

#### Soil De-compaction and Testing Requirements

#### **Soil Compaction Testing Requirements**

1. Subgrade soils prior to the application of topsoil (see permanent seeding and stabilization notes for topsoil requirements) shall be free of excessive compaction to a depth of 6.0 inches to enhance the establishment of permanent

2. Areas of the site which are subject to compaction testing and/or mitigation are graphically denoted on the certified soil erosion control plan.

3. Compaction testing locations are denoted on the plan. A copy of the plan or portion of the plan shall be used to mark locations of tests, and attached to the compaction remediation form, available from the local soil conservation district. This form must be filled out and submitted prior to receiving a certificate of compliance from the district.

4. In the event that testing indicates compaction in excess of the maximum thresholds indicated for the simplified testing methods (see details below), the contractor/owner shall have the option to perform either (1) compaction mitigation over the entire mitigation area denoted on the plan (excluding exempt areas), or (2) perform additional, more detailed testing to establish the limits of excessive compaction whereupon only the excessively compacted areas would require compaction mitigation. Additional detailed testing shall be performed by a trained, licensed professional.

#### **Compaction Testing Methods**

A. Probing Wire Test (see detail)

B. Hand-held Penetrometer Test (see detail) C .Tube Bulk Density Test (licensed professional engineer required

D. Nuclear Density Test (licensed professional engineer required)

Note: Additional testing methods which conform to ASTM standards and specifications, and which produce a dry weight, soil bulk density measurement may be allowed subject to District approval.

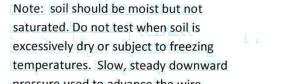
Soil compaction testing is not required if/when subsoil compaction remediation (scarification/tillage (6" minimum depth) or similar) is proposed as part of the sequence of construction.

#### **Procedures for Soil Compaction Mitigation**

Procedures shall be used to mitigate excessive soil compaction prior to placement of topsoil and establishment of permanent vegetative cover.

Restoration of compacted soils shall be through deep scarification/tillage (6" minimum depth) where there is no danger to underground utilities (cables, irrigation systems, etc.). In the alternative, another method as specified by a New Jersey Licensed Professional Engineer maybe substituted subject to District Approval.

## Probing Wire Test- 15.5 ga steel wire (survey flag)



Hold Wire here: pressure used to advance the wire Wire must penetrate a minimum of 6" without deformation. 18-21" 6.0" min. visible mark on wire at Wire may be re-inserted if/when an

## Handheld Soil Penetrometer Test

encountered

Note: soil should be moist but not saturated. Do not test when soil is excessively dry or subject to freezing temperatures. Slow, steady downward pressure used to advance the probe. Probe must penetrate at least 6" with less than 300 psi reading on the gage.

obstruction (rock, root, debris) is

Penetrometer may be re-inserted 6.0" min. visible mark on shaft at if/when an obstruction (rock, root, debris) is encountered. \*\*Use correct size tip for

## SEQUENCE OF CONSTRUCTION

- I.) INSTALL ALL SOIL EROSION AND SEDIMENT CONTROL MEASURES AS SHOWN ON PLANS.
- 2.) INSTALL STABILIZED CONSTRUCTION ENTRANCE AS SHOWN ON ON THE SOIL EROSION SEDIMENT CONTROL PLANS AND DETAILS.
- 3.) STRIP, STOCKPILE AND STABILIZE TOPSOIL AT LOCATIONS AS SHOWN ON PLANS.
- 4.) ROUGH GRADE SITE
- 5.) FINE GRADE AND STABILIZE ALL DISTURBED AREAS IN ACCORDANCE WITH THE MINIMUM STABILIZATION REQUIREMENTS.
- 6.) CLEAN AND REGRADE.
- 7.) STABILIZE ANY REMAINING DISTURBED AREAS.
- 8.) REMOVE ALL SOIL EROSION AND SEDIMENT CONTROL DEVICES.
- ESTIMATED DURATION OF PROJECT 2 MONTHS

## SOIL NOTE:

NO SOIL CAN BE IMPORTED TO OR REMOVED FROM THE SITE UNTIL A SOIL IMPORTATION OR EXPORTATION PERMIT HAS BEEN OBTAINED FROM THE TOWNSHIP, AS REQUIRED BY ORDINANCE.

#### GENERAL NOTES FOR SOIL EROSION AND SEDIMENT CONTROL PLANS

ALL SOIL EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE INSTALLED PRIOR TO ANY MAJOR SOIL DISTURBANCES, OR IN THEIR PROPER SEQUENCE AND MAINTAINED UNTIL PERMANENT PROTECTION IS ESTABLISHED.

ANY DISTURBED AREAS THAT WILL BE LEFT EXPOSED MORE THAN 30 DAYS AND NOT SUBJECT TO CONSTRUCTION TRAFFIC, WILL IMMEDIATELY RECEIVE A TEMPORARY SEEDING. IF THE SEASON PREVENTS THE ESTABLISHMENT OF A TEMPORARY COVER, THE DISTURBED AREAS WILL BE MULCHED WITH STRAW, OR EQUIVALENT MATERIAL, AT A RATE OF TWO (2) TONS PER ACRE, ACCORDING TO NJ STATE STANDARDS

PERMANENT VEGETATION SHALL BE SEEDED OR SODDED ON ALL EXPOSED AREAS WITHIN TEN (10) DAYS AFTER FINAL GRADING. MULCH WILL BE USED FOR PROTECTION UNTIL SEEDING IS

ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE NJ STATE STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY

5. A SUB-BASE COURSE WILL BE APPLIED IMMEDIATELY FOLLOWING ROUGH GRADING AND INSTALLATION OF IMPROVEMENTS IN ORDER TO STABILIZE STREETS, ROADS, DRIVEWAYS AND PARKING AREAS. IN AREAS WHERE NO UTILITIES ARE PRESENT, THE SUB-BASE SHALL BE INSTALLED WITHIN 15 DAYS

IMMEDIATELY FOLLOWING INITIAL DISTURBANCE OR ROUGH GRADING ALL CRITICAL AREAS SUBJECT TO EROSION (I.E.: STEEP SLOPES, ROADWAY EMBANKMENTS) WILL RECEIVE A TEMPORARY SEEDING IN COMBINATION WITH STRAW MULCH OR A SUITABLE EQUIVALENT, AT A RATE OF TWO (2) TONS PER ACRE, ACCORDING TO THE NJ STATE STANDARDS.

ANY STEEP SLOPES RECEIVING PIPELINE INSTALLATION WILL BE BACKFILLED AND STABILIZED DAILY, AS THE INSTALLATION PROCEEDS (I.E.: SLOPES GREATER THAT 3:1)

3. TRAFFIC CONTROL STANDARDS REQUIRE THE INSTALLATION OF A 50'X30'X6'PAD OF I 1/2" OR 2"

STONE, AT ALL CONSTRUCTION DRIVEWAYS, IMMEDIATELY AFTER INITIAL SITE DISTURBANCE. . THE SOMERSET-UNION SOIL CONSERVATION DISTRICT SHALL BE NOTIFIED IN WRITING 48 HOURS IN

ADVANCE OF ANY LAND DISTURBING ACTIVITY.

10. AT THE TIME WHEN THE SITE PREPARATION FOR PERMANENT VEGETATIVE STABILIZATION IS GOING TO BE ACCOMPLISHED, ANY SOIL THAT WILL NOT PROVIDE A SUITABLE ENVIRONMENT TO SUPPORT ADEQUATE VEGETATIVE GROUND COVER, SHALL BE REMOVED OR TREATED IN SUCH A WAY THAT WILL PERMANENTLY ADJUST THE SOIL CONDITIONS AND RENDER IT SUITABLE FOR VEGETATIVE GROUND COVER. IF THE REMOVAL OR TREATMENT OF THE SOIL WILL NOT PROVIDE SUITABLE CONDITIONS, NON-VEGETATIVE MEANS OF PERMANENT GROUND STABILIZATION WILL HAVE TO BE

IN THAT NJSA 4:24-39 ET SEQ., REQUIRES THAT NO CERTIFICATE OF OCCUPANCY BE ISSUED BEFORE THE PROVISIONS OF THE CERTIFIED PLAN FOR SOIL EROSION AND SEDIMENT CONTROL HAVE BEEN COMPLIED WITH FOR PERMANENT MEASURES, ALL SITE WORK FOR SITE PLANS AND ALL WORK AROUND INDIVIDUAL LOTS IN SUBDIVISIONS, WILL HAVE TO BE COMPLETED PRIOR TO THE DISTRICT ISSUING A REPORT OF COMPLIANCE FOR THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY BY THE

12. CONDUIT OUTLET PROTECTION MUST BE INSTALLED AT ALL REQUIRED OUTFALLS PRIOR TO THE DRAINAGE SYSTEM BECOMING OPERATIONAL.

ANY CHANGES TO THE CERTIFIED SOIL EROSION AND SEDIMENT CONTROL PLAN WILL REQUIRE THE SUBMISSION OF REVISED SOIL EROSION AND SEDIMENT CONTROL PLANS TO THE DISTRICT FOR RE-CERTIFICATION. THE REVISED PLANS MUST MEET ALL CURRENT NJ STATE SOIL EROSION \$ SEDIMENT CONTROL STANDARDS.

THE SOMERSET-UNION SOIL CONSERVATION DISTRICT SHALL BE NOTIFIED OF ANY CHANGES IN

MULCHING TO THE NJ STANDARDS IS REQUIRED FOR OBTAINING A CONDITIONAL REPORT OF COMPLIANCE. CONDITIONALS ARE ONLY ISSUED WHEN THE SEASON PROHIBITS SEEDING.

CONTRACTOR IS RESPONSIBLE FOR KEEPING ALL ADJACENT ROADS CLEAN DURING LIFE OF CONSTRUCTION PROJECT

THE DEVELOPER SHALL BE RESPONSIBLE FOR REMEDIATING ANY EROSION OR SEDIMENT PROBLEMS THAT ARISE AS A RESULT OF ONGOING CONSTRUCTION AT THE REQUEST OF THE SOMERSET-UNION SOIL CONSERVATION DISTRICT

HYDRO SEEDING IS A TWO- STEP PROCESS. THE FIRST STEP INCLUDES SEED, FERTILIZER, LIME, ETC., ALONG WITH MINIMAL AMOUNTS OF MULCH TO PROMOTE CONSISTENCY, GOOD SEED TO SOIL CONTACT, AND GIVE A VISUAL INDICATION OF COVERAGE. UPON COMPLETION OF SEEDING OPERATION, HYDRO-MULCH SHOULD BE APPLIED AT A RATE OF 1500 LBS. PER ACRE IN SECOND STEP. THE USE OF HYDRO-MULCH, AS OPPOSED TO STRAW, IS LIMITED TO OPTIMUM SEEDING DATES AS LISTED IN THE NJ STANDARDS.

## BASIN COMPACTION NOTES

Gage reading 300

psi or less at 6"

soil type

IMMEDIATELY PRIOR TO SEEDING, THE SURFACE SHOULD BE SCARIFIED 6" TO 12" INCHES WHERE THERE HAS BEEN SOIL COMPACTION. THIS PRACTICE IS PERMISSIBLE ONLY WHERE THERE IS NO DANGER TO UNDERGROUND UTILITIES (CABLES, IRRIGATION SYSTEMS, ETC.).

INSPECT SITE JUST BEFORE SEEDING. IF TRAFFIC HAS LEFT THE SOIL COMPACTED, THE AREA MUST BE RETILED AND FIRMED IN ACCORDANCE WITH ABOVE.

IMMEDIATELY PRIOR TO TOPSOILING, THE SURFACE SHOULD BE SCARIFIED 6" TO 12" INCHES WHERE THERE HAS BEEN SOIL COMPACTION. THIS WILL HELP INSURE A GOOD BOND BETWEEN THE TOPSOIL AND SUBSOIL. THIS PRACTICE IS PERMISSIBLE ONLY WHERE THERE IS NO DANGER TO UNDERGROUND UTILITIES (CABLES, IRRIGATION SYSTEMS, ETC.).

. SOIL COMPACTION RESULTING FROM LAND GRADING ACTIVITIES CAN IMPACT THE INFILTRATION RATE OF THE SOIL. RESTORATION OF COMPACTED SOILS THROUGH DEEP TILLAGE (6" TO 12") AND THE ADDITION OF ORGANIC MATTER MAY BE REQUIRED IN PLANNED PERVIOUS AREAS TO ENHANCE THE INFILTRATION RATE OF THE DISTURBED SOIL. THIS PRACTICE IS PERMISSIBLE ONLY WHERE THERE IS NO DANGER TO UNDERGROUND UTILITIES (CABLE, IRRIGATION SYSTEMS, ETC.).

TO PREVENT COMPACTION OF THE SUBSOIL WHICH WILL REDUCE ITS INFILTRATION CAPACITY BASINS SHOULD BE EXCAVATED WITH LIGHT EARTH MOVING EQUIPMENT, PREFERABLY WITH TRACKS OR OVER-SIZED TIRES RATHER THAN THE NORMAL RUBBER TIRES,. ONCE THE FINAL CONSTRUCTION PHASE IS REACHED, THE FLOOR OF THE BASIN SHALL BE DEEPLY TILLED WITH A ROTARY TILLER OR DISC HARROW AND SMOOTHED OVER WITH A LEVELING DRAG OR EQUIVALENT GRADING EQUIPMENT.

FOR BASINS, ANNUAL TILLING OPERATIONS MAINTAIN INFILTRATION CAPACITY. THESE TILLED AREAS SHOULD BE RE-VEGETATED IMMEDIATELY TO PREVENT EROSION. DEEP TILLING CAN BE USED TO BREAKUP CLOGGED SURFACE LAYERS FOLLOWED BY REGARDING AND LEVELING. SAND OR ORGANIC MATTER CAN BE TILLED INTO THE BASIN FLOOR TO PROMOTE A RESTORED INFILTRATION CAPACITY. SEDIMENT REMOVAL PROCEDURES SHOULD NOT BE UNDERTAKEN UNTIL THE BASIN IS THOROUGHLY DRY. THE TOP LAYER SHOULD BE REMOVED BY LIGHT EQUIPMENT TO PREVENT COMPACTION. THE REMAINING SOIL CAN BE RETILED AND DISTURBED VEGETATION REPLANTED.

## AGRONOMIC RECOMMENDATIONS

SEED, FERTILIZE, LIME AND TOPSOIL (IF REQUIRED) ALL SCALPED AREAS IMMEDIATELY AFTER FINISHED GRADING IS COMPLETED. LIME AND FERTILIZE RECOMMENDATIONS ARE AS FOLLOWS OR ACCORDING TO RESULTS OF SOIL TESTS:

A. FERTILIZER TO BE APPLIED AT THE RATE OF 500 LBS. PER ACRE, 10-20-10.

B. TEMPORARY SEEDING:

LIME: 2 TONS PER ACRE GROUND AREA FERTILIZER:500 LBS. PER ACRE 10-20-10

SEED: USE THE FOLLOWING SEED MIXTURE(S) AND RATES BASED ON TIME OF YEAR: - EARLY SPRING/LATE SUMMER TO EARLY FALL

100 % PERENNIAL RYEGRASS RATE = 100 LBS/ACRE - LATE FALL 100 % CEREAL RYE RATE = 112 LBS/ACRE

- MID-SUMMER 40 % PEARL MILLET 40 % MILLET (GERMAN OR HUNGARIAN) 20 % WEEPING LOVEGRASS

PERMANENT SEEDING: (TO BE APPLIED DURING PERIODS OF 3/01 - 11/15,

TEMPORARY SEEDING TO BE APPLIED ALL OTHER TIMES OF THE YEAR) LIME: 2 TONS PER ACRE GROUND AREA FERTILIZER:500 LBS. PER ACRE 10-20-10 SEED: LAWNS - QUALITY SUN AND SHADE 45 % PERENNIAL RYEGRASS\* 20 % CHEWING FESCUE

RATE = 100 LBS/ACRE

20 % CREEPING RED FESCUE 15 % KENTUCKY BLUEGRASS (\* INCLUDE AT LEAST TWO DIFFERENT VARIETIES IN MIX) RATE = 200 LBS/ACRE

MINIMUM STABILIZATION REQUIREMENTS

I. <u>SITE PREPARATION</u>

A. GRADE AS NEEDED AND FEASIBLE TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SEEDBED PREPARATION, SEEDING, MULCH APPLICATION AND ANCHORING AND MAINTENANCE. ALL GRADING SHOULD BE DONE IN ACCORDANCE WITH STANDARDS FOR LAND GRADING.

INSTALL NEEDED EROSION CONTROL PRACTICES AND FACILITIES SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, CHANNEL STABILIZATION MEASURES, SEDIMENT BASINS AND WATERWAYS.

#### II. <u>SEEDBED PREPARATION</u>

A. APPLY LIMESTONE AND FERTILIZER ACCORDING TO SOIL TEST RECOMMENDATIONS SUCH AS THOSE OFFERED BY RUTGERS UNIVERSITY SOIL TESTING LABORATORY. SOIL SAMPLE MAILERS ARE AVAILABLE FROM THE LOCAL COOPERATIVE EXTENSION SERVICE OFFICE. IF SOIL TESTING IS NOT FEASIBLE ON SMALL OR VARIABLE SITE OR WHERE TIMING IS CRITICAL, FERTILIZER MAY BE APPLIED AT THE RATE OF 500 POUNDS PER ACRE OR II POUNDS PER 1,000 SQUARE FEET OF 10-20-10 OR EQUIVALENT WITH 50% WATER INSOLUBLE NITROGEN UNLESS A SOIL TEST INDICATES OTHERWISE APPLY LIMESTONE AS FOLLOWS:

SOIL TEXTURE TONS/ACRE LBS./1,000 SQ. FT. CLAY, CLAY LOAM AND

HIGH ORGANIC SOIL SANDY LOAM, LOAM, SILT LOAM 2 LOAMY SAND, SAND

PULVERIZED DOLOMITIC LIMESTONE IS PREFERRED FOR MOST SOILS SOUTH OF THE NEW BRUNSWICK-TRENTON LINE.

B. WORK LIME AND FERTILIZER INTO SOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES WITH A DISC, SPRINGTOOTH HARROW OR OTHER SUITABLE EQUIPMENT. THE FINAL HARROWING OR DISCING OPERATION SHOULD BE ON THE GENERAL CONTOUR. CONTINUE TILLAGE UNTIL A REASONABLE UNIFORM, FINE SEEDBED IS PREPARED. ALL BUT CLAY OR SILTY SOILS AND COARSE SANDS SHOULD BE ROLLED TO FIRM THE SEEDBED WHEREVER FEASIBLE.

C. REMOVE FROM THE SURFACE ALL STONES 2 INCHES OR LARGER IN ANY DIMENSION. REMOVE ALL OTHER DEBRIS, SUCH AS WIRE, CABLE, TREE ROOTS, PIECES OF CONCRETE, CLODS, LUMPS OR OTHER UNSUITABLE

D. INSPECT SEEDBED JUST BEFORE SEEDING. IF TRAFFIC HAS LEFT THE SOIL COMPACTED, THE AREA MUST BE RETILLED AND FIRMED AS ABOVE.

SOILS HAVING A PH OF 4 OR LESS OR CONTAINING IRON SULFIDE SHALL BE COVERED WITH A MINIMUM OF 12 INCHES OF SOIL HAVING A PH OF 5 OR MORE

BEFORE SEEDBED PREPARATION. THE ADDED SOIL SHALL BE LIMED AS ABOVE.

#### III. <u>SEEDING</u>

ACID SOIL CONDITIONS

A. SEE AGRONOMIC RECOMMENDATIONS OR USE MIXTURE RECOMMENDED BY THE COOPERATIVE EXTENSION SERVICE OR SOIL CONSERVATION SERVICE WHICH IS APPROVED BY THE SOIL CONSERVATION DISTRICT.

B. APPLY SEED UNIFORMLY BY HAND, CYCLONE (CENTRIFUGAL) SEEDER, DROP SEEDER, DRILL, CULTIPACKER SEEDER OR HYDROSEEDER. THE LATTER MAY BE JUSTIFIABLÉ FOR LARGE. STEEP AREAS WHERE CONVENTIONAL VEHICLES CANNOT TRAVEL. MULCH SHALL NOT BE INCLUDED IN THE TANK WITH THE SEED. EXCEPT FOR DRILLED, HYDROSEEDED OR CULTIPACKED SEEDINGS, SEED SHALL BE INCORPORATED INTO THE SOIL, TO A DEPTH OF 1/4 TO 1/2 INCH, BY RAKING OR DRAGGING. DEPTH OF SEED PLACEMENT MAY BE 1/2 INCH DEEPER ON COARSE TEXTURED SOIL.

C. AFTER SEEDING, FIRMING THE SOIL WITH A CORRUGATED ROLLER WILL ASSURE GOOD SEED-TO-SOIL CONTACT, RESTORE CAPILLARITY AND IMPROVE SEEDLING EMERGENCE. THIS IS THE PREFERRED METHOD. WHEN PERFORMED ON THE CONTOUR, SHEET EROSION WILL BE MINIMIZED AND WATER CONSERVATION ON SITE WILL BE MAXIMIZED.

## IV. MULCHING

MULCHING IS REQUIRED ON ALL SEEDING. MULCH WILL INSURE AGAINST EROSION BEFORE GRASS IS ESTABLISHED AND WILL PROMOTE FASTER AND EARLIER ESTABLISHMENT. (THE EXISTENCE OF SATISFACTORY PERMANENT VEGETATION AT THE TIME OF PROJECT OR UNIT COMPLETION SHALL BE DEEMED AS COMPLIANCE WITH THIS MULCHING REQUIREMENT).

A. MULCH MATERIALS SHOULD BE UNROTTED SMALL GRAINS OF STRAW, HAY FREE OF SEEDS OR SALT HAY TO BE APPLIED AT THE RATE OF 1-1/2 TO 2 TONS PER ACRE (70 TO 90 POUNDS PER 1,000 SQUARE FEET), EXCEPT THAT WHERE A CRIMPER IS USED INSTEAD OF A LIQUID MULCH-BINDER (TACKIEYING OR ADHESIVE AGENT), THE RATE OF APPLICATION MUST BE DOUBLE THE LOWER RATE. MULCH CHOPPER-BLOWERS MUST NOT GRIND THE MATERIAL

B. SPREAD UNIFORMLY BY HAND OR MECHANICALLY SO THAT APPROXIMATELY 75 PERCENT TO 95 PERCENT OF THE SOIL SURFACE WILL BE COVERED. FOR UNIFORM DISTRIBUTION OF HAND-SPREAD MULCH, DIVIDE AREA INTO APPROXIMATELY 1,000 SQUARE FEET SECTIONS AND DISTRIBUTE 70 TO 90 POUNDS WITHIN EACH SECTION.

C. MULCH ANCHORING SHOULD BE ACCOMPLISHED IMMEDIATELY AFTER PLACEMENT TO MINIMIZE LOSS BY WIND OR WATER. THIS MAY BE DONE BY ONE OF THE FOLLOWING METHODS, DEPENDING UPON THE SIZE OF THE AREA, STEEPNESS OF SLOPES AND COSTS.

1. PEG AND TWINE - DRIVE 8 TO 10 INCH WOODEN PEGS TO WITHIN 2 TO 3 INCHES OF THE SOIL SURFACE EVERY 4 FEET IN ALL DIRECTIONS. STAKES MAY BE DRIVEN BEFORE OR AFTER APPLYING MULCH. SECURE MULCH TO SOIL SURFACE BY STRETCHING TWINE BETWEEN PEGS IN A CRISS-CROSS AND A SQUARE PATTERN. SECURE TWINE AROUND EACH PEG WITH TWO OR MORE ROUND TURNS.

2. MULCH NETTINGS - STAPLE PAPER, JUTE, COTTON OR PLASTIC NETTINGS TO THE SOIL SURFACE. USE A DEGRADABLE NETTING IN AREAS TO BE MOWED.

3. CRIMPER (MULCH ANCHORING TOOL) - A TRACTOR-DRAWN IMPLEMENT, SOMEWHAT LIKE A DISC-HARROW, ESPECIALLY DESIGNED TO PUSH OR CUT SOME OF THE BROADCAST LONG FIBER MULCH 3 TO 4 INCHES INTO THE SOIL SO AS TO ANCHOR IT AND LEAVE PART STANDING UPRIGHT. THIS TECHNIQUE IS LIMITED TO AREAS TRAVERSABLE BY A TRACTOR, WHICH MUST OPERATE ON THE CONTOUR OF SLOPES. STRAW MULCH RATE MUST BE 3 TONS PER ACRE. NO TACKIFYING OR ADHESIVE AGENT IS REQUIRED.

4. LIQUID MULCH-BINDERS - MAYBE USED TO ANCHOR SALT HAY, HAY OR STRAW MULCHES.

APPLICATIONS SHOULD BE HEAVIER AT EDGES WHERE WIND CATCHES THE MULCH, IN VALLEYS AND AT CRESTS OF BANKS REMAINDER OF AREA SHOULD BE UNIFORM

> SYNTHETIC OR ORGANIC BINDERS - BINDERS SUCH AS CURASOL, DCA-70, PETRO-SET AND TERRA-TACK MAY BE USED AT RATES RECOMMENDED BY THE MANUFACTURER TO

ANCHOR MULCH MATERIALS. NOTE:ALL NAMES GIVEN ABOVE ARE REGISTERED TRADE NAMES. THIS DOES NOT CONSTITUTE A RECOMMENDATION OF THESE PRODUCTS TO THE EXCLUSION OF OTHER PRODUCTS.

D. WOOD-FIBER OR PAPER-FIBER MULCH AT THE RATE OF 1,500 POUNDS PER ACRE MAY BE APPLIED BY A HYDROSEEDER. USE IS LIMITED TO FLATTER SLOPES AND DURING OPTIMUM SEEDING PERIODS IN SPRING AND FALL.

#### V. <u>IRRIGATION</u> (WHERE FEASIBLE)

IF SOIL MOISTURE IS DEFICIENT AND MULCH IS NOT USED. SUPPLY NEW SEEDINGS WITH ADEQUATE WATER (A MINIMUM OF 1/4 INCH TWICE A DAY UNTIL VEGETATION IS WELL ESTABLISHED). THIS IS ESPECIALLY TRUE WHEN SEEDINGS ARE MADE IN ABNORMALLY DRY OR HOT WEATHER OR ON DROUGHTY SITES.

#### VI. TOPDRESSING\*

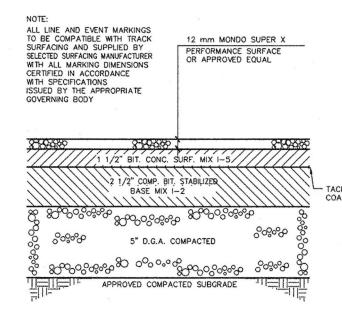
NOT MANDATORY).

A. SPRING SEEDINGS WILL REQUIRE AN APPLICATION OF FERTILIZER SUCH AS 10-10-10 OR EQUIVALENT AT 400 POUNDS PER ACRE OR 10 POUNDS PER 1,000 SQUARE FEET BETWEEN SEPTEMBER I AND OCTOBER 15.

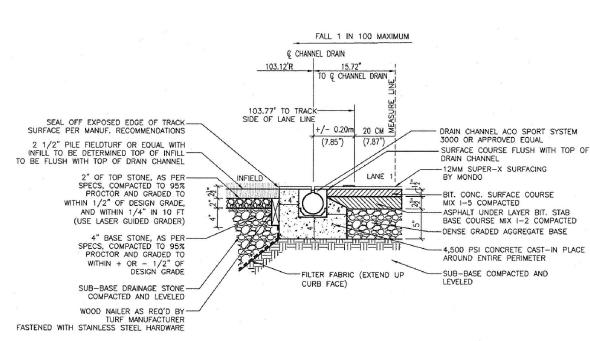
B. FALL SEEDINGS WILL REQUIRE THE ABOVE BETWEEN MARCH IS AND MAY I

C. MIXTURES DOMINATED BY WEEPING LOVEGRASS OR LEGUMES MAY NOT NEED TOPDRESSING.

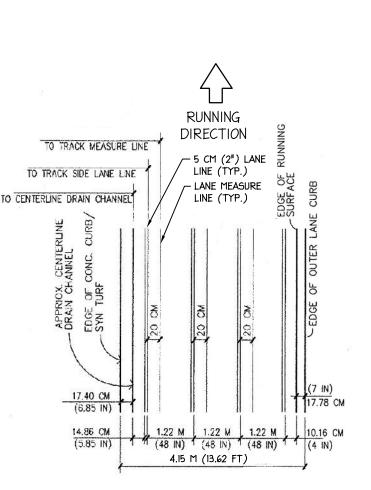
D. BERMUDAGRASS SHOULD BE TOPDRESSED BEFORE AUGUST 15. \*IF SLOW RELEASE NITROGEN (300 POUNDS 38-0-0 PER ACRE OR EQUIVALENT) IS USED IN ADDITION TO SUGGESTED FERTILIZER, THIS FOLLOW-UP OF TOPDRESSING IS



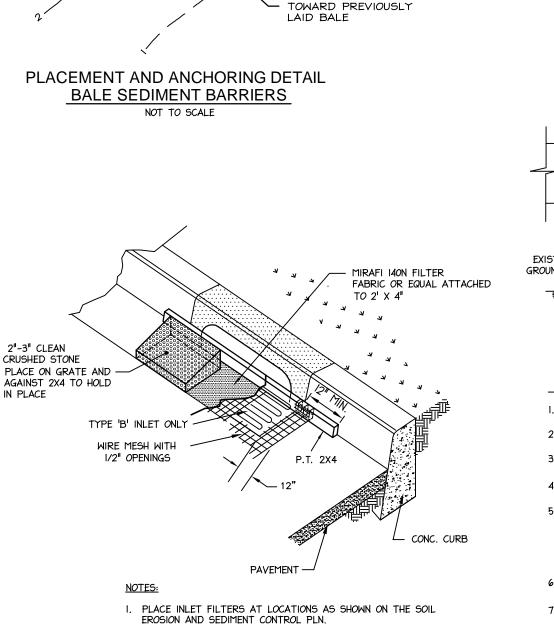
#### NEW BITUMINOUS CONCRETE RUNNING TRACK SECTION



SECTION AT DRAIN CHANNEL



3 LANE TRACK LAYOUT DETAIL



2. STONE SHALL BE PILED SO THAT ALL OPENINGS IN THE INLET ARE NOT COMPLETELY COVERED AND FILTER POSITION TO

ALLOW FLOW INTO THE CATCH BASIN.

#### NOTES\_ 1. PLACE STABILIZED CONSTRUCTION ENTRANCE AT LOCATION(S) AS SHOWN ON THE SOIL EROSION AND SEDIMENT CONTROL PLAN. 2. STONE SIZE SHALL BE ASTM C-33, SIZE No. 2 OR 3, CRUSHED 3. THE THICKNESS OF THE STAB. CONST. ENT. SHALL NOT BE LESS 4. THE WIDTH AT THE EXIST. PAVEMENT SHALL NOT BE LESS THAN THE FULL WIDTH OF POINT OF INGRESS AND EGRESS. 5. THE STAB. CONST. ENT. SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO THE R.O.W./PAVEMENT. THIS REQUIRES PERIODIC TOP DRESSING WITH ADDITONAL STONE OR ADDITIONAL LENGTH AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURE USED TO TRAP

. PLACE STOCKPILES AT LOCATIONS AS SHOWN ON THE

ACCORDANCE WITH MINIMUM STABILIZATION REQUIREMENTS.

TOPSOIL STOCKPILE

NOT TO SCALE

FULL WIDTH OF CARTWAY

└6" OF STONE(SEE NOTE 2)

<sup>L</sup>PROVIDE APPROPRIATE

TRANSITION BETWEEN

STAB, CONST. ENT. AND R.O.W.

<u>PROFILE</u>

AS SHOWN ON PLANS PLAN VIEW

SOIL EROSION AND SEDIMENT CONTROL PLAN.

4. SILT FENCE SHALL BE INSTALLED

AS DETAILED HEREON.

2" x 2" STAKES, 6" TO 24" IN GROUND STOCKPILE SHALL RECEIVE A VEGETATIVE COVER IN

2. ALL SIDE SLOPES SHALL BE 3 TO 1 OR FLATTER.

SLOPE = 5%

- 4" VERTICAL FACE

ANGLE FIRST STAKE

SECURELY TIED BALES

2 REBARS, STEEL PICKETS OR

PLACED ON THE CONTOUR NOTES

EMBEDDING DETAIL

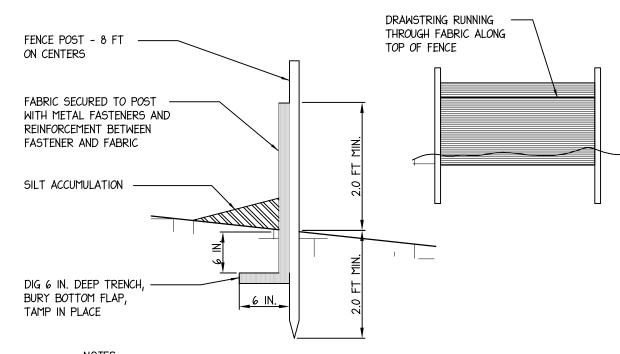
6. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO THE PUBLIC ROADWAY MUST BE REMOVED IMMEDIATELY, 7. WHERE TRACKING OF SOIL ONTO ROADWAYS IS A CONTINUAL CCURRENCE, ALL CONTRCTORS, BOTH SITE AND DWELLING CONTRACTORS, SHALL BE REQUIRED TO BROOMSWEEP THE ROADWAY AT TWO-HOUR INTERVALS MINIMUM AND PRIOR TO LEAVING THE

CONSTRUCTION SITE AT THE DAY END. STABILIZED CONSTRUCTION ENTRANCE

NOT TO SCALE

SLOPE = 5%

3. INLETS ARE TO BE CLEANED AFTER EVERY STORM. INLET FILTER AFTER PAVING NOT TO SCALE



#### <u>NOTES</u> I. PLACE SILT FENCE AT LOCATIONS AS SHOWN ON THE SOIL

EROSION AND SEDIMENT CONTROL PLAN. 2. THE SLOPE OF THE LAND FOR AT LEAST 30 FEET ADJACENT TO ANY SILT FENCE SHALL NOT EXCEED 5%.

3. SILT FENCE SHALL BE INSTALLED SO WATER CANNOT BYPASS THE FENCE AROUND IT'S ENDS.

4. INSPECTION SHALL BE FREQUENT AND REPAIR OR REPLACEMENT SHALL BE MADE AS PROMPTLY AS POSSIIBLE.

# SILT FENCE CONSTRUCTION AND INSTALLATION DETAIL

NOT TO SCALE

DATE: AUGUST 21, 2020  SCALE: AS CHOWN  DESIGNED BY: M.K.F.  DRAWN BY: A.B.  PER CLIENT  M.K.F. 10/22/20 CHECKED BY: M.K.F.	REVISIONS	AUTH.	DATE	JOB No.		06-23-FS
SCALE: AS CHOWN DESIGNED BY: M.K.F.	PER CLIENT	M.K.F.	10/22/20	CHECKED	BY:	M.K.F.
SCALE: AS CHOWN				DRAWN B	Y:	A.B.
				DESIGNED	BY:	M.K.F.
DATE: AUGUST 21, 2020				SCALE:		AS CHOWN
D. TT				DATE:	AUGUS	ST 21, 2020

With Offices In New Jersey, Pennsylvania & Delawar

Construction Inspection Geotechnical Engineering Municipal Engineering Land Surveying Professional Planning Landscape Architecture NJ LLC CERT. No. 24GA2813230

## SOIL EROSION & SEDIMENT CONTROL DETAILS

**CEDAR HILL PREP SCHOOL** BLOCK 424.12 LOT 6.03 FRANKLIN TOWNSHIP,

SOMERSET COUNTY, NEW JERSEY

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Michael K. Ford, P.E Professional Engineering, New Jersey Lic. No. 34722 32 BROWER LANE, PO BOX 5877, HILLSBOROUGH, NJ 08844 EMAIL: CONTACTUS@VANCLEEFENGINEERING.COM WEB: WWW.VANCLEEFENGINEERING.COM PHONE (908) 359-8291 FAX (908) 359-1580

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