B. CONTINGENCY PLAN

AS A PRECAUTIONARY MEASURE THE CONTRACTOR SHALL AT ALL TIMES KEEP AT AS A PRECAUTIONARY MEASURE THE CONTRACTOR SHALL AT ALL TIMES KEEP AT LEAST TWO ONE HUNDRED FOOT ROLLS OF SEDIMENTATION FENCE & 20 HAYBALES STOCKPILED ON SITE WHICH SHALL BE AVAILABLE FOR UNFORSEEN EROSION OR SEDIMENT CONTROL. PROBLEMS SHOULD ANY ARISE. THE CONTRACTOR SHALL THE SEDIMENT FENCE DOWN SLOPE SO AS TO CONTAIN ANY SEDIMENT. THE CONTRACTOR SHALL THEN PROMPTLY CONTACT THE DESIGN ENGINEER TO DETERMINE IF FURTHER CORRECTIVE ACTION IS REQUIRED. THE DESIGN ENGINEER, ALTER CONSULTED WHICH THE TOWN AND CHEEPOSCHEM, DESIGN ENGINEER, AFTER CONSULTATION WITH THE ZONING WETLANDS ENFORCEMENT OFFICER SHALL THEN INSTRUCT THE CONTRACTOR AS TO WHAT ADDITIONAL MEASURES ARE DEEMED NECESSARY

C. GENERAL GUIDELINES-EROSION CONTROL

- 1. OTHER THAN CONTRUCTION SPECIFICALLY SHOWN ON THESE APPROVED PLANS, NO ACTIVITIES SHALL BE CONDUCTED WITHIN DESIGNATED WETLAND AREAS, WATERCOURSES, FLOOD PLAINS OR WITHIN CHANNEL ENCROACHMENT LINES WITHOUT THE PRIOR APPROVAL OF THE PLANNING AND ZONING COMMESCION. AND METANDS COMMISSION.
- 2. WHEREVER FEASIBLE, NATURAL VEGETATION SHALL BE RETAINED AND PRO-
- ONLY THE SMALLEST PRACTICAL AREA OF LAND SHALL BE EXPOSED AT ANY ONE TIME DURING CONSTRUCTION. PRIOR TO THE START OF CONSTRUCTION, TEMPORARY BALED HAY EROSION CHECKS, SEDIMENTATION FENCES AND OTHER APPROVED SEDIMENT CONTROL
- MEASURES SHALL BE IN PLACE WHERE SHOWN ON THESE PLANS AND AT OTHER LOCATIONS WHERE DEEMED NECESSARY. 5. WHEN LAND IS EXPOSED DURING DEVELOPMENT, THE PERIOD OF EXPOSURE
- SHALL BE KEPT TO A MINIMUM, INSTALLING PERMANENT AND FINAL VEGETAT— ION, STRUCTURES, ETC. AT THE EARLIEST POSSIBLE OPPORTUNITY. CONSTRUCTION EQUIPMENT SHALL NOT UNNECESSARILY CROSS LIVE STREAMS EXCEPT BY MEANS OF BRIDGES, CULVERTS OR OTHER APPROVED MEANS.
- 7. ALL TEMPORARY EROSION AND SEDIMENT CONTROLS SHALL REMAIN IN PLACE AND BE MAINTAINED REGULARLY IN PROPER FUNCTIONING CONDITION, UNTIL ALL AREAS EXPOSED DURNG SITE CONSTRUCTION HAVE BEEN SUITABLY STABILIZED WITH PAVEMENT, PERMANENT STRUCTURES AND/OR FINAL VECETATURE COVER
- 8. CUT AND FILL SLOPES SHALL NOT BE STEEPER THAN 2:1 UNLESS STABIL— IZED BY A GEOTEXTILE MAT.
- ADEQUATE PROVISIONS SHALL BE MADE TO PREVENT SURFACE WATER FROM DAMAGING THE CUT FACE OF EXCAVATIONS OR THE SLOPING SURFACES OF FILLS.
- FILL SHALL BE PLACED AND COMPACTED SO AS TO MINIMIZE SLIDING OR EROSON OF THE SOIL.

D. SEDIMENT BARRIERS

- TO INTERCEPT AND RETAIN SMALL AMOUNTS OF SEDIMENT FROM DISTURBED OR UNPROTECTED AREAS OF LIMITED EXTENT.
- 2. MATERIALS AND INSTALLATION
- SEDIMENT BARRIERS MAY CONSIST OF FILTER FENCE OR STRAW OR HAY BALES, STONE BERMS, OR OTHER FILTER MATERIALS. PLANNED LIFESPAN OF SEDIMENT BARRIERS VARIES. STRAW OR HAY BALES SHOULD ONLY BE USED AS A TEMP—ORARY BARRIER FOR NO LONGER THAN 60 DAYS. SYNTHETIC FILTER FENCES CAN BE USED FOR 60 DAYS OR LONGER DEPENDING ON ULTRAVIOLET STABILITY AND TACTURER'S RECOMMENDATIONS. STONE BARRIERS CAN BE USED FOR LONGER

A. STRAW/HAY BALES

- 1. SHEET FLOW APPLICATIONS
- a. BALES SHALL BE PLACED IN A SINGLE ROW, LENGTHWISE ON THE CONTOUR, WITH ENDS OF ADJACENT BALES TIGHTLY ABUTTING ONE ANOTHER.
- b. ALL BALES SHALL BE EITHER WIRE—BOUND OR STRING—TIED. BALES SHALL BE INSTALLED SO THAT BINDINGS ARE ORIENTED AROUND THE SIDES RATHER
- C. THE BARRIER SHALL BE ENTRENCHED AND BACKFILLED.
 A TRENCH SHALL BE EXCAVATED THE WIDTH OF A BALE
 AND THE LENGTH OF THE PROPOSED BARRIER TO A
 MINIMUM DEPTH OF 4 INCHES. AFTER THE BALES ARE
 STAKED AND CHINKED, THE EXCAVATED SOIL SHALL BE
 BACKFILLED AGAINST THE BARRIER. BACKFILL SOIL SHALL
 CONFORM TO THE GROUND LEVEL ON THE DOWNHILL SIDE
 AND SHALL BE BUILT UP TO 4 INCHES AGAINST THE
 UPHILL SIDE OF THE BARRIER. BALES SHOULD BE PLACED
 TO FEET AWAY FROM TOE OF SLOPE OR AS SHOWN ON THE
 PLANS.
- d. Each Bale Shall be securely anchored by at least two stakes or rebars driven through the bale. The first stake in each bale shall be driven toward the previously laid bale to force the BALES TOGETHER. STAKES OR REBARS SHALL BE DRIVEN DEEP ENOUGH INTO THE GROUND TO SECURELY ANCHOR THE BALES.
- e. THE GAPS BETWEEN BALES SHALL BE CHINKED (FILLED BY WEDGING) WITH STRAW TO PREVENT WATER FROM ESCAPING BETWEEN THE BALES. (LOOSE STRAW SCATTERED OVER THE AREA IMMEDIATELY UPHILL From a straw bale barrier tends to increase BARRIER EFFICIENCY) IN SLOPING AREAS WHERE SURFACE FLOW FOLLOWS THE BALE LINE, PERPENDICULAR BALE CHECKS SHALL BE INSTALLED AT APPROPRIATE INTERVALS (100 FEET
- f. INSPECTION SHALL BE FREQUENT AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED. 9. BALE BARRIERS SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFULNESS, BUT NOT BEFORE THE UPSLOPE AREAS HAVE BEEN PERMANENTLY STABILIZED.
- 2. CHANNEL FLOW APPLICATIONS
- a. BALES SHALL BE PLACED IN A SINGLE ROW, LENGTHMISE, ORIENTED PERPENDICULAR TO THE CONTOUR, WITH ENDS OF ADJACENT BALES TIGHTLY
- b. THE REMAINING STEPS FOR INSTALLING A BALE BARRIER FOR SHEET FLOW APPLICATIONS APPLY HERE, WITH THE FOLLOWING ADDITION.
- c. THE BARRIER SHALL BE EXTENDED TO SUCH A LENGTH THAT THE BOTTOMS OF THE END BALES ARE HIGHER IN ELEVATION THAN THE TOP OF THE LOWEST MIDDLE BALE TO ASSURE THAT SEDIMENT LADEN RUNOFF WILL FLOW EITHER THROUGH OR OVER THE BARRIER BUT NOT
- 3. <u>MAINTENANCE</u> a. INSPECTION SHALL BE MADE AFTER EACH STORM EVENT AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY
- b. CLEANOUT OF ACCUMULATED SEDIMENT BEHIND THE BALES IS NECESSARY IF 1/2 OF THE ORIGINAL HEIGHT OF THE BALES BECOMES FILLED IN WITH SEDIMENT.

B. FILTER FENCES

1. MATERIALS a. SYNTHETIC FIBER FILTER FABRIC

> SYNTHETIC FILTER FABRIC SHALL BE A PERVIOUS SHEET OF PROPYLENE, NYLON, POLYESTER, OR POLY ETHYLENE FILAMENTS AND SHALL BE CERTIFIED BY MAN— UFACTURER OR SUPPLIER AS CONFORMING TO THE PHYSICAL PROPERTY REQUIREMENTS FILTERING EFFICIENCY 75% (MIN.)

TENSILE STRENGTH AT EXTRA STRENGTH STANDARD STRENGTH

0.3 GAL./SQ. FT./MIN.

FLOW RATE

b. NATURAL FIBER FILTER FABRIC BURLAP SHALL BE 10 OUNCE PER SQUARE YARD FABRIC. POSTS FOR FILTER FENCES SHALL BE EITHER 2X3 OR 2X4 INCH STUDS OR 0.5 POUNDS (MINIMUM) PER LINEAR FOOT STEEL WITH A MINIMUM LENGTH OF 5 FEET, STEEL POSTS SHALL HAVE PROJECTIONS FOR EQUIVALENT METAL WITH MINIMUM LENGTH OF 3

WIRE FENCE REINFORCEMENT FOR SILT FENCES USING STANDARD STRENGTH FILTER CLOTH SHALL BE A MINIMUM OF 42 INCHES IN HEIGHT, A MINIMUM OF 14 GAUGE AND SHALL HAVE A MAXIMUM MESH SPACING OF 6 INCHES. SOME SILT FENCES DO NOT REQUIRE A WIRE BACKING. CONSULT MANUFACTURER'S INSTRUCTIONS FOR PROPER INSTALLATION REQUIREMENTS.

2. INSTALLATION REQUIREMENTS

- THIS SEDIMENT BARRIER UTILIZES BURLAP OR STANDARD STRENGTH OR EXTRA STRENGTH SYNTHETIC FILTER FABRICS. IT IS DESIGNED FOR SITUATIONS IN WHICH ONLY SHEET OR OVERLAND FLOWS IS EXPECTED. IN SPECIAL CASES BURLAP MAY BE USED IN DRAINWAYS.
- a. The Height of the Barrier Shall not exceed 36 Inches (Higher Barriers May Impound Volumes of Water Sufficient to Cause Fallure of the STRUCTURE). The Filter Fence Shall Be Placed 10 FEET AWAY FROM THE TOE OF THE SLOPE, OR AS SHOWN
- b. WHEN JOINTS ARE NECESSARY, FILTER CLOTH SHALL BE SPLICED TOGETHER ONLY AT A SUPPORT POST, WITH A MINIMUM 6 INCH OVERLAP, AND SECURELY SEALED.
- POSTS SHALL BE SPACED A MAXIMUM OF 10 FEET APART AT THE BARRIER LOCATION AND DRIVEN SECURELY INTO THE GROUND (MINIMUM OF 12 INCHES), WHEN EXTRA STRENGTH FABRIC IS USED WITHOUT THE WIRE SUPPORT FENCE, POST SPACING SHALL BE AS MANUFACTURER
- d. A TRENCH SHALL BE EXCAVATED APPROXIMATELY 6 INCHES WIDE AND 6 INCHES DEEP ALONG THE LINE OF POSTS AND UPSLOPE FROM THE BARRIER IN ACCORDANCE
- e. WHEN STANDARD STRENGTH FILTER FABRIC IS USED, A WIRE MESH SUPPORT FENCE SHALL BE FASTENED SECURELY TO THE UPSLOPE SIDE OF THE POSTS USING HEAVY DUTY WIRE STAPLES AT LEAST 1 INCH LONG, TIE WIRES, OR HOG RINGS. THE WIRE SHALL EXTEND INTO THE TRENCH A MINIMUM OF 2 INCHES BELOW THE ORIGINAL GROUND SURFACE.
- THE STANDARD STRENGTH FILTER FABRIC SHALL BE STAPLED, WIRED OR TIED TO THE WIRE FENCE, AND 8 INCHES OF FABRIC SHALL BE EXTENDED INTO THE TRENCH. THE FABRIC SHALL NOT EXTEND MORE THAN 36 INCHES ABOVE THE ORIGINAL GROUND SURFACE. FILTER FABRIC SHALL NOT BE STAPLED TO EXISTING TREES.
- WHEN EXTRA STRENGTH FILTER FABRIC OR BURLAP AND CLOSER POST SPACING ARE USED, THE WIRE MESH SUPPORT FENCE MAY BE ELIMINATED. IN SUCH A CASE, THE FILTER FABRIC IS STAPLED, WIRED, OR TIED DIRECTLY TO THE POSTS WITH ALL OTHER PROVINCIALS OF THE POSTS WITH ALL OTHER PROVINCIALS.
- PROVISIONS OF ITEM NO. F APPLYING. h. THE TRENCH SHALL BE BACKFILLED AND THE SOIL COMPACTED OVER THE FILTER FABRIC.
- FILTER BARRIERS SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFUL PURPOSE, BUT NOT BEFORE THE UPSLOPE AREA HAS BEEN PERMANENTLY STABILIZED.

3. MAINTENANCE

- FILTER BARRIERS SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY
- b. SHOULD THE FABRIC DECOMPOSE OR BECOME DEFECTIVE PRIOR TO THE END OF THE EXPECTED USABLE LIFE AND THE BARRIER STILL BE NECESSARY, THE FABRIC SHALL BE REPLACED PROMPTLY.
- SEDIMENT DEPOSITS SHOULD BE REMOVED WHEN THEY REACH APPROXIMATELY ONE—HALF THE HEIGHT OF THE
- d. ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE SILT FENCE OR FILTER BARRIER IS NO LONGER REQUIRED SHALL BE DRESSED TO CONFORM TO THE EXISTING GRADE, PREPARED AND SEEDED.

E. LAND GRADING

TO RESTORE AREA UPON COMPLETION.

2. INSTALLATION REQUIREMENTS

- A. ALL GRADED OR DISTURBED AREAS INCLUDING SLOPES SHALL BE PROTECTED DURING CLEARING AND CONSTRUCTION IN ACCORDANCE WITH APPROVED SEDIMENT CONTROL PLAN UNTIL THEY ARE
- B. ALL SEDIMENT CONTROL PRACTICES AND MEASURES SHALL BE CONSTRUCTED, APPLIED AND MAINTAINED IN ACCORDANCE WITH THE APPROVED SEDIMENT CONTROL PLAN.
- C. TOPSOIL REQUIRED FOR THE ESTABLISHMENT OF VEGETATION SHALL BE STOCKPILED IN AN AMOUNT NECESSARY TO COMPLETE FINISHED
- D. AREAS TO BE FILLED SHALL BE CLEANED, GRUBBED AND STRIPPED OF TOPSOIL TO REMOVE TREES, VEGETATION, ROOTS, OR OTHER OBJECTIONABLE MATERIAL.
- AREAS ARE TO BE TOPSOILED IN ACCORDANCE WITH TOPSOILING
- F. ALL FILLS SHALL BE COMPACTED AS REQUIRED TO REDUCE EROSION, SLIPPAGE, SETTLEMENT, SUBSIDENCE OR OTHER RELATED PROBLEMS. G. ALL FILL SHALL BE PLACED AND COMPACTED IN LAYERS NOT TO EXCEED EIGHT INCHES IN THICKNESS. H. FILL MATERIAL SHALL BE FREE OF BRUSH, RUBBISH, ROCKS, LOGS, STUMPS, BUILDING DEBRIS AND OTHER OBJECTIONABLE MATERIALS THAT WOULD INTERFERE WITH OR PREVENT CONSTRUCTION OF
- FROZEN MATERIAL OR SOFT, MUCKY OR HIGHLY COMPRESSIBLE MATERIALS SHALL NOT BE INCORPORATED INTO FILLS.
- J. FILL SHALL NOT BE PLACED ON A FROZEN FOUNDATION
- K. WHERE SEEPS OR SPRINGS ARE ENCOUNTERED DURING CONSTRUCTION SUBSURFACE DRAINAGE SHALL BE PROVIDED. L. ALL GRADED AREAS SHALL BE PERMANENTLY STABILIZED IMMEDIATELY FOLLOWING FINISHED GRADING.
- 3. MAINTENANCE

ALL STRUCTURAL, NONSTRUCTURAL AND VEGETATIVE SEDIMENT AND EROSION CONTROL PRACTICES IMPLEMENTED DURING LAND GRADING OPERATIONS SHALL BE MAINTAINED ACCORDING TO REQUIREMENTS OUTLINED ON THIS PLAN.

. TOPSOILING

TO PROVIDE A SUITABLE GROWTH MEDIUM FOR FINAL SITE STABILIZATION

2. INSTALLATION REQUIREMENTS

- A. SITE INVESTIGATIONS SHALL BE MADE TO DETERMINE IF THERE IS SUFFICIENT TOPSOIL OF GOOD QUALITY TO USE FOR SITE RESTORATION. HIGH QUALITY TOPSOIL SHALL BE FRIABLE AND LOAMY (LOAM, SANDY HIGH QUALITY TOPSOIL SHALL BE FRIABLE AND LOAMY (LOAM, SANDY LOAM, SILT LOAM, SANDY CLAY LOAM, CLAY LOAM). OTHER SOIL TYPES WITH HIGH ORGANIC CONTENT MAY BE FOUND SUITABLE AFTER TESTING. IT SHALL BE FREE OF DEBRIS, TRASH, STUMPS, ROCKS, ROOTS, AND NOXIOUS WEEDS. IT SHALL GIVE EVIDENCE OF BEING ABLE TO SUPPORT HEALTHY VEGETATION. IT SHALL CONTAIN NO SUBSTANCE THAT IS POTENTIALLY TOXIC TO PLANT GROWTH. ALL TOPSOIL SHALL BE TESTED BY A RECOGNIZED LABORATORY TO DETERMINE THE PROPER APPLICATION RATES FOR LIME AND FERTILIZER.
- B. STRIPPING
- STRIPPING SHALL BE CONFINED TO THE IMMEDIATE CONSTRUCTION
 AREA. A 4 TO 6 INCH STRIPPING DEPTH IS COMMON, BUT DEPTH
 MAY VARY DEPENDING ON THE PARTICULAR SOIL. ALL PERIMETER
 DIKES, BASINS, AND ANY OTHER SEDIMENT CONTROLS SHALL BE IN PLACE
- TOPSOIL SHALL BE STOCKPILED IN SUCH A MANNER THAT NATURAL Drainage is not obstructed and no off—site sediment damage
- D. SIDE SLOPES SIDE SLOPES OF THE STOCKPILE SHALL NOT EXCEED 2 TO 1 (2
- E. SEDIMENT BARRIER A SEDIMENT BARRIER SHALL SURROUND ALL TOPSOIL STOCKPILES. F. TEMPORARY SEEDING
- TEMPORARY SEEDING OF STOCKPILES SHALL BE COMPLETED WITHIN 15 DAYS OF THE FORMATION OF THE STOCKPILE, IN ACCORDANCE WITH THE TEMPORARY VEGETATIVE COVER REQUIREMENTS. G. SITE PREPARATION BEFORE TOPSOILING, ESTABLISH NEEDED EROSION AND SEDIMENT CONTROL MEASURES SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, WATERWAYS, SEDIMENT BASINS, ETC. THESE

- PREVIOUSLY ESTABLISHED GRADES ON THE AREAS TO BE TOPSOILED SHALL BE MAINTAINED ACCORDING TO THE APPROVED PLANS.
- THE SOIL TEST OR THE VEGETATIVE ESTABLISHMENT PRACTICE BEING
- AFTER THE AREAS TO BE TOPSOILED HAVE BEEN BROUGHT TO GRADE, AND IMMEDIATELY PRIOR TO SPREADING THE TOPSOIL, THE SUBGRADE SHALL BE LOOSENED BY DISCING OR SCARIFYING TO A DEPTH OF AT LEAST 2 INCHES TO ENSURE BONDING OF THE TOPSOIL AND SUBSOIL.
- TOPSOIL SHALL NOT BE PLACED WHILE IN A FROZEN OR MUDDY CONDITION, WHEN THE SUBGRADE IS EXCESSIVELY WET, OR IN A CONDITION THAT MAY OTHERWISE BE DETRIMENTAL TO PROPER BE UNIFORMIT DISTURBED TO A MINIMOM COMPACTED DEPTH OF 4 INCHES, ANY IRREGULARITIES IN THE SURFACE RESULTING FROM TOPSOLLING OR OTHER OPERATIONS SHALL BE CORRECTED IN ORDER TO PREVENT THE FORMATION OF DEPRESSIONS OR WATER POCKETS. IT IS NECESSARY TO COMPACT THE SOIL ENOUGH TO ENSURE GOOD CONTACT WITH THE UNDERLYING SOIL AND TO OBTAIN A UNIFORM FIRM SEEDBED FOR THE ESTABLISHMENT OF A HIGH QUALITY TURF. HOWEVER, UNDUE COMPACTION IS TO BE AVOIDED AS IT INCREASES RUNOFF VELOCITY AND VOLUME, AND PREVENTS SEED GERMINATION

G. TEMPORARY MULCHING

- TO PREVENT EROSION BY PROTECTING THE EXPOSED SOIL SURFACE AND TO AID IN THE GROWTH OF VEGETATION BY CONSERVING AVAILABLE MOISTURE, CONTROLLING WEEDS, AND PROVIDING PROTECTION AGAINST EXTREME HEAT AND
- 2. INSTALLATION REQUIREMENTS
- A. ORGANIC MULCHES
 ORGANIC MULCHES MAY BE USED IN ANY AREA WHERE MULCH IS
 REQUIRED, SUBJECT TO THE RESTRICTIONS NOTED IN THE TABLE
 BELOW.

ORGANIC MULCH MATERIALS AND APPLICATION RATES

 MULCHES	PER ACRE / PER 1000FT ²	NOTES
WOOD FIBER	1000- 2000 LBS./ 25-50 LBS.	FIBERS 4mm OR LONGER. L NOT USE ALONE IN WINTER DURING HOT, DRY WEATHER APPLY AS SLURRY.
CORN STALKS	4–6 TONS / 185–275 LBS.	CUT OR SHREDDED IN 4-6 INCH LENGTHS. AIR DRIED. DO NOT USE IN FINE TURF AREAS. APPLY WITH MULCH BLOWER OR BY HAND.

FREE OR COARSE MATTER. AIR DRIED. DO NOT USE IN FINE TURF AREAS. APPLY CU. YDS. / 1-2 CU. YDS.

LBS. NITROGEN PER TON. DO

BLOWER, CHIP HANDLER, OR BY

- SELECT MULCH MATERIAL BASED ON SITE CONDITIONS, AVAILABILITY OF MATERIALS, AND LABOR AND EQUIPMENT. OTHER MATERIALS MAY BE USED ONLY WITH THE PERMISSION OF THE APPROVING AUTHORITY.

4–6 TONS / 185–275 LBS.

- COMPLETE THE REQUIRED GRADING AND INSTALL NEEDED SEDIMENT
- D. APPLICATION MULCH MATERIALS SHALL BE SPREAD UNIFORMLY, BY HAND OR MACHINE. WHEN SPREADING STRAW OR HAY MULCH BY HAND, DIVIDE THE AREA TO BE MULCHED INTO APPROXIMATELY 1,000 SQUARE FOOT SECTIONS AND PLACE 70—90 POUNDS (1 1/2 TO 2 BALES) OF STRAW OR HAY IN EACH SECTION TO ENSURE UNIFORM DISTRIBUTION.
- 3. MAINTENANCE
 - ALL MULCHES MUST BE INSPECTED PERIODICALLY, IN PARTICULAR AFTER RAINSTORMS, TO CHECK FOR EROSION. WHERE EROSION IS OBSERVED, ADDITIONAL MULCH SHOULD BE APPLIED. NETS SHOULD BE INSPECTED AFTER RAINSTORMS FOR DISLOCATION OR FAILURE. IF WASHOUTS OR BREAKAGE OCCUR, RE-INSTALL NET AS NECESSARY AFTER REPAIRING DAMAGE TO THE SLOPE. INSPECTIONS SHOULD TAKE PLACE UNTIL GRASSES ARE FIRMLY ESTABLISHED. GRASSES SHALL NOT BE CONSIDERED ESTABLISHED UNTIL A GROUND COVER IS ACHIEVED WHICH IS MATURE ENOUGH TO CONTROL SOIL A GROUND COVER IS ACHIEVED WHICH IS MAIURE ENOUGH TO CONTROL SOIL EROSION AND TO SURVIVE SEVERE WEATHER CONDITIONS. WHERE MULCH IS USED IN CONJUNCTION WITH ORNAMENTAL PLANTINGS, INSPECT PERIODICALLY THROUGHOUT THE YEAR TO DETERMINE IF MULCH IS MAINTAINING COVERAGE OF THE SOIL SURFACE; REPAIR AS NEEDED.

H. PERMANENT VEGETATIVE COVER

- TO PERMANENTLY STABILIZE THE SOIL, TO REDUCE DAMAGES FROM SEDIMENT AND RUNOFF AND TO ENHANCE THE ENVIRONMENT.
- 2. INSTALLATION REQUIREMENTS
- A. SITE PREPARATION 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 THE PLANS.
- B. SEEDED PREPARATION

LOAMY SAND, SAND

- 1. APPLY LIMESTONE AND FERTILIZER ACCORDING TO SOIL TESTS SUCH AS THOSE OFFERED BY THE UNIVERSITY OF CONNECTICUT 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 SITES, OR WHERE TIMING IS CRITICAL, FERTILIZER MAY BE APPLIED AT THE RATE OF 300 POUNDS PER ACRE OR 7.5 POUNDS PER 1,000 SQUARE FEET USING 10-10-10 OR EQUIVALENT. IN ADDITION, 300 POUNDS OF 38-0-0 FERTILIZER PER ACRE OR EQUILALENT OF SLOW RELEASE NITROGEN MAY BE USED FOR TOPPORESSING. APPLY LIMESTIONE (FOULVE ROGEN MAY BE USED FOR TOPDRESSING. APPLY LIMESTONE (EQUIV-ALENT TO 50 PERCENT CALCIUM PLUS MAGNESIUM OXIDE) AS FOLLOWS.
- SOIL TEXTURE TONS/AC. LBS./1000 SQ. FT. CLAY, CLAY LOAM AND HIGH SANDY LOAM, LOAM, SILT LOAM
- REFER TO COUNTY SOIL SURVEY REPORT FOR SOIL TEXTURES AT WORK LIME AND FERTILIZER INTO THE SOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES WITH A DISC. SPRING
- TOOTH HARROW OR OTHER SUITABLE EQUIPMENT. THE FINAL HARROWING OR DISCING OPERATION SHOULD BE ON THE GENERAL CONTOUR. CONTINUE TILLAGE UNITL A REASONABLY UNIFORM, FINE SEEDBED IS PREPARED. ALL BUT CLAYEY, SILTY SOLS, OR COARSE SANDS SHOULD BE ROLLED TO FIRM THE SEEDBED WHEREVER FEASIBLE. 3. REMOVE FROM THE SURFACE ALL STONES TWO INCHES OR LARGER IN ANY DIMENSION. REMOVE ALL OTHER DEBRIS, SUCH AS WIRE, CABLE, TREE ROOTS, PIECES OF CONCRETE, CLODS,
- LUMPS OR OTHER UNSUITABLE MATERIAL. 4. INSPECT SEEDBED JUST BEFORE SEEDING. IF TRAFFIC HAS LEFT THE SOIL COMPACTED, THE AREA MUST BE RETILLED AND FIRMED AS ABOVE.

C. <u>SEEDING DATES</u> SPRING SEEDINGS USUALLY GIVE THE BEST RESULTS. SPRING SEEDINGS OF ALL SEED MIXES WITH LEGUMES IS RECOMMENDED, HOWEVER LATE SUMMER SEEDINGS PRIOR TO SEPTEMBER 1 CAN BE MADE. WHEN CROWN VETOH IS SEEDED IN LATE SUMMER AT LEAST 35 PERCENT OF THE SEED SHOULD BE HARD SEED (UNSCARIFIED).

- APRIL 1 THROUGH JUNE 1 AUGUST 15 THROUGH SEPTEMBER 1 WITH THE EXCEPTION OF CROWN VETCH, THE FINAL SEEDING DATE MAY BE EXTENDED 15 DAYS.
- 1. THE SEED MIXTURE SHALL BE AS INDICATED IN THE SPECIFICATIONS APPLY SEED UNIFORMLY BY HAND, CYCLONE SEEDER, DRILL, CULTIPACKER TYPE SEEDER OR HYDROSEEDER (SLURRY IN-CLUDING SEED AND FERTILIZER). NORMAL SEEDING DEPTH IS FROM 1/4 TO 1/2 INCH. HYDROSEEDINGS WHICH ARE
- 3. WHEREVER FEASIBLE, EXCEPT WHERE EITHER A CULTIPACKER TYPE SEEDER OR HYDROSEEDER IS USED, THE SEEDBED SHOULD BE FIRMED FOLLOWING SEEDING OPERATIONS WITH A ROLLER, OR LIGHT DRAG, SEEDING OPERATIONS SHOULD BE ON THE CONTOUR
- 4. FROST CRACK SEEDING CAN BE USED. FROST CRACK SEEDING MUST BE DONE IN LATE WINTER OR EARLY SPRING, SUITABLE WEATHER CONDITIONS ARE FREEZING RIGHTS AND THAWING DAYS WITH LITTLE OR NO SNOW COVER. SEDING RATES MUST BE INCREASED 10 PERCENT WHEN USING THIS METHOD.
- 5. HYDRAULIC APPLICATION (HYDROSEEDING), IS A SUITABLE METHOD FOR USE IN CRITICAL AREAS. WHEN HYDROSEEDING, A SEEDBED IS PREPARED IN THE CONVENTIONAL WAY OR BY HAND SEEDBED IS PREPARED IN THE CONVENTIONAL WAY OR BY HAND RAKING TO LOOSEN AND SMOOTH THE SOIL AND TO REMOVE SURFACE STONES LARGER THAN SIX INCHES IN DIAMETER. SLOPES MUST BE NO STEEPER THAN 2 TO 1 (2 FEET HORIZONTALLY TO 1 FOOT VERTICALLY). LIME AND FERTILIZER MAY BE APPLIED SIMULTANEOUSLY WITH THE SEED. THE USE OF THE FIBER MULCH ON CRITICAL AREAS IS NOT RECOMMENDED (UNLESS IT IS USED TO HOLD STRAW OR HAY). FIBER MULCH DOES NOT PROVIDE ADEQUATE SEEDBED PROTECTION. BETTER PROTECTION IS GAINED BY USING STRAW MULCH AND HOLDING IT WITH ADHESIVE MATERIALS OR 500 MULCH AND HOLDING IT WITH ADHESIVE MATERIALS OR 500 POUNDS PER ACRE OF WOOD FIBER MULCH. SEEDING RATES MUST BE INCREASED 10 PERCENT WHEN HYDROSEEDING.
- 6. APPLY MULCH ACCORDING TO TEMPORARY MULCHING MEASURES.
- 7. IF SEEDING CANNOT BE DONE WITHIN THE SEEDING DATES, USE THE TEMPORARY MULCHING MEASURES TO PROTECT THE SITE AND DELAY SEEDING UNTIL THE NEXT RECOMMENDED SEEDING PERIOD.

TEMPORARY VEGETATIVE COVER

- TO TEMPORARILY STABILIZE THE SOIL AND REDUCE DAMAGE FROM WIND AND/OR WATER EROSION.
- (1) SITE PREPARATION SHOULD BE CONDUCTED IN ACCORDANCE WITH THE MEASURE FOR LAND GRADING.

 B. SEEDBED PREPARATION APPLY LMESTONE AND FERTILIZER IN ACCORDANCE WITH PROCEDURES OUTLINED IN TOPSOILING SECTION.
- C. SEEDING
 (1) SELECT SEED FROM SPECIFICATIONS.
 (2) WHERE THE SOIL HAS BEEN COMPACTED BY CONSTRUCTION OPERATIONS
 LOOSEN SOIL TO A DEPTH OF 2 INCHES BEFORE APPLYING FERTILIZER (3) APPLY SEED/MULCH UNIFORMLY AS INDICATED IN PERMANENT VEGETATIVE COVER SECTION.

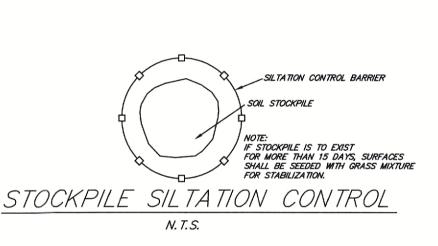
(4) SEEDING MAY BE DONE FROM MAR.1 — OCT.15. IRRIGATE AS REQUIRED DURING DRY PERIODS. DUST CONTROL

TO PREVENT BLOWING AND MOVEMENT OF DUST FROM EXPOSED SOIL SURFACES, AND REDUCE THE PRESENCE OF DUST WHICH MAY CAUSE OFF SITE DAMAGE, BE A HEALTH HAZARD TO HUMANS, WILDLIFE AND PLANTLIFE, OR REDUCE TRAFFIC

- 2. INSTALLATION REQUIREMENTS
- A. WATER THE EXPOSED SOIL SURFACE SHOULD BE MOISTENED PERIODICALLY WITH ADEQUATE WATER TO CONTROL DUST.
- COVER SURFACE WITH CRUSHED STONE OR COARSE GRAVEL. IN AREAS ADJACENT TO WATERWAYS, USE CHEMICALLY STABLE AGGREGATE.

WHEN TEMPORARY DUST CONTROL MEASURES ARE USED, REPETITIVE TREATMENT

K. INSPECTION THE TOWN WILL MAINTAIN A FULL TIME INSPECTION SCHEDULE DURING CONSTRUCTION ACTIVITIES. THE ENGINEER SHALL INSPECT AND ENFORCE ALONG WITH THE TOWN.



1. To be installed at all affected

cleaned of all sediment.

Silt Fence to Remain

Catch Basi

Anchor with two 2"x2"x3' Stakes <

Operations Have Started

Tucked 6"to 12"

2. Basins on sloping roads should not be ringed. Bales or silt fence should be placed in a configuration to contain flows without "end runs"

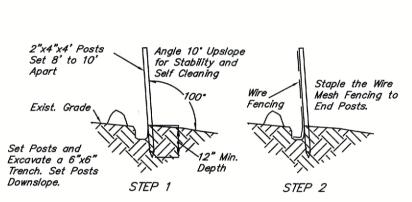
containments should be up slope

SILT FENCE

STRAW BALES

FOR CATCH BASINS ON EARTH

catch basins prior to beginning work in paved areas. Upon completion of construction, catch basins shall be



STEP 3

FOR CATCH BASINS ON PAVEMENT

TYPE "C" CATCH BASIN

STRAW BALES

LESS THAN OR EQUAL TO 3% GRADE

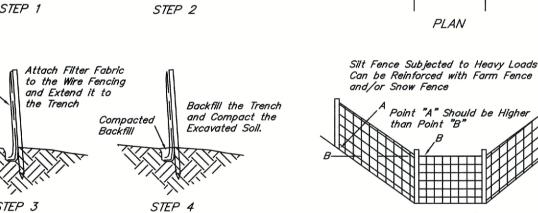
Anchor with one 2"x2"x3' Transverse Stake in Each Bale,

FOR TYPE "C" CATCH BASIN

FOR TYPE "C-L" CATCH BASINS

CATCH BASIN - SEDIMENTATION BARRIER DETAILS

LESS THAN OR EQUAL TO 3% GRADE



SILT FENCE INSTALLATION

Bottom of

Drainageway

ELEVATION

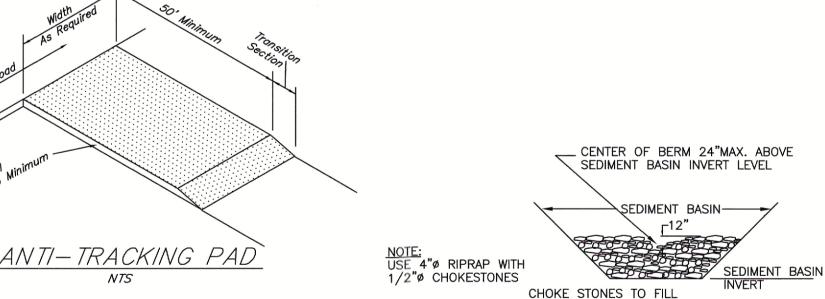
STRAW BALES CHINK WITH LOOSE STRAW (TYP.)

STRAW BALES FOR TYPE "C" CATCH BASINS

GREATER THAN 3% GRADE

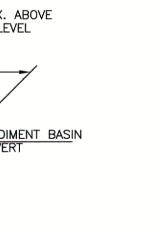
FOR TYPE "C-L" CATCH BASINS

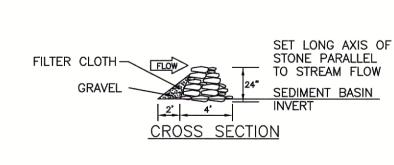
GREATER THAN 3% GRADE



- 1. STONE SIZE USE MSHA SIZE NO. 2 (2-1/2" TO 1") OR AASHTO DESIGNATION M43, SIZE NO. 2 (2-1/2" TO 1-1/2"). USE CRUSHED STONE.
- 2. LENGTH AS EFFECTIVE, BUT NOT LESS THAN 50 FEET.
- 3. THICKNESS NOT LESS THAN 8 INCHES. 4. WIDTH - NOT LESS THAN FULL WIDTH OF ALL POINTS OF INGRESS OR EGRESS. 5. WASHING - WHEN NECESSARY, WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS-OF-WAY, WHEN WASHING IS REQUIRED. IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE WHICH DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH, OR WATERCOURSE
- 6. MAINTENANCE THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.

THROUGH USE OF SAND BAGS, GRAVEL, BOARDS OR OTHER APPROVED METHODS.

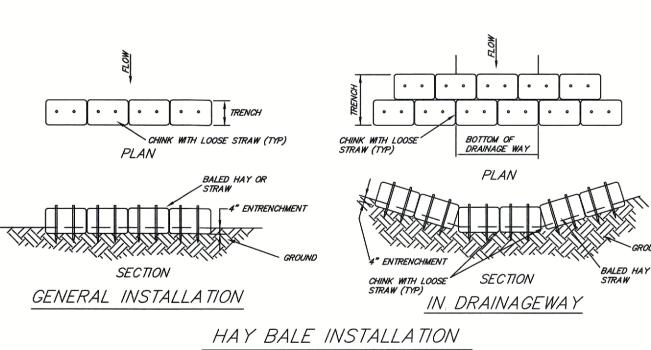




VOIDS BETWEEN STONES

RIPRAP FILTER BERM N.T.S.

ELEVATION VIEW



EARTH - SEDIMENTATION BARRIER DETAIL

SOIL EROSION AND SEDIMENTATION CONTROL

384 GREENS FARM ROAD WESTPORT, CONNECTICUT



NAFIS & YOUNG ENGINEERS, INC. 1355 Middletown Avenue Northford, Connecticut 06472 Phone: (203) 484-2793 Fax: (203) 484-7343 Email: nyeng@nafisandyoung.com

AUGUST 2, 2024

AUTHORIZED REPRESENTATIVE OF NAFIS &

YOUNG ENGINEERS, INC. SHALL BE AT THE SOLE RISK OF CLIENT, CONTRACTOR, OR OTHER PARTY AGREES TO DEFEND, INDEMNII ND HOLD NAFIS & YOUNG ENGINEERS, INC. TARMLESS FROM ALL CLAIMS, INJURIES, DAMAGES, LOSSES, EXPENSES AND ATTORNEY FEES ARISING OUT OF THE MODIFICATION

LOCATION AND BLEVATION OF UNDERGROUND TILITIES UNLESS OTHERWISE NOTED IS

UNKNOWN AND SHOULD BE FIELD VERIFIED I CONTRACTOR PRIOR TO CONSTRUCTION

ANY USE OR REUSE OF ORIGINAL OR ALTERE CADD DESIGN MATERIALS BY THE CLIENT, CONTRACTOR OR OTHER PARTIES WITHOUT TH REVIEW AND WRITTEN APPROVAL OF AN

R REUSE OF THESE MATERIALS.

PREPARED FOR: AR HOUSING CT

JOB NO. 24-180

SHEET NO. 5