

TEMPORARY SEEDING NOTES SEDIMENT CONTROL NOTES SILT FENCE APPLY TO GRADED OR CLEARED AREAS LIKELY TO BE REDISTURBED WHERE A SHORT-TERM VEGETATIVE COVER IS NEEDED. STANDARDS AND SPECIFICATIONS FOR VEGETATIVE STABILIZATION 1) A MINIMUM OF 48 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LISCENSES AND PERMITS, SEDIMENT CONTROL DIVISION PRIOR TO THE START OF ANY CONSTRUCTION (313-1855). SEEDBED PREPARATION: Using vegetation as cover for barren soil to protect it from forces that cause erosion. Vegetative stabilization specifications are used to promote the establishment of vegetation on exposed soil. When soil is stabilized with vegetation, the soil is less likely to erode and more likely to allow infiltration of rainfall, thereby reducing sediment loads and run-off to downstream areas, and improving wildlife habitat and visual resources. DIVISION PRIOR TO THE START OF ANY CONSTRUCTION (313-1855). 2) ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE MOST CURRENT MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDDMENT CONTROL AND REVISIONS THERETO. 3) FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN: a) 7 CALENDAR DAYS FOR ALL PERIMETER SEDMENT CONTROL STRUCTURES, DIKES, PERIMETER SLOPES AND ALL SLOPES STEEPER THAN 3:1, b) 14 DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE. DOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISCING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING, IF NOT PREVIOUSLY Incremental Stabilization - Cut Slopes i. All cuts slopes shall be dressed, prepared, seeded and mulched as the work progresses. Slopes shall be excavated and stabilized in equal increments not to exceed 15' Construction sequence (Refer to Figure 3 below): Excavate and stabilize all temporary swales, side ditches, or berms that will be used to convey runoff from the excavation. Perform Phase 1 excavation, dress, and stabilize. Perform Phase 2 excavation, dress and stabilize. Overseed Phase 1 areas as APPLY 600 LBS. PER ACRE 10-10-10 FERTILIZER (14 LBS./ CONDITIONS WHERE PRACTICE APPLIES CONDITIONS WHERE PRACTICE APPLIES This practice shall be used on denuded areas as specified on the plans and may be used on highly erodible or critically eroding areas. This specification is divided into Temporary Seeding, to quickly establish vegetative cover for short duration Olup to one year, and Permanent Seeding, for long term vegetative cover. Examples of applicable areas for Temporary Seeding are temporary Soil Stockpiles, cleared areas being left idle between construction phases, earth dikes, etc. and for Permanent Seeding are lawns, dams, cut and fill slopes and other areas at final grade, former stockpile and staging areas, etc. SEEDING: FOR THE PERIODS MARCH I THROUGH APRIL 30, AND AUGUST 15 THROUGH NOVEMBER 15, SEED WITH I BUSHEL PER ACRE OF ANNUAL RYE (3.2 LBS./ACRE OF WEEPING LOVEGRASS (07 LBS./ 1,000 SOLFT. FOR THE PERIOD NOVEMBER 16 THRU FEBRUARY 28, PROTECT SITE BY APPLYING 2 TONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE Perform final phase excavation, dress and stabilize. Overseed previously seeded SHRUB PLANTING DETAIL L SEDIMENT TRAPS/BASINS SHOWN MUST BE FENCED AND WARNING SIGNS POSTED AROUND THEIR PERIMETER IN ACCORDANCE WITH VOL. 1, CHAPTER 12, OF THE HOWARD COUNTY DESIGN MANUAL, STORM DRAINAGE. ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD Note: Once excavation has begun the operation should be continuous from grubbing through the completion of grading and placement of topsoil (if required) and permanent seed and mulch. Any interruptions int he operation of completing the operation out of the seeding season will necessitate the application of temporary stabilization. EFFECTS ON WATER QUALITY AND QUANTITY Planting vegetation in disturbed areas will have an effect on the water budget, especially on volumes and rates of runoff, infiltration evaporation, transpiration, percolation, and groundwater recharge. Vegetation, over time, will increase organic matter content and improve the water holding capacity of the soil and subsequent plant growth. PECIFIED ABOVE IN ACCORDANCE WITH THE 1994 MARYLAND STANDARDS Incremental Stabilization of Frobankments - Fill Slopes AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR PERMANENT SEEDING (SEC. 51), SOD (SEC. 54), TEMPORARY SEEDING (SEC. 50), AND MULCHING (SEC. 52). TEMPORARY STABILIZATION WITH MULCH ALONE CAN i. Embankments shall be constructed in lifts as prescribed on the plans. ii. Slopes shall be stabilized immediately when the vertical height of the multiple lifts reaches 15°, or when the grading operation ceases as prescribed in the plans. iii. At the end of each day, femporary berms and pipe slope drains should be constructed along the top edge of the embankment to intercept surface runoff and convey it down the slope in a non-crosive manner to APPLY 1 TO 2 TONS PER ACRE (70 TO 90 LBS./1,000 SQ.FT.) OF UNROTTED SMALL GRAIN STRAW INMEDIATELY AFTER SCEDING. ANCHORING TOOL OR 218 GALLONS PER ACRE (5 GALL1,000 SQ.FT.) OF EMULSIFIED ASPHALT ON FLAT ACRES ON SLOPES 8 FEET OR HIGGER, USE 348 GALLONS PER ACRE (8 GAL/1,000 SQ.FT.) FOR Vegetation will help reduce the movement of sediment, nutrients, and other chemicals carried by runoff to receiving waters. Plants ill also help protect groundwater supplies by assimilating those substances present within the root zone. ONLY BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER GERMINATION AND ESTABLISHMENT OF GRASSES. Sediment control devices must remain in place during grading, seedbed preparation, seeding, mulching and vegetative establishment to prevent large quantities of sediment and associated chemicals and nutrients from washing into surface waters. 6) ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE AND ARE TO BE MAINTAINED IN OPERATIVE CONDITION UNTIL PERMISSION FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT of the embankment to intercept surface runnit and convey it down the sape in a non-converted a sediment trapping device. iv. Construction sequence: Refer to figure 4 (below). a. Excavate and stabilize all temporary swales, side ditches, or berms that will be used to divert runoff around the fill. Construct slope silt fence on low side of fill as shown in Figure 5, unless other methods shown on the plans address this area. b. Place Phase 1 embankment, dress and stabilize. c. Place Phase 2 embankment, dress and stabilize. Discourse final phase embankment dress and stabilize. Overseed previously seeded SECTION 1 - VEGETATIVE STABILIZATION METHODS AND MATERIALS PERSPECTIVE VIEW Install grosion and sediment control structures (either temporary or permanent) such as diversions SPRAY WITH WILT-PROOF ACCORDING TO MANUFACTURERS STANDARDS CONTROL INSPECTOR. 7) SITE ANALYSIS: TOTAL AREA OF SITE AREA DISTURBED REFER TO THE 1986 MARYLAND STANDARDS AND SPECIFICATION FOR SOIL EROSION AND SEDIMENT CONTROL FOR RATE AND METHODS NO grade stabilization structures, berms, waterways, or sediment control basins. WOVEN WIRE FENCE ii. Perform all grading operations at right angles to the slope. Final grading and shaping is not usually 4.098 ACRES (14_1/2" GA. MIN., MAX necessary for temporary seeding. iii. Schedule required soil tests to determine soil amendment composition and application rates for sites 2492 ACRES 6" MESH SPACING) WITH FILTER CLOTH d. Place final phase embankment, dress and stabilize. Overseed previously seeded areas as necessary. Note: Once the placement of fill has begun the operation should be continuous from grubbing through the completion of and placement of topsoil (if required) grading and permanent seed and mulch. But interruptions in the operation or completing the operation out of the seeding season will necessitate the application of temporary stabilization. 1.204 1.200 3,000 3,000 AREA TO BE ROOFED OR PAVED AREA TO BE VEGETATIVELY STABILIZED ACRES having disturbed area over 5 acres. B. Soil Amendments (Fertilizer and Lime Specifications) OVER -Soil tests must be performed to determine the exact ratios and application rates for both lime and fertilizer on sites having disturbed areas over 5 acres. Soil analysis may be performed by the University of Maryland or a recognized commercial laboratory. Soil samples taken for engineering CU.YDS. CU.YDS. FLOW ____ 2 PIECES OF REINFORCED RUSSER HOSE OFFSITE WASTE/BORROW AREA LOCATION 0 CUYDS. 8) ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE EMBED FILTER purposes may also be used for chemical analyses. SECTION 2 - TEMPORARY SEEDING Double M2 Galyanized — Wire Guys Twisted SAME DAY OF DISTURBANCE. 9) ADDITIONAL SEDIMENT CONTROLS MUST BE PROVIDED, IF DEEMED NECESSARY BY THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR. 10) ON ALL SITES WITH DISTURBED AREAS IN EXCESS OF 2 ACRES, APPROVAL OF THE INSPECTION AGENCY SHALL BE REQUESTED UPON COMPLETION OF INSTALLATION OF PERIMETER EROSION AND SEDIMENT ii. Fertilizers shall be uniform in composition, free flowing and suitable for accurate application by approved equipment. Manure may be substituted for fertilizer with prior approval from the appropriate approval authority. Fertilizers shall all be delivered to the site fully labeled according to the applicable state fertilizer laws and shall bear the name, trade name or trademark and warrantee Vegetation - annual grass or grain used to provide cover on disturbed areas for up to 12 months. For longer duration of vegetative cover, Permanent Seeding is required. SECTION WRAP TRUNK TO SECOND THE -OF BRANCHES WITH WATERPROOF WRAP, THE AT 24" INTERVALS iii. Lime materials shall be ground limestone thydrated or burnt lime may be substituted which contains CONSTRUCTION NOTES FOR FABRICATED SILT FENCE at least 50% total oxides (calcium oxide plus magnesium oxide). Limestone shall be ground to such fineness that at least 50% will pass through a *100 mesh sieve and 98-100% will pass through a *20 CONTROLS, BUT BEFORE PROCEEDING WITH ANY OTHER EARTH 1. WOVEN WIRE FENCE TO BE FASTENED SECURELY Select one or more of the species or mixtures listed in Table 26 for the appropriate Plant Hardiness Zone (from Figure 5) and enter them in the Temporary seeding summary below, along with application rates, seeding dates and seeding depths. If this summary is not put on the plans DISTURBANCE OR GRADING. OTHER BUILDING OR GRADING INSPECTION APPROVALS MAY NOT BE AUTHORIZED UNTIL THIS INITIAL APPROVAL. TO FENCE POSTS WITH WIRE TIES OF STAPLES. mesh sieve. Incorporate lime and fertilizer into the top 3-5" of soil by disking or other suitable means. Y THE INSPECTION AGENCY IS MADE. 2. FILTER CLOTH TO BE FASTENED SECURELY TO Seedbed Preparation Lemporary Seeding a. Seedbed preparation shall consist of loosening soil to a depth of 3" to 5" by means of suitable agricultural or construction equipment, such as disc harrows or chisel plows or D TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE PIPE LENGHTS OR THAT WHICH SHALL BE BACK-FILLED AND STABILIZED WITHIN ONE WORKING DAY, WHICHEVER IS SHORTER. and completed, then Table 26 must be put on the plans. 3" MULCH WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION. ii. For sites having soil tests performed, the rates shown on this table shall be deleted and the rates recommended by the testing agency shall be written in Soil tests are not required for Temporary Seeding. suitable agricultural or construction equipment, such as disc harrows or chisel plows or rippers mounted on construction equipment. After the soil is loosened it should not be rolled or dragged smooth, but left in the roughened condition. Sloped areas (greater than 3:1) should be tracked leaving the surface in an irregular condition with ridges running parasel to the contour of the slope. b. Apply fertilizer and lime as prescribed on the plans. c. In corporate lime and fertilizer into the top 3-5" of soil by disking or other suitable means. ii. Permanent Seeding a. Minimum soil conditions required for permanent vegetative establishment: 1. Soil pit shall be between 6.0 and 7.0. 2. Soluble salts shall be less than 500 parts per million (ppm). 3. The soil shall contain less than 40% clay, but enough fine grained material 0:30% silt plus clay) to provide the capacity to hold a moderate amount of moisture. An exception is if lovegrass or 3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY TOPSOIL MIXTURE -SIX INCHES AND FOLDED. . MAINTENANCE SHALL BE PERFORMED AS NEEDED Seed Mixture (Hardiness Zone ______6a__) Fertilizer Lime Rate EVERGREEN PLANTING DETAIL AND MATERIAL REMOVED WHEN "BULGES" DEVELOP CONVEX SOTTOM 6" MIN. HT. IN THE SILT FENCE. Seeding Dates (10-10-10) PLANTING SPECIFICATIONS Rate (b/ac) TREE PLANTING DETAIL EARTH DIKE 3' CLEARANCE Plants, related material, and operations shall meet the detailed description as given on the plans and as described herein 500 lb/ac 2 tons/ac moderate amount of moisture. An exception is if lovegrass of serecia lespedezas is to be planted, then a sandy soil (30% si RYE PLUS 3/15 - 10/31 All plant material, unless otherwise specified, shall be nursery grown, uniformly branched, have a vigorous root system, and shall conform to the species, size, root and shape shown on the plant list and the American Association of Nurserymen (AAM) Standards. Plant material shall be healthy, vigorous, free from defects, decay, defiguring roots, sun scald injuries, abrasions of the bark, plant disease, insect pest eggs, borers and all forms of insect infestations or objectionable disfigurements. Plant material that is weak or which has been out back from larger grades to most specified requirements will be rejected. Tress with forked leaders will not be accepted. All plants shall be freshly dug; no healed-in plants from cold storage will be accepted. (100 lb/1000sf) 05 b/1000sf plus clay) would be acceptable. 4. Soil shall contain 1.5% minimum organic matter by weight. 5. Soil must contain sufficient pore space to permit adequate root penetration. 6. If these conditions cannot be met by soils on site, adding topsoil is required in accordance with Section 2! Standard and Specification for Topsoil. Areas previously graded in conformance with the drawings shall be maintained in a true and Z:1 SLOPE OR FLATTER WOOD OR MASONRY FENCE OR WALL ENCLOSURE \ Urless otherwise specified, all general conditions, planting operations, details and planting specification shall conform to "Landscape Epscification Guidelines for Baltimore Hashington Metropolitan Areas". Instelling specification to "Landscape Epscification Guidelines for Baltimore Hashington Metropolitan Areas". Instelling specification to "Landscape Epscification Guidelines for Baltimore Hashington Metropolitan Areas". SECTION 5 - PERHANENT SECONG <u>r-7 1/2°</u> "Landscape Guidelines") approved by the Landscape Contractors Association of Metropolitan Washington and the Potomac Chapter of the American Society of Landscape Architect, latest edition, including all agends. even grade, then scarified or otherwise loosened to a depth of 3-5" to permit bonding of the topsoil to the surface area and to create horizontal erosion check slots to prevent topsoil to the surface area and to create horizontal erosion check slots to prevent topsoil from DUMPSTER SIZE ONCLUDING Seeding grass and legumes to establish groung cover for a minimum of one year on disturbed areas Contractor shall be required to guarantee all plant material for a period of one year after date of acceptance in accordance with the appropriate section of the Landscape Guidelines Contractor's attention is directed to the maintenance requirements found within the one year specifications including watering and replacement of specified plant material. Contractor shall be responsible for notifying utility companies, utility contractors and "Hiss Utility" a minimum of 40 hours prior to beginning any work. Contractor may make minor adjustments in spacing and location of plant material to avoid conflicts with utilities. Damage to existing structure and utilities shall be repaired at the expense of the Contractor. spang down a slope. Apply soil amendments as per soil test or as included on the plans. Mix soil amendments into the top 3-5° of topsoil by disking or other suitable means. Lawn areas should be raked to smooth the surface, remove large objects like stones and branches, and ready the area for seed and application. Where site conditions will not permit normal A. Seed mixtures - Permanent Seeding 1. Select one or more of the species or mixtures listed in Table 25 for the appropriate Plant Hardiness Zone (from figure 5) and enter them in the Permanent Seeding Summary below, along with application rates and seeding dates. Seeding depths can be estimated using Table 26. If this summary is not put on the construction plans and completed, then Table 25 must be put on the plans. Additional planting specifications for exceptional sites such as shorelines, streambanks, or dunes or for special purposes such as wildlife or aesthetic treatment may be found in USDA-SC5 Techinical Field Office Guide, Section 342 - Critical Area Planting. For special lawn maintenance areas, see Sections IV Sod and V Turfgrass. Protection of existing vegetation to remain shall be accomplished by the temporary installation of 4 foot high snow fence or blaze orange safety tence at the drip line. seedbed preparation, loosen surface soil by dragging with a heavy chain or other equipment to roughen the surface. Steep slopes (steeper than 3:1) should be tracked by a dozer leaving the soil in an irregular condition with ridges running parallel to the contour of the slope. The top 1-3° of soil should be loose and friable. Seedbed loosening may not be necessary on Contractor id responsible for Installing all material in the proper planting season for each plant type. All planting is to be completed within the growing season of completion of site construction. Bid shall be base on actual site conditions. No extra payment shall be made for work arising from site conditions differing from those indicated on drawings and specifications GATE POST -►GATE POST POSITIVE DRAINAGE-GRADE SUFFICIENT TO DRAIN Plant quantities are provided for the convenience of the contractor only. If discrepancies exist between quantities shown on plan and those shown on the plant list, the quantities on the plan take precedence All sirules shall be planted in continuous trenches or prepared planting beds and mulched with composted hardwood mulch as details and specified except where noted on plans. II. For sites having disturbed area over 5 areas, the rates shown on this table shall be deleted and the rates recommended by the soil testing agency shall be written in D. Seed Specifications All seed must meet the requirements of the Marriand State Seed Law. All seed shall be subject to re-testing by a recognized seed laboratory. All seed used shall have been tested within the 6 months immediately preceding the date of sowing such material on this job. Planting mix shall be as follows: Deciduous Plants - Two parts topsoli, one part well-rotted cow or horse manure. Add 3 lbs. of standard fertilizer per cubic yard of planting mix. Evergreen Plants - two parts iii. For areas receiving low maintenance, apply weaform fertilizer (46-0-0) at 3 1/2 ibs/1000 sq. ft. (150 ibs/ac), in addition to the above soil amendments shown in the table below, to be performed at topicall, one part human or other approved organic material. Add 3 lbs. of evergreen (acidic) fertilizer per cubic yard of planting mix. Topical shall conform to the Landscape Guidelines Note: Seed tage shall be made available to the inspector to verify type and rate of seed used. ii. Inoculant - The inoculant for treating legume seed in the seed mixtures shall be a pure culture of nitrogen-fixing bacteria prepared specifically for the species. Inoculants shall not be used later than the date indicated on the container. Add fresh inoculant as directed on package. Use four times the recommended rate when hydroseeding. Note: It is very important to keep inoculant as cool as possible until used. Temperatures above 75°-80° f. can weaken bacteria and make the inoculant less effective. 1. ALL DIKES SHALL BE COMPACTED BY EARTH-MOVING EQUIPMENT. 2. ALL DIKES SHALL HAVE POSITIVE DRAINAGE TO AN OUTLET. 3. TOP WIDTH MAY BE WIDER AND SIDE SLOPES MAY BE FLATTER IF DESIRED TO FACILITATE CROSSING BY CONSTRUCTION TRAFFIC. Weed Control. Incorporate a pre-emergent horbicide into the planting bed following recommended rates on the label. Caution Be sure to carefully check the chemical used to assure its adaptability to the specific ground cover to be treated. the time of seeding. CONCRETE All areas within contract limits disturbed during or prior to construction not designated to receive plants and mulch shall be fine graded and seeded 4. FIELD LOCATION SHOULD BE ADJUSTED AS NEEDED TO UTILIZE A STABILIZED SAFE OUTLET. Seed Mixture (Hardiness Zone 6a) - SERVICE PAI E. Methods of Seeding i. Hydroseeding: Apply seed uniformly with hydroseeder (slurry includes seed and fertilizer), broadcast or drop seeded, or a cultipacker seeder. a. If fertilizer is being applied at the time of seeding, the application rates amounts will not exceed the following: nitrogen, maximum of 100 bs. per acre total of soluble nitrogen, P205 (phosphorous); 200 lbs/ac. K20 (potassium): 200 lbs/ac. This plan is intended for landscape use only. see other plan sheets for more information on grading, sediment control, layout, etc. (10-20-20)STABILIZED SAFE OUTLET. 5. EARTH DIKES SHALL HAVE AN OUTLET THAT FUNCTIONS WITH A MINIMUM OF EROSION. RUNOFF SHALL BE CONVEYED TO A SEDIMENT BASIN WHERE EITHER THE DIKE CHANNEL OR THE DRAINAGE AREA ABOVE THE DIKE ARE NOT ADEQUATELY STABILIZED. Lime Rate P205 Species Seeding Dates 6. STABILIZATION SHALL BE: (A) IN ACCORDANCE WITH STANDARD SPECIFICATIONS FOR SEED AND STRAW MULCH OR STRAW MULCH IF NOT IN SEEDING SEASON, (B) FLOW CHANNEL AS PER THE CHART 10'-0" Lime - use only ground agricultural limestone. (Up to 3 tons per acre may be applied by hydroseeding). Normally, not more than 2 tons are applied by hydroseeding at any one 3/15 - 6/1, 6/1 - 10/1 90 lb/ac 175 lb/ac 175 lb/ac 2 tons/ac PERENNIAL RYE GRASS (10X) KENTUCKY BLUEGRASS (5X) (4 lb/ 1000sf) (20 b/ (4 lb/ 1000sf) time. Do not use burnt or hydrated lime when hydroseeding. Seed and fertilizer shall be mixed on site and seeding shall be done immediately and SOLID WASTE OPTIONAL CONTAINER ENCLOSURE TALL PESCUE (80%) HARD PESCUE (20%) without interruption. Ii. Dry Seeding: This includes use of conventional drop or broadcast spreaders. a. Seed spread dry shall be incorporated into the subsoil at the rates prescribed on the Temporary or Permanent Seeding Summaries or Tables 265 or 26. The seeded area shall then be rolled with a weighted roller to provide good seed to soil contact. b. Where practical, seed should be applied in two directions perpendicular to each other. Apply half the seeding rate in each direction. TYPE OF TREATMENT STANDARD INLET PROTECTION 31-5.0% STABILIZED CONSTRUCTION ENTRANCE iii. Drill or Cultipacker Seeding: Mechanized seeders that apply and cover seed with soil. a. Cultipacking seeders are required to bury the seed in such a fashion as to provide at least 1/4 inch of soil covering. Seedbed must be firm after planting. b. Where practical, seed should be applied in two directions perpendicular to each other. Apply half the seeding rate in each direction. EDGE OF ROADWAY OR TOP OF EARTH DIKE LEVEL OF TREE LIMBS, 2" X 4" FRAMING OVERHEAD WIRES, ETC. BERM (6" MIN) 6" MINIMUM f. Mulch Specifications (In order of preference) i. Straw shall consist of thoroughly threshed wheat, rye or oat straw, reasonable bright in color, and shall not be musty, moldy, caked, decayed, or excessively dusty and shall be free of noxious weed seeds as specified in the Maryland Seed Law. ii. Wood Cellulose Fiber Mulch (WCFM) a. WCFM shall consist of specially prepared wood cellulose processed into a uniform fibrous physical state. -TOP ELEVATION A. STONE TO BE 2 INCH STONE, OR RECYCLED CONCRETE EQUIVALENT, IN A LAYER AT LEAST 3 INCHES IN THICKNESS AND BE PRESSED INTO THE SOIL WITH - EARTH FILI -NOTCH ELEVATION ** GEOTEXTILE CLASS 'C' B. RIP-RAP TO BE 4-8 INCHES IN A LAYER AT LEAST 8 INCHES THICKNESS AND - PIPE AS NECESSARY MINIMUM 6" OF 2"-3" AGGREGATE OVER LENGTH AND WIDTH OF PRESSED INTO THE SOIL C. APPROVED EQUIVALENTS CAN BE SUBSTITUTED FOR ANY OF THE ABOVE MATERIALS FLOW WCFM shall be dyed green or contain a green dye in the package that will provide an appropriate color to facilitate visual inspection of the uniformy spread slurry. WCFM, including dye, shall contain no germination or growth inhibiting factors. WCFM materials shall be manufactured and processed in such a manner that the EXISTING GROUND . PERIODIC INSPECTION AND REQUIRED MAINTENANCE MUST BE PROVIDED AFTER PROFILE wood cellulose fiber mulch will remain in uniform suspension in water under agitation . 50° MINIMUM EXCAVATE, BACKFILL AND SCE# The mulch material shall form a blotter-like ground cover, on application, having moisture absorption and percolation properties and shall cover and hold grass seed COMPACT EARTH PERMANENT SEEDING NOTES WOOD OR MASONRY FENCE OR WALL in contact with the soil without inhibiting the growth of the grass seedlings. WCFM material shall contain no elements or compounds at concentration levels that will be phytol-toxic. GATE POST-ALL DISTURBED AREAS SHALL BE STABILIZED AS FOLLOWS: ENCLOSURE-SEEDBED PREPARATION: LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISCING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING. will be phytol-toxic. f. WCFM must conform to the following physical requirements: fiber length to approximately 10 mm., diameter approximately 1 mm., phytogeness of 4.0 to 8.5, ash content of 1.6% maximum and water holding capacity of 90% minimum. Note: Only sterile straw much should be used in areas where one species of grass is desired. Muching Seeded Areas - Much shall be applied to all seeded areas immediately after seeding. If grading is completed outside of the seeding season, much along shall be applied as prescribed in this section and maintained until the seeding season returns and seeding can be performed in accordance with these specifications. STANDARD SYMBOL MUMBHUM 'C WIRE MESH GEOTEXTILE CLASS E SOIL AMENIMENTS: APPLY TWO TONS PER ACRE DOLOMITIC LIMESTONE (92 LBS/1,000 SQ.FT.) AND 600 LBS, PER ACRE 0-20-20 FERTILIZER (14 LBS./1,000 SQ.FT.) BEFORE SEEDING HARROW OR DISC. INTO UPPER THREE INCHES OF SOIL. AT TIME OF SEEDING, APPLY 400 LBS. PER ACRE 30-0-0 UREAFORM FERTILIZER (1) LBG (1) LBG (1) LBG (2) LBG (2) LBG (2) LBG (2) LBG (3) LBG (4) MAX. DRAINAGE AREA - 1/4 ACRE SIP Construction Specifications 1. Excavate completely around the inlet to a depth of 10" below the ii. When straw much is used, it shall be spread over all seeded areas at the rate of 2 tons/acre. Much shall be applied to a uniform loose depth of between 1" and 2". Much applied shall achieve a uniform distribution and depth so that the soil surface is not exposed. If a much anchoring tool is to be used, the rate should be increased to 2.5 tons/acre. notch elevation. (9 LB5./1,000 SQ.FT.) AND 500 LB5. PER ACRE (11.5 LB5./1,000 SQ.FT.) OF 10-20-20 FERTILIZER. Construction Specification 2. Drive the 2" x 4" construction grade lumber posts 1' into the FEEDING: FOR THE PERIODS MARCH I THROUGH APRIL 30, AND AUGUST I THROUGH OCTOBER 15, SEED WITH 100 LBS. PER ACRE (2.3 LBS-1,000 SQ.FT.) OF KENTUCKY 31 TALL FESCUE, FOR THE PERIOD MAY I THROUGH JULY 31, SEED WITH 60 LBS-/ACRE (1.4 LBS-/1,000 SQ.FT.) KENTUCKY 31 TALL FESCUE AND 2 LBS. PER ACRE (0.05 LBS-/1,000 SQ.FT.) OF WEEPING iii. Wood cellulose fiber used as a much shall be applied at a net dry weight of 1,500 bs. per acre. The wood cellulose fiber shall be mixed with water, and the mixture shall contain a maximum of 50 bs. of wood cellulose fiber per 100 gallons of water. Length - minimum of 50° (*30° for single residence lot). ground at each corner of the inlet. Place nail strips between the CLEARANCE posts on the ends of the inlet. Assemble the top portion of the 2. Width - 10' minimum, should be flared at the existing road to provide a turning 2" x 4" frame using the overlap joint shown on Detail 23A. The Securing Straw Mulch Mulch Anchoring: Mulch anchoring shall be performed immediately following mulch application to minimize loss by wind or water. This may be done by one of the following methods (listed by top of the frame (weir) must be 6" below adjacent roadways where 3. Geotextile fabric (filter cloth) shall be placed over the existing ground prior to placing stone. **The plan approval authority may not require single family flooding and safety issues may arise. preference), depending upon size of area and erosion hazard A mulch anchoring tool is a tractor drawn implement designed to punch and anchor mulch into the soil surface a minimum of two (2) inches. This practice is most effective on large areas, but is limited to flatter slopes where equipment can operate safety. It used on sloping land, this practice should be used on the contour if possible. Wood cellulose fiber may be used for anchoring straw. The fiber binder shall be applied at a net dry weight of 750 pounds/acre. The wood cellulose fiber shall be mixed with water and the mixture shall contain a maximum of 50 pounds of wood cellulose fiber per 100 gallons of water. residences to use geotextile. 3. Stretch the 1/2" x 1/2" wire mesh tightly around the frame LOYEGRASS, DURING THE PERIOD OF OCTOBER 16 THROUGH FEBRUARY 28. PROJECT SITE BY: OPTION (1) - TWO TONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS GRADE -Stone - crushed aggregate (2" to 3") or rectained or recycled concrete equivalent shall be placed at least 6" deep over the length and width of the and fasten securely. The ends must meet and overlap at a POSSIBLE IN THE SPRING, OPTION (2) - USE 500; OPTION (3) - SEED WITH 100 LBS./ACRE KENTUCKY 31 TALL FESCUE AND MULCH WITH TWO TONS/ACRE WELL ANCHORED STRAW. ALL SLOPES SHOULD 4. Stretch the Geotextile Class £ tightly over the wire mesh with 5. Surface Water - all eurface water flowing to or diverted toward construction of water. iii. Application of liquid binders should be heavier at the edges where wind catches mulch, such as in valleys and crest of banks. The remainder of area should be appear uniform after binder application. Synthetic binders - such as Acrylic DLR (Agro-Tack), DCA-70 Petroset, Terra Tail, Terra Tack AR or other approved equal may be used at rates recommended by the manufacturer to anchor mulch. entrances shall be piped through the entrance, maintaining positive drainage. Pipe the geotixtile extending from the top of the frame to 10" below the BE HYDROSEEDED. Installed through the stabilized construction entrance shall be protected with a inlet notch elevation. Fasten the geotextile firmly to the frame. APPLY 1 TO 2 TONS PER ACRE (10 TO 90 LB5./1,000 SQ.FT.) mountable berm with 5:1 slopes and a minimum of 5" of stone over the pipe. Pipe ha The ends of the geotextile must meet at a post, be overlapped and to be sized according to the drainage. When the SCE is located at a high spot and OF UNROTTED SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING 200 GALLONS PER ACRE (5 GAL./1,000 SQ.FT.) OF EMULSIFIED SERVICE PAD folded, then fastened down. has no drainage to convey a pipe will not be necessary. Pipe should be sized iv. Lightweight plastic netting may be stapled over the much according to manufacturer's recommendations. Netting is usually available in rolls 4' to 15' feet wide and 300 to 3,000 feet long. according to the amount of runoff to be conveyed. A 6" minimum will be required Ø'x10'x6" 5. Backfill around the injet in compacted 6" layers until the ASPHALT ON FLAT ACRES. ON SLOPES & FEET OR HIGHER USE 348 GALLONS PER ACRE (& GALL/1,000 SQ.FT.) FOR ANCHORING. CONC. PAD 6. Location - A stabilized construction entrance shall be located at every point layer of earth is level with the notch elevation on the ends and where construction traffic enters or leaves a construction site. Vehicles leaving top elevation on the sides. " EXP. JT. MATERIAL the site must travel over the entire length of the stabilized construction entrance MAINTENANCE: INSPECT ALL SEEDED AREAS AND MAKE NEEDED REPAIRS, -6x6/6-6 Welded Wire Mesh 6. If the injet is not in a sump, construct a compacted earth dike - 5.H.A. MIX NO. 3 CONCRETE across the ditch line directly below it. The top of the earth dike REPLACEMENTS AND RESEEDINGS. -NO. 6 REBAR should be at least 6" higher than the top of the frame. FOR PUBLIC PONDS SUBSTITUTE CHEMUNG CROWNVETCH AT 15 LBS./ACRE AND KENTUCKY 31 TALL FESCUE AT 40 LBS/ACRE AS THE SEEDING REQUIRMENT. OPTIMUM SEEDING DATE FOR THIS MIXTURE IS MARCH 1 TO APRIL 30. 7. The structure must be inspected periodically and after each rain and the geotextile replaced when it becomes clogged. SOLID WASTE SERVICE PAD NOT TO SCALE ENGINEER'S CERTIFICATE PPROVED: DEPARTMENT OF PLANNING AND ZONING I certify that this plan for erosion and sediment control represents a practical and workable DETAIL SHEET 9/1/00 plan based on my personal knowledge of the site conditions and that it was prepared in U.S.D.A.-Natural accordance with the requirements of the Howard Soil Conservation District." 3 31 00 GETHSEMANE BAPTIST CHURCH 9/1/00 FISHER, COLLINS & CARTER, INC. IVIL ENGINEERING CONSULTANTS & LAND SURVEYORS Signature of Ebgineer (Print name below signature) ector, separtment of Planning and Zoning as DEVELOPER'S CERTIFICATE SECTION/AREA SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL ELLICOTT CITY, MARYLAND 21042 "I/We certify that all development and construction will be done according to this plan. BRANTLY - GETHSEMANE BAPTIST CHURCH SECTION 2 AREA 1 and that any responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District." BLOCK NO. ZONE TAX/ZONE ELEC. DIST. CENSUS TR. TAX MAP No: 21 PARCEL: 185 OWNER 14392 and 4TH 5040 4TH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND GETHSEMANE BAPTIST CHURCH 14135 BURNT WOODS ROAD SCALE: AS SHOWN Developer (Fint name below signature) WATER CODE SEWER CODE GLENWOOD, MARYLAND 21738 PRIVATE PRIVATE 40050\40050 Site development plan detail sheet.dw

DATE: JUNE, 2000

BRANTLY

(LOT 28)

SHEET 2 OF 5

NOT TO SCALE

_____16" MIN.

UNDISTURBED

NOT TO SCALE

-2:1 SLOPE OR FLATTER

CONSTRUCTION SPECIFICATIONS

FLOW CHANNEL STABILIZATION

SEED AND STRAW MULCH SEED AND STRAW MULCH SEED AND STRAW MULCH SEED USING JUTE, OR EXCELSIOR; SOD; 2° STONE

SEED WITH JUTE, OR SOD; LINED RIP-RAP 4"-B"

LINED RIP-RAP 4"-8" ENGINEERING DESIGN

WOVEN WIRE FENCE

MAX. 6" MESH SPACING)

— 36° MIN. FENCE

STANDARD SYMBOL

_____ 5 _____ 5-___

POSTS. DRIVEN MIN.

-HEIGHT OF FILTER

POSTS: STEEL EITHER I OR U

FENCE: WOVEN WIRE, 14. GA.

FILTER CLOTH: FILTER X, MIRAFI

PREFABRICATED UNIT: GEOFAB,

EQUAL

STABILIZATION AS REQUIRED

ON STEEP SLOPES EXCAVATE TO PROVIDE

DIKE A DIKE B (5 ac. or less) (5-10 ac.)

TYPE OR 2" HARDWOOD

6" MAX. MESH OPENING

100X, STABILINKA TI4 ON

ENVIROFENCE, OR APPROVED

OR APPROVED EQUAL

16" INTO GROUND





