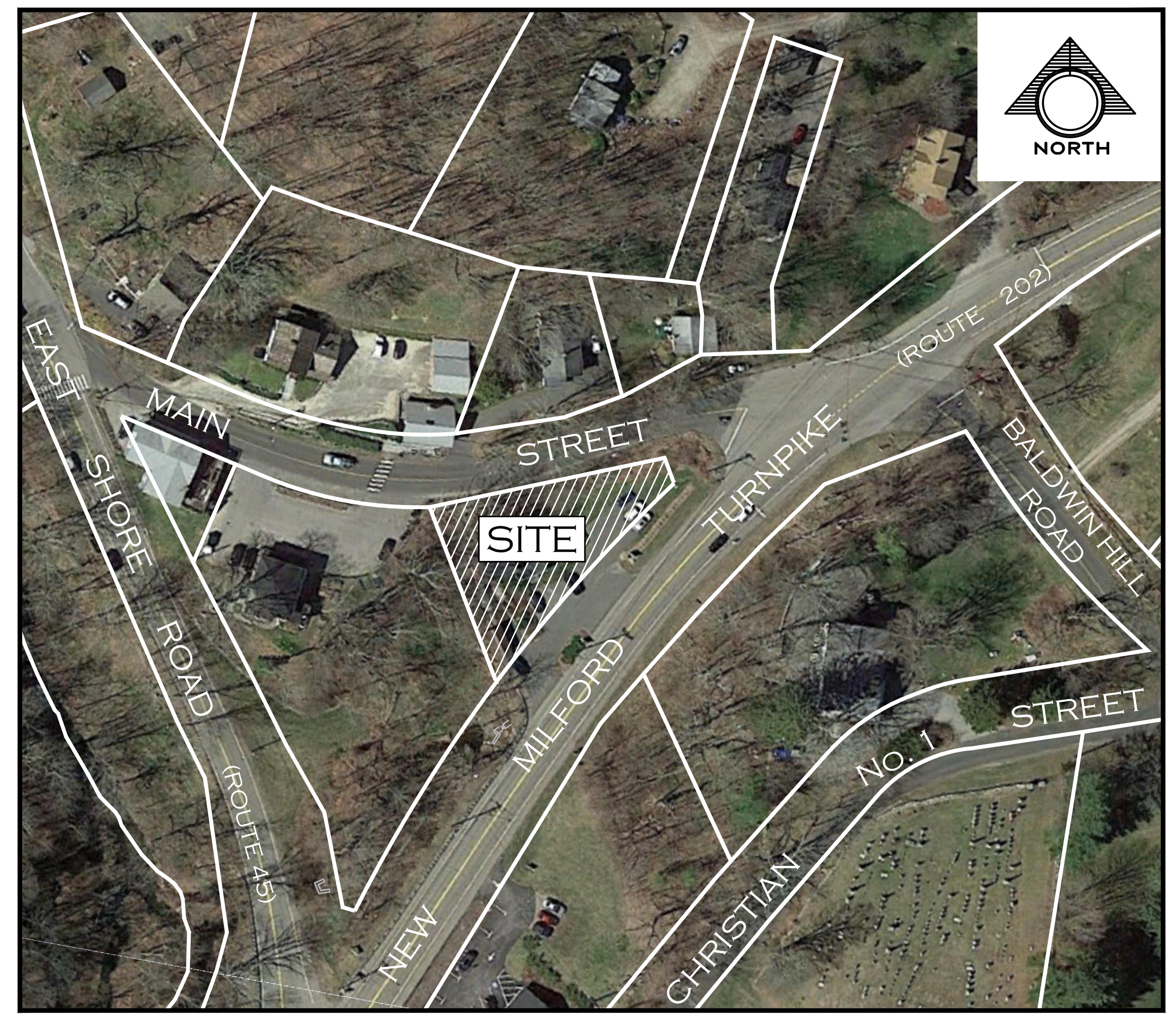
SMF UNIVERSAL, LLC

124 NEW MILFORD TURNPIKE

WASHINGTON, CONNECTICUT



LOCATION MAP

SCALE: 1" = 100'

INDEX OF SHEETS

DESCRIPTION OF SHEETS

REV.	DATE	COMMENT

STATE OF CONNECTICUT
DARIUS L. VIRBICKAS
17671
LICENSED PROFESSIONAL ENGINEER

[illegible]

ARTEL ENGINEERING GROUP, LLC
304 FEDERAL ROAD - SUITE 308
BROOKFIELD, CONNECTICUT 06804
WWW.ARTELENGINEERING.COM
PHONE: (203) 740-2033 FAX: (203) 740-2067

• CIVIL ENGINEERS
• ENVIRONMENTAL ENGINEERS
• MUNICIPAL ENGINEERS

PROJECT MANAGERS •
SITE PLANNERS •
PERMIT EXPEDITORS •

COVER SHEET

SMF UNIVERSAL, LLC
124 NEW MILFORD TURNPIKE
WASHINGTON, CONNECTICUT

DRAWN BY:	BH
CHECKED BY:	DV
DATE:	1/13/22
SCALE:	AS NOTED
DRAWING No:	DD21050
PROJECT No:	DD21050
SHEET:	1

Important Note:

Additional underground utilities may exist
Prior to any excavation or construction,
contact: "CALL BEFORE YOU DIG" 1-800-922-4455 or 811

Notes:

1. This map represents a Property & Topographical Survey based on a Resurvey and was prepared in accordance with Class A-2 & Class T-2 Standards. Vertical datum based on map referenced in note no. 4 below.

2. Refer to Vol. 253 Pg. 284 of the Washington Land Records. Refer to Vol. 111 Pg. 36 & Vol. 143 Pg. 616 – W.L.R. (variances granted).

3. Refer to Map No.'s 515 and 1567 of the Washington Land Records.

4. Refer to Map entitled: "Topographic Survey prepared for SMF Universal, LLC #9 Main Street, New Preston, Connecticut, Scale: 1"=30', August 22, 2020 Area = 41,666± Sq.Ft. = 0.9565± Ac." prepared by John M. Farnsworth & Associates.

5. Refer to Map entitled: "Property Survey, 124 New Milford Turnpike, prepared for Robert Slodowitz, Washington, Connecticut, Scale 1"=20', Oct. 16, 1998" prepared by Richard W. Dibble, LLS #8158.

6. Refer to Connecticut State Highway Department Right of Way Map, Town of Washington, New Milford – Litchfield Road from the New Milford Town Line Easterly to Flirtation Ave., Route No. 25, Scale: 1"=40', Dated Dec. 28, 1934 Revised Jan. 21, 1966, Number 150-04, Sheet No. 5 of 6.

Property & Topographical Map

Prepared For

SMF Universal, LLC

124 New Milford Turnpike

Washington, Connecticut

Scale: 1"=10'

Area: 0.274 Ac.

Zone: B-3
Per Assessor's Records

Date: Jan.6,2022

Revisions

NOT VALID WITHOUT A LIVE SIGNATURE AND EMBOSSED SEAL.

"I HEREBY DECLARE THAT TO MY KNOWLEDGE AND BELIEF, THIS MAP IS SUBSTANTIALLY CORRECT AS NOTED HEREON." THIS SURVEY AND MAP HAS BEEN PREPARED IN ACCORDANCE WITH SECTIONS 20-300b-1 THRU 20-300b-20 OF THE REGULATIONS OF CONNECTICUT STATE AGENCIES – "MINIMUM STANDARDS FOR SURVEYS AND MAPS IN THE STATE OF CONNECTICUT" AS ENDORSED BY THE CONNECTICUT ASSOCIATION OF LAND SURVEYORS, INC.

NEW ENGLAND LAND SURVEYING, P.C.
ROBIN COMMONS-118 COAL PIT HILL RD.-DANBURY, CT.
203-790-5597 Nelandsurv@aol.com

MATTHEW E. REYNOLDS, L.S. # 13286

Job No.1420
1420sv1

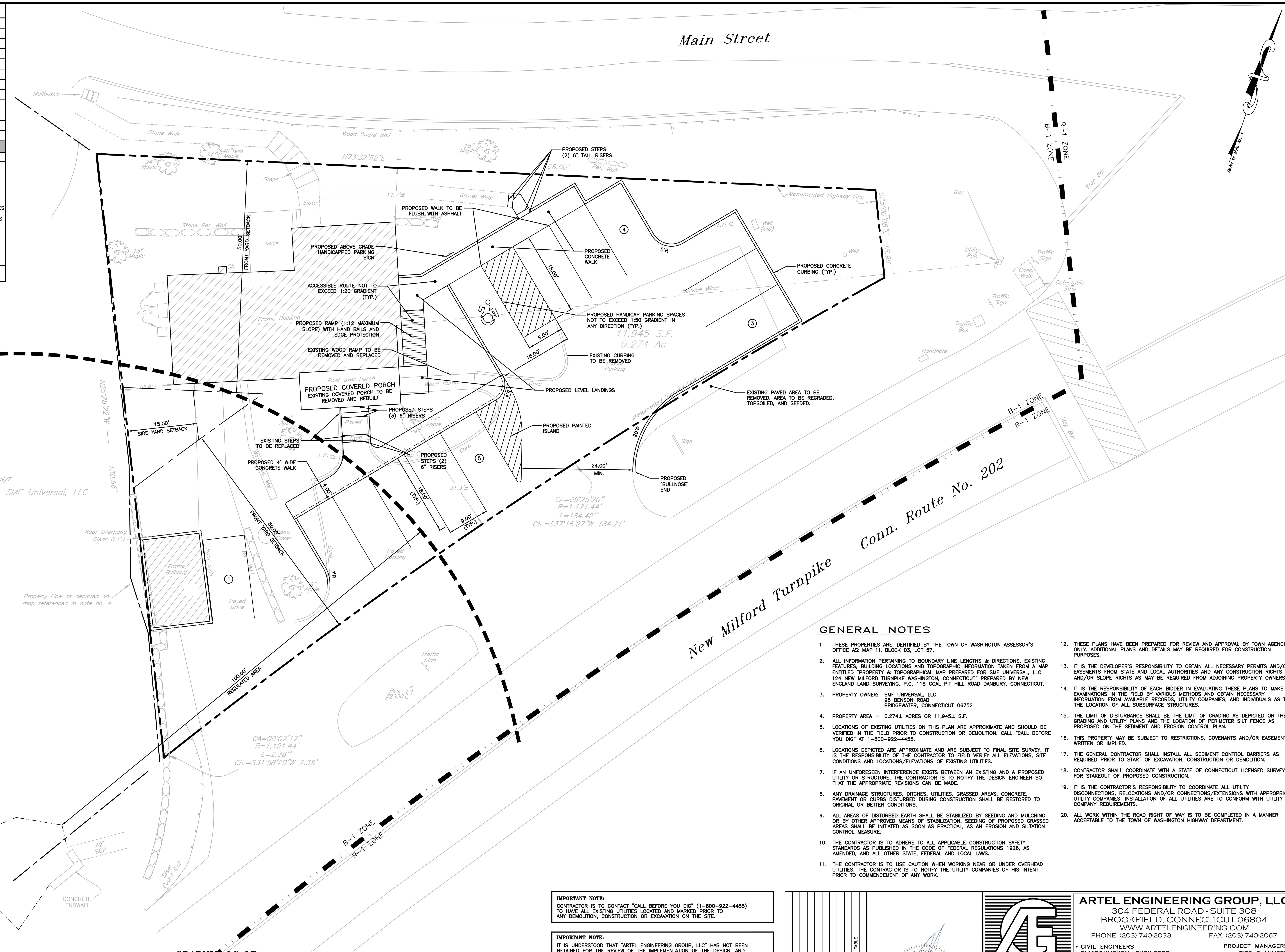
ZONING ANALYSIS TABLE

ZONE CRITERIA	REQUIRED	EXISTING	PROPOSED
ZONE DISTRICT	B1 ZONE		
EXISTING USE	RETAIL, OFFICE		
PROPOSED USE	RETAIL, OFFICE, RESIDENTIAL		
LOT: MINIMUM LOT AREA	65,340 S.F.	11,945 S.F.	NO CHANGE
MINIMUM LOT FRONTAGE	60'	373.78'±	NO CHANGE
BUILDING: MINIMUM SETBACKS			
FRONT YARD	50'	11.7'±	NO CHANGE
SIDE YARD	15'	10.9'±	NO CHANGE
REAR YARD	30'	N/A	N/A
MAXIMUM HEIGHT	35'	<35'	NO CHANGE
MAXIMUM LOT COVERAGE	25%	46.81%	61.07%

PARKING:	REQUIRED	EXISTING	PROPOSED
RETAIL: MAXIMUM: 3 SPACES/1,000 S.F. OF GROSS FLOOR AREA (G.F.A.) MINIMUM 1 SPACES/1,000 S.F. OF G.F.A 1,224 S.F. OF RETAIL OFFICE: MAXIMUM: 5 SPACES/1,000 S.F. OF G.F.A. MINIMUM: 2 SPACES/1,000 S.F. OF G.F.A. RESIDENTIAL: MAXIMUM: 1 SPACE PER BEDROOM MINIMUM: 1 SPACE PER UNIT (2) 1-BEDROOM APARTMENTS	MAXIMUM: 2 SPACES MINIMUM: 1 SPACE MAXIMUM: 3 SPACES MINIMUM: 2 SPACE MAXIMUM: 2 SPACES MINIMUM: 2 SPACE	6 SPACES	12 STANDARD SPACES + 1 HANDICAP SPACES
TOTAL:	MAXIMUM: 6 SPACES MINIMUM: 4 SPACES	6 SPACES	13 SPACES

REQUESTED WAIVERS

1. 7.5. MAXIMUM COVERAGE
2. 15.4. VISUAL SCREENING OF PARKING FACILITIES
3. ACCESSIBLE RAMP AND LANDING WITHIN SETBACK



LEGEND

— — —	PROPERTY LINE
—— — ——	SETBACK LINE
▭	EXISTING CATCH BASIN
○	EXISTING MANHOLE
☼	EXISTING LIGHT POLE
⊙	EXISTING UTILITY POLE
▬ ¦ ▬	APPROXIMATE ZONE LINE

GRAPHIC SCALE

10 0 5 10 20 40

(IN FEET)
1 inch = 10 ft.

GENERAL NOTES

1. THESE PROPERTIES ARE IDENTIFIED BY THE TOWN OF WASHINGTON ASSESSOR'S OFFICE AS: MAP 11, BLOCK 03, LOT 57.
2. ALL INFORMATION PERTAINING TO BOUNDARY LINE LENGTHS & DIRECTIONS, EXISTING FEATURES, BUILDING LOCATIONS AND TOPOGRAPHIC INFORMATION TAKEN FROM A MAP ENTITLED "PROPERTY & TOPOGRAPHICAL MAP PREPARED FOR SMF UNIVERSAL, LLC 124 NEW MILFORD TURNPIKE WASHINGTON, CONNECTICUT" PREPARED BY NEW ENGLAND LAND SURVEYING, P.C. 118 COAL PIT HILL ROAD DANBURY, CONNECTICUT.
3. PROPERTY OWNER: SMF UNIVERSAL, LLC
   98 BENSON ROAD
   BRIDGEWATER, CONNECTICUT 06752
4. PROPERTY AREA = 0.274± ACRES OR 11,945± S.F.
5. LOCATIONS OF EXISTING UTILITIES ON THIS PLAN ARE APPROXIMATE AND SHOULD BE VERIFIED IN THE FIELD PRIOR TO CONSTRUCTION OR DEMOLITION. CALL "CALL BEFORE YOU DIG" AT 1-800-922-4455.
6. LOCATIONS DEPICTED ARE APPROXIMATE AND ARE SUBJECT TO FINAL SITE SURVEY. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD VERIFY ALL ELEVATIONS, SITE CONDITIONS AND LOCATIONS/ELEVATIONS OF EXISTING UTILITIES.
7. IF AN UNFORESEEN INTERFERENCE EXISTS BETWEEN AN EXISTING AND A PROPOSED UTILITY OR STRUCTURE, THE CONTRACTOR IS TO NOTIFY THE DESIGN ENGINEER SO THAT THE APPROPRIATE REVISIONS CAN BE MADE.
8. ANY DRAINAGE STRUCTURES, DITCHES, UTILITIES, GRASSED AREAS, CONCRETE, PAVEMENT OR CURBS DISTURBED DURING CONSTRUCTION SHALL BE RESTORED TO ORIGINAL OR BETTER CONDITIONS.
9. ALL AREAS OF DISTURBED EARTH SHALL BE STABILIZED BY SEEDING AND MULCHING OR BY OTHER APPROVED MEANS OF STABILIZATION. SEEDING OF PROPOSED GRASSED AREAS SHALL BE INITIATED AS SOON AS PRACTICAL, AS AN EROSION AND SILTATION CONTROL MEASURE.
10. THE CONTRACTOR IS TO ADHERE TO ALL APPLICABLE CONSTRUCTION SAFETY STANDARDS AS PUBLISHED IN THE CODE OF FEDERAL REGULATIONS 1926, AS AMENDED, AND ALL OTHER STATE, FEDERAL AND LOCAL LAWS.
11. THE CONTRACTOR IS TO USE CAUTION WHEN WORKING NEAR OR UNDER OVERHEAD UTILITIES. THE CONTRACTOR IS TO NOTIFY THE UTILITY COMPANIES OF HIS INTENT PRIOR TO COMMENCEMENT OF ANY WORK.
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13. IT IS THE DEVELOPER'S RESPONSIBILITY TO OBTAIN ALL NECESSARY PERMITS AND/OR EASEMENTS FROM STATE AND LOCAL AUTHORITIES AND ANY CONSTRUCTION RIGHTS AND/OR SLOPE RIGHTS AS MAY BE REQUIRED FROM ADJOINING PROPERTY OWNERS.
14. IT IS THE RESPONSIBILITY OF EACH BIDDER IN EVALUATING THESE PLANS TO MAKE EXAMINATIONS IN THE FIELD BY VARIOUS METHODS AND OBTAIN NECESSARY INFORMATION FROM AVAILABLE RECORDS, UTILITY COMPANIES, AND INDIVIDUALS AS TO THE LOCATION OF ALL SUBSURFACE STRUCTURES.
15. THE LIMIT OF DISTURBANCE SHALL BE THE LIMIT OF GRADING AS DEPICTED ON THE GRADING AND UTILITY PLANS AND THE LOCATION OF PERIMETER SILT FENCE AS PROPOSED ON THE SEDIMENT AND EROSION CONTROL PLAN.
16. THIS PROPERTY MAY BE SUBJECT TO RESTRICTIONS, COVENANTS AND/OR EASEMENTS, WRITTEN OR IMPLIED.
17. THE GENERAL CONTRACTOR SHALL INSTALL ALL SEDIMENT CONTROL BARRIERS AS REQUIRED PRIOR TO START OF EXCAVATION, CONSTRUCTION OR DEMOLITION.
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20. ALL WORK WITHIN THE ROAD RIGHT OF WAY IS TO BE COMPLETED IN A MANNER ACCEPTABLE TO THE TOWN OF WASHINGTON HIGHWAY DEPARTMENT.

IMPORTANT NOTE:
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REV.	DATE	COMMENT
1	2/14/22	REVISED ZONING ANALYSIS TABLE

STATE OF CONNECTICUT
17671
LICENSED PROFESSIONAL ENGINEER

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SITE PLAN

SMF UNIVERSAL, LLC
124 NEW MILFORD TURNPIKE
WASHINGTON, CONNECTICUT

DRAWN BY:	BH
CHECKED BY:	DV
DATE:	1/13/22
SCALE:	1" = 10'
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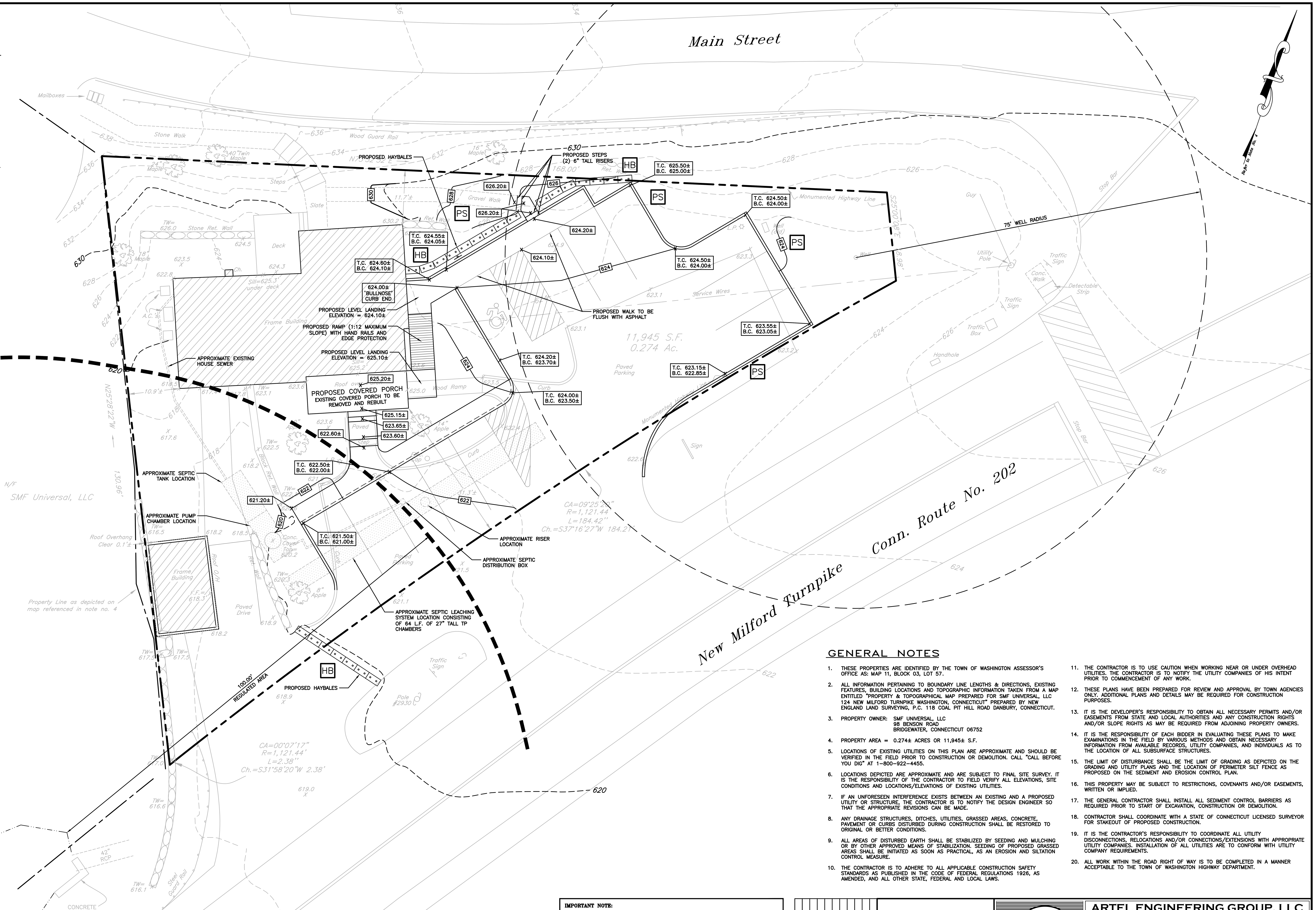
SHEET:	3

GRADING NOTES:

1. CONTRACTOR IS RESPONSIBLE FOR VERIFICATION OF EXISTING TOPOGRAPHY AND UTILITY INVERT ELEVATIONS PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION. CONTRACTOR TO ENSURE 0.75% MIN. SLOPE AGAINST ALL GUTTERS TO PREVENT PUDDLING. ANY DISCREPANCIES SHALL BE IMMEDIATELY PROVIDED IN WRITING TO THE ENGINEER OF RECORD.
2. LOCATION OF ALL EXISTING AND PROPOSED SERVICES ARE APPROXIMATE AND MUST BE CONFIRMED INDEPENDENTLY WITH LOCAL UTILITY COMPANIES PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION OR EXCAVATION. SANITARY SEWER AND ALL OTHER UTILITY SERVICES CONNECTION POINTS SHALL BE CONFIRMED INDEPENDENTLY BY THE CONTRACTOR IN THE FIELD PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. ALL DISCREPANCIES SHALL BE REPORTED IMMEDIATELY IN WRITING TO THE ENGINEER OF RECORD. CONSTRUCTION SHALL COMMENCE BEGINNING AT THE LOWEST POINTS. CROSSINGS WITH EXISTING UNDERGROUND INSTALLATIONS SHALL BE FIELD VERIFIED BY TEST PIT PRIOR TO COMMENCEMENT OF CONSTRUCTION.
3. SUBBASE MATERIAL FOR SIDEWALKS, CURB, OR ASPHALT SHALL BE FREE OF ORGANICS AND OTHER UNSUITABLE MATERIALS. SHOULD SUBBASE BE DEEMED UNSUITABLE, SUBBASE IS TO BE REMOVED AND FILLED WITH APPROVED FILL MATERIAL COMPACTED TO 95% OPTIMUM DENSITY (AS DETERMINED BY MODIFIED PROCTOR METHOD).
4. SITE GRADING SHALL BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AND STANDARDS OF THE LOCAL AUTHORITY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING AND REPLACING ALL SOFT, YIELDING OR UNSUITABLE MATERIALS AND REPLACING WITH SUITABLE MATERIALS. ALL EXCAVATED OR FILLED AREAS SHALL BE COMPACTED TO 95% OF MODIFIED PROCTOR MAXIMUM DENSITY PER A.S.T.M. TEST D-1557. MOISTURE CONTENT AT TIME OF PLACEMENT SHALL NOT EXCEED 2% ABOVE NOR 3% BELOW OPTIMUM. CONTRACTOR SHALL SUBMIT A COMPACTION REPORT PREPARED BY A QUALIFIED, LICENSED, SOILS ENGINEER, CERTIFYING THAT THE SUBBASE WITHIN THE AREAS TO BE BUILT UPON AND/OR PAVED HAS BEEN COMPACTED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS.



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LEGEND

— — —	PROPERTY LINE
■	EXISTING CATCH BASIN
○	EXISTING MANHOLE
☼	EXISTING LIGHT POLE
	EXISTING UTILITY POLE
— — 618 — —	EXISTING CONTOUR
623.6 ×	EXISTING SPOT ELEVATION
628	PROPOSED CONTOUR
623.75±	PROPOSED SPOT ELEVATION

EROSION CONTROL LEGEND

HB	PROPOSED HAYBALES
PS	PROPOSED AREA OF PERMANENT SEEDING

GRAPHIC SCALE

10 0 5 10 20 40

(IN FEET)
1 inch = 10 ft.

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GRADING, UTILITY, AND SEDIMENT AND EROSION CONTROL PLAN

SMF UNIVERSAL, LLC
124 NEW MILFORD TURNPIKE
WASHINGTON, CONNECTICUT

DRAWN BY:	BH
CHECKED BY:	DV
DATE:	1/13/22
SCALE:	1" = 10'
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SHEET:	4

PLANT LIST

KEY	QTY.	BOTANICAL NAME	COMMON NAME	SIZE
PA	4	PICEA ABIES	NORWAY SPRUCE	5/6' HEIGHT
HPT	1	HYDRANGEA PANICULATA PINKY WINKY – TREE FORM	TREE HYDRANGEA	10 GAL.
ICC	10	ILEX CRENATA COMPACTA	COMPACT JAPANESE HOLLY	3 GAL.
RDC	11	ROSA DRIFT "CORAL"	CORAL DRIFT ROSE	3 GAL.
HPF	7	HYDRANGEA P. "FIRE & ICE"	HYDRANGEA "FIRE & ICE"	3 GAL.
LV	19	LIRIOPE M. VARIGAITA	VARIGAITED LIRIOPE	1 GAL.

LEGEND

- PROPERTY LINE
- EXISTING CATCH BASIN
- EXISTING MANHOLE
- EXISTING LIGHT POLE
- EXISTING UTILITY POLE
- 100' REGULATED AREA LINE

IMPORTANT NOTE:
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PLANTING PLAN

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ANTI-TRACKING PAD CONSTRUCTION ENTRANCE

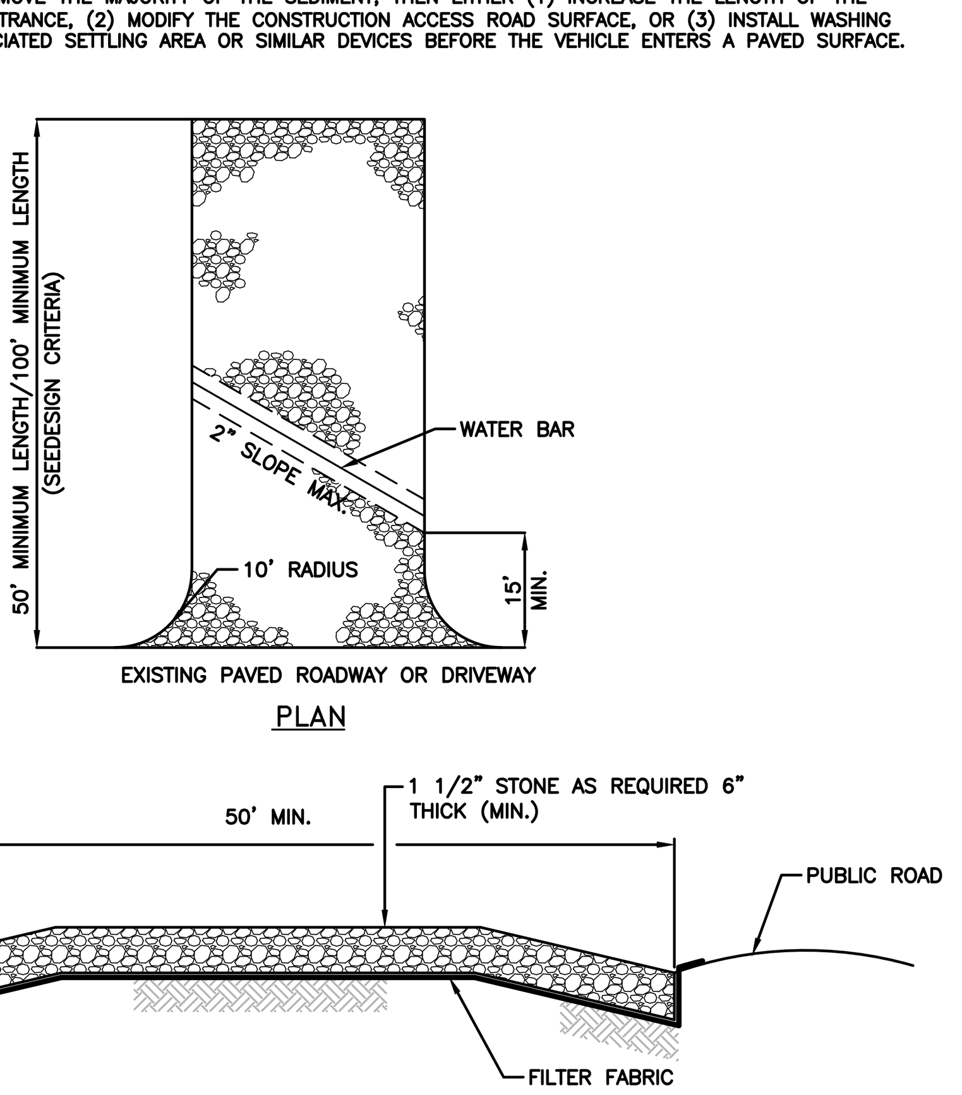
CE

DESIGN CRITERIA:

1. CONSTRUCTION
CLEAR THE AREA OF THE ENTRANCE OF ALL VEGETATION, ROOTS, AND, OTHER OBJECTIONABLE MATERIAL. AT POORLY DRAINED LOCATIONS INSTALL SUBSURFACE DRAINAGE INSURING THE OUTLET TO THE DRAINS ARE FREE FLOWING. IF USING A GEOTEXTILE IN PLACE OF FREE DRAINING MATERIAL, UNROLL THE GEOTEXTILE IN A DIRECTION PARALLEL TO THE ROADWAY CENTERLINE IN A LOOSE MANNER PERMITTING IT TO CONFORM TO THE SURFACE IRREGULARITIES WHEN THE STONE IS PLACED. UNLESS OTHERWISE SPECIFIED BY THE MANUFACTURER. THE MINIMUM OVERLAP OF GEOTEXTILE PANELS JOINED WITHOUT SEWING ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS. THE GEOTEXTILE MAY BE TEMPORARILY SECURED WITH PINS RECOMMENDED OR PROVIDED BY THE MANUFACTURER BUT THEY SHALL BE REMOVED PRIOR TO PLACEMENT OF STONE. PLACE THE STONE TO THE SPECIFIED DIMENSION. KEEP ADDITIONAL STONE AVAILABLE OR STOCKPILE FOR FUTURE USE. IF GRADE OF THE CONSTRUCTION ENTRANCE DRAINS TO PAVED SURFACE AND IT EXCEEDS 2%, CONSTRUCT A WATER BAR WITHIN THE CONSTRUCTION ENTRANCE AT LEAST 15 FEET FROM IT ENTRANCE ON THE PAVED SURFACE DIVERTING RUNOFF WATER TO A SETTLING OR FILTERING AREA. CONSTRUCT ANY DRAINAGE AND FACILITIES NEED FOR WASHING OPERATIONS IF WASH RACKS ARE USED INSTALL ACCORDING THE MANUFACTURE'S SPECIFICATIONS.

2. WASHING
IF MOST OF THE SEDIMENT IS NOT REMOVED BY TRAVEL OVER THE STONE, WASH TIRES BEFORE VEHICLES ENTER A PUBLIC ROAD. DIVERT WASH WATER AWAY FROM THE ENTRANCE TO A SETTLING AREA TO REMOVE SEDIMENT. SIZE SETTLING AREA TO HOLD THE VOLUME OF WATER USED DURING ANY 2-HOUR PERIOD. USING A WASH RACK MAY MAKE WASHING MORE CONVENIENT AND EFFECTIVE.

3. MAINTENANCE
MAINTAIN THE ENTRANCE IN A CONDITION WHICH WILL PREVENT TRACKING AND WASHING OF SEDIMENT ONTO PAVED SURFACES. PROVIDE PERIODIC TOP DRESSING WITH ADDITIONAL STONE OR ADDITIONAL LENGTH AS CONDITIONS DEMAND. REPAIR ANY MEASURES USED TO TRAP SEDIMENT AS NEEDED. IMMEDIATELY REMOVE ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PAVED SURFACES. ROADS ADJACENT TO A CONSTRUCTION SITE SHALL BE LEFT CLEAN AT THE END OF EACH DAY. IF THE CONSTRUCTION ENTRANCE IS BEING PROPERLY MAINTAINED AND THE ACTION OF A VEHICLE TRAVELING OVER THE STONE PAD IS NOT SUFFICIENT TO REMOVE THE MAJORITY OF THE SEDIMENT, THEN EITHER (1) INCREASE THE LENGTH OF THE CONSTRUCTION ENTRANCE, (2) MODIFY THE CONSTRUCTION ACCESS ROAD SURFACE, OR (3) INSTALL WASHING RACKS AND ASSOCIATED SETTLING AREA OR SIMILAR DEVICES BEFORE THE VEHICLE ENTERS A PAVED SURFACE.



ANTI-TRACKING PAD

NOT TO SCALE

TEMPORARY SEEDING

TS

1. SPECIFICATIONS:
   A. SEED SELECTION
   SELECT GRASS SPECIES APPROPRIATE FOR THE SEASON AND SITE CONDITIONS.

   B. TIMING CONSIDERATIONS
   SEED WITH A TEMPORARY SEED MIXTURE WITHIN 7 DAYS AFTER THE SUSPENSION OF GRADING WORK IN THE 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 TABLE MAY RESULT IN EITHER INADEQUATE GERMINATION OR LOW PLANT SURVIVAL RATE, REDUCING EROSION CONTROL EFFECTIVENESS.

   C. SITE PREPARATION
   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 LAND GRADING MEASURE.

   D. SEEDBED PREPARATION
   LOOSEN THE SOIL TO A DEPTH OF 3-4 INCHES WITH A SLIGHTLY ROUGHED SURFACE. IF THE AREA HAS BEEN RECENTLY LOOSENED OR 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. SOIL SAMPLE MAILERS ARE AVAILABLE FROM THE LOCAL COOPERATIVE EXTENSION SYSTEMS OFFICE. APPENDIX E CONTAINS A LISTING OF THE COOPERATIVE EXTENSION SYSTEM OFFICES. 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 SQUARE FEET OF 10-10-10 OR EQUIVALENT. ADDITIONALLY LIME MAY BE APPLIED USING RATES GIVEN IN TABLE BELOW.

SOIL TEXTURE VS. LIMING RATES		
SOIL TEXTURES	TONS/ACRE OF LIME	POUNDS/1,000 S.F. OF LIME
CLAY, CLAY LOAM, AND HIGHLY ORGANIC SOIL	3	135
SANDY LOAM, LOAM, AND SILTY LOAM	2	672
LOAMY SAND, AND SAND	1	45

   E. SEEDING
   APPLY SEED UNIFORMLY BY HAND, CYCLONE SEEDER, DRILL, CULTIPACKER TYPE SEEDER OR HYDROSEEDER AT A MINIMUM RATE FOR THE SELECTED SEED IDENTIFIED IN TABLE. INCREASE SEEDING RATES BY 100% WHEN HYDROSEEDING.

   F. MULCHING
   TEMPORARY SEEDINGS MADE DURING OPTIMUM SEEDING DATES SHALL BE MULCHED ACCORDING TO THE MULCH SEED MEASURE. NOTE WHEN SEEDING OUTSIDE OF THE OPTIMUM SEEDING DATES, INCREASE THE APPLICATION OF MULCH TO PROVIDE 95%-100% COVERAGE

2. MAINTENANCE:
INSPECT SEEDED AREA AT LEAST ONCE A WEEK AND WITHIN 24 HOURS OF THE END OF A STORM WITH A RAINFALL AMOUNT OF ½" OR GREATER FOR SEED AND MULCH MOVEMENTS 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 THE SEED. RE-SEED AND RE-MULCH. IF MOVEMENT WAS THE RESULT OF WIND, THE REPAIR EROSION DAMAGE (IF ANY). REAPPLY SEED AND MULCH AND APPLY MULCH ANCHORING. IF FAILURE WAS CAUSED BY 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 MEASURE. 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)

TEMPORARY SEEDING RATES AND DATES

SPECIES[4]	SEEDING RATES (POUNDS) PER ACRE	SEEDING RATES (POUNDS) PER 1,000 S.F.	OPTIMUM SEED DEPTH (INCHES)[2]	OPTIMUM SEEDING DATES[1]	PLANT CHARACTERISTICS
ANNUAL RYEGRASS (LOLIUM MULTIFLORUM)	40	1.0	0.5	3/1 - 6/15 & 8/1 - 10/15	MAY BE ADDED IN MIXES WILL MOW OUT OF MOST STANDS
PERENNIAL RYEGRASS (LOLIUM PERENNE)	40	1.0	0.5	3/1 - 7/1 & 8/1 - 10/15	USE FOR WINTER COVER. TOLERATES COLD AND LOW MOISTURE
WINTER RYE (SECALE CEREALE)	120	3.0	1.0	4/15 - 7/1 & 8/15 - 10/15	QUICK GERMINATION AND HEAVY SPRING GROWTH. DIES BACK IN JUNE WITH LITTLE REGROWTH
OATS (AVENA SAIIVA)	86	2.0	1.0	3/1 - 8/15 & 8/1 - 9/15	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	4/15 - 7/1 & 8/15 - 10/15	QUICK GERMINATION WITH MODERATE GROWTH. DIES BACK IN JUNE WITH NO REGROWTH
MILLET (ECHINOCHLOA CRUSGALLI)	20	0.5	1.0	5/15 - 7/15	WARM SEASON SMALL GRAIN. DIES WITH FROST IN SEPTEMBER
SUDANGRASS (SORGHUM SUDANESE)	30	0.7	1.0	5/15 - 8/1	TOLERATES WARM TEMPERATURES AND DRAUGHTY CONDITIONS
BUCKWHEAT (FAGOPYRUM ESCULENTUM)	15	0.4	1.0	4/1 - 9/15	HARDY PLANT THAT WILL RESEED ITSELF AND IS GOOD AS A GREEN MANURE CROP
WEEPING LOVEGRASS (EERAGOSTIS CURBULA)	5	0.2	0.25	6/1 - 7/1	WARM SEASON PERENNIAL. MAY BUNCH. TOLERATES HOT, DRY SLOPES, ACID INFERTILE SOIL. EXCELLENT NURSE CROP. USUALLY WINTER KILLS
DOT ALL PURPOSE MIX[3]	150	3.4	0.5	3/15 - 6/15 & 8/15 - 10/15	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 COASTAL TOWNS
2. SEED AT TWICE THE INDICATED DEPTH FOR SANDY SOILS.
3. SEE PERMANENT SEEDING TABLE 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.

GEOTEXTILE SILT FENCE

SF

GEOTEXTILE SILT FENCING MINIMUM REQUIREMENTS		
PHYSICAL PROPERTIES	TEST METHOD	MINIMUM REQUIREMENT
FILTERING EFFICIENCY	ASTM 5141	75%
GRAB TENSILE STRENGTH (LBS.)	ASTM D4632	100 POUNDS
ELONGATED AT FAILURE	ASTM D4632	15%
MULLEN BURST STRENGTH	ASTM D3786	250 P.S.I.
PUNCTURE STRENGTH	ASTM 4833	50 POUNDS
APPARENT OPENING SIZE	ASTM D4751	NO LESS THAN 0.90 MM AND NO GREATER THAN 0.60 MM
FLOW RATE	ASTM D4491	0.2 GALLONS/FT²/MIN.
PERMATIVITY	ASTM D4491	0.05 SEC. -1 (MIN.)
ULTRAVIOLET RADIATION STABILITY %	ASTM-D4355	70% AFTER 500 HOURS OF EXPOSURE (MIN.)

GEOTEXTILE SILT FENCE SLOPE/LENGTH LIMITATIONS	
SLOPE STEEPNESS	SLOPE LENGTH AND WING SPACING
5:1 OR FLATTER	100 FEET
3:1 TO 5:1	75 FEET
2:1 TO 3:1	50 FEET

1. MATERIALS:
   A. GEOTEXTILE FABRIC: SHALL BE A PERVIOUS SURFACE SHEET OF POLYPROPYLENE NYLON, POLYESTER, ETHYLENE OR SIMILAR FILAMENTS AND SHALL BE CERTIFIED BY THE MANUFACTURER OR SUPPLIER AS CONFORMING TO THE STANDARDS SHOWN. THE GEOTEXTILE MUST BE NON-ROTTING, ACID AND ALKALI RESISTANT, AND HAVE SUFFICIENT STRENGTH AND PERMEABILITY FOR THE PURPOSE INTENDED, INCLUDING HANDLING AND BACKFILLING OPERATIONS. FILAMENTS IN THE GEOTEXTILE SHALL BE RESISTANT TO ABSORPTION. THE FILAMENT NETWORK MUST BE DIMENSIONALLY STABLE AND RESISTANT TO DE-LAMINATION. THE GEOTEXTILE SHALL BE FREE OF ANY CHEMICAL TREATMENT OR COATING THAT WILL REDUCE ITS PERMEABILITY. THE GEOTEXTILE SHALL ALSO BE FREE OF ANY FLAWS OR DEFECTS WHICH WILL ALTER ITS PHYSICAL PROPERTIES. TORN OR PUNCTURED GEOTEXTILES SHALL NOT BE USED.

   B. SUPPORTING POSTS: SHALL BEE AT LEAST 42 INCHES LONG AND MADE OF 1½ INCH SQUARE HARDWOOD STAKES OR STEEL POSTS WITH PROJECTIONS FOR FASTENING THE GEOTEXTILE POSSESSING A MINIMUM STRENGTH OF ½ POUND PER LINEAR FOOT.

2. PLACEMENT ON THE LANDSCAPE:
   A. FOR TOE OF SLOPE: LOCATE 5-10 FEET DOWN FROM GRADIENT FROM THE TOE OF THE SLOPE GENERALLY ON THE CONTOUR WITH MAINTENANCE AND SEDIMENT REMOVAL REQUIREMENTS IN MIND. WHEN THE CONTOUR CANNOT BE FOLLOWED INSTALL THE FENCE SUCH THAT PERPENDICULAR WINGS ARE CREATED TO BREAK THE VELOCITY OF WATER FLOWING ALONG THE FENCE.

   B. SWALES: LOCATE 'U' SHAPE ACROSS SWALE SUCH THAT THE BOTTOM OF BOTH ENDS OF THE FENCE ARE HIGHER THAN THE TOP OF THE LOWEST SECTION OF THE FENCE.

   C. CATCH BASINS IN SWALE ON SLOPES: LOCATED TWO 'U' SHAPES ACROSS AS ABOVE; ONE IMMEDIATELY UP SLOPE FROM THE CATCH BASIN AND THE OTHER IMMEDIATELY DOWN SLOPE FROM THE CATCH BASIN.

   D. CATCH BASINS IN DEPRESSIONS: ENCIRCLE ENTIRE CATCH BASIN

   E. CULVERT INLETS: LOCATE IN 'U' SHAPES APPROXIMATELY 6 FEET FROM THE CULVERT IN THE DIRECTION OF THE INCOMING FLOW.

   F. LOCATE ACROSS THE SWALE AT LEAST 6 FEET FROM THE CULVERT OUTLET.

3. INSTALLATION:
   A. TRENCH EXCAVATION: EXCAVATE A TRENCH A MINIMUM OF 6 INCHES DEEP AND 6 INCHES WIDE ON THE UP SLOPE SIDE OF THE FENCE LOCATION. FOR SLOPE AND SWALE INSTALLATIONS, EXTEND THE ENDS OF THE TRENCH SUFFICIENTLY UP SLOPE SUCH THAT BOTTOM END OF THE FENCE WILL BE HIGHER THAN THE TOP OF THE LOWEST PORTION OF THE FENCE. WHEN THE FENCE IS NOT INSTALLED ON THE CONTOUR, EXCAVATE WING TRENCHES SPACED AT THE INTERVALS GIVEN IN THE TABLE.

   B. SUPPORT POSTS DRIVE SUPPORT POSTS ON THE DOWN SLOPE OF THE TRENCH TO A DEPTH OF AT LEAST 12 INCHES INTO ORIGINAL GROUND. NEVER INSTALL SUPPORT POSTS MORE THAN _ FEET APART. INSTALL SUPPORT POSTS CLOSER THAN 10 FEET APART WHEN CONCENTRATED FLOWS ARE ANTICIPATED OR WHEN STEEP CONTRIBUTING SLOPES AND SOIL CONDITIONS ARE EXPECTED TO GENERATE LARGER VOLUMES OF SEDIMENT. FOR CATCH BASINS IN HOLLOWS, DRIVE POSTS AT EACH CORNER OF THE CATCH BASIN. WHENEVER THE GEOTEXTILE FILTER FABRIC THAT IS USED EXCEEDS THE MINIMUM MATERIAL SPECIFICATIONS CONTAINED IN THE MEASURE, THE SPACING OF THE STAKES SHALL BE PER MANUFACTURER'S RECOMMENDATIONS.

   C. GEOTEXTILE FABRIC: STAPLE OR SECURE THE GEOTEXTILE TO THE SUPPORT POSTS PER MANUFACTURER'S INSTRUCTION SUCH THAT AT LEAST 6 INCHES OF GEOTEXTILE LIES WITHIN THE TRENCH, THE HEIGHT OF THE FENCE DOES NOT EXCEED 30 INCHES AND THE GEOTEXTILE IS TAUT BETWEEN THE POSTS, WHEN THE TRENCH IS OBSTRUCTED BY STONES, TREE ROOTS, ETC. ALLOW THE GEOTEXTILE TO LAY OVER THE OBSTRUCTION SUCH THAT THE BOTTOM OF THE GEOTEXTILE POINTS UP SLOPE. IN THE ABSENCE OF MANUFACTURER'S SPECIFICATIONS SPACE WIRE STAPLES ON WOODEN STAKES AT A MAXIMUM OF 4 INCHES APART AND ALTERNATE THEIR POSITIONS FROM PARALLEL TO THE AXIS OF THE STAKE TO PERPENDICULAR. DO NOT STAPLE THE GEOTEXTILE TO LIVING TREES.PROVIDE REINFORCEMENT FOR THE FENCE WHEN IT CAN BE EXPOSED TO HIGH WINDS. WHEN JOINTS IN THE GEOTEXTILE FABRIC ARE NECESSARY, SPLICE TOGETHER ONLY AT SUPPORT POSTS AND SECURELY SEAL (SEE MANUFACTURER'S RECOMMENDATIONS).

   D. BACKFILL AND COMPACTION: BACKFILL THE TRENCH WITH TAMPED SOIL OR AGGREGATE OVER THE GEOTEXTILE WHEN THE TRENCH IS OBSTRUCTED BY A STONE, TREE ROOTS, ETC. MAKE SURE THE BOTTOM OF THE GEOTEXTILE LIES HORIZONTAL ON THE GROUND WITH THE RESULTING FLAP ON THE UP SLOPE SIDE OF THE GEOTEXTILE AND BURY THE FLAP 6 INCHES OF TAMPED SOIL OR AGGREGATE.

4. MAINTENANCE:
INSPECT THE SILT FENCE AT LEAST ONCE A WEEK AND WITHIN 24 HOURS OF THE END OF A STORM WITH A RAINFALL OF ½ INCH OR GREATER TO DETERMINE MAINTENANCE NEEDS. WHEN USED FOR DEWATERING OPERATIONS, INSPECT FREQUENTLY BEFORE, DURING, AND AFTER PUMPING OPERATIONS. REMOVE THE SEDIMENT DEPOSITS OR, IF ROOM ALLOWS INSTALL A SECONDARY SILT FENCE UP SLOPE OF THE EXISTING FENCE WHEN SEDIMENT DEPOSITS REACH APPROXIMATELY ONE HALF THE HEIGHT OF THE EXISTING FENCE. REPLACE OR REPAIR THE FENCE WITHIN 24 HOURS OF OBSERVED FAILURE. FAILURE OF THE FENCE HAS OCCURRED WHEN SEDIMENT FAILS TO BE RETAINED BY THE FENCE BECAUSE:
(A) THE BARRIER HAS BEEN OVERTOPPED, UNDERCUT, OR BYPASSED BY RUNOFF WATER,
(B) THE BARRIER HAS BEEN MOVED OUT OF POSITION, OR
(C) THE HAYBALES HAVE DETERIORATED OR BEEN DAMAGED.
WHEN REPETITIVE FAILURES OCCUR AT THE SAME LOCATION, REVIEW CONDITIONS, AND LIMITATIONS FOR USE AND DETERMINE IF ADDITIONAL CONTROLS (E.G. TEMPORARY STABILIZATION OF CONTRIBUTING AREA, DIVERSIONS, STONE BARRIERS) ARE NEEDED TO REDUCE FAILURE RATE OR REPLACE HAY BALE BARRIER. MAINTAIN THE HAY BALE BARRIER UNTIL THE CONTRIBUTING AREA IS STABILIZED. AFTER THE UP SLOPE AREAS HAVE BEEN PERMANENTLY STABILIZED, PULL THE STAKES OUT OF THE HAY BALES. UNLESS OTHERWISE REQUIRED, NO REMOVAL OR REGRADING OF ACCUMULATED SEDIMENT IS REQUIRED. THE HAY BALES MAY THEN BE LEFT IN PLACE OR BROKEN UP FOR GROUND COVER.

HAY BALE BARRIER

HB

GEOTEXTILE SILT FENCE SLOPE/LENGTH LIMITATIONS	
SLOPE STEEPNESS	SLOPE LENGTH AND WING SPACING
5:1 OR FLATTER	100 FEET
3:1 TO 5:1	75 FEET
2:1 TO 3:1	50 FEET

1. MATERIALS:
   A. HAY BALES: SHALL BE MADE OF HAY OR STRAW WITH 40 POUNDS MINIMUM WEIGHT AN 120 POUNDS MAXIMUM WEIGHT HELD TOGETHER BY TWINE OR WIRE.

   B. STAKES FOR ANCHORING HAY BALES: SHALL BE MINIMUM OF 36 INCHES LONG AND MADE OF EITHER HARDWOOD WITH DIMENSIONS OF 1½ INCHES SQUARE OR STEEL POSTS WITH A MINIMUM WEIGHT OF ½ POUND PER LINEAR FOOT.

2. PLACEMENT ON THE LANDSCAPE:
CONTRIBUTING DRAINAGE AREA IS NO GREATER THAN 1 ACRE. MAXIMUM SLOPE LENGTH IS AS SHOWN IN TABLE.
   A. TOE OF SLOPE: LOCATE 5-10 FEET DOWN GRADIENT FROM THE TOW OF SLOPE GENERALLY ON THE CONTOUR.

   B. SWALES: NOT RECOMMENDED. SEE GEOTEXTILE SILT FENCE OR STONE CHECK DAM MEASURES.

   C. CATCH BASINS IN SWALES ON SLOPES: NOT RECOMMENDED. SEE GEOTEXTILE SILT FENCE OR STONE CHECK DAM MEASURES

   D. CATCH BASINS IN DEPRESSIONS OR LOW SPOTS (YARD DRAINS): ENCIRCLE CATCH BASIN.

   E. CULVERT INLETS: NOT RECOMMENDED. SEE GEOTEXTILE SILT FENCE MEASURES.

   F. CULVERT OUTLETS: NOT RECOMMENDED. USE TEMPORARY SEDIMENT TRAP AND/OR STONE CHECK DAM MEASURES.

3. INSTALLATION:
   A. TRENCH EXCAVATION: EXCAVATE A TRENCH AS WIDE AS THE BALES AND AT LEAST 4 INCHES DEEP. EACH END OF THE TRENCH SHOULD BE WINGED UP SLOPE SO THAT THE BOTTOM OF THE LAST BALE IS HIGHER THAN THE TOP OF THE LOWEST HAY BALE IN THE BARRIER.

   B. HAY BALE PLACEMENT: PLACE BALES IN A SINGLE ROW IN THE TRENCH, LENGTHWISE, WITH ENDS OF ADJACENT BALES TIGHTLY ABUTTING ONE ANOTHER AND THE BINDINGS ORIENTED AROUND THE SIDES RATHER THAN ALONG THE TOPS AND BOTTOMS OF THE BALES (TO AVOID PREMATURE ROTTING OF THE BINDINGS).

   C. STAKING HAY BALES: ANCHOR EACH BALE WITH AT LEAST 2 STAKES, DRIVING THE FIRST STAKE IN EACH BALE TOWARD THE PREVIOUSLY LAID BALE TO FORCE THE BALES TOGETHER. STAKES MUST BE DRIVEN A MINIMUM OF 18 INCHES INTO THE GROUND. FILL ANY GAPS BETWEEN THE BALES WITH HAY OR STRAW TO PREVENT WATER FROM ESCAPING BETWEEN THE BALES.

   D. BACKFILL & TAMPED: BACKFILL THE BALES WITH EXCAVATED TRENCH MATERIAL TO A MINIMUM DEPTH OF 4 INCHES ON THE UPHILL SIDE OF THE BALES TAMP BY HAND OR MACHINE AND COMPACT THE SOIL. LOOSE HAY OR STRAW SCATTERED OVER THE DISTURBED AREA IMMEDIATELY UPHILL FROM THE HAY BALE BARRIER TENDS TO INCREASE BARRIER EFFICIENCY.

4. MAINTENANCE:
INSPECT THE HAY BALE BARRIER AT LEAST ONCE A WEEK AND WITHIN 24 HOURS OF THE END OF A STORM WITH RAIN FALL AMOUNT ½ INCH OR GREATER TO DETERMINE MAINTENANCE NEEDS. FOR DEWATERING OPERATIONS, INSPECT FREQUENTLY BEFORE, DURING, AND AFTER PUMPING OPERATIONS. REMOVE THE SEDIMENT DEPOSITS OR, INSTALL A SECONDARY BARRIER UP SLOPE FROM THE EXISTING BARRIER WHEN SEDIMENT DEPOSITS REACH APPROXIMATELY ONE HALF THE HEIGHT OF THE EXISTING BARRIER. REPLACE OR REPAIR THE BARRIER WITHIN 24 HOURS OF OBSERVED FAILURE. FAILURE OF THE BARRIER HAS OCCURRED WHEN SEDIMENT FAILS TO BE RETAINED BY THE BARRIER BECAUSE:
(A) THE FENCE HAS BEEN OVER TOPPED, UNDERCUT OR BYPASSED BY RUNOFF WATER,
(B) THE FENCE HAS BEEN MOVED OUT OF POSITION (KNOCKED OVER), OR
(C) THE GEOTEXTILE HAS DECOMPOSED OR HAS BEEN DAMAGED
WHEN REPETITIVE FAILURES OCCUR AT THE SAME LOCATION, REVIEW CONDITIONS AND LIMITATIONS FOR USE AND DETERMINE IF ADDITIONAL CONTROLS (E.G. TEMPORARY STABILIZATION OF CONTRIBUTING AREA, DIVERSIONS, STONE BARRIERS) ARE NEEDED TO REDUCE FAILURE RATE OR REPLACE FENCE. MAINTAIN THE FENCE UNTIL THE CONTRIBUTING AREA IS STABILIZED. AFTER THE CONTRIBUTING AREA IS STABILIZED DETERMINE IF SEDIMENT CONTAINED BY THE FENCE REQUIRES REMOVAL OR REGRADING AND STABILIZATION. IF THE DEPTH IS GREATER THAN OR EQUAL TO 6 INCHES, REGRADING OR REMOVAL OF THE ACCUMULATED SEDIMENT IS REQUIRED. NO REMOVAL OR REGRADING IS REQUIRED IF SEDIMENT DEPTH IS LESS THAN 6 INCHES.REMOVE THE FENCE BY PULLING UP THE SUPPORT POSTS AND CUTTING THE GEOTEXTILE AT GROUND LEVEL. REGRADE OR REMOVE SEDIMENT AS NEEDED, AND STABILIZE DISTURBED SOILS.

PERMANENT SEEDING

PS

1. SPECIFICATIONS
   A. SEED SELECTION AND QUANTITY
   SELECT A SEED MIXTURE APPROPRIATE TO THE INTENDED USE AND SOIL CONDITIONS OR USE A 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 QUANTITY 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 BETWEEN 95% AND 98% AND A GERMINATION RATE BETWEEN 70% AND 90%. SOME SEEDING MIXTURES CALL FOR PURE LIVE SEED. INCREASE SEEDING RATES 10% WHEN USING FROST CRACK SEEDING OR HYDROSEEDING.

   B. TIMING
   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 15 THROUGH OCTOBER 1, WITH THE FOLLOWING EXCEPTIONS:
   - FOR 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.

   C. SITE PREPARATION
   GRADE IN ACCORDANCE WITH THE LAND GRADING MEASURE. 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 A SOIL TEST AT THE TIME OF SEEDING; ANTICIPATE 12 POUNDS NITROGEN PER TON OF WOOD CHIPS AND/OR BARK MULCH.

   D SEEDBED PREPARATION.
   APPLY TOPSOIL IF NECESSARY, IN ACCORDANCE WITH TOPSOILING MEASURE, APPLY FERTILIZER AND GROUND LIMESTONE 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 A 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 TABLE. 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 TIME OF SEEDING. WORK LIME AND FERTILIZER INTO THE SOIL TO A DEPTH OF 3 TO 4 INCHES WITH A DISC OR OTHER SUITABLE EQUIPMENT. CONTINUE TILLAGE UNTIL A REASONABLE UNIFORM, FINE SEEDBED IS PREPARED. FOR AREAS TO BE MOWED THE FINAL SOIL LOOSENING AND SURFACE ROUGHENING OPERATION IS BY HAND, HARROW, OR DISC. IF DONE BY HARROW OR DISC, IT IS GENERALLY DONE ON THE CONTOUR. AREAS NOT TO BE MOWED CAN BE TRACKED WITH CLEATED EARTH MOVING 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 SEED BED JUST BEFORE SEEDING, IF THE SOIL IS COMPACTED, CRUSTED, OR HARDENED SCARIFY THE AREA PRIOR TO SEEDING.

SOIL TEXTURE VS. LIMING RATES		
SOIL TEXTURES	TONS/ACRE OF LIME	POUNDS/1,000 S.F. OF LIME
CLAY, CLAY LOAM, AND HIGHLY ORGANIC SOIL	3	135
SANDY LOAM, LOAM, AND SILTY LOAM	2	672
LOAMY SAND, AND SAND	1	45

   E. SEED APPLICATION
   APPLY SELECTED SEED AT RATES PROVIDED IN TABLE UNIFORMLY BY HAND, CYCLONE SEEDER, DRILL, CULTIPACKER TYPE SEEDER OR HYDROSEEDER (SLURRY INCLUDING SEED AND FERTILIZER). NORMAL SEEDING DEPTH IF FROM ¼ TO ½ INCH. INCREASE SEEDING RATES BY 10% WHEN HYDROSEEDING OR FROST CRACK SEEDING. SEED WARM SEASON GRASSES DURING THE SPRING ONLY. APPLY MULCH ACCORDING TO THE MULCH FOR SEED MEASURE.

   F. IRRIGATION FOR SUMMER FEEDING
   WHEN SEEDING OUTSIDE OF THE RECOMMENDED 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 IN 1 TO 2 INCHES OF WATER APPLIED PER APPLICATION, SOAKING THE GROUND TO A DEPTH OF 4 INCHES.

2. MAINTENANCE
   A. INITIAL ESTABLISHMENT
   INSPECT SEEDED AREA AT LEAST ONCE A WEEK AND WITHIN 24 HOURS OF THE END OF A STORM WITH A RAINFALL AMOUNT OF ½ INCH OR GREATER DURING THE FIRST GROWING SEASON. WHERE SEED HAS BEEN MOVED OR WHERE SOIL EROSION HAS OCCURRED DETERMINE THE CAUSE OF THE FAILURE. BAIRD DAMAGE MAY BE A PROBLEM IF MULCH WAS APPLIED TO THINLY TO PROTECT SEED. RE-SEED AND RE-MULCH. IF MOVEMENT WAS THE RESULT OF WIND, REPAIR EROSION DAMAGE (IF ANY), REAPPLY 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) REAPPLY MULCH WITH ANCHORING OR USE TEMPORARY EROSION CONTROL BLANKET MEASURE AND/OR TURF REINFORCEMENT MAT MEASURE. IF THERE IS NO EROSION, BUT SEED SURVIVAL IS LESS THAN 100 PLANTS PER SQUARE FOOT AFTER 4 WEEKS 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.

   B. 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 ON THE TYPE OF GRASS AND WHERE IT IS BEING USED. DO NOT MOW GRAS 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.

   C. LONG TERM MAINTENANCE
   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 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 SEEDLING HAS BEEN MOWED AT LEAST FOUR TIMES.

SEED MIX SELECTION

AREA TO BE SEEDED	MIXTURE NUMBER[1] MOWING DESIRED	MIXTURE NUMBER[1] MOWING NOT DESIRED
BORROW AREAS, ROADSIDES, POND BANKS, AND OTHER SLOPES AND BANKS A. WELL OR EXCESSIVELY DRAINED SOILS B. SOMEWHAT POORLY DRAINED SOILS[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 B. SOMEWHAT POORLY DRAINED SOILS C. VARIABLE DRAINAGE SOILS	 2, 3, OR 4 2 2	 9, 10, OR 11 – –
EFFLUENT DISPOSAL	–	5 OR 6
GRAVEL PITS	–	26, 27, OR 28
GULLIED AND ERODED AREAS	–	3, 4, 5, 8, 10, 11, OR 12
MINE SPOIL AND OTHER SPOIL BANKS (IF TOXIC SUBSTANCES AND 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	1, 19, ***21***, OR ***29***	–

FOOTNOTES:
1. THE NUMBERS FOLLOWING IN THESE COLUMNS REFER TO SEED MIXTURES IN THE FOLLOWING TABLE MIXES FOR SHADY AREAS ARE IN ***BOLD-ITALICS*** PRINT (INCLUDING MIXES 20 THROUGH 24).
2. SEE COUNTY SOIL SURVEY FOR DRAINAGE CLASS. SOIL SURVEYS ARE AVAILABLE FROM THE COUNTY SOIL AND WATER CONSERVATION OFFICE.
3. USE MIX 26 WHEN SOIL PASSING A 200 MESH SIEVE IS LESS THAN 15% OF TOTAL WEIGHT. USE MIX 26 AND 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.

SEED MIXTURES FOR PERMANENT SEEDING

NUMBER	SEED MIXTURE (VARIETY)[4]	POUNDS/ACRE	POUNDS/1,000 S.F.
1[5]	KENTUCKY BLUEGRASS CREEPING RED FESCUE (PENNLAWN, WINTERGREEN) PERENNIAL RYEGRASS (NORLEA, MANHATTEN)	20 2 20 TOTAL 42	0.45 0.45 0.10 1.00
2[5]	CREEPING RED FESCUE (PENNLAWN, WINTERGREEN) REDTOP (STREEKER, COMMON) TALL FESCUE (KENTUCKY 31) OR SMOOTH BROMEGRASS (SARATOGA, LINCOLN)	20 2 20 TOTAL 42	0.45 0.05 0.45 0.95
3[5]	CREEPING RED FESCUE (PENNLAWN, WINTERGREEN) BIRDS FOOT TREFOIL (EMPIRE, VIKING) WITH INOCULANT[1] TALL FESCUE (KENTUCKY 31) OR SMOOTH BROMEGRASS (SARATOGA, LINCOLN)	20 8 20 TOTAL 48	0.45 0.20 0.45 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	0.45 0.05 0.20 .70
5[5]	WHITE CLOVER PERENNIAL RYE GRASS	10 2 TOTAL 12	0.25 0.05 .30
6[5]	CREEPING RED FESCUE REDTOP (STREEKER, COMMON) PERENNIAL RYE GRASS	20 2 20 TOTAL 42	0.50 0.05 0.50 1.05
7[5]	SMOOTH BROMEGRASS (SARATOGA, LINCOLN) PERENNIAL RYE GRASS BIRD'S-FOOT TREFOIL (EMPIRE, VIKING) WITH INOCULANT[1]	15 5 10 TOTAL 30	0.35 0.10 0.25 0.70
8[6]	SWITCHGRASS (BLACKWELL, SHELTER, CAVE-IN-ROCK) WEEPING LOVEGRASS LITTLE BLUESTEM (BLAZE, ALDOUS, CAMPER)	10[1] 3 10[1] TOTAL 23	0.25 0.07 0.25 0.57
9[5]	CREEPING RED FESCUE (PENNLAWN, WINTERGREEN) CROWN VETCH (CHEMUNING, PENNGIFT) WITH INOCULANT[1] (OR FLATPEA (LATHCO) WITH INOCULANT)[1] TALL FESCUE (KENTUCKY 31) OR SMOOTH BROMEGRASS (SARATOGA, LINCOLN) REDTOP (STREEKER, COMMON)	10 15 (30) 15 2 TOTAL 42 (OR 57)	0.25 0.35 (0.75) 0.35 0.05 1.10 (OR 1.25)
10[5]	CREEPING RED FESCUE (PENNLAWN, WINTERGREEN) REDTOP (STREEKER, COMMON) CROWN VETCH (CHEMUNING, PENNGIFT) WITH INOCULANT[1] (OR FLATPEA (LATHCO) WITH INOCULANT)[1]	20 2 15 (30) TOTAL 37 (OR 52)	0.45 0.05 0.35 (0.75) 0.85 (OR 1.25)
11[5]	BIRD'S-FOOT TREFOIL (EMPIRE, VIKING) WITH INOCULANT[1] CROWN VETCH (CHEMUNING, PENNGIFT) WITH INOCULANT[1] CREEPING RED FESCUE (PENNLAWN, WINTERGREEN) OR TALL FESCUE (KENTUCKY 31)	8 15	0.20 0.35
12[6]	SWITCHGRASS (BLACKWELL, SHELTER, CAVE-IN-ROCK) PERENNIAL RYEGRASS (NORLEA, MANHATTEN) CROWN VETCH (CHEMUNING, PENNGIFT) WITH INOCULANT[1]	10 5 15 TOTAL 45	0.25 0.10 0.35 1.05
13[6]	CROWN VETCH (CHEMUNING, PENNGIFT) WITH INOCULANT[1] (OR FLATPEA (LATHCO) WITH INOCULANT)[1] SWITCHGRASS (BLACKWELL, SHELTER, CAVE-IN-ROCK) PERENNIAL RYEGRASS (NORLEA, MANHATTEN)	10 (30) 5[1] 5 TOTAL 20 (OR 40)	0.25 (0.75) 0.10 0.25 0.85 (OR 1.25)
14[5]	CROWN VETCH (CHEMUNING, PENNGIFT) WITH INOCULANT[1] (OR FLATPEA (LATHCO) WITH INOCULANT)[1] PERENNIAL RYEGRASS (NORLEA, MANHATTEN)	15 (30) 10 TOTAL 25 (OR 40)	0.35 (0.75) 0.25 0.60 (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 INOCULANT[1]	5[1] 5[1] 5 5 TOTAL 20	0.10 0.10 0.10 0.10 1.10
16[5]	TALL FESCUE (KENTUCKY 31) OR FLATPEA (LATHCO) WITH INOCULANT[1]	20 30 TOTAL 12	0.45 0.75 1.20
17[6]	DEER TONGUE (TIOGA) WITH INOCULANT[1] BIRD'S-FOOT TREFOIL (EMPIRE, VIKING) WITH INOCULANT[1] PERENNIAL RYEGRASS (NORLEA, MANHATTEN)	10[1] 8 3 TOTAL 30	0.25 0.20 0.07 0.52
18[6]	DEER TONGUE (TIOGA) WITH INOCULANT[1] CROWN VETCH (CHEMUNING, PENNGIFT) WITH INOCULANT[1] PERENNIAL RYEGRASS (NORLEA, MANHATTEN)	10 15 3 TOTAL 28	0.25 0.35 0.07 0.67
19[5]	CHEWINGS FESCUE HARD FESCUE COLONIAL BENTGRASS BIRD'S-FOOT TREFOIL (EMPIRE, VIKING) PERENNIAL RYEGRASS	35 30 5 10 20 TOTAL 100	0.80 0.70 0.10 0.20 0.50 2.30
20	DELETED DUE TO INVASIVE SPECIES	–	–
21[5]	CREEPING RED FESCUE (PENNLAWN, WINTERGREEN)	TOTAL 60	1.35
22[5]	CREEPING RED FESCUE (PENNLAWN, WINTERGREEN) TALL FESCUE (KENTUCKY 31)	40 20 TOTAL 60	0.90 0.45 1.35
23[5]	CREEPING RED FESCUE (PENNLAWN, WINTERGREEN) FLATPEA (LATHCO) WITH INOCULANT[1]	15 30 TOTAL 45	0.35 0.75 3.60
24[5]	TALL FESCUE (KENTUCKY 31)	TOTAL 150	3.60
25[5]	AMERICAN BEACHGRASS (CAPE)	58,500 CULMS/ ACRE	1,345 CULMS/ 100 S.F.
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)	4 4 2 1.5 2 TOTAL 13.5	0.10 0.10 0.05 0.03 0.05 0.33
27[5]	FLATPEA (LATHCO) PERENNIAL PEA (LANCER) CROWN VETCH (CHEMUNING, PENNGIFT) TALL FESCUE (KENTUCKY 31)	10 2 10 2 TOTAL 24	0.20 0.05 0.20 0.20 0.65
28[5]	ORCHARDGRASS (PENNLATE, KAY, POTOMAC) TALL FESCUE (KENTUCKY 31) REDTOP (STREEKER, COMMON) BIRD'S-FOOT TREFOIL (EMPIRE, VIKING)	5 10 2 5 TOTAL 22	0.10 0.20 0.05 0.10 0.45
29	TURF TYPE TALL FESCUE (BONANZA, MUSTANG, REBEL II, SPARTAN, JAGUAR) OR PERENNIAL RYE ("FORTUNE 2000" MIX, FIESTA II, BLAZER II, AND DASHER II)	175 TO 250	6 TO 8

1. USE PROPER INOCULANT FOR LEGUME SEED, USE FOUR TIMES RECOMMENDED RATE WHEN HYDRO SEEDING.
2. USE PURE LIVE SEED (PLS) = % GERMINATION x % PURITY / 100
   EXAMPLE COMMON BERMUDA SEED WITH 70% GERMINATION AND 80% PURITY = 70 x 80 / 100 OR 56 / 100 OR 56%
   10 POUNDS PLS/ACRE / 56% = 17.9 POUNDS/ACRE OF BAGGED SEED
3. D.O.T. ALL PURPOSE MIX
4. WILD FLOWER MIX CONTAINING NEW ENGLAND ASTER, BABY'S BREATH, BLACK EYED SUSAN, CATCHFLY, DWARF COLUMBINE, PURPLE CONE FLOWER, LANCE-LEAVED COREOPSIS, OX-EYED DAISY, DAME'S ROCKET, SCARLET FLAX, GAYFEATHER, ROCKY LARKSPUR, SPANISH LARKSPUR, CORN POPPY, SPURRED SNAPDRAGON, WALL FLOWER AND/OR YARROW MAY BE ADDED TO ANY SEED MIX GIVEN. MOST SEED SUPPLIERS CARRY A WILD FLOWER MIXTURE THAT IS SUITABLE FOR THE NORTHEAST AND CONTAINS A VARIETY OF BOTH ANNUAL AND PERENNIAL FLOWERS, SEEDING RATES FOR THE SPECIFIC MIXTURES SHOULD BE FOLLOWED.
5. CONSIDERED TO BE A COOL SEASON MIX.
6. CONSIDERED TO BE A WARM SEASON MIX.

RIP RAP

RR

DESIGN CRITERIA

A. SIZES - EQUIVALENT SPHERES
RIP RAP SIZES CAN BE DESIGNATED BY EITHER THE DIAMETER OR THE WIGHT OF THE STONES. THEY CAN ALSO BE DESIGNATED BY ESTABLISHED PUBLISHED STANDARDS, SUCH AS THAT FOUND IN THE D.O.T. STANDARDS AND SPECIFICATIONS SECTION M.02.06. IT IS OFTEN MISLEADING TO THINK OF RIP RAP IN TERMS OF DIAMETER, SINCE THE STONES SHOULD BE ANGULAR INSTEAD OF SPHERICAL. IT IS SIMPLER TO SPECIFY THE DIAMETER OF AN EQUIVALENT SIZE OF A SPHERICAL STONE. STONE SIZES ARE BASED UPON AN ASSUMED BULK WEIGHT OF 2.65 GRAMS PER CUBIC CENTIMETER (165 LBS/C.F.). A DIAMETER OF STONE IN THE MIXTURE IS SPECIFIED FOR WHICH SOME PERCENTAGE, BY WEIGHT, WILL BE SMALLER. FOR EXAMPLE, D85 REFERS TO A MIXTURE OF STONES IN WHICH 85% OF THE STONE BY WEIGHT WOULD BE SMALLER THAN THE DIAMETER SPECIFIED. MOST DESIGNS ARE BASED ON D50. IN OTHER WORDS, THE DESIGN IS BASED ON THE AVERAGE SIZE OF STONE IN THE MIXTURE.

B. GRADIATION
RIP RAP GRADIATIONS SHALL BE SPECIFIED BY EITHER THE D.O.T. STANDARD SPECIFICATIONS, OR OTHER ESTABLISHED PUBLISHED STANDARDS. REGARDLESS OF THE STANDARD USED, RIP RAP SHALL BE COMPOSED OF A WELL-GRADED MIXTURE DOWN TO THE ONE-INCH SIZE PARTICLE SUCH THAT 50% OF THE MIXTURE BY WEIGHT SHALL BE LARGER THAN THE D50 SIZE AS DETERMINED FROM THE DESIGN PROCEDURE. THE DIAMETER OF THE LARGEST STONE SIZE IN SUCH A MIXTURE SHALL BE 1½ TIMES THE D50 SIZE. A WELL-GRADED MIXTURE AS USED HEREIN IS DEFINED AS AS MIXTURE COMPOSED PRIMARILY OF THE LARGER STONE SIZES BUT WITH A SUFFICIENT MIXTURE OF OTHER SIZES TO FILL THE PROGRESSIVELY SMALLER VOIDS BETWEEN THE STONES. THE D.O.T. RIP RAP STANDARDS ARE EXAMPLES OF WELL GRADED MIXTURES. AFTER DETERMINING THE RIP RAP SIZE THAT WILL BE STABLE UNDER THE FLOW CONDITIONS, CONSIDER THAT THE SIZE TO BE A MINIMUM AND THEN, BASED ON RIP RAP GRADATIONS ACTUALLY AVAILABLE IN THE AREA, SELECT THE SIZE OR GRADATION THAT EQUAL OR EXCEED THE MINIMUM SIZE.

EXAMPLES OF AVERAGE STONE SIZE FOR D50	
MODIFIED D50	0.42 FEET OR 5 INCHES
INTERMEDIATE D50	0.67 FEET OR 8 INCHES
STANDARD D50	1.25 FEET OR 15 INCHES

C. THICKNESS
THE MINIMUM THICKNESS OF THE RIP RAP LAYER SHALL BE 1½ TIMES THE MAXIMUM STONE DIAMETER BUT NOT LESS THAN 12 INCHES.

D. QUALITY OF STONE
INDIVIDUAL ROCK FRAGMENTS SHALL BE DENSE, SOUND AND FREE FROM CRACKS, SEAMS AND OTHER DEFECTS CONDUCTIVE TO ACCELERATED WEATHERING. THE ROCK FRAGMENTS SHALL BE ANGULAR IN SHAPE. THE LEAST DIMENSION OF AN INDIVIDUAL ROCK FRAGMENT SHALL BE NOT LESS THAN ONE-TIRD THE GREATEST DIMENSION OF THE FRAGMENT. THE STONE SHALL BE OF SUCH QUALITY THAT IT WILL NOT DISINTEGRATE ON EXPOSURE TO WATER OR WEATHERING, BE CHEMICALLY STABLE, AND SHALL BE SUITABLE IN ALL OTHER RESPECTS FOR PURPOSE INTENDED. THE BULK SPECIFIC GRAVITY (SATURATED SURFACE-DRY BASIS) OF THE INDIVIDUAL STONES SHALL BE AT LEAST 2.65.
NOTE: D.O.T. STANDARD SPECIFICATIONS DO NOT ACCEPT ROUNDED STONE OR BROKEN CONCRETE FOR RIP RAP.

D.O.T. STANDARD RIP RAP SIZES				
*STANDARD RIP RAP	*INTERMEDIATE RIP RAP STONE SIZE	*INTERMEDIATE RIP RAP % OF MASS	*MODIFIED RIP RAP STONE SIZE	*MODIFIED RIP RAP % OF MASS
A. NOT MORE THAN 15% OF THE RIP RAP SHALL BE SCATTERED SPALLS AND STONES LESS THAN 6 INCHES (150 MM) IN SIZE	18" OR OVER	0	18" OR OVER	0
	10" TO 18"	30 - 50	10" TO 18"	30 - 50
B. NO STONE SHALL BE LARGER INCHES (760 MM) IN SIZE AND AT LEAST 75% OF THE MASS SHALL BE STONES AT LEAST 15 INCHES (380 MM) IN SIZE.	6" TO 10"	30 - 50	6" TO 10"	30 - 50
	4" TO 6"	20 - 30	4" TO 6"	20 - 30
	2" TO 4"	10 - 20	2" TO 4"	10 - 20
	LESS THAN 2"	0 - 10	LESS THAN 2"	0 - 10

* THIS MATERIAL SHALL CONFORM TO LISTED GRADIATION

E. RIP RAP AT OUTLETS
DESIGN CRITERIA FOR SIZING THE STONE AND DETERMINING THE DIMENSION OR RIP RAP PADS USED AT THE OUTLETS OF DRAINAGE STRUCTURES ARE CONTAINED IN THE OUTLET PROTECTION MEASURE. A PROPERLY DESIGNED BEDDING, FILTER, AND/OR GEOTEXTILE UNDERLINING IS REQUIRED FOR RIP RAP USED AS OUTLET PROTECTION. WHERE THE NATIVE MATERIAL MEETS THE REQUIREMENTS FOR GRANULAR FREE DRAINING BEDDING MATERIAL, NO ADDITIONAL FILTER OR GEOTEXTILE IS REQUIRED.

F. RIP RAP FOR CHANNEL STABILIZATION
RIP RAP FOR CHANNEL STABILIZATION SHALL BE DESIGNED TO BE STABLE FOR THE CONDITION OF BANK-FULL FLOW IN REACH OF CHANNEL BEING STABILIZED (SEE PERMANENT LINED WATER MEASURE). THE DESIGN PROCEDURE, WHICH IS EXTRACTED FROM THE FEDERAL HIGHWAY ADMINISTRATION'S DESIGN OF ROADSIDE CHANNELS WITH FLEXIBLE LININGS, IS ONE ACCEPTED METHOD. OTHER GENERALLY ACCEPTED PUBLISHED METHODS MAY BE USED. RIP RAP SHALL EXTEND UP THE BANKS OF THE CHANNEL TO A HEIGHT EQUAL TO THE DESIGN DEPTH OF FLOW OR TO A POINT WHERE VEGETATION CAN BE ESTABLISHED TO ADEQUATELY PROTECT THE CHANNEL. THE RIP RAP SIZE TO BE USED IN A CHANNEL BEND SHALL EXTEND UPSTREAM FROM THE POINT OF CURVATURE A MINIMUM OF 0.4 TIME THE WATER SURFACE WIDTH, AND DOWNSTREAM FROM THE POINT OF TANGENCY A DISTANCE OF AT LEAST 5 TIMES THE CHANNEL BOTTOM AND UP BOTH SIDES OF THE CHANNEL OR ONLY PROTECT THE OUTSIDE BANK DEPENDING UPON SPECIFIC DESIGN REQUIREMENTS. WHERE RIP RAP IS USED ONLY FOR BANK PROTECTION AND DOES NOT EXTEND ACROSS THE BOTTOM OF THE CHANNEL, RIP RAP SHALL BE KEYED INTO THE BOTTOM OF THE CHANNEL TO A MINIMUM ADDITIONAL DEPTH EQUAL TO 1½ TIMES THE MAXIMUM SIZE STONE. FOR RIP RAP AND OTHER LINED CHANNELS, THE HEIGHT OF CHANNEL LINING ABOVE THE DESIGN WATER SURFACE SHALL BE BASED ON THE SIZE OF THE CHANNEL, THE FLOW VELOCITY, THE CURVATURE, IN FLOWS, WIND ACTION, FLOW REGULATION, ETC. IS WITHIN PLUS OR MINUS ¼ OF THE SPECIFIED THICKNESS.

G. RIP RAP FOR SLOPE STABILIZATION
RIP RAP FOR SLOPE STABILIZATION SHALL BE DESIGNED SO THAT THE NATURAL ANGLE OF REPOSE OF THE STONE MIXTURE IS STEEPER THAN THE GRADIENT OF THE SLOPE BEING STABILIZED.

H. FILTER BLANKETS OR BEDDING
A FILTER BLANKET OR BEDDING IS A LAYER OF MATERIAL PLACED BETWEEN THE RIP RAP AND THE UNDERLYING SOIL SURFACE TO PREVENT SOIL MOVEMENT THROUGH THE RIP RAP. FILTER BLANKETS OR BEDDING SHOULD ALWAYS BE PROVIDED WHERE SEEPAGE FROM UNDERGROUND SOURCES THREATENS THE STABILITY OF THE RIP RAP. A FILTER BLANKET OR BEDDING CAN BE EITHER GRANULAR STONE LAYER(S), A GEOTEXTILE OR BOTH. A DETERMINATION OF THE NEED FOR A FILTER BLANKET IS MADE BY COMPARING PARTICLE SIZE'S OF THE OVERLAYING MATERIAL AND THE MATERIAL UNDERLYING MATERIAL IN ACCORDANCE WITH THE CRITERIA BELOW.
1. A GRANULAR (STONE) BEDDING IS A VIABLE OPTION WHEN THE FOLLOWING RELATIONSHIP EXISTS:
   d15 FILTER/d85 BASE <5<d15 FILTER/d15 BASE <40 AND d50 FILTER/d50 BASE
   IN SOME CASES, MORE THAN ONE LAYER OF FILTER MATERIAL MAY BE NEEDED. IN THESE CASES FILTER REFERS TO THE OVERLAYING MATERIAL AND BASE REFERS TO THE UNDERLYING MATERIAL. THE RELATIONSHIP MUST HOLD BETWEEN THE RIP RAP AND THE FILTER MATERIAL. EACH LAYER OF FILTER MATERIAL SHALL BE A MINIMUM OF 6 INCHES THICK.
2. GEOTEXTILE (SPECIFICALLY INTENDED TO PREVENT PIPING): MAY BE USED IN CONJUNCTION WITH A LAYER OF COARSE AGGREGATE. THE GEOTEXTILE SHALL NOT BE USED ON SLOPES STEEPER THAN 1½:1 AS SLIPPAGE MAY OCCUR. THE FOLLOWING PARTICLE SIZE RELATIONSHIPS MUST EXIST:
   A. FOR GEOTEXTILE ADJACENT TO BASE MATERIALS CONTAINING 50% OR LESS (BY WEIGHT) OF FINE PARTICLES (LESS THAN 0.075 MM):
      I. d85 BASE (MM)/EOS GEOTEXTILE (MM) > 1
      WHERE EOS = EQUIVALENT OPENING SIZE TO A U.S. STANDARD SIEVE SIZE.
      II. TOTAL OPEN AREA OF GEOTEXTILE IS LESS THAN 36%
   B. GEOTEXTILE ADJACENT TO ALL OTHER SOILS:
      I. EOS LESS THAN U.S. STANDARD SIEVE No. 70.
      II. TOTAL OPEN AREA OF GEOTEXTILE IS LESS THAN 10%

INSTALLATION REQUIREMENTS

A. SUB GRADE PREPARATION
PREPARE THE SUB GRADE FOR THE RIP RAP, BEDDING, FILTER, OR GEOTEXTILE TO THE REQUIRED LINES AND GRADES. COMPACT ANY FILL REQUIRED IN THE SUB GRADE TO A DENSITY APPROXIMATING THAT OF THE SURROUNDING UNDISTURBED MATERIAL. REMOVE BRUSH, TREES, STUMPS, AND OTHER OBJECTIONABLE MATERIAL.

B. GEOTEXTILE
FOR GEOTEXTILE FILTERS, USE ONLY GEOTEXTILES THAT WERE STORED IN A CLEAN DRY PLACE, OUT OF DIRECT SUN LIGHT, WITH THE MANUFACTURER'S PROTECTIVE COVER IN PLACE TO INSURE THE GEOTEXTILE WAS NOT DAMAGED BY ULTRAVIOLET LIGHT. PLACE THE GEOTEXTILE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

C. FILTER BLANKET OR BEDDING
IMMEDIATELY AFTER SLOPE PREPARATION, INSTALL THE FILTER OR BEDDING MATERIALS. SPREAD THE FILTER OR BEDDING MATERIALS IN A UNIFORM LAYER TO THE SPECIFIED DEPTH. WHERE MORE THAN ONE DISTINCT LAYER OF FILTER OR BEDDING MATERIAL IS REQUIRED, SPREAD THE LAYERS SO THAT THERE IS MINIMAL MIXING BETWEEN MATERIALS.

D. STONE PLACEMENT
IMMEDIATELY AFTER PLACEMENT OF THE FILTER BLANKET, BEDDING AND/OR GEOTEXTILE, PLACE THE RIP RAP TO ITS FULL COURSE THICKNESS IN ONE OPERATION SO THAT IT PRODUCES A DENSE WELL-GRADED MASS OF STONE WITH A MINIMUM OF VOIDS. THE DESIRED DISTRIBUTION OF STONES THROUGHOUT THE MASS MAY BE OBTAINED BY SELECTIVE LOADING AT THE QUARRY, CONTROLLED DUMPING OF SUCCESSIVE LOADS DURING FINAL PLACING OR BY A COMBINATION OF THESE METHODS. DO NOT PLACE THE RIP RAP IN LAYERS OR USE CHUTES OR SIMILAR METHODS TO DUMP THE RIP RAP WHICH ARE LIKELY TO CAUSE SEGREGATION OF THE VARIOUS STONE SIZES. TAKE CARE NOT TO DISLODGE THE UNDERLYING MATERIAL WHEN PLACING THE STONES. WHEN PLACING RIP RAP ON A GEOTEXTILE TAKE CARE NOT TO DAMAGE THE FABRIC. IF DAMAGE OCCURS, REMOVE AND REPLACE THE DAMAGED SHEET. FOR LARGE STONE, 12 INCHES OR GREATER US A 6 INCH LAYER OF FILTER OR BEDDING MATERIAL TO PREVENT DAMAGE TO THE MATERIAL FROM PUNCTURE. ENSURE THE FINISHED SLOPE IS FREE OF POCKETS OF SMALL STONES OR CLUSTERS OF LARGE STONES. HAND PLACING MAY BE NECESSARY TO ACHIEVE THE REQUIRED GRADES AND A GOOD DISTRIBUTION OF STONE SIZES. ENSURE THE FINAL THICKNESS OF THE RIP RAP BLANKET IS WITHIN PLUS OR MINUS ¼ THE SPECIFIED THICKNESS.

REFERENCE: 2002 CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL HANDBOOK

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REV.	DATE	COMMENT

STATE OF CONNECTICUT · DARIUS L. VIRBICKAS · 17671 · LICENSED PROFESSIONAL ENGINEER

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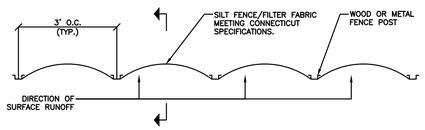
PROJECT MANAGERS • SITE PLANNERS • PERMIT EXPEDITORS •

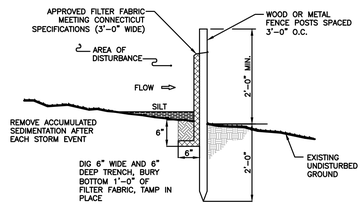
SEDIMENT AND EROSION CONTROL NOTES

SMF UNIVERSAL, LLC
124 NEW MILFORD TURNPIKE
WASHINGTON, CONNECTICUT

DRAWN BY:	BH
CHECKED BY:	DV
DATE:	1/13/22
SCALE:	AS NOTED
DRAWING No:	DD21050
PROJECT No:	DD21050
SHEET:	6



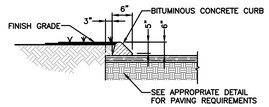
PLAN



SECTION

SILT FENCE

NOT TO SCALE



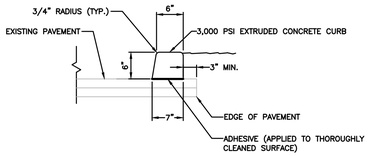
NOTES:

BITUMINOUS CURBING SHALL CONFORM TO STATE OF CT. D.O.T SPECIFICATIONS.

BITUMINOUS CURBING TO BE INSTALLED ONLY WHERE PERMITTED (NOT TO BE USED ON LANDSCAPED ISLANDS)

BITUMINOUS CONCRETE CURB

NOT TO SCALE

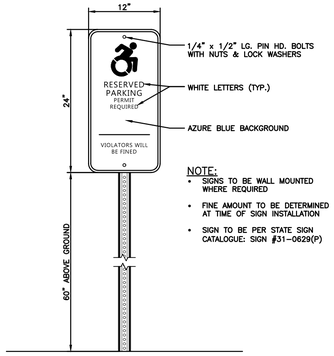


EXTRUDED CONCRETE CURB

NOT TO SCALE

NOTES:

EXTRUDED CURBING IS AN ACCEPTABLE ALTERNATE TO PRECAST OR POUR IN PLACE CURBING (ON SITE ONLY). NOT TO BE USED ON GRAVEL SURFACES. CONCRETE TO BE PRODUCED IN ACCORDANCE WITH ASTM C94 OR ASTM C685 AS APPLICABLE.

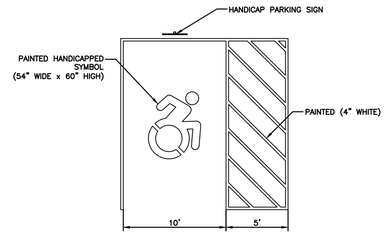


NOTE:

- SIGNS TO BE WALL MOUNTED WHERE REQUIRED
- FINE AMOUNT TO BE DETERMINED AT TIME OF SIGN INSTALLATION
- SIGN TO BE PER STATE SIGN CATALOGUE: SIGN #31-0629(P)

HANDICAP PARKING SIGN

NOT TO SCALE



TYPICAL HANDICAP PARKING AND STRIPING DETAIL

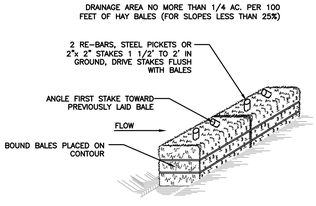
NOT TO SCALE

EROSION AND SEDIMENTATION NOTES:

1. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED PRIOR TO PRE-CONSTRUCTION CLEARING AND GRUBBING AND PRIOR TO CONSTRUCTION.
2. HAY BALE FILTERS AND/OR SILT FENCE WILL BE INSTALLED AT ALL CULVERT OUTLETS AND ALONG THE TOE OF ALL CRITICAL CUT AND FILL SLOPES.
3. ALL CULVERT DISCHARGE AREAS WILL BE PROTECTED WITH RIP-RAP. ENERGY DISSIPATORS WILL BE PROVIDED FOR THESE AREAS.
4. CATCH BASINS WILL BE PROTECTED WITH HAY BALE FILTERS THROUGHOUT THE CONSTRUCTION PERIOD AND UNTIL ALL DISTURBED AREAS ARE THOROUGHLY STABILIZED.
5. ALL EROSION AND SEDIMENT CONTROL MEASURES WILL BE CONSTRUCTED IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS OF THE 2002 CONNECTICUT EROSION AND SEDIMENT CONTROL GUIDELINES.
6. LAND DISTURBANCE SHALL BE KEPT TO A MINIMUM. RESTABILIZATION WILL BE SCHEDULED AS SOON AS PRACTICAL.
7. ALL CONTROL MEASURES WILL BE MAINTAINED IN EFFECTIVE CONDITION THROUGHOUT THE CONSTRUCTION PERIOD AND UNTIL SITE STABILIZATION HAS BEEN ACHIEVED.
8. ADDITIONAL CONTROL MEASURES WILL BE INSTALLED DURING THE CONSTRUCTION PERIOD, IF NECESSARY OR REQUESTED, BY THE TOWN OR ENGINEER.
9. SEDIMENT REMOVED FROM CONTROL STRUCTURES WILL BE DISPOSED OF IN A MANNER WHICH IS CONSISTENT WITH THE INTENT OF THE PLAN.
10. THE CONTRACTOR IS ASSIGNED THE RESPONSIBILITY FOR IMPLEMENTING THIS EROSION AND SEDIMENT CONTROL PLAN. THIS RESPONSIBILITY INCLUDES THE INSTALLATION AND MAINTENANCE OF CONTROL MEASURES, INFORMING ALL PARTIES ENGAGED ON THE CONSTRUCTION SITE OF THE REQUIREMENTS AND OBJECTIVES OF THE PLAN, NOTIFYING THE PLANNING AND ZONING OFFICE OF ANY TRANSFER OF THIS RESPONSIBILITY, AND FOR CONVEYING A COPY OF THE EROSION AND SEDIMENT CONTROL PLAN IF THE TITLE TO THE LAND IS TRANSFERRED.
11. ALL SILT FENCE OR HAYBALES RETAINING SEDIMENT OVER 1/2 THEIR HEIGHT SHALL HAVE THE SEDIMENT REMOVED AND ALL DAMAGED EROSION CONTROLS REMOVED AND REPLACED.
12. THE CONTRACTOR SHALL BE RESPONSIBLE TO CONTROL DUST AND WIND EROSION THROUGHOUT THE LIFE OF HIS CONTRACT. THE CONTRACTOR SHALL CONTROL DUST TO PREVENT A HAZARD TO TRAFFIC ON ADJACENT ROADWAYS.
13. SOIL AND EROSION CONTROLS MUST BE INSPECTED AND APPROVED BY THE TOWN PRIOR TO COMMENCEMENT OF WORK.
14. THE LIMITS OF CLEARING, GRADING AND DISTURBANCE SHALL BE KEPT TO A MINIMUM WITHIN THE APPROVED AREA OF CONSTRUCTION. ALL AREAS OUTSIDE THE LIMITS OF CLEARING SHALL REMAIN TOTALLY UNDISTURBED.
15. UNLESS DIRECTED OTHERWISE BY THE TOWN, THE PLANTING SEASON SHALL BE MARCH 15 TO JUNE 15 AND AUGUST 15 TO OCTOBER 15. AFTER OCTOBER 15, AREAS WILL BE STABILIZED WITH HAYBALE CHECK, FILTER FABRIC OR WOODCHIP MULCH AS REQUIRED TO CONTROL EROSION.
16. ALL NECESSARY MEASURES WILL BE TAKEN TO ENSURE THAT NO DRAINAGE FROM THE TOWN ROADS ENTERS THE SITE DURING OR AFTER CONSTRUCTION.

MAINTENANCE OF EROSION AND SEDIMENT CONTROLS:

1. ALL EROSION AND SEDIMENTATION CONTROLS TO BE CHECKED WEEKLY AND/OR AFTER A RAIN EVENT AND REPAIRS MADE, IF NECESSARY.
2. PRIOR TO THE TIME OF ANY FORECASTED RAINFALL, ALL EROSION AND SEDIMENTATION CONTROLS TO BE CHECKED AND NECESSARY REPAIRS MADE.
3. ALL SILT IS TO BE REMOVED FROM EROSION CONTROLS AS NECESSARY AND/OR PRIOR TO ANY FORECASTED RAINFALL.
4. ALL REMOVED SILT IS TO BE PROPERLY DISPOSED OF IN AN APPROVED DISPOSAL AREA. ANY DISPOSED SILT IS TO BE IMMEDIATELY SEEDED WITH ANNUAL RYE GRASS AND MULCHED.
5. AFTER ALL DISTURBED AREAS ARE STABILIZED AND APPROVAL TO REMOVE EROSION AND SEDIMENT CONTROLS HAVE BEEN OBTAINED FROM THE TOWN OR ENGINEER, THE CONTROLS CAN BE REMOVED.
6. A FORMAL LOG SHOULD BE KEPT OF ALL EROSION CONTROL INSPECTIONS AND MAINTENANCE, INCLUDING REMOVAL OF ANY TRAPPED SILT. THE LOG SHOULD BE KEPT ON SITE.
7. TEMPORARY CONTROLS ARE TO CONSIST OF SEEDING WITH ANNUAL RYE GRASS. HAY MULCH OR OTHER APPROVED METHODS SHALL BE USED IF SEASON WILL NOT PERMIT GRASS TO GERMINATE.
8. AFTER COMPLETION OF THIS PROJECT, ALL CATCH BASINS ARE TO BE CLEANED AND THERE AFTER ON A REGULAR BASIS. THE TIME INTERVAL SHOULD NOT EXCEED ONE YEAR.

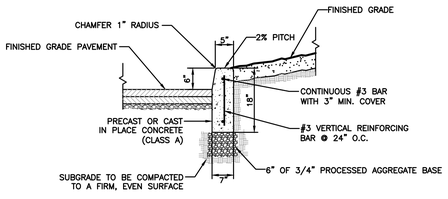


NOTES:

1. BALES SHALL BE PLACED AT THE TOE OF FILL SLOPE ALONG THE CONTOUR AND IN A ROW WITH ENDS TIGHTLY ABUTTING THE ADJACENT BALES.
2. EACH BALE SHALL BE PLACED SO THE BINDINGS ARE HORIZONTAL.
3. BALES SHALL BE SECURELY ANCHORED IN PLACE BY EITHER TWO STAKES OR RE-BARS DRIVEN THROUGH THE BALE. THE FIRST STAKE IN EACH BALE SHALL BE DRIVEN TOWARD THE PREVIOUSLY LAID BALE AT AN ANGLE TO FORCE THE BALES TOGETHER. STAKES SHALL BE DRIVEN FLUSH WITH THE BALE.
4. INSPECTION SHALL BE FREQUENT AND REPAIR REPLACEMENT SHALL BE PROMPT (WHEN NEEDED).
5. BALES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFULNESS.

HAY BALE

NOT TO SCALE



CONCRETE CURBING DETAIL

NOT TO SCALE

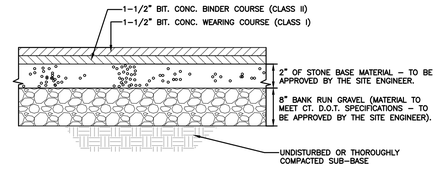
NOTES:

CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4,500 P.S.I @ 28 DAYS MODIFIED DOT CLASS "C" CONFORM TO ACI-301 & ACI 318-99.

PLACE 1/4" PREMOLDED EXPANSION JOINTS EVERY 20 FT. PLACE EXPANSION JOINT FILLER MATERIAL THE FULL DEPTH OF CONCRETE RECESSED AT 1/4" FROM THE TOP OF THE CONCRETE.

FILLER MATERIAL SHALL BE PREFORMED, NON EXTRUDING, BITUMINOUS TYPE CONFORMING TO A.S.T.M. D1751.

*CONCRETE CURBING IS REQUIRED FOR LANDSCAPED ISLANDS. EXTRUDED CONCRETE CURBING IS AN ACCEPTABLE ALTERNATE TO FULL DEPTH CURBING.



STANDARD DUTY BITUMINOUS PAVEMENT

NOT TO SCALE

NOTES:

TO BE PLACED IN PARKING AREAS FOR PASSENGER VEHICLES AND OTHER AREAS WHERE FREQUENT TRUCK TRAFFIC IS NOT ANTICIPATED

BASE MATERIAL SHALL CONFORM TO CONNECTICUT D.O.T. SPECIFICATION M.02.05 GRADATION B, AND APPROVED BY THE ENGINEER PRIOR TO PLACEMENT.

SUBGRADE TO BE MOISTURE CONDITIONED AND PROOFROLLED PRIOR TO PLACEMENT OF FILL AND/OR PAVEMENT. PAVEMENT MATERIAL TO CONFORM TO CONNECTICUT D.O.T. SPECIFICATION M.04.03

PROCESSED AGGREGATE BASE SHALL CONFORM TO CONNECTICUT D.O.T. SPECIFICATION M.05.01

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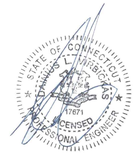

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