AND MAY THROUGHOUT THE STATE IN SEVERE WINTERS.
WINTER WHEAT TRITICUM AESTIVUM	120	3.0	1.0									QUICK GERMINATION WITH MODERATE GROWTH. DIES BACK IN JUNE WITH NO REGROWTH.
MILLET ECHINOCHLOA CRUSGALLI	20	0.5	1.0									WARM SEASON SMALL GRAIN. DIES WITH FROST IN SEPTEMBER.
SUDANGRASS AORGHUM SUDANENSE	30	0.7	1.0									TOLERATES WARM TEMPERATURES AND DROUGHTY CONDITIONS.
BUCKWHEAT FAGOPYRUM ESCULENTUM	15	0.4	1.0									HARDY PLANT THAT WILL RESEED ITSELF AND IS GOOD AS A GREEN MANURE CROP.
WEEPING LOVEGRASS ERAGOSTIS CURBULA	5	0.2	0.25									WARM SEASON PERENNIAL. MAY BUNCH. TOLERATES HOT, DRY SLOPES, ACID INFERTILE SOILS. EXCELLENT NURSE CROP. USUALLY WINTER KILLS.
DOT ALL PURPOSE MIX (3)	150	3.4	0.5									SUITABLE FOR ALL CONDITIONS.

(1) MAY BE PLANTED THROUGHOUT SUMMER IF SOIL MOISTURE IS ADEQUATE OR CAN BE IRRIGATED. FALL SEEDING MAY BE EXTENDED 15 DAYS IN THE COASTAL TOWNS.
(2) SEED AT TWICE THE INDICATED DEPTH FOR SANDY SOILS.
(3) SEE PERMANENT SEEDING FIGURE PS-3 FOR SEEDING MIXTURE REQUIREMENTS.
(4) LISTED SPECIES MAY BE USED IN COMBINATIONS TO OBTAIN A BROADER TIME SPECTRUM. IF USED IN COMBINATIONS, REDUCE EACH SPECIES PLANTING RATE BY 20% OF THAT LISTED.

SEAL

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REVISIONS NUMBER - DESCRIPTION - DATE - INITIAL

PROPOSED EROSION AND SEDIMENTATION CONTROL PLAN
PREPARED FOR
AMERICAN SCHOOL FOR THE DEAF
231 TWIN LAKES ROAD
SALISBURY, CONNECTICUT

SCALE: AS NOTED
FILE NAME: 1109-ES
DATE: 5/27/26
ISSUED FOR: PERMITTING
PROJECT NO. 1109
DRAWING NO. ES-1

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5-3-5 PERMANENT SEEDING (PS)

THERE ARE SEVERAL FACTORS THAT SHOULD BE CONSIDERED WHEN EVALUATING A SITE FOR THE ESTABLISHMENT OF PERMANENT VEGETATION.
SEEDING DATES IN CONNECTICUT ARE NORMALLY APRIL 1 THROUGH JUNE 15 AND AUGUST 15 THROUGH OCTOBER 1. SPRING SEEDINGS GIVE THE BEST RESULTS AND SPRING SEEDINGS OF ALL MIXES WITH LEGUMES IS RECOMMENDED.
THERE ARE TWO EXCEPTIONS TO THE ABOVE DATES. THE FIRST EXCEPTION IS WHEN SEEDINGS WILL BE IN THE AREAS OF CONNECTICUT KNOWN AS THE COASTAL SLOPE AND THE CONNECTICUT RIVER VALLEY. THE COASTAL SLOPE INCLUDES THE COASTAL TOWNS OF NEW LONDON, MIDDLESEX, NEW HAVEN, AND FAIRFIELD COUNTIES. IN THESE AREAS, WITH THE EXCEPTION OF CROWN VETCH, THE FINAL FALL SEEDING DATES CAN BE EXTENDED AN ADDITIONAL 15 DAYS. THE SECOND EXCEPTION IS FROST CRACK OR DORMANT SEEDING. IN THIS TYPE OF SEEDING, THE SEED IS APPLIED DURING THE TIME OF YEAR WHEN NO GERMINATION CAN BE EXPECTED, NORMALLY NOVEMBER THROUGH FEBRUARY. GERMINATION WILL TAKE PLACE WHEN WEATHER CONDITIONS IMPROVE. IN THIS TYPE OF SEEDING, MULCHING IS EXTREMELY IMPORTANT TO PROTECT THE SEED FROM WIND AND SURFACE EROSION AND TO PROVIDE EROSION PROTECTION UNTIL THE SEEDING BECOMES ESTABLISHED.
THE NEED FOR TOPSOIL IS DETERMINED BY A COMBINATION OF EXISTING SOIL FERTILITY AND INTENDED USE. THE POORER THE SITE IS IN TERMS OF NATURAL FERTILITY AND SOIL TEXTURE, THE GREATER THE NEED FOR TOPSOIL. THIS IS ESPECIALLY TRUE ON SITES WHERE A HIGH QUALITY VEGETATIVE COVER IS NEEDED EITHER FOR EROSION CONTROL OR AESTHETICS.
SOIL TEXTURE (RATIO OF GRAVEL, SAND, SILT, CLAY AND ORGANIC MATERIAL) CAN AFFECT THE CHOICE OF A SEED MIXTURE FOR VEGETATING DISTURBED AREAS. FOR EXAMPLE, SITES WHICH HAVE SOILS WITH A LARGE PERCENTAGE OF SANDS AND GRAVELS WILL TEND TO BE DROUGHTY AND THEREFORE REQUIRE A MIXTURE THAT WILL TOLERATE WET CONDITIONS. SOIL TEXTURE OF THE SITE MAY WARRANT CONSIDERATION FOR THE USE OF TOPSOIL OR SODDING.
REFERRING TO FIGURE PS-2, CONSIDER THE ULTIMATE USE AND MAINTENANCE REQUIREMENTS OF THE AREA WHEN CHOOSING A SEED MIXTURE TO BE USED. THERE ARE TWO LEVELS OF MAINTENANCE: AREAS THAT WILL BE MOWED AND AREAS THAT WILL NOT.
AREAS THAT WILL BE MOWED CAN HAVE DIFFERENT LEVELS OF MAINTENANCE AND MOWING. GOLF COURSES AND RECREATION AREAS WILL REQUIRE MORE INTENSIVE MANAGEMENT THAN ROADSIDE BANKS AND MEDIANS.
AREAS SUCH AS SPOIL BANKS, GRAVEL PITS AND STEEP ROAD BANKS ONCE SEEDED AND ESTABLISHED WILL REQUIRE NO FURTHER MOWING AND LITTLE, IF ANY, MAINTENANCE.
DO NOT USE PERMANENT SEEDING ON SLOPES STEEPER THAN 2:1. UNDER SATURATED CONDITIONS SLOPES COULD DEVELOP DEEP OR SHALLOW SURFACE FAILURES. IN CASES SUCH AS THIS, MAINTENANCE CAN BE A CONSTANT PROBLEM AND THERE CAN BE DANGER TO STRUCTURES. A THOROUGH SITE INVESTIGATION IS NEEDED TO DETERMINE IF ALTERNATIVES SUCH AS BENCHING OR OTHER STRUCTURAL METHODS ARE NEEDED TO ENSURE SOIL STABILITY BEFORE SEEDING IS DONE.
COOL SEASON GRASSES ARE THOSE SPECIES THAT NORMALLY BEGIN GROWTH VERY EARLY IN THE SPRING (LATE MARCH TO EARLY APRIL) AND WILL CONTINUE TO GROW UNTIL WARM WEATHER SETS IN MID-JUNE. AT THE ONSET OF HOT WEATHER, COOL SEASON GRASSES WILL ENTER A STAGE OF DORMANCY AND EXHIBIT LITTLE GROWTH. THEY WILL MAINTAIN THAT DORMANT STATE UNTIL THE COOLER WEATHER OF THE FALL (END OF AUGUST) AND WILL THEN BEGIN TO GROW AGAIN UNTIL LATE FALL (END OF OCTOBER). WARM SEASON GRASSES ON THE OTHER HAND, DO NOT BEGIN VIGOROUS GROWTH UNTIL WARM WEATHER (LATE MAY) AND WILL CONTINUE GROWTH UNTIL COOL WEATHER IN THE LATE FALL (MID SEPTEMBER). COOL SEASON GRASSED GENERALLY ARE THE SOD FORMERS, SUCH AS BLUEGRASS, WHILE THE WARM SEASON GRASSES, SUCH AS THE PERRENIAL RYES, DO NOT FORM SOD.
SOMETIMES SEEDING WILL OCCUR AFTER A PREVIOUS APPLICATION OF MULCH. IF WOOD CHIPS, BARK OR SIMILAR MATERIALS WERE USED ON THE SEEDING AREA, PLAN ON EITHER REMOVING THE MULCH OR INCORPORATING IT INTO THE SOIL AND APPLYING MORE NITROGEN. PREVIOUSLY APPLIED HAY AND STRAW MULCH CAN BE INCORPORATED INTO THE SOIL WITHOUT ADDING SUPPLEMENTAL NITROGEN.
SELECT A SEED MIXTURE APPROPRIATE TO THE INTENDED USE AND SOIL CONDITIONS FROM FIGURE PS-S AND FIGURE PS-3 OR USE MIXTURE RECOMMENDED BY THE NRCS. FOR SEED MIXTURES CONTAINING LEGUMES, SELECT THE TYPE AND AMOUNT OF INOCULANT THAT IS SPECIFIC FOR THE LEGUME TO BE USED,
WHEN BUYING SEED MAKE SURE THE QUALITY OF THE SEED IS GIVEN FOR PURE LIVE SEED AND GERMINATION RATE. ASK THE SUPPLIER FOR AN AFFIDAVIT OF PURITY AND GERMINATION RATE IF THERE IS ANY QUESTION. EXPECT A PURITY OF BETWEEN 95% AND 98% AND GERMINATION RATE BETWEEN 70% AND 90%. SOME SEEDING MIXTURES CALL FOR PURE LIVE SEED. AN EXAMPLE OF CALCULATION OF PURE LIVE SEED IS GIVEN IN FIGURE PS-3.
INCREASE SEEDING RATES 10% WHEN USING FROST CRACK SEEDING OR HYDROSEEDING.
SEED WITH A PERMANENT SEED MIXTURE WITHIN 7 DAYS AFTER ESTABLISHING FINAL GRADES OR WHEN GRADING WORK WITHIN A DISTURBED AREA IS TO BE SUSPENDED FOR A PERIOD OF MORE THAN 1 YEAR. SEEDING IS RECOMMENDED FROM APRIL 1 THROUGH JUNE 15 AND AUGUST 14 THROUGH OCTOBER 1, WITH THE FOLLOWING EXCEPTIONS:
FOR THE COASTAL TOWNS AND IN THE CONNECTICUT RIVER VALLEY FINAL FALL SEEDING DATES CAN BE EXTENDED AN ADDITIONAL 15 DAYS, AND
DORMANT OR FROST CRACK SEEDING IS DONE AFTER THE GROUND IS FROZEN.
GRADE ACCORDING TO PLANS, INSTALL ALL NECESSARY SURFACE WATER CONTROLS. FOR AREAS TO BE MOWED REMOVE ALL SURFACE STONES 2 INCHES OR LARGER. REMOVE ALL OTHER DEBRIS SUCH AS WIRE, CABLE, TREE ROOTS, PIECES OF CONCRETE, CLODS, LUMPS OR OTHER UNSUITABLE MATERIAL.
NOTE: ON AREAS WHERE WOOD CHIPS AND/OR BARK MULCH WAS PREVIOUSLY APPLIED, EITHER REMOVE THE MULCH OR INCORPORATE IT INTO THE SOIL WITH A NITROGEN FERTILIZER ADDED. NITROGEN APPLICATION RATE IS DETERMINED BY SOIL TEST AT TIME OF SEEDING; ANTICIPATE 12 LBS. NITROGEN PER TON OF WOOD CHIPS AND/OR BARK MULCH.
APPLY TOPSOIL, IF NECESSARY. APPLY FERTILIZER AND GROUND LIMESTONE ACCORDING TO SOIL TESTS CONDUCTED BY THE UNIVERSITY OF CONNECTICUT SOIL TESTING LABORATORY OR OTHER RELIABLE SOURCE. A pH RANGE OF 6.2 TO 7.0 IS OPTIMAL FOR PLANT GROWTH OF MOST GRASS SPECIES.
WHERE SOIL TESTING IS NOT FEASIBLE ON SMALL OR VARIABLE SITES, OR WHERE TIMING IS CRITICAL, FERTILIZER MAY BE APPLIED AT THE RATE OF 300 POUNDS PER ACRE OR 7.5 POUNDS PER 1,000 SQUARE FEET USING 10-10-10 OR EQUIVALENT AND LIMESTONE AT 4 TONS PER ACRE OR 200 POUNDS PER 1,000 SQUARE FEET. ADDITIONALLY LIME MAY BE APPLIED USING RATES GIVEN IN FIGURE PS-1. A pH OF 6.2 TO 7.0 IS OPTIMAL.
FOR AREAS THAT WERE PREVIOUSLY MULCHED WITH WOOD CHIPS OR BARK AND THE WOOD CHIPS OR BARK ARE TO BE INCORPORATED INTO THE SOIL, APPLY ADDITIONAL NITROGEN AT A RATE THAT IS DETERMINED BY SOIL TESTS AT THE TIME OF SEEDING.
WORK LIME AND FERTILIZER (ORGANIC ONLY) INTO THE SOIL TO A DEPTH OF 3 TO 4 INCHES WITH A DISC OR OTHER SUITABLE EQUIPMENT. CONTINUE TILLAGE UNTIL A REASONABLY UNIFORM, FINE SEEDBED IS PREPARED. FOR AREAS TO BE MOWED THE FINAL SOIL LOOSENING AND SURFACE ROUGHENING OPERATION IS BY HAND, HARROW OR DISK. IF DONE BY HARROW OR DISC, IT IS GENERALLY DONE ON THE CONTOUR. AREAS NOT TO BE MOWED CAN BE TRACKED WITH CLEATED EARTHMOVING EQUIPMENT PERPENDICULAR TO THE SLOPE. HOWEVER, FOR AREAS WHERE TEMPORARY EROSION CONTROL BLANKETS ARE TO BE USED INSTEAD OF MULCH FOR SEED, PREPARE THE SEED BED IN ACCORDANCE WITH BLANKET MANUFACTURER'S RECOMMENDATIONS.
INSPECT SEEDBED JUST BEFORE SEEDING. IF THE SOIL IS COMPACTED, CRUSTED OR HARDENED, SCARIFY THE AREA PRIOR TO SEEDING.
APPLY SELECTED SEED AT RATES PROVIDED IN FIGURE PS-3 UNIFORMLY BY HAND, CYCLONE SEEDER, DRILL, CULTIPACKER TYPE SEEDER OR HYDROSEEDER (SLURRY INCLUDING SEED, FERTILIZER). NORMAL SEEDING DEPTH IS FROM 0.25 TO 0.5 INCH. INCREASE SEEDING RATES BY 10% WHEN HYDROSEEDING OR FROST CRACK SEEDING. SEED WARM SEASON GRASSES DURING THE SPRING PERIOD ONLY. APPLY MULCH AS REQUIRED.
WHEN SEEDING OUTSIDE OF THE RECOMMENDED SEEDING DATES IN THE SUMMER MONTHS, WATERING MAY BE ESSENTIAL TO ESTABLISH A NEW SEEDING. IRRIGATION IS A SPECIALIZED PRACTICE AND CARE NEEDS TO BE TAKEN NOT TO EXCEED THE INFILTRATION RATE OF THE SOIL. EACH APPLICATION MUST BE UNIFORMLY APPLIED WITH 1 TO 2 INCHES OF WATER APPLIED PER APPLICATION, SOAKING THE GROUND TO A DEPTH OF 4 INCHES.
INSPECT SEEDED AREA AT LEAST ONCE A WEEK AND WITHIN 24 HOURS OF THE END OF A STORM WITH A RAINFALL AMOUNT OF 0.5 INCH OR GREATER DURING THE FIRST GROWING SEASON.
WHERE SEED HAD BEEN MOVED OR WHERE SOIL EROSION HAS OCCURRED DETERMINE THE CAUSE OF THE FAILURE. BIRD DAMAGE MAY BE A PROBLEM IF MULCH WAS APPLIED TOO THINLY TO PROTECT SEED. RE-SEED AND RE-MULCH. IF MOVEMENT WAS THE RESULT OF WIND, REPAIR EROSION DAMAGE (IF ANY), RE-APPLY SEED AND MULCH, AND APPLY MULCH ANCHORING. IF FAILURE WAS CAUSED BY CONCENTRATED WATER, 1) INSTALL ADDITIONAL MEASURES TO CONTROL WATER AND SEDIMENT MOVEMENT, 2) REPAIR EROSION DAMAGE, 3) RE-SEED AND 4) RE-APPLY MULCH WITH ANCHORING OR USE TEMPORARY EROSION CONTROL BLANKET AND/OR PERMANENT TURF REINFORCEMENT MAT.
IF THERE IS NO EROSION, BUT SEED SURVIVAL IS LESS THAN 100 PLANTS PER SQUARE FOOT AFTER 4 WEEKS OF GROWTH, RE-SEED AS PLANTING SEASON ALLOWS. CONTINUE INSPECTIONS UNTIL AT LEAST 100 PLANTS PER SQUARE FOOT HAVE GROWN AT LEAST 6 INCHES TALL OR UNTIL THE FIRST MOWING.
ALLOW THE MAJORITY OF PLANTS TO ACHIEVE A HEIGHT OF AT LEAST 6 INCHES BEFORE MOWING IT THE FIRST TIME. DO NOT MOW WHILE THE SURFACE IS WET. MOWING WHILE THE SURFACE IS STILL WET MAY PULL MANY SEEDLINGS FROM THE SOIL AND OFTEN LEAVES A SERIES OF UNNECESSARY RUTS. THE FIRST MOWING SHOULD REMOVE APPROXIMATELY ONE THIRD OF THE GROWTH, DEPENDING UPON THE TYPE OF GRASS AND WHERE IT IS BEING USED. DO NOT MOW GRASS BELOW 3 INCHES.
IF THE SEEDING WAS MULCHED, DO NOT ATTEMPT TO RAKE OUT THE MULCHING MATERIAL. NORMAL MOWING WILL GRADUALLY REMOVE ALL UNWANTED DEBRIS.
MOW AND FERTILIZE AT A RATE THAT SUSTAINS THE AREA IN A CONDITION THAT SUPPORTS THE INTENDED USE. IF APPROPRIATE THE HEIGHT OF CUT MAY BE ADJUSTED DOWNWARD, BY DEGREES, AS NEW PLANTS BECOME ESTABLISHED. CARRY OUT ANY FERTILIZATION PROGRAM IN ACCORDANCE WITH APPROVED SOIL TESTS THAT DETERMINE THE PROPER AMOUNT OF LIME AND FERTILIZER NEEDED TO MAINTAIN A VIGOROUS SOD YET PREVENT EXCESSIVE LEACHING OF NUTRIENTS TO THE GROUNDWATER OR RUNOFF TO SURFACE WATERS.
ALTHOUGH WEEDS MAY APPEAR TO BE A PROBLEM, THEY SHADE THE NEW SEEDLINGS AND HELP CONSERVE SURFACE MOISTURE. DO NOT APPLY WEED CONTROL UNTIL THE NEW SEEDING HAS BEEN MOWED AT LEAST FOUR TIMES.
NOTE: NO INVASIVE SPECIES ARE ALLOWED IN THE PERMANENT SEEDING.

MONITORING AND MAINTENANCE

THE PROJECT MANAGER HAS THE RESPONSIBILITY AND AUTHORITY FOR THE IMPLEMENTATION, OPERATION, MONITORING AND MAINTENANCE OF E&S MEASURES. THE PROJECT MANAGER SHALL BE FAMILIAR WITH EACH CONTROL MEASURE USED INCLUDING ITS LIMITATIONS, INSTALLATION, INSPECTION AND MAINTENANCE. WHEN CONTROL MEASURES FAIL, OR ARE FOUND TO BE OTHERWISE INEFFECTIVE, THE PROJECT MANAGER SHALL COORDINATE PLAN REVISIONS WITH A PROFESSIONAL EXPERIENCED IN EROSION AND SEDIMENT CONTROL AND ANY APPROVING AGENCY WHEN THAT AGENCY'S APPROVAL IS REQUIRED. THE PROJECT MANAGER SHALL HAVE THE ADDITIONAL RESPONSIBILITY FOR ENSURING ALL EROSION AND SEDIMENT CONTROLS ARE PROPERLY INSTALLED AND MAINTAINED ON THE CONSTRUCTION SITE BEFORE PREDICTED MAJOR STORMS. A MAJOR STORM IS DEFINED AS A STORM PREDICTED BY THE NATIONAL OFFICE OF ATMOSPHERIC ADMINISTRATION (NOAA) WEATHER SERVICE WITH WARNINGS OF FLOODING, SEVERE THUNDERSTORMS OR SIMILARLY SEVERE WEATHER CONDITIONS OR EFFECTS.
SILT FENCE AND HAYBALE MEASURES SHOULD BE INSPECTED AT LEAST ONCE A WEEK AND WITHIN 24 HOURS AFTER THE END OF A STORM WITH A RAINFALL AMOUNT OF 0.5 INCH OR GREATER TO DETERMINE MAINTENANCE NEEDS. REMOVE THE SEDIMENT DEPOSITS WHEN THE SEDIMENT DEPOSITS REACH APPROXIMATELY ONE HALF THE HEIGHT OF THE MEASURE. REPAIR OR REPLACE ANY DAMAGE OR FAILURE OF THE MEASURE WITHIN 24 HOURS OF OBSERVED FAILURE. ASSESS NEED FOR ADDITIONAL MEASURES.
EROSION CONTROL MEASURES MAY BE REMOVED WHEN THE CONTRIBUTING AREAS ARE STABILIZED.

5-4-5 MULCH FOR SEED (MS)

MULCH FOR SEED, INCLUDING TACKIFIERS AND NETTINGS USED TO ANCHOR MULCH, SHALL BE:
BIODEGRADABLE OR PHOTO-DEGRADABLE WITHIN 2 YEARS BUT WITHOUT SUBSTANTIAL DEGRADATION OVER A PERIOD OF 6 WEEKS,
FREE OF CONTAMINANTS THAT POLLUTE THE AIR OR WATERS OF THE STATE WHEN PROPERLY APPLIED,
FREE OF FOREIGN MATERIAL, COARSE STEMS AND ANY SUBSTANCE TOXIC TO PLANT GROWTH OR WHICH INTERFERES WITH SEED GERMINATION, AND
CAPABLE OF BEING APPLIED EVENLY SUCH THAT IT PROVIDES 80%-95% SOIL COVERAGE AND STILL ADHERES TO THE SOIL SURFACE, DOES NOT SLIP ON SLOPES WHEN IT RAINS OR IS WATERED, DOES NOT BLOW OFF SITE, DISSIPATES RAINDROP SPLASH, HOLDS SOIL MOISTURE, MODERATES SOIL TEMPERATURES AND DOES NOT INTERFERE WITH SEED GROWTH.
TYPES OF MULCHES WITHIN THIS SPECIFICATION INCLUDE, BUT ARE NOT LIMITED TO:
HAY: THE DRIED STEMS AND LEAFY PARTS OF PLANTS CUT AND HARVESTED, SUCH AS ALFALFA, CLOVERS, OTHER FORAGE LEGUMES AND THE FINER STEMMED, LEAFY GRASSES. STEM LENGTH SHOULD NOT AVERAGE LESS THAN 4 INCHES. HAY THAT CAN BE WINDBLOWN MUST BE ANCHORED. PREFERRED MULCH WHEN SEEDING OCCURS OUTSIDE OF THE RECOMMENDED SEEDING DATES.
STRAW: CUT AND DRIED STEMS OF HERBACEOUS PLANTS, SUCH AS WHEAT BARLEY, CEREAL RYE OR BROOM. THE AVERAGE STEM LENGTH SHOULD NOT BE LESS THAN 4 INCHES. STRAW THAT CAN BE WINDBLOWN SHOULD BE ANCHORED TO HOLD IT IN PLACE.
CELLULOSE FIBER: FIBER ORIGIN IS EITHER VIRGIN WOOD, POST-INDUSTRIAL/PRE-CONSUMER WOOD OR POST-CONSUMER WOOD COMPLYING WITH MATERIALS SPECIFICATION (COLLECTIVELY REFERRED TO AS "WOOD FIBER"). NEWSPAPER, KRAFT PAPER, CARDBOARD (COLLECTIVELY REFERRED TO AS "PAPER FIBER") OR A COMBINATION OF WOOD AND PAPER FIBER. PAPER FIBER, IN PARTICULAR, SHALL NOT CONTAIN BORON, WHICH INHIBITS SEED GERMINATION. THE CELLULOSE FIBER MUST BE MANUFACTURED IN SUCH A MANNER THAT AFTER THE ADDITION TO AND AGITATION IN SLURRY TANKS WITH WATER, THE FIBERS IN THE SLURRY BECOME UNIFORMLY SUSPENDED TO FORM A HOMOGENEOUS PRODUCT. SUBSEQUENT TO HYDRAULIC SPRAYING ON THE GROUND, THE MULCH SHALL ALLOW FOR THE ABSORPTION AND PERCOLATION OF MOISTURE AND SHALL NOT FORM A TOUGH CRUST SUCH THAT IT INTERFERES WITH SEED GERMINATION OR GROWTH. GENERALLY APPLIED WITH TACKIFIER AND FERTILIZER. REFER TO MANUFACTURER'S SPECIFICATIONS FOR APPLICATION RATES NEEDED TO ATTAIN 80%-95% COVERAGE WITHOUT INTERFERING WITH SEED GERMINATION OR PLANT GROWTH. NOT RECOMMENDED AS A MULCH FOR USE WHEN SEEDING OCCURS OUTSIDE OF THE RECOMMENDED SEEDING DATES.
OTHER MULCHES ALSO INCLUDE CORN STALKS AND OTHER SIMILAR ORGANIC MATERIALS PROVIDED THEY MEET THE REQUIREMENTS LISTED IN THE FIRST PARAGRAPH OF THIS SECTION DOES NOT INCLUDE MATERIALS SUCH AS WOOD CHIPS, BARK CHIPS OR COCOA HULLS.
TACKIFIERS WITHIN THIS SPECIFICATION INCLUDE, BUT ARE NOT LIMITED TO:
WATER SOLUBLE MATERIALS THAT CAUSE MULCH PARTICLES TO ADHERE TO ONE ANOTHER, GENERALLY CONSISTING OF EITHER A NATURAL VEGETABLE GUM BLENDED WITH GELLING AND HARDENING AGENTS OR A BLEND OF HYDROPHILIC POLYMERS, RESINS, VISCOSIFIERS, STICKING AIDS AND GUMS. GOOD FOR AREAS INTENDED TO BE MOWED. CELLULOSE FIBER MULCH MAY BE APPLIED AS A TACKIFIER TO OTHER MULCHES, PROVIDED THE APPLICATION IS SUFFICIENT TO CAUSE THE OTHER MULCHES TO ADHERE TO ONE ANOTHER. EMULSIFIED ASPHALT IS SPECIFICALLY PROHIBITED FOR USE AS TACKIFIER DUE TO ITS POTENTIAL FOR CAUSING WATER POLLUTION FOLLOWING ITS APPLICATION.
NETTINGS WITHIN THIS SPECIFICATION INCLUDE, BUT ARE NOT LIMITED TO:
PREFABRICATED OPENWORK FABRICS MADE OF CELLULOSE CORD, ROPES, THREADS, OR BIODEGRADABLE SYNTHETIC MATERIAL THAT IS WOVEN, KNOTTED OR MOLDED IN SUCH A MANNER THAT IT HOLDS MULCH IN PLACE UNTIL VEGETATION GROWTH IS SUFFICIENT TO STABILIZE THE SOIL. GENERALLY USED IN AREAS WHERE NO MOWING IS PLANNED. EXAMPLES OF NETTING ARE TOBACCO NETTING (USED WHERE FLOWS ARE NOT CONCENTRATED) AND JUTE NETTING (TYPICALLY USED IN DRAINAGE WAYS).
APPLIED IMMEDIATELY FOLLOWING SEEDING. SOME CELLULOSE FIBER MAY BE APPLIED WITH SEED TO ASSIST IN MARKING WHERE SEED HAS BEEN SPRAYED, BUT EXPECT TO APPLY A SECOND APPLICATION OF CELLULOSE FIBER TO MEET THE REQUIREMENTS.
MULCH MATERIAL SHALL BE SPREAD UNIFORMLY BY HAND OR MACHINE RESULTING IN 80%-95% COVERAGE OF THE DISTURBED SOIL WHEN SEEDING WITHIN THE RECOMMENDED SEEDING DATES. APPLICATIONS THAT ARE UNEVEN CAN RESULT IN EXCESSIVE MULCH SMOTHERING THE GERMINATING SEEDS. FOR HAY OR STRAW ANTICIPATE AND APPLICATION RATE OF 2 TONS PER ACRE. FOR CELLULOSE FIBER FOLLOW MANUFACTURER'S RECOMMENDED APPLICATION RATES TO PROVIDE 80%-95% COVERAGE.
WHEN SEEDING OUTSIDE THE RECOMMENDED SEEDING DATES, INCREASE MULCH APPLICATION RATE TO PROVIDE BETWEEN 95%-100% COVERAGE OF THE DISTURBED SOIL. FOR HAY OR STRAW ANTICIPATE AN APPLICATION RATE OF 2.5 TO 3 TONS PER ACRE.
WHEN NEEDED, MULCH ANCHORING IS APPLIED EITHER WITH THE MULCH AS WITH CELLULOSE FIBER OR APPLIED IMMEDIATELY FOLLOWING MULCH APPLICATION. EXPECT THE NEED FOR MULCH ANCHORING ALONG THE SHOULDERS OF ACTIVELY TRAVELED ROADS, HILL TOPS, AND LONG OPEN SLOPES NOT PROTECTED BY WIND BREAKS.
WHEN USING NETTING, THE MOST CRITICAL ASPECT IS TO ENSURE THAT THE NETTING MAINTAINS SUBSTANTIAL CONTACT WITH THE UNDERLYING MULCH AND THE MULCH, IN TURN, MAINTAINS CONTINUOUS CONTACT WITH THE SOIL SURFACE. WITHOUT SUCH CONTACT, THE MATERIAL IS USELESS AND EROSION OCCURS.
INSTALL IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
INSPECT MULCH AREAS AT LEAST ONCE A WEEK AND WITHIN 24 HOURS OF THE END OF A STORM WITH A RAINFALL AMOUNT OF 0.5 INCHES OR GREATER UNTIL THE GRASS HAS GERMINATED TO DETERMINE MAINTENANCE NEEDS.
WHERE MULCH HAS BEEN MOVED OR WHERE SOIL EROSION HAS OCCURRED, DETERMINE THE CAUSE OF THE FAILURE. IF IT WAS THE RESULT OF WIND, THEN REPAIR EROSION DAMAGE (IF ANY), RE-APPLY MULCH (AND SEED AS NEEDED) AND CONSIDER APPLYING A NETTING OR TACKIFIER. IF MULCH FAILURE WAS CAUSED BY CONCENTRATING WATER, INSTALL ADDITIONAL MEASURES TO CONTROL WATER AND SEDIMENT MOVEMENT, REPAIR EROSION DAMAGE, RE-APPLY MULCH AND CONSIDER APPLYING A NETTING OR TACKIFIER.

5-4-10 TEMPORARY EROSION CONTROL BLANKET (ECB)

WHEN CONSIDERING THE USE OF ECB KEEP IN MIND THE BLANKETS CAPABILITY TO CONFORM TO GROUND SURFACES IRREGULARITIES. IF THE BLANKET IS NOT CAPABLE OF DEVELOPING A CONTINUOUS CONTACT WITH THE SOIL THEN IT MUST BE APPLIED TO A FINE GRADED SURFACE. SOME BLANKETS WILL SOFTEN AND WHEN WETTED RECONFORM TO THE GROUND. ALSO, WHEN THE GROUND IS FROZEN, PROPER ANCHORING CAN BE DIFFICULT, IF NOT IMPOSSIBLE.
CARE MUST BE TAKEN TO CHOOSE THE TYPE OF BLANKET WHICH IS MOST APPROPRIATE FOR THE SPECIFIC NEED OF THE PROJECT. WITH THE ABUNDANCE OF EROSION CONTROL BLANKETS AVAILABLE, IT IS IMPOSSIBLE TO COVER ALL OF THE ADVANTAGES, DISADVANTAGES AND SPECIFICATIONS OF ALL MANUFACTURED BLANKETS. THERE IS NO SUBSTITUTE FOR A THOROUGH UNDERSTANDING OF THE MANUFACTURER'S INSTRUCTIONS AND RECOMMENDATIONS IN CONJUNCTION WITH A SITE VISIT BY THE EROSION AND SEDIMENTATION PLAN DESIGNER PRIOR TO AND DURING INSTALLATION TO VERIFY A PRODUCT'S APPROPRIATENESS.
THE SUCCESS OF TEMPORARY EROSION CONTROL BLANKETS IS DEPENDENT UPON STRICT ADHERENCE TO THE MANUFACTURER'S INSTALLATION RECOMMENDATIONS. AS SUCH, A FINAL INSPECTION SHOULD BE PLANNED TO ENSURE THAT THE LAP JOINTS ARE SECURE, ALL EDGES ARE PROPERLY ANCHORED AND ALL STAKING/STAPLING PATTERNS FOLLOW THE MANUFACTURER'S RECOMMENDATIONS.
TEMPORARY EROSION CONTROL BLANKETS SHALL BE COMPOSED OF FIBERS AND/OR FILAMENTS THAT:
ARE BIODEGRADABLE OR PHOTODEGRADABLE WITHIN TWO YEARS BUT WITHOUT SUBSTANTIAL DEGRADATION OVER THE PERIOD OF INTENDED USAGE (FIVE MONTHS MAX.)
ARE MECHANICALLY, STRUCTURALLY, OR CHEMICALLY BOUND TOGETHER TO FORM A CONTINUOUS MATRIX OF EVEN THICKNESS AND DISTRIBUTION THAT RESIST RAINDROP SPLASH AND WHEN USED WITH SEEDLINGS ALLOWS VEGETATION TO PENETRATE THE BLANKET.
ARE OF SUFFICIENT STRUCTURAL STRENGTH TO WITHSTAND STRETCHING OR MOVEMENT BY WIND OR WATER WHEN INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
ARE FREE OF ANY SUBSTANCE TOXIC TO PLANT GROWTH AND UNPROTECTED HUMAN SKIN OR WHICH INTERFERES WITH SEED GERMINATION;
CONTAIN NO CONTAMINANTS THAT POLLUTE THE AIR OR WATERS OF THE STATE WHEN PROPERLY APPLIED; AND
PROVIDE EITHER 80%-95% SOIL COVERAGE WHEN USED AS A SUBSTITUTE FOR MULCH FOR SEED OR 100% INITIAL SOIL COVERAGE WHEN USED AS A SUBSTITUTE FOR TEMPORARY SOIL PROTECTION MEASURE.
MATERIALS SHALL BE SELECTED AS APPROPRIATE FOR THE SPECIFIC SITE CONDITIONS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. USE OF ANY PARTICULAR TEMPORARY EROSION CONTROL BLANKET SHOULD BE SUPPORTED BY MANUFACTURER'S TEST DATA THAT CONFIRMS THE BLANKET MEETS THE MATERIAL SPECIFICATIONS AND WILL PROVIDE THE SHORT TERM EROSION CONTROL CAPABILITIES NECESSARY FOR THE SPECIFIC PROJECT.
PREPARE THE SURFACE, REMOVE PROTRUDING OBJECTS AND INSTALL TEMPORARY EROSION CONTROL BLANKETS IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
ENSURE THAT THE ORIENTATION AND ANCHORING OF THE BLANKET IS APPROPRIATE FOR THE SITE.
THE BLANKET CAN BE LAID OVER AREAS WHERE SPRIGGED GRASS SEEDLINGS HAVE BEEN INSERTED INTO THE SOIL. WHERE LANDSCAPE PLANTINGS ARE PLANNED, LAY THE BLANKET FIRST AND THEN PLANT THROUGH THE BLANKET.
INSPECT THE INSTALLATION TO INSURE THAT ALL LAP JOINTS ARE SECURE, ALL EDGES ARE PROPERLY ANCHORED AND ALL STAKING OR STAPLING PATTERNS FOLLOW MANUFACTURER'S RECOMMENDATIONS.
INSPECT TEMPORARY EROSION CONTROL BLANKETS AT LEAST ONCE A WEEK AND WITHIN 24 HOURS OF THE END OF A STORM WITH A RAINFALL AMOUNT OF 0.5 INCHES OR GREATER FOR FAILURES. BLANKET FAILURE HAS OCCURRED WHEN (1) SOILS AND/OR SEED HAVE WASHED AWAY FROM BENEATH THE BLANKET AND THE SOIL SURFACE CAN BE EXPECTED TO CONTINUE TO ERODE AT AN ACCELERATED RATE, AND/OR (2) THE BLANKET HAD BECOME DISLODGED FROM THE SOIL SURFACE OR IS TORN.
IF WASHOUTS OR BREAKOUTS OCCUR, RE-INSTALL THE BLANKET AFTER REGRADING AND RE-SEEDING, ENSURING THAT BLANKET INSTALLATION STILL MEETS DESIGN SPECIFICATIONS. WHEN REPETITIVE FAILURES OCCUR AT THE SAME LOCATION, REVIEW CONDITIONS AND LIMITATIONS FOR USE AND DETERMINE IF DIVERSIONS, STONE CHECK, DAMS OR OTHER MEASURES ARE NEEDED TO REDUCE FAILURE RATE.
AND REPAIR ANY DISLODGED OR FAILED BLANKETS IMMEDIATELY.

FIGURE PLANNING I MULCHING SECTION CHART

MULCH TYPE	EXPOSURE PERIOD	HOW APPLIED	LIMITATIONS / CONSIDERATIONS
TEMPORARY SOIL PROTECTION – TEMPORARY SOIL COVER WHEN SEEDING DATES CANNOT BE MET			
STRAW/HAY	0-6 MONTHS	BY HAND OR BLOWN BY MACHINE	* PREFERRED OVER OTHER MULCHES. * REQUIRES ANCHORING IN WINDY AREAS * HAY WILL TYPICALLY SUPPLY WEED SEEDS, STRAW WILL NOT.
CELLULOSE FIBER	NOT RECOMMENDED	NOT RECOMMENDED	* USE ONLY AS A TACKIFIER FOR OTHER MULCH MATERIAL
WOOD CHIPS	> 1 YEAR	BY HAND OR BLOWN BY MACHINE	* RESTRICTED TO SLOPES 3 ON 1 OR FLATTER. * MUST BE REMOVED OR TILLED INTO GROUND BEFORE SEEDING OR PLANTING * MAY REDUCE SOIL FERTILITY DURING DECAY PROCESS REQUIRING SUBSEQUENT FERTILIZATION FOR PLANT GROWTH * LASTS LONGER THAN STRAW/HAY * NO ANCHORING REQUIRED
BARK CHIPS / SHREDDED BARK	0-1 YEAR	BY HAND	* SAME AS WOOD CHIPS
MULCH FOR SEED – TEMPORARY SOIL COVER UNTIL SEEDS GERMINATE AND GROW SUFFICIENTLY TO STABILIZE SOIL			
STRAW/HAY	0-6 MONTHS	BY HAND OR BLOWN BY MACHINE	* REQUIRES ANCHORING IN WINDY AREAS * HAY WILL SUPPLY WEED SEED, STRAW WILL NOT * MAY PROVIDE BETTER SHADING AGAINST HOT SUMMER SUN FOR SEEDING DONE AT THE BEGINNING OF SUMMER
CELLULOSE FIBER	0-6 MONTHS	SPRAYED IN SLURRY WITH WATER	* NO VOLUNTEER WEED SEEDS, LAWN SEEDING * WOOD FIBER PER UNIT COST GENERALLY MORE EXPENSIVE THAN PAPER FIBER, BUT REQUIRES LESS PRODUCT FOR EQUIVALENT COVERAGE * MAY BE USED IN SUMMER WITH SEED ONLY IF ADEQUATE IRRIGATION IS PLANNED
WOOD CHIPS	NOT RECOMMENDED	NOT RECOMMENDED	NOT RECOMMENDED
BARK CHIPS / SHREDDED BARK	NOT RECOMMENDED	NOT RECOMMENDED	NOT RECOMMENDED
LANDSCAPE MULCH – SOIL COVER INHIBITING WEED GROWTH AROUND PLANTED TREES, SHRUBS & VINES			
STRAW/HAY	NOT RECOMMENDED	NOT RECOMMENDED	NOT RECOMMENDED
CELLULOSE FIBER	NOT RECOMMENDED	NOT RECOMMENDED	NOT RECOMMENDED
WOOD CHIPS	> 1 YEAR	BY HAND OR GRADED BY MACHINE	* MAY REDUCE SOIL FERTILITY DURING DECAY PROCESS, REQUIRING APPLICATION OF NITROGEN * SLIPPAGE MAY OCCUR ON STEEPER SLOPES IF WOOD CHIPS ARE APPLIED OVER A LARGE AREA
BARK CHIPS / SHREDDED BARK	0-1 YEAR	BY HAND	* SAME AS WOOD CHIPS

NOTE: ALL EROSION CONTROL MEASURES DURING CONSTRUCTION WILL BE INSPECTED AT LEAST ONCE A WEEK AND WITHIN 24 HOURS OF THE END OF A STORM WITH A RAINFALL AMOUNT OF 0.5 INCH OR GREATER.

FIGURE PS-3 SEED MIXTURES FOR PERMANENT SEEDING

NO.	SEED MIXTURE (VARIETY)	LBS/ACRE	LBS/1,000 SF
1(5)	KENTUCKY BLUEGRASS CREEPING RED FESCUE (PENNLAWN, WINTERGREEN) PERENNIAL RYEGRASS (NORLEA, MANHATTEN)	20 20 5 TOTAL 45	.45 .45 .10 TOTAL 1.00
2(5)	CREEPING RED FESCUE (PENLAWN, WINTERGREEN) REDTOP (STREEKER, COMMON) TALL FESCUE (KENTUCKY 31) OR SMOOTH BROMEGRASS (SARATOGA, LINCOLN)	20 2 20 TOTAL 42	.45 .05 .45 TOTAL .95
3(5)	CREEPING RED FESCUE (PENNLAWN, WINTERGREEN) BIRD'S-FOOT TREFOIL (EMPIRE, VIKING) WITH INOCULANT(1) TALL FESCUE (KENTUCKY 31) OR SMOOTH BROMGRASS (SARATOGA, LINCOLN)	20 8 20 TOTAL 48	.45 .20 .45 TOTAL 1.10
4(5)	CREEPING RED FESCUE (PENNLAWN, WINTERGREEN) OR TALL FESCUE (KENTUCKY 31) REDTOP (STREEKER, COMMON) BIRD'S-FOOT TREFOIL (EMPIRE, VIKING) WITH INOCULANT(1)	20 2 8 TOTAL 30	.45 .05 .20 TOTAL .70
5(5)	WHITE CLOVER PERENNIAL RYE GRASS	10 2 TOTAL 12	.25 .05 TOTAL .30
6(5)	CREEPING RED FESCUE REDTOP (STREEKER, COMMON) PERENNIAL RYE GRASS	20 2 20 TOTAL 42	.50 .05 .50 TOTAL 1.05
7(5)	SMOOTH BROMEGRASS (SARATOGA, LINCOLN) PERENNIAL RYEGRASS (NORLEA, MANHATTEN) BIRD'S-FOOT TREFOIL (EMPIRE, VIKING) WITH INOCULANT(1)	15 5 10 TOTAL 30	.35 .10 .25 TOTAL .79
8(6)	SWITCHGRASS (BLACKWELL, SHELTER, CAVE-IN-ROCK) WEEPING LOVEGRASS LITTLE BLUESTEM (BLAZE, ALDOUS, CAMPER)	10(1) 3 10(1) TOTAL 23	.25 .07 .25 TOTAL .57
9(5)	CREEPING RED FESCUE (PENNLAWN, WINTERGREEN) CROWN VETCH (CHEMUNG, PENNGIFT) WITH INOCULENT(1) (OR FLATPEA (LATHCO) WITH INOCULENT(1)) TALL FESCUE (KENTUCKY 31) OR SMOOTH BROMEGRASS (SARATOGA, LINCOLN) REDTOP (STREEKER, COMMON)	10(1) 15 (30) 15 2 TOTAL 42 (OR 57)	.25 .35 (.75) .35 .05 TOTAL 1.00 (or 1.40)
10(5)	CREEPING RED FESCUE (PENNLAWN, WINTERGREEN) REDTOP (STREEKER, COMMON) CROWN VETCH (CHEMUNG, PENNGIFT) WITH INOCULENT(1) (OR FLATPES (LATHCO) WITH INOCULENT(1))	20 2 15 (30) TOTAL 37 (OR 52)	.45 .05 .35 (.75) TOTAL .85 (or 1.25)
11(5)	BIRD'S-FOOT TREFOIL (EMPIRE, VIKING) WITH INOCULENT(1) CROWN VETCH (CHEMUNG, PENNGIFT) WITH INOCULENT(1) CREEPING RED FESCUE (PENNLAWN, WINTERGREEN) OR TALL FESCUE (KENTUCKY 31)	8 15	.20 .35
12(6)	SWITCHGRASS (BLACKWELL, SHELTER, CAVE-IN-ROCK) PERENNIAL RYEGRASS (NORLEA, MANHATTEN) CROWN VETCH (CHEMUNG, PENNGIFT) WITH INOCULENT(1)	10 5 15 TOTAL 30	.25 .10 .35 TOTAL .70
13(6)	CROWN VETCH (CHEMUNG, PENNGIFT) WITH INOCULENT (OR FLATPEA (LATHCO) WITH INOCULENT(1)) SWITCHGRASS (BLACKWELL, SHELTER, CAVE-IN-ROCK) PERENNIAL RYEGRASS (NORLEA, MANHATTEN)	10 (30) 5(1) 5 TOTAL 20 (OR 40)	.25 (.75) .10 .10 TOTAL .45 (or .95)
14(5)	CROWN VETCH (CHEMUNG, PENNGIFT) WITH INOCULENT(1) (OR FLATPEA (LATHCO) WITH INOCULENT(1)) PERENNIAL RYEGRASS (NORLEA, MANHATTEN)	15 (30) 10 TOTAL 25 (OR 40)	.35 (.75) .25 TOTAL .60 (or 1.00)
15(6)	SWITCHGRASS (BLACKWELL, SHELTER, CAVE-IN-ROCK) BIG BLUESTEM (NIAGRA, KAW) OR LITTLE BLUESTEM (BLAZE, ALDOUS, CAMPER) PERENNIAL RYEGRASS (NORLEA, MANHATTEN) BIRD'S-FOOT TREFOIL (EMPIRE, VIKING) WITH INOCULENT(1)	5(1) 5(1) 5 5 TOTAL 20	.10 .10 .10 .10 TOTAL .40
16(5)	TALL FESCUE (KENTUCKY 31) FLATPEA (LATHCO) WITH INOCULENT(1)	20 30 TOTAL 50	.45 .75 TOTAL 1.20
17(6)	DEER TONGUE (TIOGA) WITH INOCULENT(1) BIRD'S-FOOT TREFOIL (EMPIRE, VIKING) WITH INOCULENT(1) PERENNIAL RYEGRASS (NORLEA, MANHATTEN)	10(1) 8 3 TOTAL 21	.25 .20 .07 TOTAL .52
18(6)	DEER TONGUE (TIOGA) WITH INOCULANT(1) CROWN VETCH (CHEMUNG, PANNGIFT) WITH INOCULANT(1) PERENNIAL RYEGRASS (NORLEA, MANHATTEN)	10(1) 15 3 TOTAL 28	.25 .35 .07 TOTAL .67
19(3)	CHEWINGS FESCUE HARD FESCUE COLONIAL BENTGRASS WITH INOCULENT(1) PERENNIAL RYEGRASS	35 30 5 10 20 TOTAL 100	.80 .70 .10 .20 .50 TOTAL 2.30
20(5)	DELETED DUE TO INVASIVE SPECIES		
21(5)	CREEPING RED FESCUE (PENNLAWN, WINTERGREEN)	TOTAL 60	TOTAL 1.35
22(5)	CREEPING RED FESCUE (PENNLAWN, WINTERGREEN) TALL FESCUE (KENTUCKY 31)	40 20 TOTAL 60	.90 .45 TOTAL 1.35
23(5)	CREEPING RED FESCUE (PENNLAWN, WINTERGREEN) FLATPEA (LATHCO) WITH INOCULENT(1)	15 30 TOTAL 45	.35 .75 TOTAL 1.10
24(5)	TALL FESCUE (KENTUCKY 31)	TOTAL 150	TOTAL 3.60
25(5)	AMERICAN BEACHGRASS (CAPE)	58,500 CULMS/ACRE	1,345 CULMS/1,000 SF
26(6)	SWITCHGRASS (BLACKWELL, SHELTER, CAVE-IN-ROCK) BIG BLUESTEM (NIAGRA, KAW) LITTLE BLUESTEM (BLAZE, ALDOUS, CAMPER) SAND LOVEGRASS (NE-27, BEND) BIRD'S-FOOT TREFOIL (EMPIRE, VIKING) WITH INOCULENT(1)	4.0 4.0 2.0 1.5 2.0 TOTAL 13.5	.10 .10 .05 .03 .05 TOTAL .33
27(5)	FLATPEA (LATHCO) WITH INOCULENT(1) PERENNIAL PEA (LANCER) CROWN VETCH (CHEMUNG, PENNGOFT) TALL FESCUE (KENTUCKY 31)	10 2 10 2 TOTAL 24	.20 .05 .20 .20 TOTAL .65
28(5)	ORCHARDGRASS (PENNLATE, KAY, POTOMAC) TALL FESCUE (KENTUCKY 31) REDTOP (STREEKER, COMMON) BIRD'S-FOOT TREFOIL (EMPIRE, VIKING) WITH INOCULENT(1)	5 10 2 5 TOTAL 22	.10 .20 .05 .10 TOTAL .45
29	TURF TYPE TALL FESCUE (BONANZA, MUSTANG, REBEL II, SPARTAN, JAGUAR) OF PERENNIAL RYE ("FUTE 2000" MIX; FIESTA II, BLAZER II, AND DASHER II)	175 TO 250	6 TO 8

(1) USE PROPER INOCULENT FOR LEGUME SEEDS, USE FOUR TIMES RECOMMENDED RATE WHEN HYDROSEEDING.
(2) USE PURE LIVE SEED (PLS) = % GERMINATION X % PURITY / 100
EXAMPLE: COMMON BERMUDA SEED WITH 70% GERMINATOIN AND 80% PURITY =
70 X 80 / 100 = 5600/100 = 56%
10 LBS PLS PER ACRE / 56% = 17.9 LBS PER ACRE OF BAGGED SEED

(3) DOT ALL PURPOSE SEED.
(4) WILD FLOWER MIX CONTAINING NEW ENGLAND ASTER, BABY'S BREATH, BLACK EYE SUSAN, CATCHFLY, DWARF COLUMBINE, PURPLE CONEFLOWER, LANCE-LEAVED COREOPSIS, CORNFLOWER, OX-EYE DAISY, DAME'S ROCKET, SCARLET FLAX, FOXGLOVE, GAYFEATHER, ROCKY LARKSPUR, SPANISH LARKSPUR, CORN POPPY, SPURRED SNAPDRAGON, WALLFLOWER AND/OR YSRROW MAY BE ADDED TO ANY SEED MIX GIVEN.
(5) CONSIDERED TO BE A COOL SEASON MIX.
(6) CONSIDERED TO BE A WARM SEASON MIX.

SEAL

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REVISIONS
NUMBER – DESCRIPTION – DATE – INITIAL

PROPOSED EROSION AND SEDIMENTATION CONTROL PLAN
PREPARED FOR
AMERICAN SCHOOL FOR THE DEAF
231 TWIN LAKES ROAD
SALISBURY, CONNECTICUT

SCALE: AS NOTED
FILE NAME: 1109-ES
DATE: 5/27/26
ISSUED FOR: PERMITTING
PROJECT NO. 1109
DRAWING NO. ES-2