MERCER COUNTY	SOIL CONSERV	ATION DIS	TRICT
NOTES FOR SOIL	EROSION AND	SEDIMENT	CONTROL
UPDATED AUGUS	T 13, 2014		

1. THE MERCER COUNTY SOIL CONSERVATION DISTRICT SHALL BE NOTIFIED 48 HOURS PRIOR TO
STARTING LAND DISTURBANCE ACTIVITY. NOTICE MAY BE MAILED, FAXED OR EMAILED TO: MCSCD,
508 HUGHES DRIVE, HAMILTON SQUARE, NJ 08690 PHONE: 609-586-9603 FAX: 609-586-1117
EMAIL: MERCERSOIL@AOL.COM

2. IF APPLICABLE TO THIS PROJECT, THE OWNER SHOULD BE AWARE OF HIS OR HER OBLIGATION TO FILE FOR A NJPDES CONSTRUCTION ACTIVITY STORMWATER 5G3 PERMIT (NJG0088323) VIA THE NJDEP ONLINE PERMITTING SYSTEM WWW.NJ.GOV/DEP/ONLINE) AND TO MAINTAIN THE ASSOCIATED BEST MANAGEMENT PRACTICES AND STORMWATER POLLUTION PREVENTION PLAN SELF-INSPECTION LOGBOOK ONSITE AT ALL TIMES. THIS PERMIT MUST BE FILED PRIOR TO THE START OF SOL DISTURBANCE. THE ONLINE APPLICATION PROCESS WILL REQUIRE ENTRY OF AN SCD CERTIFICATION ODE, WHICH IS PROVIDED BY THE SOIL CONSERVATION DISTRICT UPON CERTIFICATION OF THE SOIL EROSION AND SEDIMENT CONTROL PLAN. 3. THE MERCER COUNTY SOIL CONSERVATION DISTRICT SHALL BE NOTIFIED OF ANY CHANGES IN

4. ANY CHANGES TO THE CERTIFIED SOIL EROSION AND SEDIMENT CONTROL PLAN, INCLUDING AN INCREASE IN THE LIMIT OF DISTURBANCE, WILL REQUIRE THE SUBMISSION OF REVISED SOIL EROSION AND SEDIMENT CONTROL PLANS TO THE DISTRICT FOR RECERTIFICATION. THE REVISED PLANS MUST MEET ALL CURRENT STATE SOIL EROSION & SEDIMENT CONTROL STANDARDS. 5. A COPY OF THE CERTIFIED SOIL EROSION AND SEDIMENT CONTROL PLAN SHALL BE MAINTAINED ON SITE AT ALL TIMES. 6. ALL SOIL EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE INSTALLED PRIOR TO ANY MAJOR SOIL DISTURBANCES, OR IN THEIR PROPER SEQUENCE AS OUTLINED WITHIN THE SEQUENCE OF CONSTRUCTION ON THE CERTIFIED SOIL EROSION AND SEDIMENT CONTROL PLAN, AND MAINTAINED UNTIL PERMANENT PROTECTION IS ESTABLISHED.

ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE CURRENT STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NJ. IF LANGUAGE CONTAINED WITH THE CORRENT STANDARDS FOR SOLE EROSION AND SEDIMENT CONTROL IN NJ. IF LANGUAGE CONTAINED WITHIN ANY OTHER PERMIT FOR THIS PROJECT IS MORE RESTRICTIVE THAN (BUT NOT CONTRADICTORY TO) WHAT IS CONTAINED WITHIN THESE NOTES OR ON THE CERTIFIED SOIL EROSION AND SEDIMENT CONTROL PLAN, THEN THE MORE RESTRICTIVE PERMIT REQUIREMENTS SHALL BE FOLLOWED. 8. THE STANDARD FOR STABILIZED CONSTRUCTION ACCESS REQUIRES THE INSTALLATION OF A 11/2"

TO 2½ CLEAN STONE TRACKING PAD AT ALL CONSTRUCTION DRIVEWAYS IMMEDIATELY AFTER INITIAL SITE DISTURBANCE, WHETHER IDENTIFIED ON THE CERTIFIED PLAN OR NOT. THE WIDTH SHALL SPAN THE FULL WIDTH OF EGRESS, AND LENGTH SHALL BE 50 FT. OR MORE, DEPENDING ON SITE CONDITIONS AND AS REQUIRED BY THE STANDARD. THIS SHALL INCLUDE INDIVIDUAL LOT ACCESS POINTS WITHIN RESIDENTIAL SUBDIVISIONS. IF THE EGRESS IS TO A COUNTY ROAD, THEN A 20 FT. ONG PAVED TRANSITION SHALL BE PROVIDED BETWEEN THE EDGE OF PAVEMENT AND THE STONE ACCESS PAD.

9. 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 OF PRELIMINARY GRADING, PROVIDED THAT ALL OTHER REQUIREMENTS RELATED TO DETENTION BASINS, SWALES AND THE SEQUENCE OF CONSTRUCTION HAVE BEEN MET. 10. ANY DISTURBED AREAS THAT WILL BE LEFT EXPOSED MORE THAN 14 DAYS AND NOT SUBJECT TO CONSTRUCTION ACTIVITY WILL IMMEDIATELY RECEIVE TEMPORARY STABILIZATION. IF THE SEASON PREVENTS ESTABLISHMENT OF A TEMPORARY VEGETATIVE COVER, OR IF THE AREA IS NOT TOPSOILED, THEN THE DISTURBED AREAS WILL BE MULCHED WITH STRAW, OR EQUIVALENT MATERIAL, AT A RATE OF TWO (2) TONS PER ACRE ACCORDING TO STATE STANDARDS SLOPED AREAS IN XCESS OF 3H:1V SHALL BE PROVIDED WITH EROSION CONTROL BLANKETS. CRITICAL AREAS SUBJECT TO FROSION (LE STEEP SLOPES ROADWAY EMBANKMENTS ENVIRONMENTALLY SENSITIVE AREAS) MILL RECEIVE TEMPORARY STABILIZATION IMMEDIATELY AFTER INITIAL DISTURBANCE OR ROUGH

11. ANY STEEP SLOPES (I.E. SLOPES GREATER THAN 3:1) RECEIVING PIPELINE OR UTILITY INSTALLATION WILL BE BACKFILLED AND STABILIZED DAILY, AS THE INSTALLATION PROCEEDS. 12. PERMANENT VEGETATION SHALL BE SEEDED OR SODDED ON ALL EXPOSED AREAS WITHIN TEN (10) DAYS AFTER FINAL GRADING AND TOPSOILING. ALL AGRONOMIC REQUREMENTS CONTAINED WITHIN THE STANDARDS AND ON THE CERTIFIED PLAN SHALL BE EMPLOYED. MULCH WITH BINDER, IN ACCORDANCE WITH THE STANDARDS, SHALL BE USED ON ALL SEEDED AREAS. SAVE ALL TAGS AND/OR BAGS USED FOR SEED, LIME AND FERTILIZER, AND PROVIDE THEM TO THE DISTRICT INSPECTOR TO VERIFY THAT MIXTURES AND RATES MEET THE STANDARDS.

13. 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, THEN NON-VEGETATIVE MEANS OF PERMANENT GROUND STABILIZATION WILL HAVE TO BE EMPLOYED. BE EMPLOYED.

14. DURING THE COURSE OF CONSTRUCTION, SOIL COMPACTION MAY OCCUR WITHIN HAUL ROUTES, TAL DURING THE COURSE OF CONSTRUCTION, SOLE COMPACE INTO MAIL OCCUR WITHIN HAUE ROUTES, STAGING AREAS AND OTHER PROJECT AREAS. IN ACCORDANCE WITH THE STANDARD FOR TOPSOILING, COMPACTED SURFACES SHOULD BE SCARIFIED 6" TO 12" IMMEDIATELY PRIOR TO TOPSOIL APPLICATION. THIS WILL HELP ENSURE 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.).

15. PRIOR TO SEEDING, TOPSOIL SHALL BE WORKED TO PREPARE A PROPER SEEDBED. THIS SHALL INCLUDE RAKING OF THE TOPSOIL AND REMOVAL OF DEBRIS AND STONES, ALONG WITH OTHER REQUIREMENTS OF THE STANDARD FOR PERMANENT VEGETATIVE COVER FOR SOIL STABILIZATION. 16. IN ACCORDANCE WITH THE STANDARD FOR MANAGEMENT OF HIGH ACID PRODUCING SOILS, ANY SOIL HAVING A PH OF 4 OR LESS OR CONTAINING IRON SULFIDES SHALL BE BURIED WITH LIMESTONE IN ACCORDANCE WITH THE STANDARD AND BE COVERED WITH A MINIMUM OF 12" OF SOIL HAVING A PH OF 5 OR MORE PRIOR TO TOPSOIL APPLICATION AND SEEDBED PREPARATION. IF THE AREA IS TO RECEIVE TREE OR SHRUB PLANTINGS, OR IS LOCATED ON A SLOPE, THEN THE AREA SHALL BE COVERED WITH A MINIMUM OF 24" OF SOIL HAVING A PH OF 5 OR MORE. . MULCHING TO THE STANDARDS IS REQUIRED FOR OBTAINING A CONDITIONAL REPORT OF

COMPLIANCE. CONDITIONAL ROC'S ARE ONLY ISSUED WHEN THE SEASON PROHIBITS SEEDING. PERMANENT STABILIZATION MUST THEN BE COMPLETED DURING THE OPTIMUM SEEDING SEASON IMMEDIATELY FOLLOWING THE CONDITIONAL ROC, OR THE COMPLETION OF WORK IN A GIVEN AREA. 8. HYDROSEEDING IS A TWO-STEP PROCESS. THE FIRST STEP INCLUDES SEED, FERTILIZER, LIME, TC., ALONG WITH MINIMAL AMOUNTS OF MULCH TO PROMOTE CONSISTENCY, GOOD SEED-TO-SOI ONTACT, AND GIVE A VISUAL INDICATION OF COVERAGE. UPON COMPLETION OF THE SEEDING OPERATION, HYDROMULCH SHOULD BE APPLIED AT A MINIMUM 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 STANDARDS. THE USE OF HYDROMULCH ON SLOPED AREAS IS

19. THE CONTRACTOR IS RESPONSIBLE FOR KEEPING ALL ADJACENT ROADS CLEAN DURING LIFE OF THE CONSTRUCTION PROJECT. ALL SEDIMENT WASHED, DROPPED, TRACKED OR SPILLED ONTO PAVED SURFACES SHALL BE IMMEDIATELY REMOVED. 20. THE DEVELOPER SHALL BE RESPONSIBLE FOR REMEDIATING ANY EROSION OR SEDIMENT PROBLEMS THAT ARISE AS A RESULT OF ONGOING CONSTRUCTION, AND FOR EMPLOYING ADDITIONAL

EROSION AND SEDIMENT CONTROL MEASURES AT THE REQUEST OF THE MERCER COUNTY SOIL CONSERVATION DISTRICT. 21. CONDUIT OUTLET PROTECTION MUST BE INSTALLED AT ALL REQUIRED OUTFALLS PRIOR TO THE DRAINAGE SYSTEM BECOMING OPERATIONAL.

22. ALL DETENTION / RETENTION BASINS MUST BE FULLY CONSTRUCTED (INCLUSIVE OF ALL TRUCTURAL COMPONENTS AND LINERS) AND PERMANENTLY STALLIZED PRIOR TO PAVING OR PRIOR TO THE ADDITION OF ANY IMPERVIOUS SURFACES. PERMANENT STABILIZATION INCLUDES, BUT MAY NOT HE ADDITION OF ANY IMPERVIOUS SURFACES. PERMANENT STABILIZATION INCLUDES, BUT MAT NOT BE LIMITED TO: TOPSOIL, SEED, STRAW MULCH AND BINDERS OR EROSION CONTROL BLANKETS ON ALL SEEDING, ALL AGRONOMIC REQUIREMENTS AS SPECIFIED ON THE CERTIFIED SOIL EROSION AND SEDIMENT CONTROL PLAN, INSTALLATION OF THE OUTFLOW CONTROL STRUCTURES AND DISCHARGE STORM DRAINAGE PIPING, LOW FLOW CHANNELS, CONDUIT OUTLET PROTECTION, ENERGENCY CONTROL PLAN, INSTALLATION OF TOTOTON EMERGENCY SPILLWAYS, AND LAP RING PROTECTION.

23. THE RIDING SURFACE OF ALL UTILITY TRENCHES WITHIN PAVED AREAS SHALL BE 3/4" CLEAN STONE OR BASE PAVEMENT UNTIL SUCH TIME AS FINAL PAVEMENT HAS BEEN INSTALLED. TEMPORARY SOIL RIDING SURFACES ARE PROHIBITED. 24. ALL CONSTRUCTION DEWATERING (TRENCHES, EXCAVATIONS, ETC.) MUST BE DONE THROUGH AN INLET OR OUTLET FILTER IN ACCORDANCE WITH THE STANDARD FOR DEWATERING OR AS DEPICITED ON THE CERTIFIED SOIL EROSION AND SEDIMENT CONTROL PLAN. DISCHARGE LOCATIONS FOR THE

DEWATERING OPERATION MUST CONTAIN PERENNIAL VEGETATION OR SIMILAR STABLE SURFACE. 25. ALL SWALES OR CHANNELS THAT WILL RECEIVE RUNOFF FROM PAVED SURFACES MUST BE PERMANENTLY STABILIZED PRIOR TO THE INSTALLATION OF PAVEMENT. IF THE SEASON PROHIBITS THE ESTABLISHMENT OF PERMANENT STABILIZATION, THE SWALES OR CHANNELS MAY BE TEMPORARILY STABILIZED IN ACCORDANCE WITH THE STANDARDS. 26. NJSA 4:24-39 ET SEQ.REQUIRES THAT NO CERTIFICATE OF OCCUPANCY OR TEMPORARY CERTIFICATE OF OCCUPANCY BE ISSUED BY THE MUNICIPALITY BEFORE THE PROVISIONS OF THE CERTIFIED SOIL EROSION AND SEDIMENT CONTROL PLAN HAVE BEEN SATISFIED. THEREFORE, AL

SITE WORK FOR SITE PLANS AND ALL WORK AROUND INDIVIDUAL LOTS IN SUBDIVISIONS MUST BE COMPLETED BEFORE THE DISTRICT ISSUES A REPORT OF COMPLIANCE OR CONDITIONAL REPORT OF COMPLIANCE, WHICH MUST BE FORWARDED TO THE MUNICIPALITY PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY OR TEMPORARY CERTIFICATE OF OCCUPANCY, RESPECTIVELY. MERCER COUNTY SCD'S REQUIREMENTS FOR PERMANENT VEGETATIVE COVER FOR SOIL STABILIZATION

- 1. TOPSOIL STRIPPING AND STOCKPILING.
- A. FIELD EXPLORATION SHOULD BE MADE TO DETERMINE WHETHER QUANTITY AND OR QUALITY OF SURFACE SOIL JUSTIFIES STRIPPING.
- B. A 6 INCH STRIPPING DEPTH IS TYPICAL, BUT MAY VARY DEPENDING ON THE PARTICULAR SOIL STRUCTURE OR PRE-EXISITNG USE.
- C. STOCKPILES SHOULD BE LOCATED SO AS NOT TO OBSTRUCT NATURAL DRAINAGE OR CAUSE OFF-SITE ENVIRONMENTAL DAMAGE, AND SHALL BE DELINEATED ON THE CERTIFIED SOIL EROSION AND SEDIMENT CONTROL PLAN AND BE CONSTRUCTED IN ACCORDANCE WITH THE TOPSOIL STOCKPILE DETAIL. D. STOCKPILES SHOULD BE TEMPORARILY STABILIZED ACCORDING TO THE STANDARDS.
- 2. SITE PREPARATION A. INSTALL EROSION CONTROL MEASURES AND FACILITIES SUCH AS SILT FENCE, DIVERSIONS, SEDIMENT BASINS, AND CHANNEL STABILIZATION.
- B. GRADE AS NEEDED AND FEASIBLE TO PERMIT THE USE OF CONVENTIONA EQUIPMENT FOR SEEDBED PREPARATION, SEEDING, MULCH APPLICATION AND TACKING, AND MAINTENANCE. ALL GRADING SHOULD BE DONE IN ACCORDANCE WITH THE STANDARD FOR LAND GRADING, 19-1.

SEEDBED PREPARATION TOPSOIL REQUIRED 5" (UNSETTLED) 6.0 TO 8.0 MIN. DEPTH: ORGANIC MATTER CONTENT: 2.75 % 50 LBS/ACRE (50% WATER INSOLUBLE) NITRATE N2: PHOSPHOROUS: 100 LBS/ACRE

POTASSIUM: 50 LBS/ACRE B. THE CONTRACTOR SHOULD BE AWARE OF THE POSSIBILITY, DEPENDING UPON THE SITE CONDITIONS, THAT ALL TOPSOIL MAY HAVE TO BE PROVIDED FROM AN OFF-SITE SOURCE.

C. TOPSOIL SHOULD BE HANDLED ONLY WHEN DRY ENOUGH TO WORK WITHOUT DAMAGING SOIL STRUCTURE. D. APPLY A UNIFORM 5 INCHES (UNSETTLED) OF TOPSOIL OVER ALL DISTURBED AREAS. SOILS WITH A pH OF 4.0 OR LESS OR CONTAINING IRON SULFIDE SHALL BE COVERED WITH A MINIMUM DEPTH OF 12 INCHES OF SOIL HAVING A pH OF 5.0 OR MORE AND THE TOP 5 INCHES SHALL CONFORM TO THE TOPSOIL STANDARD AND SHALL BE LIMED ACCORDING TO THE OPERICATIONS

THE SPECIFICATIONS E. IF THE TOPSOIL BECOMES COMPACTED, THE SURFACE MUST BE SCARIFIED 6" TO 12" TO PROVIDE A GOOD SEED-TO-SOIL BOND.

F. APPLY I IMESTONE AND FERTILIZER ACCORDING TO SOIL TEST RECOMMENDATIONS SUCH AS THOSE OFFERED BY RUTGERS UNIVERSITY COOPERATIVE EXTENSION. I SOIL TESTING IS NOT FEASIBLE, FERTILIZER (10-20-10) WITH 50% WATER INSOLUBLE NITROGEN SHOULD BE APPLIED AT THE TYPICAL RATE OF 500 LBS/ACRE OR 11 LBS/1,000 SQUARE FEET.

CCR CALCULATION:	
 MEASURE THE DIAMETER OF THE TREE 4.5 FEET ABOVE GROUND ON THE UPHILL SIDE (DBH) IN INCHES. 	
 FOR OLDER, UNHEALTHY OR SENSITIVE SPECIES: DBH x 1.5 = CCR (IN FEET) 	
3. FOR YOUNGER, HEALTHY OR TOLERANT SPECIES: DBH x 1.0 = CCR (IN FEET)	
GREATER THAN CRITICAL ROOT RADIUS (CCR) (SEE CALCULATION)	
PROTECTIVE SNOW FENCE	
TREE PROTECTION DETAIL	
NOT TO SCALE	

- TREE PROTECTION NOTES: TREE PROTECTION SHALL BE PROVIDED AROUND AROUND EXISTING TREES TO BE SAVED PRIOR TO ANY SITE DISTURBANCE. FENCE SHOULD BE INSTALLED BEYOND THE CRITICAL ROOT RADIUS (CCR) AS SHOWN
- 2. BOARDS SHALL NOT BE NAILED TO TREES DURING
- CONSTRUCTION. 3. FEEDER ROOTS SHALL NOT BE CUT IN AN AREA WITHIN CCR (ALSO KNOWN AS THE PROJECTED ROOT ZONE).

4. DAMAGED TRUNKS OR EXPOSED ROOTS SHALL HAVE DAMAGED TRUNKS OF EXPOSED ROUTS SHALL HAVE DAMAGED BARK REMOVED IMMEDIATELY AND NO PAINT SHALL BE APPLIED. EXPOSED ROOTS SHALL BE PRUNED AND COVERED WITH TOPSOIL IMMEDIATELY AFTER EXCAVATION IS COMPLETE. ADDITIONALLY, ROOTS SHALL BE IRRIGATED IF EXPOSED DURING HOT WEATHER.

5. TREE LIMB REMOVAL, WHERE NECESSARY, WILL BE DONE AS NATURALLY TARGET PRUNING TO REMOVE THE DESIRED BRANCH AS CLOSE AS POSSIBLE TO THE BRANCH COLLAR (NO FLUSH CUTS) AND TREE PAINT SHALL NOT BE APPLIED.

G.	APPLY LIMESTONE EQUIVALENT TO 50% ((PULVERIZED DOLOMITIC LIMESTONE IS NEW BRUNSWICK - TRENTON FALL LINE)	PREFERRED FOR M		H OF THE
	SOIL TEXTURE CLAY, CLAY LOAM, HIGH ORGANIC SANDY LOAM, LOAM. SILT LOAMY SAND, SAND	TONS/ACRE 3 2 1	LBS/1,000 SQ 135 90 45	. FT.

- H. WORK LIME AND FERTILIZER INTO THE SOIL TO A DEPTH OF 4 INCHES. THE FINAL HAROWING OR DISC OPERATION SHOULD BE ON THE GENERAL CONTOUR. CONTINUE TILLAGE UNTIL A UNIFORM, FINE SEEDBED IS PREPARED. · REMOVE FROM THE SURFACE ALL STONES 2 INCHES OR LARGER IN ANY DIMENSION, AND OTHER OBJECTIONABLE STONES OR DEBRIS SUCH AS WIRE, TREE ROOTS, PIECES OF CONCRETE, CLODS, LUMPS, OR OTHER UNSUITABLE MATERIAL.
- 4. SEEDING
- A. SELECT AN APPROVED MIXTURE BY THE MERCER COUNTY SCD. B. APPLY SEE UNIFORMLY BY HAND, CYCLONES, DROP SEEDER, DRILL CULTIPACKER OR HYDROSEEDER*. THE LATTER MAY BE JUSTIFIABLE FOR LARGE, STEEP AREAS WHERE CONVENTIONAL APPLICATIONS ARE NOT FEASIBLE. HYDROSEEDING SHALL THE SEED MUST BE APPLIED FIRST TO ASSURE PROPER SEED TO SOIL CONTACT, THE HYDROMULCH IS THEN SPRAYED OVER THE SEEDING. FOR OPTIMUM RESULTS, HE SEED SHOULD BE INCORPORATED INTO THE SOIL TO A DEPTH OF 1/4 TO 1/2 INCH DEPENDING UPON SPECIES. * THE USE OF HYDRO-MULCH, AS OPPOISED TOSTRAW, IS LIMITED TO OPTIMUM
- SEEDING DATES AS LISTED IN THE STANDARDS. AFTER SEEDING, THE SOIL SHOULD BE PACKED WITH A CORRUGATED ROLLER. WHEN PERFORMED ON THE CONTOUR, ROLLING WILL MINIMIZE SHEET EROSION AND MAXIMIZE WATER CONSERVATION. 5. MULCHING
- A. UNROTTED STRAW, HAY FREE OF SEEDS, OR SALT HAY IS REQUIRED ON ALL SEEDING AT A RATE OF 1.5 TO 2 TONS/ACRE, (70 TO 90 LBS./1,000 SQUARE FEET), EXCEPT WHERE A CRIMPER IS USED INSTEAD OF A LIQUID MULCH-BINDER, THEN THE RATE OF APPLICATION IS 3 TONS PER ACRE. B. MULCH ANCHORING SHOULD BE ACCOMPLISHED IMMEDIATELY AFTER PLACEMENT TO MINIMIZE LOSS DUE TO WIND OR WATER. THIS MAY BE DONE ACCORDING TO THE FOLLOWING METHODS:
- . WOOD-FIBER OR PAPER-FIBER MULCH AT THE RATE OF 1,500 LBS/ACRE APPLIED BY A HYDROSEEDER. USE IS LIMITED TO ONLY THE OPTIMUM SEEDING SEASON. . SYNTHETIC OR ORGANIC BINDERS. . PEG & TWINE, MULCH NETTING, AND MECHANICAL CRIMPING.
- 4. CRIMPING REQUIRES A HIGHER MULCH RATE (3 TONS/ACRE). NOTE: 1) ONE BALE OF HAY WEIGHTS 40-60 BLS DEPENDING ON HOW IT WAS BALED.
- 2) 1,500 GALLON TANK OF HYDROMULCH COVERS .5 ACRES. 6. TEMPORARY SEEDING MIXES - RATE: 100 LBS/ACRE

MIX: EARLY SPRING LATE SUMMER TO EARLY FALL	MIX: LATE FALL	MIX: MID-SUMMER
100% PERENNIAL RYEGRASS RATE: 100 LB/AC	100% CEREAL RYE RATE: 112 LB/AC	40% PEARL MILLET 40% MILLET (GERMAN OR HUNGARIAN) 20% WEEPING LOVEGRASS

RATE: 100 LB/AC 7. RECOMMENDED PERMANENT SEEDING MIXES <u>OPTIMUM SEEDING DATES:</u> MARCH 1 TO MAY 15 AND AUGUST 15 TO OCTOBER 15 LAWNS - RATE 200 LBS/ACRE

MIX: SHADE

20% KENTUCKY BLUEGRASS

15% PERENNIAL RYEGRASS

MERCER CO. SCD PREFERRED MISX FOR LAWNS AND DETENTION BASINS 70% TURF TYPE TALL FESCUE 10% KENTUCKY BLUEGRASS 20% PERENNIAL RYEGRASS MIX: LAWNS-LOW MAINTENANCE DROUGHTY & HEAVY TRAFFIC 80% TALL FESCUE TURF TYPE

(LOW GROWING VARIETIES) *# 10% PERENNIAL RYEGRASS (LOW GROWING VARIETIES)

MIX: LAWNS-QUALITY SUN/SHADE 20% PERENNIAL RYEGRASS MIX: MOIST DETENTION BASIN BOTTOMS 40% FLAT PEA (WITH PROPER INOCULANT) 30% CHEWINGS FESCUE 25% PERENNIAL RYEGRASS 25% TALL TALL FESCUE OR STRONG 35% CREEPING RED FESCUE CREEPING RED FESCUE 10% REDTOP 15% KENTUCKY BLUEGRASS

* INCLUDE AT LEAST THREE DIFFERENT VARIETIES IN THE MIX # EXCLUDES K-31

8. CONSERVATION PLANTINGS MIX: RECLAMATION, EROSION CONTROL & ACID SOILS- RATE: 150 LBS/ACRE ACID SOILS- RATE: 150 LBS 40% SWITCHGRASS 22% NORTH/MID-ATLANTIC WILDFOWER MIXTURE 25% SERECIA LESPEDEZA OR FLAT PEA 6% BIRDSFOOT TREFOIL 15% TALL FESCUE OR CREEPING RED 15% DEERTONGUE 5% BIRDSFOOT TREFOIL

MIX: WILDLIFE HABITAT ENHANCEMENT RATE: 100 LBS/ACRE 40% SWITCHGRASS 40% SWITCHGRASS 30% CANADA BLUEGRASS OR SMOOTH BROMEGRASS 10% ORCHARDGRASS 10% WHITE CLOVER

JAPANESE MILLET

5% BIRDSFOOT TREFOIL

30% CANADA BLUEGRASS OR SMOOTH BROMEGRASS 15% ROUGH BLUEGRASS (SHADE) OR TALL FESCUE (OPEN) 10% ALSIKE CLOVER OR LADINO WHITE CLOVER 10% BIRDSFOOT TREFOIL OR CREEPING FOXTAIL

65% HARD, CHEWINGS OR CREEPING RED FESCUE *

4% JAPANESE MILLET 1% RED TOP * SHOULD NOT BE MOWED LESS THAN 6 INCHES

BEGIN END DATE DATE

WEEK 1 WEEK 2

WEEK 1 WEEK 2

WEEK 2 WEEK 3

CONSTRUCTION SEQUENCE OPERATION

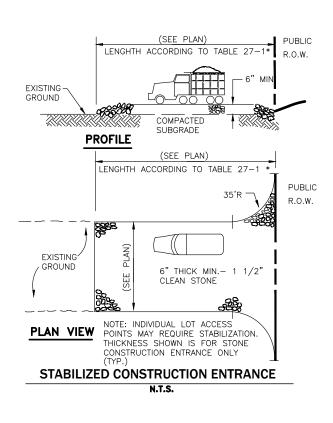
1. CONSTRUCT STABILIZED CONSTRUCTION ENTRANCES AS SHOWN.

- 2. INSTALL STAKED STRAW BALES OR SEDIMENT BARRIER AS SHOWN.
- 3. DETERMINE TEMPORARY STOCKPILE LOCATION
- 4. PERFORM INITIAL LOT GRADING AND TEMPORARY STABILIZATION OF TOPSOIL STOCKPILES. WEEK 2 WEEK 4 WEEK 3 WEEK 7 5. INSTALL PAVEMENT CURBING SIDEWALKS, AND UTILITIES. PROTECT INLETS AS SHOWN.
- CONSTRUCT BUILDING IN ACCORDANCE WITH TYPICAL EROSION CONTROL PLANS.
- WEEK 7 WEEK 18 FINAL GRADE TO BOTTOM OF SEED BED, LANDSCAPE BED OR SOD BED. TOP SOIL, MULCH, AND SEED OR INSTALL LANDSCAPING IN DISTURBED AREAS. WEEK 18 WEEK 20
- 8. IF APPLICABLE, EITHER SCARIFY 6" OF BED SURFACE OR WEEK 20 WEEK 21 TEST SOIL COMPACTION.

NOTES: 1. THE PROPERTY OWNER SHALL BE RESPONSIBLE FOR MAINTENANCE OF EROSION

CONTROL MEASURES DURING CONSTRUCTION. THE TOWNSHIP SHALL HAVE RESPONSIBILITY FOR MAINTENANCE OF PERMANENT EROSION CONTROL MEASURES RELATED TO DRAINAGE FACILITIES UNDER ITS CONTROL.

3. ROADSIDE EMBANKMENTS ARE TO BE MAINTAINED IN A ROUGH GRADE AND TEMPORARILY STABILIZED UNTIL SUCH TIME AS PERMANENT VEGETATIVE COVER CAN BE ESTABLISHED.



CONDUIT OUTLET PROTECTION Ewing Cemetery Lot 25, Block 364.01

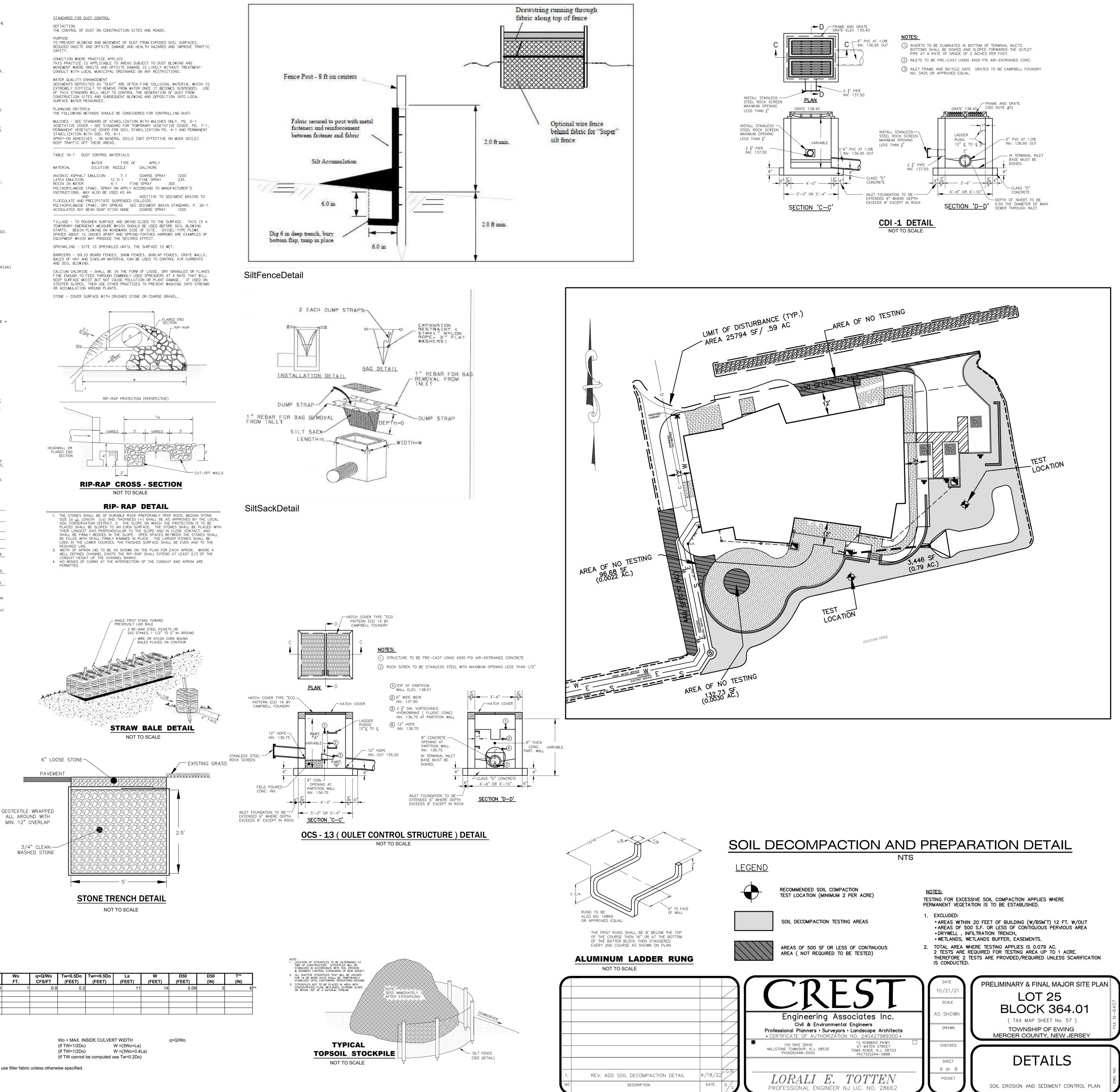
N-6407 Date: 10/15/21

	_			
RIPRAP	STRUCTURE	Q	Do	Wo
CHEDULE		CFS	FT.	FT.
А	FES-1	0.9	1	

\$2 yr Tailwater Elev. Used * 100 Yr. Routed Outflow Used

> Do=MAX. INSIDE CULVERT HT. La =(1.8q/Do^1/2)+(7Do) La =(3q/Do^1/2) $D50 = (0.02/TW)^{*}(q)^{4/3}$

**T = 3(d50) or 2(d50) w/Filter Fabric, use filter fabric unless otherwise specified.



				10/21/21	PRELIN
				SCALE	
			Engineering Associates Inc. Civil & Environmental Engineers	AS SHOWN	
			Professional Planners • Surveyors • Landscape Architects • CERTIFICATE OF AUTHORIZATION NO. 24GA27989300 •	DRAWN	ME
			100 RIKE DRIVE 12 ROBBINS PKWY. MILLSTONE TOWNSHIP, N.J. 08535 AT WATER STREET Ph(609)448-5550 TOMS RIVER, N.J. 08753 Ph(732)244-0888 Ph(732)244-0888	CHECKED	
				SHEET 6 OF 8	
1.	REV. ADD SOIL DECOMPACTION DETAIL	4/18/22	LORALI E. TOTTEN	POCKET	
NO	DESCRIPTION	DATE D C	PROFESSIONAL ENGINEER NJ LIC. NO. 28662		SOIL