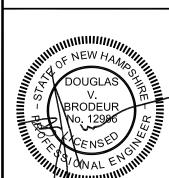


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LAND SERVICES, I
ENGINEERING | SURVEYING | PERMIT
SOIL & WETLAND MAPPING | SEPTIC DE
31 OLD NASHUA ROAD, AMHERST, NH 03031 TEL. 603.



NON-RESIDENTIAL SITE F

SUPERIOR STEEL (PHASE III)
46 NH ROUTE 13
MAP J LOT 10
ROOKLINE, NEW HAMPSHIRE
SCALE: 1" = 50'

SP-1
SHEET
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SHEET

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PROJECT 00650.06

SHEET NO. 1 OF 4

GENERAL

- 1. ALL WORK SHALL CONFORM TO THE LATEST EDITION OF THE NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION (NHDOT) STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (STANDARD SPEC), INCLUDING ALL REVISIONS AND ADDENDA.
- 2. CONTRACTOR SHALL NOTIFY 'DIG-SAFE' (1-888-344-7233) A MINIMUM OF 72 HOURS
- 3. CONTRACTOR SHALL BE RESPONSIBLE FOR SITE SECURITY.
- 4. CONTRACTOR SHALL PERFORM ALL WORK IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL LABOR AND SAFETY REQUIREMENTS (IE OSHA, NIOSH, MHSA, NH DOL, ETC.).
- 5. AREAS DISTURBED DURING CONSTRUCTION AND NOT RESTORED WITH IMPERVIOUS SURFACES (IE BUILDINGS, PAVEMENTS, STONE, GRAVELS, ETC.) SHALL RECEIVE A MINIMUM OF FOUR INCHES (4") OF LOAM AND SEED.
- 6. UPON AWARD OF THE CONTRACT, CONTRACTOR SHALL MAKE ALL NECESSARY CONSTRUCTION NOTIFICATIONS AND APPLY FOR AND OBTAIN NECESSARY PERMITS, PAY FEES, AND POST BONDS ASSOCIATED WITH THE WORK INDICATED ON THE DRAWINGS, SPECIFICATIONS, AND
- 7. PRIOR TO THE START OF CONSTRUCTION, CONTRACTOR SHALL VERIFY EXISTING PAVEMENT ELEVATION AT INTERFACES WITH PROPOSED PAVEMENTS AND EXISTING GROUND ELEVATIONS ADJACENT TO PROPOSED DRAINAGE OUTLETS TO ASSURE PROPER TRANSITIONS BETWEEN EXISTING AND PROPOSED FACILITIES.
- 8. THE CONTRACTOR SHALL NOT CLOSE OR OBSTRUCT ROADWAYS, SIDEWALKS, FIRE HYDRANTS, AND/OR RIGHT-OF-WAYS WITHOUT APPROPRIATE PERMITS.
- 9. TRAFFIC SIGNAGE AND PAVEMENT MARKINGS SHALL CONFORM TO THE LATEST EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) INCLUDING ALL REVISIONS
- 10. AREAS DISTURBED BY CONTRACTOR OUTSIDE OF THE LIMITS OF WORK SHALL BE RESTORED BY THE CONTRACTOR TO THEIR ORIGINAL CONDITION AT NO ADDITIONAL EXPENSE TO THE OWNER. 'ORIGINAL CONDITION' SHALL BE DETERMINED BY THE TOWN OF MILFORD.
- 11. IN THE EVENT THAT SUSPECTED CONTAMINATED SOIL, GROUNDWATER, OR OTHER MEDIA ARE ENCOUNTERED DURING CONSTRUCTION ACTIVITIES, BASED ON VISUAL, OLFACTORY, OR OTHER EVIDENCE, CONTRACTOR SHALL STOP ALL OPERATIONS IN THE VICINITY OF THE SUSPECTED CONTAMINATION AND CONTACT THE OWNER IMMEDIATELY.
- 12. CONTRACTOR SHALL PREVENT DUST, SEDIMENT, AND DEBRIS FROM EXITING THE SITE AND SHALL BE RESPONSIBLE FOR CLEANUP, REPAIRS, AND CORRECTIVE ACTION.
- 13. DAMAGE RESULTING FROM CONSTRUCTION LOADS SHALL BE REPAIRED BY CONTRACTOR AT NO ADDITIONAL EXPENSE TO THE OWNER.
- 14. CONTRACTOR SHALL CONTROL STORMWATER RUNOFF DURING CONSTRUCTION TO PREVENT ADVERSE EFFECTS TO OFF SITE AREAS, AND SHALL BE RESPONSIBLE FOR REPAIRING ANY DAMAGE AT NO ADDITIONAL EXPENSE TO THE OWNER.
- 15. THE PROJECT DOES NOT DISTURB MORE THAN ONE—HALF (1/2) ACRE OF LAND AND IS AS SUCH DOES NOT REQUIRE A CONSTRUCTION GENERAL PERMIT (CGP) FROM THE ENVIRONMENTAL PROTECTION AGENCY (EPA).
- 16. SNOW SHALL BE STORED ONSITE IN THE AREAS DESIGNATED ON THE DRAWINGS. EXCESS SNOW SHALL BE REMOVED FROM THE SITE AND DISPOSED OF IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL REGULATIONS.
- 17. IN THE EVENT OF CONFLICTING STANDARDS, SPECIFICATIONS, REGULATIONS, ETC. THE HIGHER REQUIREMENT SHALL PREVAIL.
- 18. CONTRACTOR SHALL OBTAIN WRITTEN AUTHORIZATION FROM THE OWNER PRIOR TO PERFORMING ANY ADDITIONAL SERVICES OR WORK, NOT SHOWN ON THE PROJECT DRAWINGS OR CONTAINED IN THE PROJECT DOCUMENTS. FAILURE TO OBTAIN AUTHORIZATION PRIOR TO PERFORMING WORK, MAY INDEMNIFY THE OWNER FROM ADDITIONAL EXPENSES AND COSTS BORNE BY CONTRACTOR.

LAYOUT AND MATERIALS:

- 1. DIMENSIONS ARE FROM FACE OF CURB, FACE OF BUILDINGS, FACE OF WALLS, CENTER OF PIPE, AND CENTER OF PAVEMENT MARKINGS, UNLESS OTHERWISE INDICATED, AND AS
- A. SIDEWALK WIDTHS ARE MEASURED FROM THE BACK FACE OF CURB TO THE OUTSIDE EDGE OF SIDEWALK;
- B. PIPE SEPARATION IS MEASURED FROM THE OUTSIDE DIAMETERS OF PIPE(S).
- 2. SEE ARCHITECTURAL DRAWINGS FOR EXACT STRUCTURE DIMENSIONS AND DETAILS CONTIGUOUS TO THE BUILDINGS, INCLUDING SIDEWALKS, RAMPS, STAIRWAYS, ENTRANCES, UTILITY PENETRATIONS, CONCRETE DOOR PADS, COMPACTOR PAD, LOADING DOCKS, BOLLARDS, ETC.
- 3. EXISTING PROPERTY MONUMENTATION DISTURBED DURING CONSTRUCTION SHALL BE SET OR RESET BY A LICENSED LAND SURVEYOR (LLS).
- 4. IN ORDER TO PROVIDE VISUAL CLARITY ON THE PLANS NOT ALL DEPICTED ITEMS ARE SHOWN ON EVERY PLAN SHEET. THE CONTRACTOR SHALL USE ENTIRE PLAN SETS AND NOT RELY ON INDIVIDUAL SHEETS DURING CONSTRUCTION.
- 5. STATED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS.
- 6. SYMBOLS AND LEGENDS OF PROJECT FEATURES ARE GRAPHIC REPRESENTATIONS AND ARE NOT NECESSARILY SCALED TO THEIR ACTUAL DIMENSIONS OR LOCATIONS ON THE DRAWINGS. THE CONTRACTOR SHALL REFER TO THE DETAIL SHEET DIMENSIONS, MANUFACTURERS LITERATURE, SHOP DRAWINGS, AND FIELD MEASUREMENTS OF SUPPLIED PRODUCTS FOR LAYOUT OF THE PROJECT FEATURES.
- 7. CONTRACTOR SHALL NOT RELY SOLELY ON ELECTRONIC VERSIONS OF PLANS, SPECIFICATIONS, AND DATA FILES THAT ARE OBTAINED FROM DESIGNERS. BUT SHALL VERIFY LOCATION OF PROJECT FEATURES IN ACCORDANCE WITH PAPER COPIES OF THE DRAWINGS AND SPECIFICATIONS THAT ARE SUPPLIED AS PART OF THE CONTRACT DOCUMENTS.

LITILITIES:

- 1. LOCATIONS, SIZES AND TYPES OF EXISTING UTILITIES ARE SHOWN AS AN APPROXIMATE REPRESENTATION ONLY. THE OWNER OR ITS REPRESENTATIVE(S) HAVE NOT NECESSARILY INDEPENDENTLY VERIFIED THIS INFORMATION AS SHOWN ON THE DRAWINGS, AND AS FOLLOWS:
- A. UTILITY INFORMATION SHOWN DOES NOT GUARANTEE THE ACTUAL EXISTENCE, SERVICEABILITY, OR OTHER DATA CONCERNING THE SERVICEABILITY OF UTILITIES;
- B. DOES NOT GUARANTEE THE POSSIBILITY THAT ADDITIONAL UTILITIES MAY BE PRESENT, WHICH MAY NOT BE SHOWN ON THE DRAWINGS;
- C. PRIOR TO ORDERING MATERIALS CONTRACTOR SHALL:
 - . SHALL VERIFY AND DETERMINE EXACT LOCATIONS, SIZES, ELEVATIONS, AND MATERIAL TYPES OF EXISTING UTILITIES AT POINTS OF CONNECTIONS:
 - ii. SHALL CONFIRM THAT THERE ARE NOT INTERFERENCES WITH EXISTING UTILITIES AND PROPOSED ROUTES.
- 2. WHERE EXISTING UTILITIES ARE FOUND TO CONFLICT WITH PROPOSED WORK, OR EXISTING CONDITIONS DIFFER FROM THOSE SHOWN ON THE DRAWINGS, SUCH THAT WORK CANNOT BE COMPLETED AS INTENDED ON THE DRAWINGS, THE CONTRACTOR SHALL:
- A. CONTACT THE OWNER AND DESIGNATED REPRESENTATIVE(S), WITHOUT DELAY BY THE CONTRACTOR, AND FURNISH THE FOLLOWING INFORMATION AS FOLLOWS:
- i IN WRITIN
- ii. ACCURATE LOCATION, ELEVATION, SIZE, TYPE, AND MATERIAL OF THE UTILITY;
- B. FAILURE OF THE CONTRACTOR TO NOTIFY THE OWNER, MAY INDEMNIFY THE OWNER OF ANY ADDITIONAL COSTS, CHANGE ORDERS, OR FEES BORNE BY THE CONTRACTOR, AND AS FOLLOWS:
- i. IN A TIMELY FASHION OR PER THE CONTRACT DOCUMENTS FOR RESOLUTION OF A CONFLICT;
- ii. PERFORMING ADDITIONAL WORK OR DIFFERENTIATION FROM THE CONTRACT DOCUMENTS, WITHOUT ATTAINING AUTHORIZATION FROM THE OWNER.
- 3. LOCATION, SIZE, DEPTH AND CONSTRUCTION SPECIFICATIONS OF PROPOSED PRIVATE UTILITIES AND SERVICES SHALL BE INSTALLED ACCORDING TO THE REQUIREMENTS OF THE RESPECTIVE UTILITY COMPANY (GAS, WATER, TELEPHONE, ELECTRIC, CABLE, FIRE ALARM, SECURITY ALARM, ETC.). FINAL DESIGN LOADS SHALL BE COORDINATED BY THE OWNER AND ARCHITECT.
- 4. UTILITY PIPE MATERIALS SHALL BE AS FOLLOWS, UNLESS OTHERWISE INDICATED:
- A. STORM SEWER: POLYVINYLCHLORIDE (PVC) STANDARD DIAMETER RATIO 35 (SDR-35):
- 5. STORM AND SANITARY SEWER STRUCTURES SHALL HAVE A MINIMUM INTERIOR DIAMETER OF FOUR FEET (4'). THE FINAL INTERIOR DIAMETER SHALL BE DETERMINED BY THE MANUFACTURER BASED ON THE PIPE SIZES AND CONFIGURATIONS SHOWN ON THE DRAWINGS
- 9. GRATES, COVERS, VALVE COVERS, GAS GATES, PULL BOX COVERS SHALL BE SET AND/OR RESET AS FOLLOWS:
- B. PAVEMENT SURFACES: FLUSH
- C. SURFACES WITHIN ACCESSIBLE ROUTES: FLUSH
- D. LANDSCAPE, TURF, OR OTHER EARTH SURFACES: ONE INCH (1") ABOVE FINAL GRADE, WITH EARTH TAPERED UP TO THE FINAL COVER/RIM ELEVATION.
- 10. CONTRACTOR SHALL BE RESPONSIBLE FOR ARRANGING WITH AND PAYING FEES ASSOCIATED FOR RELOCATING AND/OR ALTERATION TO UTILITY POLES AND ABOVE AND/OR UNDERGROUND UTILITIES (IE GAS, TELEPHONE, ELECTRIC, CABLE, FIRE/SECURITY ALARM, ETC.), IRRESPECTIVE OF WHETHER THE WORK IS PERFORMED BY THE PRIVATE UTILITY.

DEMOLITION:

- CONTRACTOR SHALL REMOVE AND DISPOSE OF EXISTING MANMADE SURFACE FEATURES WITHIN THE LIMITS OF WORK INCLUDING BUT NOT LIMITED TOO, BUILDINGS, STRUCTURES, PAVEMENTS, SLABS, CURBING, FENCING, SIGNS, UTILITIES AND APPURTENANCES, UNLESS OTHERWISE INDICATED AND AS FOLLOWS:
- A. DO NOT REMOVE ACTIVE UTILITIES;
- B. SALVAGEABLE AND REUSABLE MATERIALS DETERMINED BY THE OWNER WHICH MAY INCLUDE BUT NOT BE LIMITED TOO, CURBING, SIGNS, HYDRANTS, VALVES, STRUCTURES, ETC. SALVAGEABLE MATERIALS SHALL BE DETERMINED BY THE OWNER PRIOR TO THE START OF WORK.
- 2. CONTRACTOR SHALL BECOME THE OWNER OF AND DISPOSE OF ALL MATERIALS, DEBRIS, AND ITEMS IN ACCORDANCE WITH APPLICABLE LAW(S).

CONSTRUCTION SEQUENCE:

- 1. SURVEY AND MARK LIMITS OF WORK;
- 2. PRIOR TO THE START OF VEGETATION CLEARING AND/OR EARTH ALTERING ACTIVITIES:
- A. MARK ALL WETLAND AND THE TOP OF STREAM BANK WITH CONSTRUCTION DEMARCATION/SAFETY FENCING;
- B. INSTALL/CONSTRUCT EROSION CONTROL MEASURES (IE SILTATION FENCE, CHECK DAMS, INLET/OUTLET PROTECTION, ETC.) AS INDICATED BY THE APPROVED SWPPP, AND AS DEEMED NECESSARY BY THE OWNER. EROSION CONTROL MEASURES SHALL BE MAINTAINED THROUGHOUT THE DURATION OR WORK, AND AS REQUIRED BY NHDES AND THE SWPPP;
- C. INSTALL TRAFFIC/PEDESTRIAN CONTROL SIGNS, BARRIERS, AND APPURTENANCES AS
- D. CONTACT DIG-SAFE (1-888-DIGSAFE), A MINIMUM OF 72 HOURS, PRIOR TO ANY EARTH MOVING OR EXCAVATION OPERATIONS;
- 3. STRIP TOPSOIL AND OVERBURDEN AS REQUIRED TO THE LIMITS OF WORK;
- 4. INSTALL TEMPORARY UTILITY SERVICES AS REQUIRED;
- 5. INSTALL PROPOSED UTILITIES AS REQUIRED;
- 6. REMOVE FEATURES AS NECESSARY AND WHEN APPROPRIATE;
- 7. PREPARED FOUNDATION PAD BASES;
- 8. ADJUST GRATES, COVERS, AND RIMS AS NECESSARY;
- 9. CONSTRUCT STRUCTURES;

DOWNSTREAM IMPACTS.

10. FINISH GRADE AND RESTORE AREAS OUTSIDE OF THE LIMITS OF WORK DISTURBED BY WORK, INCLUDING NOT LIMITED TOO, LAWNS, LANDSCAPE AREAS, WALKS, AND OTHER PRIVATE/PUBLIC FEATURES, DAMAGED BY WORK;

11. REMOVE TEMPORARY EROSION CONTROL MEASURERS, AFTER AREAS THEY ARE SERVICING

- 10. PERFORM ALL REMAINING WORK;
- HAVE BECOME STABILIZED;

 12. CLEAN ALL STORM SEWER BASINS, STRUCTURES, PIPES, AND APPURTENANCES OF ANY SILT AND DEBRIS. OUTLET POINTS SHALL BE PROTECTED TO PREVENT AND ADVERSE
- 13. CONDUCT FINAL CLEANUP, ANY ANCILLARY WORK, AND DEMOBILIZATION EFFORTS AS REQUIRED.

EROSION AND SEDIMENTATION CONTROL NOTES

- THE EROSION CONTROL MEASURES SHOWN ARE DIAGRAMMATIC, IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO PLACE THE APPROPRIATE CONTROL MEASURES IN THE BEST SUITED LOCATIONS.
- 2. PRIOR TO STARTING ANY OTHER WORK ON THE SITE, THE CONTRACTOR SHALL NOTIFY APPROPRIATE AGENCIES AND SHALL INSTALL EROSION CONTROL MEASURES AS SHOWN ON THE PLANS.
- 3. THE CONTRACTOR SHALL INSPECT AND MAINTAIN EROSION CONTROLS, AND REMOVE SEDIMENT AS NECESSARY, ON A WEEKLY BASIS, AND WITHIN TWENTY FOUR HOURS AFTER EACH STORM EVENT (0.25" OR GREATER) AND DISPOSE OF SEDIMENTS IN AN UPLAND AREA SUCH THAT THEY DO NOT ENCUMBER OTHER DRAINAGE WAYS AND PROTECTED AREAS.
- 4. THE CONTRACTOR SHALL BE RESPONSIBLE TO CONTROL CONSTRUCTION SUCH THAT SEDIMENTATION SHALL NOT AFFECT REGULATORY PROTECTED AREAS (IE WETLANDS, STREAMS, ETC.) WHETHER SUCH SEDIMENTATION IS CAUSED BY WATER, WIND, OR DIRECT DEPOSITED.
- THE CONTRACTOR SHALL PERFORM CONSTRUCTION SEQUENCING SUCH THAT EARTH MATERIALS ARE EXPOSED FOR A MINIMUM OF TIME BEFORE THEY ARE COVERED, SEEDED, OR OTHERWISE STABILIZED TO PREVENT EROSION.
- 6. UPON COMPLETION OF CONSTRUCTION AND ESTABLISHMENT OF PERMANENT GROUND COVER, THE CONTRACTOR SHALL REMOVE AND DISPOSE OF EROSION CONTROL MEASURES AND CLEAN DEBRIS AND SEDIMENT FROM THE DRAINAGE SYSTEM
- 7. AREAS REMAINED UNSTABILIZED FOR A PERIOD OF MORE THAN 30 DAYS SHALL BE TEMPORARY SEEDED AND MULCHED. HAY MULCH SHALL BE APPLIED AT A MINIMUM RATE OF 1-1/2 TONS/ACRE.
- 8. PERMANENT SEEDING SHALL OCCUR BETWEEN APRIL 1 AND JUNE 1 AND/OR BETWEEN AUGUST 15 AND OCTOBER 15. ALL SEEDING SHALL BE HAY MULCHED.
- 9. DUST SHALL BE CONTROLLED THROUGH THE USE OF WATER OR OTHER INDUSTRY APPROVED STANDARD METHODS.
- 10. SOILS TO BE STOCKPILED FOR A PERIOD OF MORE THAN THIRTY DAYS SHALL BE TEMPORARILY SEEDED AND MULCHED. THE CONTRACTOR SHALL INSTALL SILT FENCE AND OR COMPOST SOCK ALONG THE DOWNHILL SIDE OF THE STOCKPILE.
- 11. THE CONTRACTOR SHALL PROVIDE TEMPORARY SEDIMENTATION BASINS AND TEMPORARY DIVERSION SWALES TO CONTROL SEDIMENTATION AND STORMWATER RUNOFF DURING THE CONSTRUCTION PERIOD, THAT MEET THE REQUIREMENTS OF THE NEW HAMPSHIRE DEPARTMENT OF ENVIRONMENTAL SERVICES (NHDES).
- 12. THE CONTRACTOR SHALL PROVIDE NECESSARY EROSION CONTROLS TO INSURE THAT SURFACE WATER RUNOFF FROM UNSTABILIZED AREAS DOES NOT CARRY SILT, SEDIMENT, AND OTHER DEBRIS OUTSIDE THE SITE WORK
- 13. AN AREA SHALL BE CONSIDERED STABILIZED IF ONE OF THE FOLLOWING HAS OCCURRED:
- A. BASE COURSE GRAVELS HAVE BEEN INSTALLED IN AREAS TO BE PAVED AND COMPACTED TO A MINIMUM OF 90% OF THE DRY UNIT WEIGHT:
- B. A MINIMUM OF 85% VEGETATIVE GROWTH HAS BEEN ESTABLISHED;
- C. A MINIMUM OF 3-IN OF NON EROSIVE MATERIAL, SUCH AS STONE OR RIPRAP HAS BEEN INSTALLED;
- D. EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED;
- E. THE AREA HAS BEEN PAVED WITH BITUMINOUS ASPHALT CONCRETE, PORTLAND CEMENT CONCRETE, OR SIMILAR COVERS.
- 15. AT NO TIME SHALL THE TOTAL DISTURBED AREA BE GREATER THAN FIVE (5) ACRES.
- 16. ALL DITCHES, SWALES, STORMWATER BASINS, OR OTHER DRAINAGE FEATURES SHALL BE FULLY STABILIZED PRIOR TO DIRECTING STORMWATER TO THEM.
- 17. ALL DRIVEWAYS, ROADWAYS, AND/OR PARKING AREAS SHALL BE STABILIZED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.
- 18. ALL CUT AND FILL SLOPES SHALL BE LOAMED AND SEEDED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.
- 19. EROSION CONTROL BLANKETS SHALL BE INSTALLED ON ALL SLOPES THAT ARE STEEPER THAN 4-FT HORIZONTAL TO 1-FT VERTICAL (4:1). EROSION CONTROL BLANKETS SHALL BE NORTH AMERICAN GREEN SC150BN OR APPROVED EQUAL.

PERMITS:

TOWN OF BROOKLINE PLANNING BOARD
 NON-RESIDENTIAL SITE PLAN APPROVAL

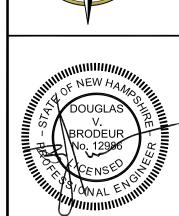
2. NHDOT DRIVEWAY PERMIT UPDATE

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LAND SERVICES,





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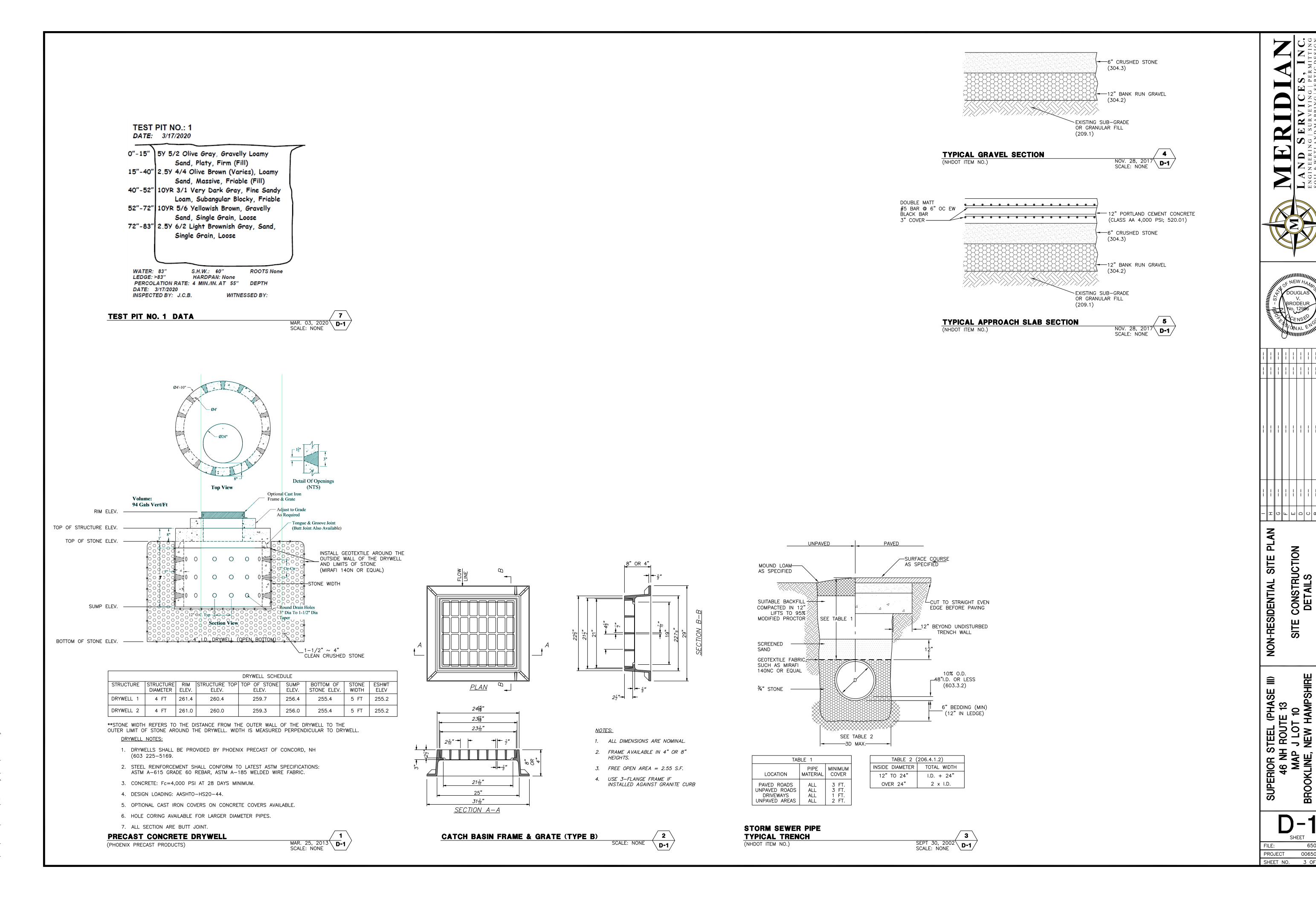
ERIOR STEEL (PHAS 46 NH ROUTE 13 MAP J LOT 10 OKLINE, NEW HAMP

SP-2

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2 OF 4

SHEET NO.



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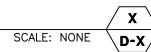
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3 OF 4

CONSTRUCTION REQUIREMENTS AND SLOPE APPLICATIONS:

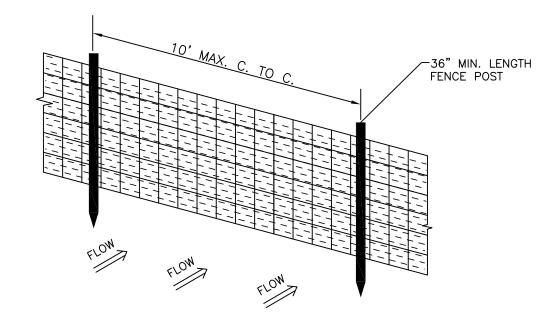
- 1. MATS SHALL BE STRAW/COCONUT FIBER EROSION CONTROL TURF REINFORCEMENT MAT SUCH AS NORTH AMERICAN GREEN SC150BN OR EQUAL.
- 2. THE USE OF ANY EROSION CONTROL MAT WHICH CONTAINS ANY WELDED PLASTIC OR BIODEGRADABLE PLASTIC THREAD OR NETTING IS STRICTLY PROHIBITED.
- 3. THE EROSION CONTROL MATERIAL(S) SHALL BE ANCHORED WITH "U" SHAPED 11 GAUGE WIRE STAPLES OR WOODEN STAKES WITH A MINIMUM TOP WIDTH OF 1" AND A LENGTH OF 6".
- 4. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER AND SEED.
- 5. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN A 6" DEEP BY 6" WIDE TRENCH WITH APPROXIMATELY 12" OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROLL OF STAPLES OR STAKES APPROXIMATELY 12" APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" PORTION OF BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET WITH A ROW OF STAPLES/STAKES PLACED APPROXIMATELY 12" APART ACROSS THE WIDTH OF THE BLANKET.
- 6. ROLL THE BLANKETS DOWN THE SLOPE. BLANKETS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES OR STAKES IN APPROPRIATE LOCATIONS. REFER TO MANUFACTURERS STAPLE GUIDE FOR CORRECT
- 7. THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 2"-5" OF OVERLAP DEPENDING ON THE BLANKET TYPE.
- 8. CONSECUTIVE BLANKETS SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" OVERLAP. STAPLE OVERLAPPED AREA APPROXIMATELY 12" APART ACROSS ENTIRE BLANKET WIDTH.
- 9. IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" MAY BE NECESSARY TO PROPERLY SECURE BLANKETS.
- 10. THE CONTRACTOR SHALL MAINTAIN THE BLANKET UNTIL ALL WORK ON THE CONTRACT HAS BEEN COMPLETED AND ACCEPTED. MAINTENANCE SHALL CONSIST OF THE REPAIR OF AREAS WHERE DAMAGED BY ANY CAUSE. ALL DAMAGED AREAS SHALL BE REPAIRED TO REESTABLISH THE CONDITIONS AND GRADE OF THE SOIL PRIOR TO APPLICATION OF THE COVERING AND SHALL BE REFERTILIZED, RESEEDED AND REMULCHED AS DIRECTED.

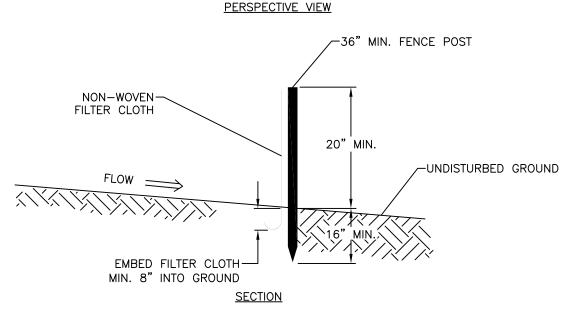
SLOPE STABILIZATION TURF REINFORCEMENT MAT



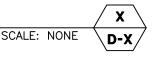
- 1. TEMPORARY PROTECTION OF DISTURBED AREAS SHALL BE IMPLEMENTED WHERE A TEMPORARY STAND OF GRASS OR SMALL GRAINS WILL NORMALLY PRODUCE SUFFICIENT COVER TO RETARD EROSION AND REDUCE SEDIMENT.
- 2. USE OF TEMPORARY SEEDING SHALL BE IMPLEMENTED WHEN A DISTURBED AREA OR MATERIAL STOCKPILE WILL BE INACTIVE FOR A PROLONGED PERIOD OF TIME.
- 3. ALL ESSENTIAL GRADING SUCH AS DIVERSIONS. DAMS, DITCHES, AND DRAINS NEEDED TO PREVENT GULLYING AND REDUCE SILTATION SHALL BE COMPLETED PRIOR TO
- 4. PREPARE SEEDBED BY REMOVING ALL STONES, TRASH AND STUMPING DEBRIS THAT WILL INTERFERE WITH SEEDING AREA. WHERE FEASIBLE, TILL THE SOIL TO A DEPTH OF ABOUT 3 INCHES TO PREPARE SEEDBED AND MIX FERTILIZER INTO THE SOIL. THE SEEDBED SHOULD BE LEFT IN A FIRM AND SMOOTH CONDITION. THE LAST TILLAGE OPERATIONS SHOULD BE PERFORMED ACROSS THE SLOPE.
- 5. A MINIMUM OF 300 POUNDS PER ACRE (7 LBS. PER 1,000 SQ.FT.) OF 10-10-10 FERTILIZER, OR ITS EQUIVALENT, SHALL BE UNIFORMLY SPREAD OVER THE AREA PRIOR TO BEING INCORPORATED INTO THE SOIL.
- 6. THE SEED SHALL BE SPREAD UNIFORMLY OVER THE AREA. AFTER SEEDING, THE SOIL SHOULD BE FIRMED BY ROLLING OR PACKING. WHERE ROLLING OR PACKING IS NOT FEASIBLE, THE SEED SHALL BE COVERED LIGHTLY BY RAKING, DISKING, OR
- 7. HAY OR STRAW MULCH MAY BE NECESSARY TO PROMOTE SEED GERMINATION IN DRY AND/OR INFERTILE CONDITIONS.
- 8. PLANT SELECTION AND APPLICATION RATES:

SPECIES	RATE 1 (LBS/AC.)	RATE 2 (LBS/1,000 S.F.)	REMARKS
WINTER RYE	112	2.5	FALL, 8/15 TO 9/15 PLANT 1.0 INCH DEEP
OATS	80	2.0	SPRING PRIOR TO 5/15 PLANT 1.0 INCH DEEP
ANNUAL RYEGRASS	40	1.0	QUICK, SHORT DURATION GOOD APPEARANCE EARLY SPRING & FALL PLANT 0.25 INCH DEEP
PERENNIAL RYEGRASS	30	0.7	LASTS LONGER THAN ANNUAL LATE SPRING & FALL MULCHING WILL ALLOW USE ALL SEASON





SILTATION FENCE



- DURING CONSTRUCTION AND THEREAFTER, EROSION CONTROL MEASURES ARE TO BE IMPLEMENTED AS NOTED:
- 1. INSTALLATION OF SILT SOCKS AND SILTATION FENCE WHERE INDICATED SHALL BE COMPLETED PRIOR TO THE START OF SITE WORK IN ANY GIVEN AREA.
- 2. SILT SOCKS AND SILTATION FENCES SHALL BE KEPT CLEAN DURING CONSTRUCTION AND REMOVED WHEN ALL DISTURBED AREAS HAVE A HEALTHY STAND OF VEGETATIVE COVER. EROSION CONTROL MEASURES SHALL BE INSPECTED AT LEAST ONCE A WEEK AND AFTER EVERY 0.5" OR GREATER RAINFALL.
- 3. EXISTING VEGETATION IS TO REMAIN UNDISTURBED WHEREVER POSSIBLE.
- 4. PER THE NEW HAMPSHIRE DEPARTMENT OF ENVIRONMENTAL SERVICES, THE SMALLEST PRACTICAL AREA SHALL BE DISTURBED DURING CONSTRUCTION. THE TOTAL AREA OF ACTIVE DISTURBANCE, INCLUDING LOT DISTURBANCES, SHALL NOT EXCEED 5 ACRES.
- 5. THE DURATION OF TIME THAT AN AREA IS DISTURBED SHALL BE MINIMIZED. ALL NON-ACTIVE DISTURBED AREAS (ie: CLEARED FOR CONSTRUCTION BUT NOT PRESENTLY UNDERGOING CONSTRUCTION) SHALL BE STABILIZED WITHIN 28 DAYS OF DISTURBANCE ALL DISTURBED AREAS SHALL BE STABILIZED WITHIN 72 HOURS AFTER FINAL GRADING.
- 6. ALL DITCHES, SWALES AND DETENTION BASINS SHALL BE CONSTRUCTED DURING THE INTIAL PHASE OF CONSTRUCTION AND SHALL BE STABILIZED PRIOR TO DIRECTING STORM
- 7. AN AREA MAY BE CONSIDERED STABILIZED WHEN ONE OF THE FOLLOWING HAS OCCURED:
- A. BASE COURSE GRAVELS HAVE BEEN INSTALLED IN AREAS TO BE PAVED; B. A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED;
- C. A MINIMUM OF 3" OF NON-EROSIVE MATERIAL SUCH AS STONE OR RIPRAP HAS
- BEEN INSTALLED; OR D. EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.
- 8. ALL DISTURBED AREAS SHALL BE COVERED WITH A MINIMUM OF 4" OF LOAM. LOAM SHALL BE COVERED WITH THE APPROPRIATE SEED MIXTURE AS INDICATED BELOW.
- THE SEED MIXTURE SHALL BE APPLIED AT A RATE OF 2.5 POUNDS PER 1,000 SQ. FT. AND SHALL BE MIXED AS FOLLOWS:

TYPICAL LAWN SEED		SLOPE SEED	
CREEPING RED FESCUE	0.87 LBS.	CREEPING RED FESCUE	1.01 LBS.
KENTUCKY BLUEGRASS	0.71 LBS.	RYE GRASS	0.75 LBS.
RYE GRASS	0.58 LBS.	RED TOP	0.18 LBS.
RED TOP	0.14 LBS.	ALSIKE CLOVER	0.18 LBS.

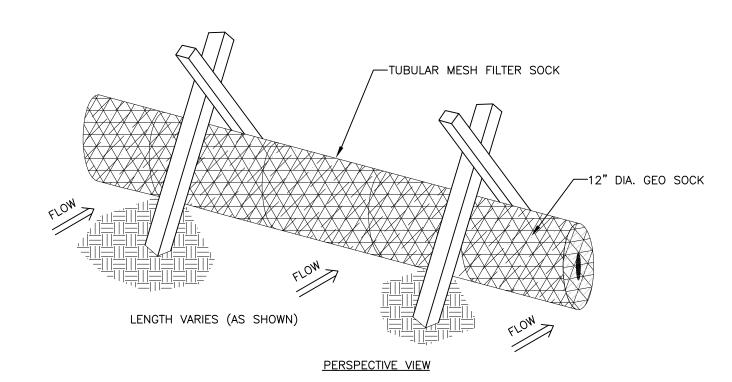
9. APPLY LIMESTONE AND FERTILIZER ACCORDING TO SOIL TEST RECOMMENDATIONS. IF SOIL TESTING IS NOT FEASIBLE ON SMALL OR VARIABLE SITES, OR WHERE TIMING IS CRITICAL, FERTILIZER MAY BE APPLIED AT THE RATE OF 600 POUNDS PER ACRE OR 13.8 POUNDS PER 1,000 SQUARE FEET OF LOW PHOSPHATE FERTILIZER (N-P205-K20) OR EQUIVALENT (LOW PHOSPHORUS FERTILIZER IS DEFINED BY THE COMPREHENSIVE SHORELAND PROTECTION ACT AS LESS THAN 2% PHOSPHORUS). APPLY LIMESTONE (EQUIVALENT TO 50 PERCENT CALCIUM PLUS MAGNESIUM OXIDE) AT A RATE OF 3 TONS PER ACRE (138 LB. PER 1,000 SQUARE FEET).

| BIRDSFOOT TREFOIL

0.18 LBS.

FERTILIZER SHOULD BE RESTRICTED TO A LOW PHOSPHATE, SLOW RELEASE NITROGEN FERTILIZER WHEN APPLIED TO AREAS BETWEEN 25 FEET AND 250 FEET FROM A SURFACE WATER BODY AS SPECIFIED BY THE COMPREHENSIVE SHORELAND PROTECTION ACT (SLOW RELEASE FERTILIZERS MUST BE AT LEAST 50% SLOW RELEASE NITROGEN COMPONENT). NO FERTILIZER EXCEPT LIMESTONE SHOULD BE APPLIED WITHIN 25 FEET OF THE SURFACE WATER. THESE LIMITATIONS ARE REQUIREMENTS.

- 10. PERMANENT OR TEMPORARY COVER MUST BE IN PLACE BEFORE THE GROWING SEASON ENDS. WHEN SEEDED AREAS ARE MULCHED, PLANTINGS MAY BE MADE FROM EARLY SPRING TO EARLY OCTOBER. WHEN SEEDED AREAS ARE NOT MULCHED, PLANTINGS SHOULD BE MADE FROM EARLY SPRING TO MAY 20 OR FROM AUGUST 10 TO SEPTEMBER 15. NO DISTURBED AREA SHALL BE LEFT EXPOSED DURING THE WINTER
- 11. THE SITE CONTRACTOR SHALL MAINTAIN A VIGOROUS DUST CONTROL PROGRAM THROUGHOUT THE CONSTRUCTION PROCESS. EXPOSED EARTH SHALL BE KEPT MOIST OR MULCHED AT ALL TIMES TO PREVENT DUST FORMATION. SPECIAL ATTENTION SHALL BE PAID TO HIGH TRAFFIC AREAS.



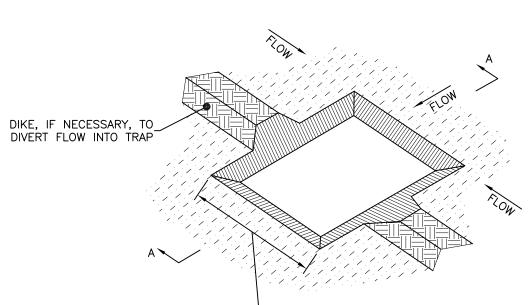
THE FILTER SOCK SHALL BE A MESH TUBE FILLED WITH COMPOSTED

MINIMAL CLEARING MAY BE REQUIRED TO INSTALL FILTER SOCKS. 3. INSTALL FILTER SOCKS PRIOR TO ANY CLEARING OR GRUBBING.

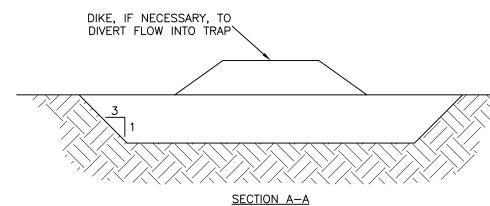
FILTER SOCK (COMPOST SOCK)

SCALE: NONE





CREST LENGTH (FT)=6 X DRAINAGE AREA (AC.)

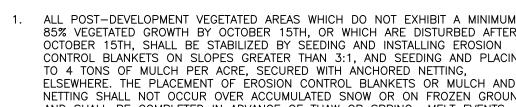


ISOMETRIC VIEW

- 1. SEDIMENT TRAPS SHOULD BE LOCATED SO THEY CAN BE INSTALLED PRIOR TO DISTURBING THE AREA THEY ARE TO PROTECT.
- 2. THE TRAP SHOULD BE INSTALLED AS CLOSE TO THE DISTURBED AREA OR SOURCE OF SEDIMENT AS POSSIBLE.
- 3. THE MAXIMUM CONTRIBUTING AREA TO THE TRAP SHOULD BE LESS THAN 5 ACRES.
- 4. THE MINIMUM VOLUME OF THE TRAP SHOULD BE 3,600 CUBIC FEET OF STORAGE FOR EACH ACRE OF DRAINAGE AREA.
- THE SIDE SLOPES OF THE TRAP SHOULD BE 3:1 OR FLATTER, AND SHOULD BE STABILIZED IMMEDIATELY AFTER THEIR CONSTRUCTION.
- REFER TO THE <u>NEW HAMPSHIRE STORMWATER MANAGEMENT MANUAL, VOL. 3:</u>
 <u>CONSTRUCTION PHASE EROSION AND SEDIMENT CONTROLS</u>, DECEMBER 2008 FOR COMPLETE INFORMATION.

EARTH OUTLET SEDIMENT TRAP (IF REQUIRED)





- 2. ALL DITCHES OR SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATED GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHALL BE STABILIZED WITH STONE RIPRAP OR EROSION CONTROL BLANKETS
- PROTECTED WITH A MINIMUM OF 3 INCHES OF CRUSHED GRAVEL PER NHDOT ITEM 304.3, OR IF CONSTRUCTION IS TO CONTINUE THROUGH THE WINTER SEASON BE

SCALE: NONE \ D-X

1.	ALL POST-DEVELOPMENT VEGETATED AREAS WHICH DO NOT EXHIBIT A MINIMUM O 85% VEGETATED GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHALL BE STABILIZED BY SEEDING AND INSTALLING EROSION CONTROL BLANKETS ON SLOPES GREATER THAN 3:1, AND SEEDING AND PLACING TO 4 TONS OF MULCH PER ACRE, SECURED WITH ANCHORED NETTING, ELSEWHERE. THE PLACEMENT OF EROSION CONTROL BLANKETS OR MULCH AND NETTING SHALL NOT OCCUR OVER ACCUMULATED SNOW OR ON FROZEN GROUND AND SHALL BE COMPLETED IN ADVANCE OF THAW OR SPRING MELT EVENTS.

APPROPRIATE FOR THE DESIGN FLOW CONDITION.

3. AFTER OCTOBER 15TH, INCOMPLETE ROAD OR PARKING SURFACES SHALL BE CLEARED OF ANY ACCUMULATED SNOW AFTER EACH STORM EVENT.

PLANT 0.5 INCH DEEP

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