

SUBJECT PROPERTY ZONED RC-DEO PER THE OCTOBER 6, 2013 COMPREHENSIVE

PREVIOUS DPZ NUMBERS: ECP-19-045, WP-20-006, WP-20-101, F-20-048

COORDINATES BASED ON NAD '83 MARYLAND COORDINATE SYSTEM AS PROJECTED BY HOWARD COUNTY GEODETIC CONTROL STATIONS NO. 0018 AND 08CA

STA. No. 0018: N 607,697.308: E 1,308,424.309: ELEV. 626.856

PROJECT BOUNDARY IS BASED ON A FIELD RUN MONUMENTED BOUNDARY SURVEY PERFORMED ON OR

EXISTING TOPOGRAPHY SHOWN HEREON IS BASED ON A FIELD RUN SURVEY PERFORMED ON OR ABOUT

WETLAND DELINEATION PERFORMED BY ECO-SCIENCE, INC. IN THE FALL OF 2017 AND DECEMBER 2018.

FOREST STAND DELINEATION PERFORMED BY ECO-SCIENCE PROFESSIONALS, INC. IN THE FALL OF 2017

FOREST CONSERVATION OBLIGATIONS IN ACCORDANCE WITH SECTION 16.1200 OF THE HOWARD COUNTY CODE AND FOREST CONSERVATION MANUAL FOR THIS SUBDIVISION WILL BE FULFILLED BY THE RETENTION OF 2.0 ACRES (89,271 SQ. FT.) OF FOREST AND 0.8 ACRES (33,485 SQ.FT.) OF REFORESTATION. FINANCIAL SURETY FOR THE REQUIRED REFORESTATION IN THE AMOUNT OF \$16,742.50 WILL BE POSTED WITH THE DPW

10. HOUSE ON LOT 2 IS DESIGNATED AS HISTORIC IN THE HOWARD COUNTY HISTORIC REGISTER, HOCO ID: 170. HISTORIC PRESERVATION COMMITTEE MEETING WAS HELD ON MAY 7, 2020.

11. A TOTAL OF 13 SPECIMEN TREES EXIST ON-SITE. TWO TREES ARE PROPOSED TO BE REMOVED. AN ALTERNATIVE COMPLIANCE (WP-20-006 AND WP-20-101) TO SECTION 16.1205(a)(3) OF THE HOWARD

14. FOREST CONSERVATION EASEMENTS HAVE BEEN ESTABLISHED TO FULFILL THE REQUIREMENTS OF SECTION 16.1200 OF HOWARD COUNTY CODE. NO CLEARING, GRADING, OR CONSTRUCTION IS PERMITTED WITHIN THE FOREST CONSERVATION EASEMENT. HOWEVER, FOREST MANAGEMENT

15. EXISTING STRUCTURES ON LOT 2 ARE TO REMAIN. NO NEW BUILDINGS, EXTENSIONS OR ADDITIONS TO

16. CYTYTY THIS AREA DESIGNATES A PRIVATE SEWERAGE EASEMENT OF AT LEAST 10,000 SQ. FT. AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF ENVIRONMENT FOR INDIVIDUAL △ SEWERAGE DISPOSAL. IMPROVEMENTS OF ANY NATURE IN THIS AREA ARE RESTRICTED UNTIL PUBLIC SEWERAGE IS AVAILABLE. THIS EASEMENT SHALL BECOME NULL AND VOID UPON CONNECTION TO A PUBLIC SEWERAGE SYSTEM. THE COUNTY HEALTH OFFICER SHALL HAVE THE

AUTHORITY TO GRANT ADJUSTMENTS TO THE PRIVATE SEWERAGE EASEMENT. RECORDATION OF

17. FOR FLAG OR PIPESTEM LOTS, REFUSE COLLECTION, SNOW REMOVAL AND ROAD MAINTENANCE ARE PROVIDED TO THE JUNCTION OF THE FLAG OR PIPESTEM AND ROAD RIGHT-OF-WAY LINE AND NOT TO THE PIPESTEM LOT

18. DRIVEWAYS SHALL BE PROVIDED PRIOR TO RESIDENTIAL OCCUPANCY TO ENSURE SAFE ACCESS FOR FIRE AND

A) WIDTH - 12 FEET (16 FEET SERVING MORE THAN ONE RESIDENCE).

SURFACE — 6 INCHES OF COMPACTED CRUSHER RUN BASE WITH TAR AND CHIP COATING

GEOMETRY -MAX. 15% GRADE, MAX. 10% GRADE CHANGE AND MIN. OF 45 FOOT

STRUCTURES (CULVERT/BRIDGES)-CAPABLE OF SUPPORTING 25 GROSS TONS (H25 LOADING)

DRAINAGE ELEMENTS-CAPABLE OF SAFELY PASSING 100 YEAR FLOOD PLAIN WITH NO MORE

19. STORMWATER MANAGEMENT REQUIREMENTS WILL BE MET ON-SITE VIA GRASS SWALES (M-8), MICRO-BIORETENTION FACILITIES (M-6) AND PERMEABLE PAVEMENT (A-2) IN ACCORDANCE WITH THE 2000 MARYLAND STORMWATER MANAGEMENT DÉSIGN MANUAL. ALL STORMWATER MANAGEMENT FACILITIES WILL BE PRIVATELY OWNED AND

20. LANDSCAPING FOR LOTS 1 AND 3 HAS BEEN PROVIDED IN ACCORDANCE WITH SECTION 16.124 OF TH HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL. FINANCIAL SURETY FOR 17 SHADE TREES FOR PERIMETER LANDSCAPING IN THE AMOUNT OF \$5,100.00 AND 4 SHADE TREES PROVIDED AS A CONDITION OF THE APPROVAL OF WP-20-101 IN THE AMOUNT OF \$1,200.00 (TOTAL OF \$2,100.00 FOR LOT 1, \$4,200.00 FOR LOT 3) WILL BE POSTED WITH THE GRADING PERMIT APPLICATION FOR THE

NO GRADING, REMOVAL OF VEGETATIVE COVER OR TREES, OR PLACEMENT OF NEW STRUCTURES IS PERMITTED WITHIN THE LIMITS OF WETLANDS, STREAMS, OR THEIR BUFFERS AND FOREST CONSERVATION RETENTION CREDIT

23. A PRE-SUBMISSION COMMUNITY MEETING WAS HELD FOR THIS PROJECT ON FEBRUARY 19, 2019 AT THE GLENWO

24. PRIVATE USE-IN-COMMON DRIVEWAY AND SWM MAINTENANCE AGREEMENT FOR LOTS 1-3 AND PARCEL 27-A WILL BE RECORDED SIMULTANEOUSLY WITH THIS PLAT OF SUBDIVISION AMONG THE LAND

HOWARD COUNTY PLUS MSHA STANDARDS AND SPECIFICATIONS IF APPLICABLE.

THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS / BUREAU OF ENGINEERING, CONSTRUCTION INSPECTION DIVISION AT (410)313-1880 AT LEAST FIVE (5) WORKING DAYS PRIOR TO

IN ACCORDANCE WITH SECTION 104.0.F OF ZONING REGULATIONS, ALL LOTS/RESIDENTIAL UNITS IN THIS SUBDIVISION ARE SUBJECT TO THE MIHU FEE-IN-LIEU REQUIREMENT THAT IS TO BE CALCULATED AND PAID TO THE DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS AT THE TIME OF BUILDING PERMIT ISSUANCE BY THE PERMIT APPLICANT. IF THE EXISTING HOUSE ON LOT 2 IS DEMOLISHED AND REBUILT IN THE FUTURE, IT WILL BE SUBJECT TO MIHU REQUIREMENTS. AN MIHU AGREEMENT WILL BE RECORDED IN THE LAND RECORDS OF HOWARD

29. IN ACCORDANCE WITH SECTION 16.121.(a)(2) OF SUBDIVISION AND LAND DEVELOPMENT REGULATIONS, OPEN SPACE REQUIREMENT FOR THIS SUBDIVISION IS MET BY A PAYMENT OF FEE-IN-LIEU IN THE

30. THE SUBJECT PROPERTY IS A 3 LOT MINOR SUBDIVISION AND IS LOCATED IN THE COUNTY'S DESIGNATED GROWTH TIER AREA IV IN ACCORDANCE WITH PLAN HOWARD 2030 AND SUBJECT TO STATE LAW, SB-236, "THE SUSTAINABLE GROWTH AND AGRICULTURAL PRESERVATION ACT OF 2012". THEREFORE, ANY LOTS ELIGIBLE FOR FUTURE RE—SUBDIVISION MAY ONLY BE RE—SUBDIVIDED TO CREATE NO MORE THAN A MAXIMUM TOTAL OF 4 LOTS FROM THE ORIGINAL PROPERTY PARCEL BECAUSE STATE LAW ONLY PERMITS MINOR SUBDIVISIONS WITHIN THE TIER IV GROWTH AREA IN ACCORDANCE WITH SB-236. ONCE THE FOURTH LOT OR PARCEL IS ESTABLISHED FOR THIS

31. FLOODPLAIN STUDY WAS PREPARED BY MILDENBERG, BOENDER & ASSOC., INC. 115 JUNE 2019.

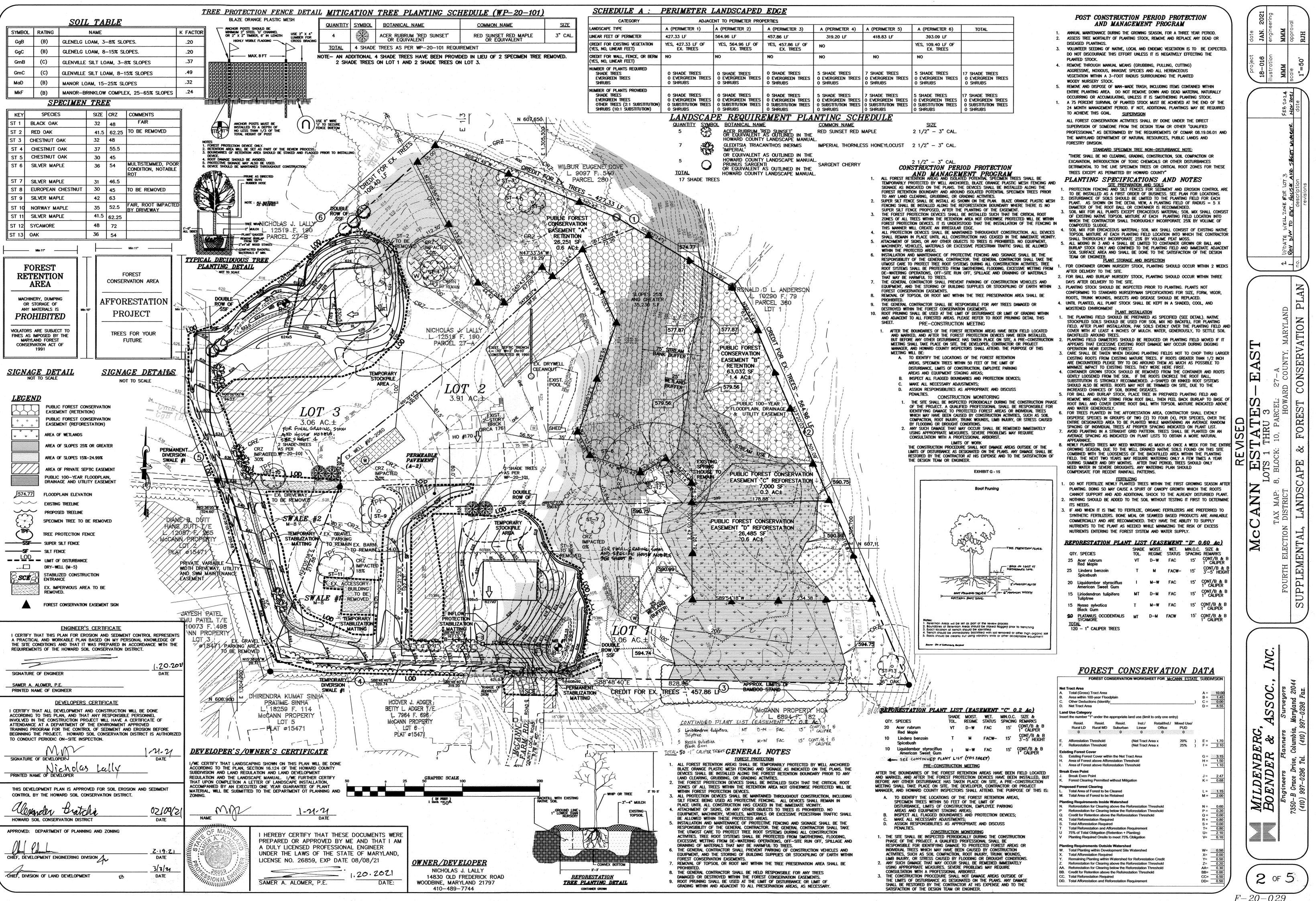
32. THIS DEVELOPMENT IS A 3-LOT MINOR SUBDIVISION. IN ACCORDANCE WITH SECTION 16.1107(b)(I)(v) OF

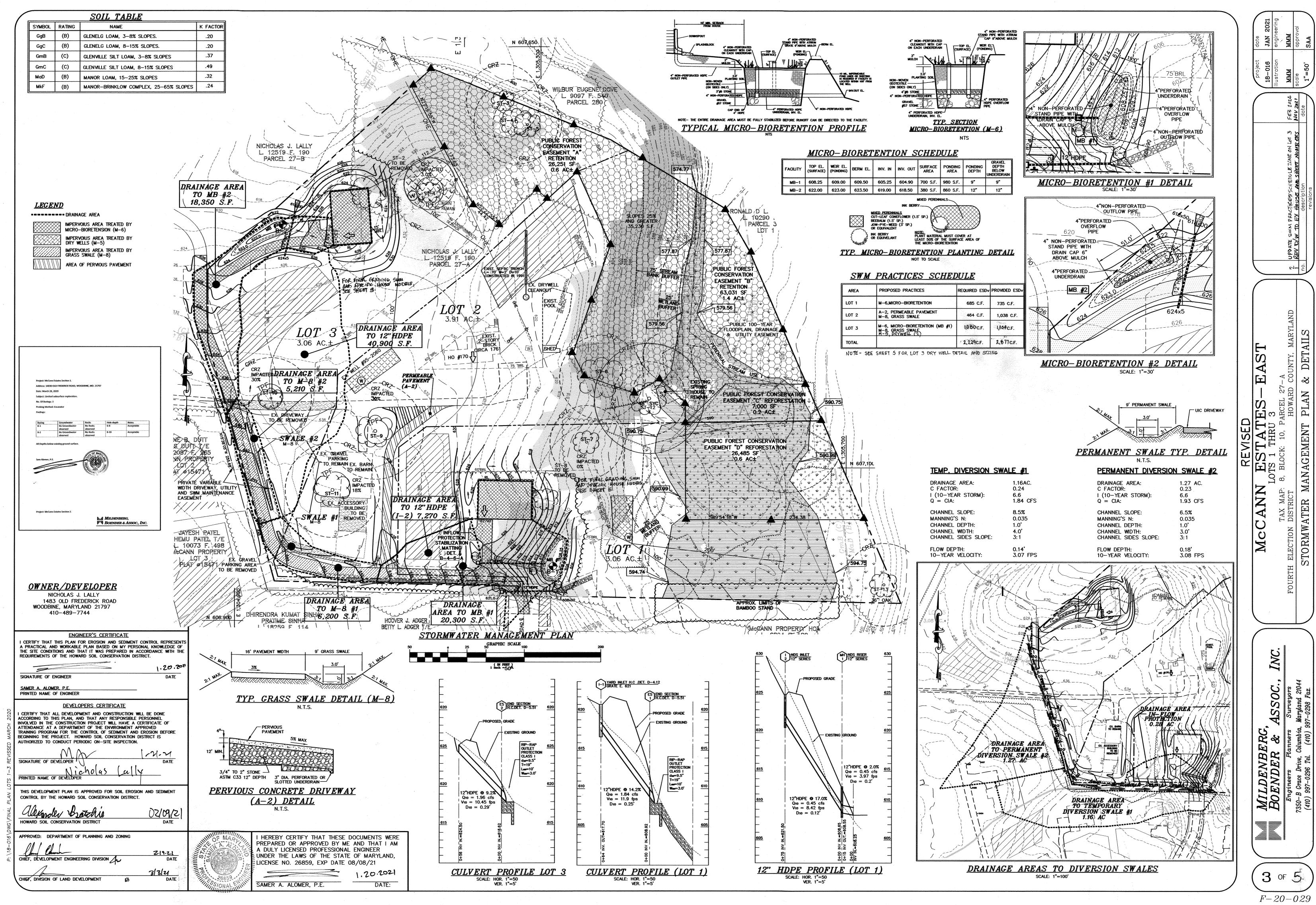
33. REFUSE COLLECTION, SNOW REMOVAL AND ROAD MAINTENANCE ARE PROVIDED TO THE JUNCTION OF THE USE-IN-COMMON DRIVEWAY AND ROAD RIGHT-OF-WAY LINE.

of 5

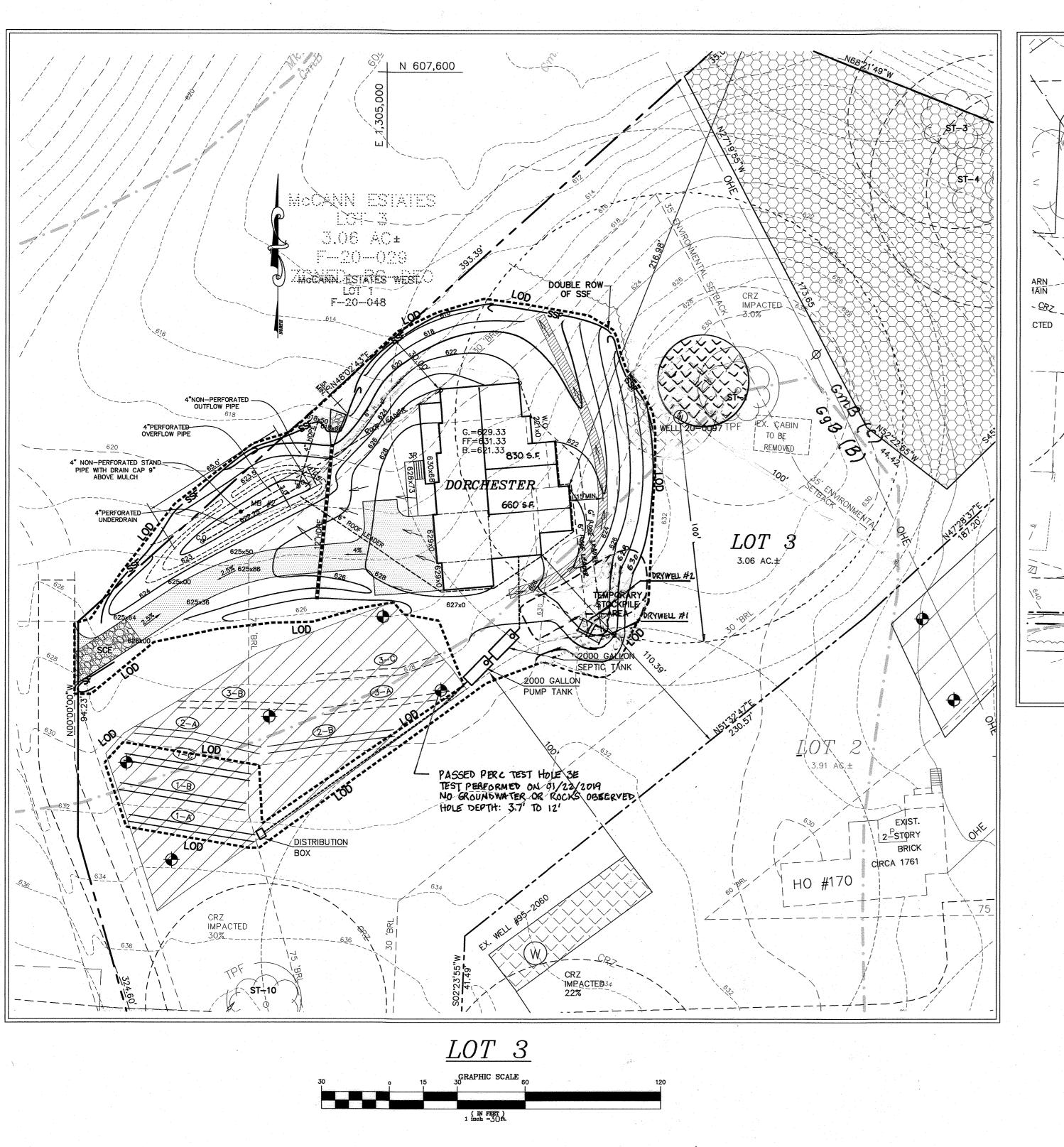
LDENI

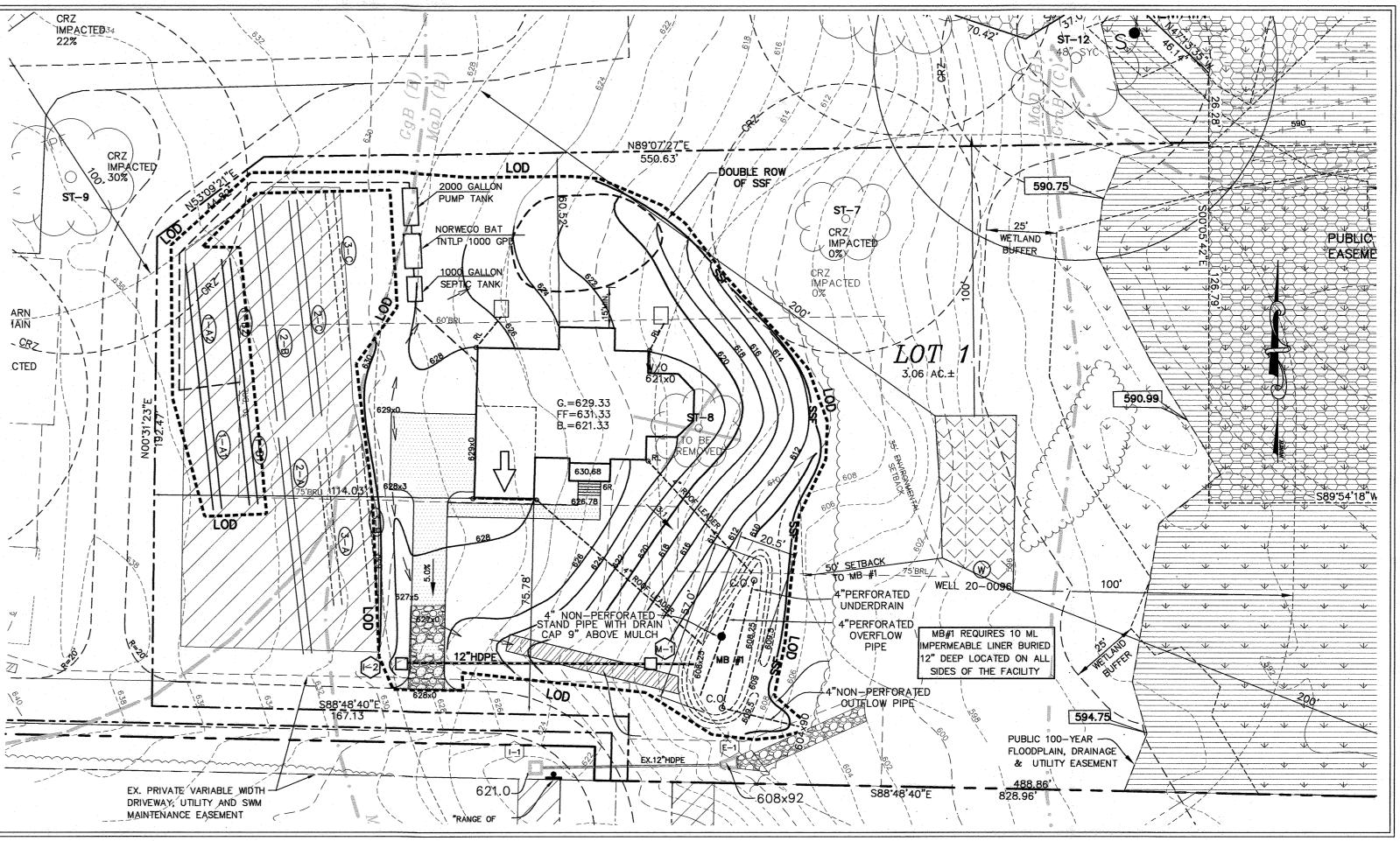
CONTROL)

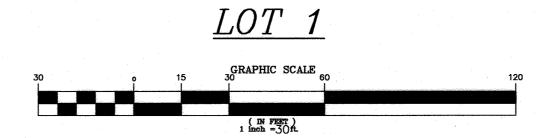


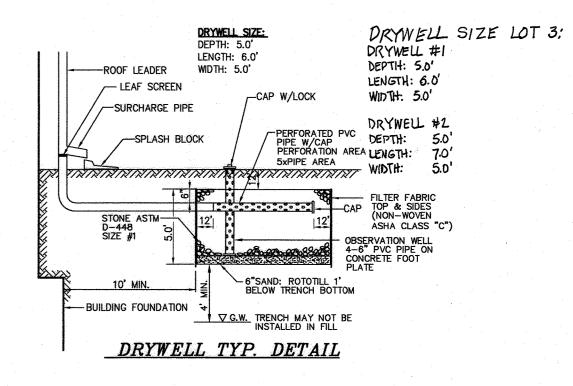


(B-4-5) STANDARDS AND SPECIFICATIONS FOR PERMANENT STABILIZATION TEMPORARY SEEDING FOR SITE STABILIZATION (B-4-3) STANDARDS AND SPECIFICATIONS (B-4-2) STANDARDS AND SPECIFICATIONS TO STABILIZE DISTURBED SOIL WITH PERMANENT VEGETATION. RATE RECOMMENDED SEEDING DATED BY PLANT HARDINESS ZONE FOR SOIL PREPARATION, TOPSOILING, AND SOIL AMENDMENTS FOR SEEDING AND MULCHING <u>PURPOSE</u> PLANT SPECIES DEFINITION TO USE LONG-LIVED PERENNIAL GRASSES AND LEGUMES TO ESTABLISH PERMANENT GROUND COVER OF DISTURBED DEFINITION LB/AC LB/ (INCHES) 5B AND 6A THE PROCESS OF PREPARING THE SOILS TO SUSTAIN ADEQUATE VEGETATIVE STABILIZATION, CONDITIONS WHERE PRACTICE APPLIES 7A AND 7R THE APPLICATION OF SEED AND MULCH TO ESTABLISH VEGETATIVE COVER. EXPOSED SOILS WHERE GROUND COVER IS NEEDED FOR 6 MONTHS OR MORE. COOL SEASON GRASSES TO PROVIDE A SUITABLE SOIL MEDIUM FOR VEGETATIVE GROWTH TO PROTECT DISTURBED SOILS FROM EROSION DURING AND AT THE END OF CONSTRUCTION. CRITERIA MAR 15 TO MAY 31; | MAR 1 TO MAY 15; | FEB.15 TO APR 30; A. SEED MIXTURES 1. GENERAL US CONDITIONS WHERE PRACTICE APPLIES CONDITIONS WHERE PRACTICE APPLIES 40 1.0 0.5 (LOLIUM PERENNE SSP. MULTIFLORI AUG 1 TO SEP 30 AUG 1 TO OCT 15 WHERE VEGETATIVE STABILIZATION IS TO BE ESTABLISHED. TO THE SURFACE OF ALL PERIMETER CONTROLS, SLOPES, AND ANY DISTURBED AREA NOT UNDER ACTIVE GRADING. A. SELECT ONE OR MORE OF THE SPIECES OF MIXTURES LISTED IN TABLE B.3 FOR THE APPROPRIATE MAR 15 TO MAY 31. | MAR 1 TO MAY 15. | FFR 15 TO APR 30 CRITERIA PLANT HARDINESS ZONE (FROM FIGURE B.3) AND BASED IN THE SITE CONDITION OR PURPOSE FOUND ON (HORDEUM VULGARI AUG 1 TO SEP 30 | AUG 1 TO OCT 15 | AUG 15 TO NOV 30 A. SOIL PREPARATION A. SEEDING TABLE B.2. ENTER SELECTED MIXTURE(S), APPLICATION RATES, AND SEEDING DATES IN THE MAR 15 TO MAY 31; | MAR 1 TO MAY 15; | FEB.15 TO APR 30; 72 | 1.7 | 0.5 1. TEMPORARY STABILIZATION 1. SPECIFICATIONS PERMANENT SEEDING SUMMARY. (AVENA SATIVA AUG 1 TO SEP 30 | AUG 1 TO OCT 15 | AUG 15 TO NOV 30 B. ADDITIONAL PLANTING SPECIFICATIONS FOR EXCEPTIONAL SITES SUCH AS SHORELINES, STREAM BANKS, a. SEEDBED PREPARATION CONSISTS OF LOOSENING SOIL TO A DEPTH OF 3 TO 5 INCHES BY MEANS OF a. ALL SEED MUST MEET THE REQUIREMENTS OF THE MARYLAND STATE SEED LAW. ALL SEED MUST BE SUBJECT TO RE-TESTING BY A RECOGNIZED SEED LABORATORY. ALL SEED USED MUST HAVE BEEN TESTED WITHIN THE 6 OR DINES OR FOR SPECIAL PURPOSES SUCH AS WILDLIFE OR AESTHETIC TREATMENT MAY BE MAR 15 TO MAY 31: | MAR 1 TO MAY 15: | FEB.15 TO APR 30 SUITABLE AGRICULTURAL OR CONSTRUCTION EQUIPMENT, SUCH AS DISC HARROWS OR CHISEL PLOWS OR FOUND IN USDA-NRCS TECHNICAL FIELD GUIDE, SECTION 342-CRITICAL AREA PLANTING. (TRITICUM AESTIVUM AUG 1 TO SEP 30 AUG 1 TO OCT 15 AUG 15 TO NOV 30 MONTHS IMMEDIATELY PRECEDING THE DATE OF SOWING SUCH MATERIAL ON ANY PROJECT. REFER TO TABLE RIPPERS MOUNTED ON CONSTRUCTION EQUIPMENT. AFTER THE SOIL IS LOOSENED, IT MUST NOT BE ROLLED C. FOR SITES HAVING DISTURBAD AREA OVER 5 ACRES, USE AND SHOW RATES RECOMMENDED BY THE OR DRAGGED SMOOTH BUT LEFT IN THE ROUGHENED CONDITION. SLOPES 3:1 OR FLATTER ARE TO BE B.4 REGARDING THE QUALITY OF SEED. SEED TAGS MUST BE AVAILABLE UPON REQUEST TO THE INSPECTOR TO MAR 15 TO MAY 31; MAR 1 TO MAY 15; FEB.15 TO APR 30; CEREAL RYE 112 | 2.8 | 0.5 TRACKED WITH RIDGES RUNNING PARALLEL TO THE CONTOUR OF THE SLOPE. APPLY FERTILIZER AND LIME AS PRESCRIBED ON THE PLANS. VERIFY TYPE OF SEED AND SEEDING RATE. AUG 1 TO OCT 31 | AUG 1 TO OCT 15 | AUG 15 TO DEC 15 (SECALE ITALICA) D. FOR AREAS RECEIVING LOW MAINTENANCE, APPLY UREA FROM FERTILIZED (40-0-01) AT 3 1/2 b. Mulch alone may be applied between the fall and spring seeding dates only if the ground is INCORPORATE LIME AND FERTILIZER INTO THE TOP 3 TO 5 INCHES OF SOIL BY DISKING OR OTHER WARM SEASON GRASSES FROZEN. THE APPROPRIATE SEEDING MIXTURE MUST BE APPLIED WHEN THE GROUND THAWS. POUNDS PER 1000 S.F. (150 POUNDS PER ACRE) AT THE TIME OF SEEDING IN ADDITION TO THE SOIL c. Inoculants: the inoculant for treating legume seed in the seed mixtures must be a pure culture AMENDMENTS SHOWN IN THE PERMANENT SEEDING SUMMARY. FOXTAIL MILLET 30 | 0.7 | 0.5 | JUN 1 TO JUL 31 | MAY 16 TO JUL 31 | MAY 1 TO AUG 14 OF NITROGEN FIXING BACTERIA PREPARED SPECIFICALLY FOR THE SPECIES, INOCULANTS MUST NOT BE USED 2. PERMANENT STABILIZATION (SETARIA ITALICA) 2. TURFGRASS MIXTURES LATER THAN THE DATE INDICATED ON THE CONTAINER. ADD FRESH INOCULANTS AS DIRECTED ON THE PACKAGE A. AREAS WHERE TURFGRASS MAY BE DESIRE INCLUDE LAWNS, PARKS, PLAYGROUNDS, AND COMMERCIAL a. A SOIL TEST IS REQUIRED FOR ANY EARTH DISTURBANCE OF 5 ACRES OR MORE. THE MINIMUM SOIL USE FOUR TIMES THE RECOMMENDED RATE WHEN HYDROSEEDING. NOTE: IT IS VERY IMPORTANT TO KEEP 0.5 | 0.5 | JUN 1 TO JUL 31 | MAY 16 TO JUL 31 | MAY 1 TO AUG 14 SITES WHICH WILL RECEIVE A MEDIUM TO HIGH LEVEL OF MAINTENANCE. CONDITIONS REQUIRED FOR PERMANENT VEGETATIVE ESTABLISHMENT ARE: 1. SOIL PH BETWEEN 6.0 AND 7.0. (PENNISETUM GLAUCUM NOCULANT AS COOL AS POSSIBLE UNTIL USED. TEMPERATURES ABOVE 75 TO 80 DEGREES FAHRENHEIT CAN SELECT ONE OR MORE OF THE SPECIES OF MIXTURES LISTED BELOW BASED ON THE SITE WEAKEN BACTERIA AND MAKE THE INOCULANT LESS EFFECTIVE. CONDITIONS OR PURPOSE. ENTER SELECTED MIXTURE(S), APPLOCATION RATES, AND SEEDING II. SOLUBLE SALTS LESS THAN 500 PARTS PER MILLION (PPM). d. SOD OR SEED MUST NOT BE PLACED ON SOIL WHICH HAS BEEN TREATED WITH SOIL STERILANTS OR PERMANENT SEEDING SUMMARY III. SOIL CONTAINS LESS THAN 40 PERCENT CLAY BUT ENOUGH FINE GRAINED MATERIAL (GREATER THAN 30 CHEMICALS USED FOR WEED CONTROL UNTIL SUFFICIENT TIME HAS ELAPSED (14 DAYS MIN.) TO PERMIT PERCENT SILT PLUS CLAY) TO PROVIDE THE CAPACITY TO HOLD A MODERATE AMOUNT OF MOISTURE. AN I. KENTUCKY BLUEGRASS: FULL SUN MIXTURE: FOR USE IN AREAS THAT RECEIVE INTENSIVE DISSIPATION OF PHYTO-TOXIC MATERIALS. FERTILIZER RATE MANAGEMENT, IRRIGATION REQUIRED IN THE AREAS OF CENTRAL MARYLAND AND EASRERN SHORE EXCEPTION: IF LOVEGRASS WILL BE PLANTED, THEN A SANDY SOIL (LESS THAN 30 PERCENT SILT PLUS 2. APPLICATION RECOMMENDED CERTIFIED KENTUCKY BLUEGRASS SEEDING RETA: 1.5 TO 2.0 POUNDS PER 1000 S.F. SEED MIXTURE (FROM TABLE B.3): 8 (10-20-20) CLAY) WOULD BE ACCEPTABLE CHOOSE A MINIMUM OF THREE KENTUCKY BLUEGRASS CULTIVARS WITH EACH RANGING FROM 10 TO 35 a. DRY SEEDING: THIS INCLUDES USE OF CONVENTIONAL DROP OR BROADCAST SPREADERS. IV. SOIL CONTAINS 1.5 PERCENT MINIMUM ORGANIC MATTER BY WEIGHT. V. SOIL CONTAINS SUFFICIENT PORE SPACE TO PERMIT ADEQUATE ROOT PENETRATION. SEEDING SEEDING PERCENT OF THE TOTAL MIXTURE BY WEIGHT. APPLICATION | I. INCORPORATE SEED INTO THE SUBSOIL AT THE RATES PRESCRIBED ON TEMPORARY SEEDING TABLE B.1 SPECIES RATE (LB/AC) DATES DEPTHS PERMANENT SEEDING TABLE B.3, OR SITE-SPECIFIC SEEDING SUMMARIES. II. KENTUCKY BLUEGRASS/PERENIAL RYE: FULL SUN MIXTURE: FOR USE IN FULL SUN AREAS WHERE b. APPLICATION OF AMENDMENTS OR TOPSOIL IS REQUIRED IF ON-SITE SOILS DO NOT MEET THE ABOVE II. APPLY SEED IN TWO DIRECTIONS, PERPENDICULAR TO EACH OTHER. APPLY HALF THE SEEDING RATE IN 90 LBS. PER ACRE RAPID ESTABLISHMENT IS NECESSARY ABD WHEN TURF WILL RECEIVE MEDIUM TO INTENSUVE 90 LBS. | 2 TONS / ACRE PER ACRE (90 LBS / 1000 PER ACRE EACH DIRECTION. ROLL THE SEEDED AREA WITH A WEIGHTED ROLLER TO PROVIDE GOOD SEED TO SOIL GRADED AREAS MUST BE MAINTAINED IN A TRUE AND EVEN GRADE AS SPECIFIED ON THE APPROVED PLAN, MANAGEMENT, CERTIFIED PERENIAL RYEGRASS CULTIVARS/CERTIFIED KENTUCKY BLUEGRASS AUG 15-OCT 15 1/4"-1/2" TALL FESCUE THEN SCARIFIED OR OTHERWISE LOOSENED TO A DEPTH OF 3 TO 5 INCHES. (1 LB./1000 SF) (2 LB./1000 SF)(2 LB./1000 SF) SF) SEEDINGRATE: 2 POUNDS MIXTURE PER 1000 S.F. SHOOSE A MINIMUM OF THREE b. DRILL OR CULTIPACKER SEEDING: MECHANIZED SEEDERS THAT APPLY AND COVER SEED WITH SOIL APPLY SOIL AMENDMENTS AS SPECIFIED ON THE APPROVED PLAN OR AS INDICATED BY THE RESULTS OF KENTUCKYBLUEGRASS CULTIVARS EITH EACH RANGING FROM 10 TO 35 PERCENT OF THE TOTAL MIXTURE MIXTURES 1, 4-7, 9, AND 10 FROM TABLE B.3 OF THE 2011 MARYLAND STANDARD AND SPECIFICATIONS FOR SOIL EROSION AND I. CULTIPACKING SEEDERS ARE REQUIRED TO BURY THE SEED IN SUCH A FASHION AS TO PROVIDE AT LEAST SEDIMENT CONTROL MAY BE USED. 1/4 INCH OF SOIL COVERING. SEEDBED MUST BE FIRM AFTER PLANTING. MIX SOIL AMENDMENTS INTO THE TOP 3 TO 5 INCHES OF SOIL BY DISKING OR OTHER SUITABLE MEANS. III. TALL FESCUE/KENTUCKY BLUEGRASS: FULL MIXTURE: FOR USE IN DROUGHT AREAS AND/OR FOI RAKE LAWN AREAS TO SMOOTH THE SURFACE, REMOVE LARGE OBJECTS LIKE STONES AND BRANCHES, AND II. APPLY SEED IN TWO DIRECTIONS, PERPENDICULAR TO EACH OTHER. APPLY HALF THE SEEDING RATE IN AREAS RECEIVING LOW TO MEDIUM MANAGEENT IN FULL SUN TO MEDIUM SHADE. RECOMMENDED (B-4-4) STANDARDS AND SPECIFICATIONS FOR DETAIL B-1 STABILIZED CONSTRUCTION READY THE AREA FOR SEED APPLICATION. LOOSEN SURFACE SOIL BY DRAGGING WITH A HEAVY CHAIN OR mixture includes; certified tall fescue cultivars 65 to 100 percent, certified kentucky ENTRANCI TEMPORARY STABILIZATION OTHER EQUIPMENT TO ROUGHEN THE SURFACE WHERE SITE CONDITIONS WILL NOT PERMIT NORMAL SEEDBED BLUEGRASS CULTIVARS 0 TO 5 PERCENT. SEEDING RATE: 5 TO 8 PERCENT PER 1000 S.F. ONE OR c. Hydroseeding: Apply seed uniformly with hydroseeder (slurry includes seed and fertilizer) PREPARATION. TRACK SLOPES 3:1 OR FLATTER WITH TRACKED EQUIPMENT LEAVING THE SOIL IN AN MORE CULTIVARS MAY BE BLENDED IRREGULAR CONDITION WITH RIDGES RUNNING PARALLEL TO THE CONTOUR OF THE SLOPE. LEAVE THE TOP 1 TO 3 INCHES OF SOIL LOOSE AND FRIABLE. SEEDBED LOOSENING MAY BE UNNECESSARY ON NEWLY IV. KENTUCKY BLUEGRASS/FINE FESCUE: SHADE MIXTURE: FOR USE IN AREAS WITH SHADE IN I. IF FERTILIZER IS BEING APPLIED AT THE TIME OF SEEDING, THE APPLICATION RATES SHOULD NOT EXCEED TO STABILIZE DISTURBED SOIL WITH VEGETATION FOR UP TO 6 MONTHS. BLUEGRASS LAWNS. FOR ESTABLISHMENT IN HIGH QUALITY, INTENSIVELY MANAGED TIRF AREA. MIXTURE THE FOLLOWING: NITROGEN, 100 POUNDS PER ACRE TOTAL OF SOLUBLE NITROGEN; P2 05 (PHOSPHOROUS), INCLUDES; CERTIFIED KENTUCKY BLUEGRASS CULTIVARS 30 TO 40 PERCANT AND CERTIFIES <u>Purpose</u> To use fast growing vegetation that provides cover on disturb soil. 200 POUNDS PER ACRE; K20 (POTASSIUM), 200 POUNDS PER ACRE. II. 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 FESCUE AND 60 TO 70 PERCENT. SEEDING RATES 1 1/2 TO 3 POUNDS PER 1000 S.F. C. IDEAL TIMES OF SEEDING FOR TURF GRASS MIXTURE 1. TOPSOIL IS PLACED OVER PREPARED SUBSOIL PRIOR TO ESTABLISHMENT OF PERMANENT VEGETATION. THE CONDITIONS WHERE PRACTICE APPLIES EXPOSED SOILS WHERE GROUND COVER IS NEEDED FOR A PERIOD OF 6 MONTHS OR LESS. FOR -PIPE (SEE NOTE 6 TIME. DO NOT USE BURNT OR HYDRATED LIME WHEN HYDROSEEDING WESTERN MD: MARCH 15 TO JUNE 1, AUGUST 1 TO OCTOBER 1 (HARDINESS ZONES: 5B,6A) PURPOSE IS TO PROVIDE A SUITABLE SOIL MEDIUM FOR VEGETATIVE GROWTH. SOILS OF CONCERN HAVE LOW PROFILE III. MIX SEED AND FERTILIZER ON SITE AND SEED IMMEDIATELY AND WITHOUT INTERRUPTION. CENTRAL MD: MARCH 1 TO MAY 15, AUGUST 15 TO OCTOBER 15 (HARDINESS ZONE: 6B) LONGER DURATION OF TIME, PERMANENT STABILIZATION PRACTICES ARE REQUIRED. MOISTURE CONTENT, LOW NUTRIENT LEVELS, LOW PH, MATERIALS TOXIC TO PLANTS, AND/OR UNACCEPTABLE IV. WHEN HYDROSEEDING DO NOT INCORPORATE SEED INTO THE SOIL. SOUTHERN MD. EASTERN SHORE: MARCH 1 TO MAY 15, AUGUST 15 TO OCTOBER 15 (HARDINESS ZONE: 7A, 7B) TOPSOIL SALVAGED FROM AN EXISTING SITE MAY BE USED PROVIDED IT MEETS THE STANDARDS AS SET SELECT ONE OR MORE OF THE SPECIES OR SEED MIXTURES LISTED IN TABLE B.1 FOR THE D. TILL AREAS TO RECEIVE SEED BY DISKING OR OTHER APPROVED METHODS TO A DEPTH OF 2 TO 4 FORTH IN THESE SPECIFICATIONS. TYPICALLY, THE DEPTH OF TOPSOIL TO BE SALVAGED FOR A GIVEN SOIL APPROPRIATE PLANT HARDINESS ZONE (FROM FIGURE B.3), AND ENTER THEM IN THE TEMPORARY SEEDING SUMMARY ALONG WITH APPLICATION RATES, SEEDING DATES AND 1 MUI CH MATERIALS (IN ORDER OF PREFERENCE) INCHES, LEVEL AND RAKE THE AREAS TO PREPARE A PROPER SEEDBED. REMOVE STONE AND DEBRIS TYPE CAN BE FOUND IN THE REPRESENTATIVE SOIL PROFILE SECTION IN THE SOIL SURVEY PUBLISHED BY a. STRAW CONSISTING OF THOROUGHLY THRESHED WHEAT, RYE, OAT, OR BARLEY AND REASONABLY BRIGHT IN OVER 1.5 INCHES IN DIAMETER. THE RESULTING SEEDBED MUST BE IN SUCH CONDITION THAT FUTURE SFFDING DEPTHS. IF THIS SUMMARY IS NOT PUT ON THE PLAN AND COMPLETED, THEN COLOR. STRAW IS TO BE FREE OF NOXIOUS WEED SEEDS AS SPECIFIED IN THE MARYLAND SEED LAW AND NOT MOWING OF GRASS WILL POSE NO DIFFICULTY. TABLE B-1 PLUS FORTELIZER AND LIME RATES MUST BE PUT ON THE PLAN. TOPSOILING IS LIMITED TO AREAS HAVING 2:1 OR FLATTER SLOPES WHERE: MUSTY, MOLDY, CAKED, DECAYED, OR EXCESSIVELY DUSTY. NOTE: USE ONLY STERILE STRAW MULCH IN E. IF SOIL MOISTURE IS DEFICIENT, SUPPLY NEW SEEDINGS WITH ADEQUATE WATER FOR PLANT GROWTH FOR SITES HAVING SOIL TESTS PERFORMED, USE AND SHOW THE RECOMMENDED RATES BY THE TESTING AGENCY. SOIL TESTS ARE NOT REQUIRED FOR TEMPORARY SEEDING. AREAS WHERE ONE SPECIES OF GRASS IS DESIRED 0.5 TO 1 INCH EVERY 3 TO 4 DAYS DEPENDING ON SOIL TEXTURE) UNTIL THEY ARE FIRMLY a. The texture of the exposed subsoil/parent material is not adequate to produce vegetative b. WOOD CELLULOSE FIBER MULCH (WCFM) CONSISTING OF SPECIALLY PREPARED WOOD CELLULOSE ESTABLISHED. THIS IS ESPECIALLY TRUE WHEN SEEDINGS ARE MADE LATE IN THE PLANTING SEASON, IN b. THE SOIL MATERIAL IS SO SHALLOW THAT THE ROOTING ZONE IS NOT DEEP ENOUGH TO SUPPORT PLANTS WHEN STABILIZATION IS REQUIRED OUTSIDE OF A SEEDING SEASON, APPLY SEED AND PROCESSED INTO A UNIFORM FIBROUS PHYSICAL STATE. ABNORMALLY DRY OR HOT SEASON, OR ON ADVERSE SITES. PLAN VIEW MULCH OR STRAW MULCH ALONE AS PRESCRIBED IN SECTION B-4-3.A.1b, AND MAINTAIN OR FURNISH CONTINUING SUPPLIES OF MOISTURE AND PLANT NUTRIENTS. I. WCFM IS TO BE DYED GREEN OR CONTAIN A GREEN DYE IN THE PACKAGE THAT WILL PROVIDE A UNTIL THE NEXT SEEDING SEASON. THE ORIGINAL SOIL TO BE VEGETATED CONTAINS MATERIAL TOXIC TO PLANT GROWTH, APPROPRIATE COLOR TO FACILITATE VISUAL INSPECTION OF THE UNIFORMLY SPREAD SLURRY. A MOUND OR PILE OF SOIL PROTECTED BY APPROPRIATELY DESIGNED EROSION AND SEDIMENT CONTROL MEASURES. II. WCFM, INCLUDING DYE, MUST CONTAIN NO GERMINATION OR GROWTH INHIBITING FACTORS. THE SOIL IS SO ACIDIC THAT TREATMENT WITH LIMESTONE IS NOT FEASIBLE. SEQUENCE OF CONSTRUCTION: III. WCFM MATERIALS ARE TO BE MANUFACTURED AND PROCESSED IN SUCH A MANNER THAT THE WOOD CELLULOSE FIBER MULCH WILL REMAIN IN UNIFORM SUSPENSION IN WATER UNDER AGITATION AND WILL CONSTRUCTION SPECIFICATIONS 4. AREAS HAVING SLOPES STEEPER THAN 2:1 REQUIRE SPECIAL CONSIDERATION AND DESIGN TO PROVIDE A DESIGNATED LOCATION FOR THE TEMPORARY STORAGE OF SOIL THAT CONTROLS THE POTENTIAL FOR PLACE STABILIZED CONSTRUCTION ENTRANCE IN ACCORDANCE WITH THE APPROVED PLAN, VEHICLES MUST TRAVEL OVER THE ENTIRE LENGTH OF THE SCE. USE MINIMUM LENGTH OF 50 FEET (*30 FEET FOR SINGLE RESIDENCE LOT). USE MINIMUM WIDTH OF 10 FEET. FLARE SCE 10 FEET MINIMUM AT THE ENSTRING ROAD TO PROVIDE A TURNING RADIUS. NOTE: HOUSES CANNOT BE CONSTRUCTED USING THIS DRAWING BLEND WITH SEED, FERTILIZER AND OTHER ADDITIVES TO FORM A HOMOGENEOUS SLURRY. THE MULCH TOPSOIL SPECIFICATIONS: SOIL TO BE USED AS TOPSOIL MUST MEET THE FOLLOWING CRITERIA EROSION, SEDIMENTATION, AND CHANGES TO DRAINAGE PATTERNS. MATERIAL MUST FORM A BLOTTER-LIKE GROUND COVER, ON APPLICATION, HAVING MOISTURE ABSORPTION CONDITIONS WHERE PRACTICE APPLIES TOPSOIL MUST BE A LOAM, SANDY LOAM, CLAY LOAM, SILT LOAM, SANDY CLAY LOAM, OR LOAMY SAND. OTHER SOILS MAY BE USED IF RECOMMENDED BY AN AGRONOMIST OR SOIL SCIENTIST AND APPROVED BY OBTAIN GRADING PERMIT (1 DAY). AND PERCOLATION PROPERTIES AND MUST COVER AND HOLD GRASS SEED IN CONTACT WITH THE SOIL STOCKPILE AREAS ARE UTILIZED WHEN IT IS NECESSARY TO SALVAGE AND STORE SOIL FOR LATER USE. 2. PIPE ALL SURFACE WATER FLOWING TO OR DIVERTED TOWARD THE SCE UNDER THE ENTRANCE, MAINTAINING POSITIVE DRAINAGE. PROTECT PIPE INSTALLED THROUGH THE SCE WITH A MOUNTABLE BERM WITH 5:1 SLOPES AND A MINIMAM OF 12 INCHES OF STONE OVER THE PIPE. PROVIDE PIPE AS SPECIFIED ON APPROVED PLAN. WHEN THE SCE IS LOCATED AT A HIGH SPOT AND HAS NO DRAINAGE TO CONVEY, A PIPE IS NOT NECESSARY. A MOUNTABLE BERM IS REQUIRED WHEN SCE IS NOT LOCATED AT A HIGH SPOT. WITHOUT INHIBITING THE GROWTH OF THE GRASS SEEDLINGS. 2. PERFORM CLEARING AND GRUBBING AS NECESSARY FOR THE INSTALLATION OF PERIMETER HE APPROPRIATE APPROVAL AUTHORITY. TOPSOIL MUST NOT BE A MIXTURE OF CONTRASTING TEXTURED IV. WCFM MATERIAL MUST NOT CONTAIN ELEMENTS OR COMPOUNDS AT CONCENTRATION LEVELS THAT WILL CONTROLS PER SHEET 2 (5 DAYS). SUBSOILS AND MUST CONTAIN LESS THAN 5 PERCENT BY VOLUME OF CINDERS, STONES, SLAG, COARSE FRAGMENTS. GRAVEL. STICKS, ROOTS, TRASH, OR OTHER MATERIALS LARGER THAN 1½ INCHES IN DIAMETER. 1. THE STOCKPILE LOCATION AND ALL RELATED SEDIMENT CONTROL PRACTICES MUST BE CLEARLY INDICATED ON THE EROSION AND SEDIMENT CONTROL PLAN. TOPSOIL MUST BE FREE OF NOXIOUS PLANTS OR PLANT PARTS SUCH AS BERMUDA GRASS, QUACK V. WCFM MUST CONFORM TO THE FOLLOWING PHYSICAL REQUIREMENTS: FIBER LENGTH OF 3. CONSTRUCT STABILIZED CONSTRUCTION ENTRANCE AT LOCATION INDICATED (1 DAY). APPROXIMATELY 10 MILLIMETERS, DIAMETER APPROXIMATELY 1 MILLIMETER, PH RANGE OF 4.0 TO 8.5, GRASS, JOHNSON GRASS, NUT SEDGE, POISON IVY, THISTLE, OR OTHERS AS SPECIFIED. 2. THE FOOTPRINT OF STOCKPILE MUST BE SIZED TO ACCOMMODATE THE ANTICIPATED VOLUME OF MATERIAL AND 4. CONSTRUCT PERIMETER CONTROLS: SILT FENCES (SF), SUPER SILT FENCES (SSF) (2 DAYS) ASH CONTENT OF 1.6 PERCENT MAXIMUM AND WATER HOLDING CAPACITY OF 90 PERCENT MINIMUM. TOPSOIL SUBSTITUTES OR AMENDMENTS, AS RECOMMENDED BY A QUALIFIED AGRONOMIST OR SOIL BASED ON A SIDE SLOPE RATIO NO STEEPER THAN 2:1. BENCHING MUST BE PROVIDED IN ACCORDANCE WITH PLACE CRUSHED AGGREGATE (2 TO 3 INCHES IN SIZE) OR EQUIVALENT RECYCLED CONCRETE (WITHOU REBAR) AT LEAST 6 INCHES DEEP OVER THE LENGTH AND WIDTH OF THE SCE. SCIENTIST AND APPROVED BY THE APPROPRIATE APPROVAL AUTHORITY, MAY BE USED IN LIEU OF NATURAL SECTION B-3 LAND GRADING. CONSTRUCT PERMANENT AND TEMPORARY DIVERSION SWALES (A-2), SEED AND MULCH 5. MAINTAIN ENTRANCE IN A CONDITION THAT MINIMIZES TRACKING OF SEDIMENT, ADD STONE OR MAKE OTHER REPAIRS AS CONDITIONS DEMAND TO MAINTAIN CLEAN SURFACE, MOUNTABLE BERM, AND SPECIFIED DIMENSIONS. MAMEDIATELY REMOVE STONE AND/OR SEDIMENT SPILLS, DROPPED, OR TRACKED ONTO ADJACENT ROADWAY BY VACUUMING, SCRAPING, AND/OR SWEEPING. WASHING ROADWAY TO REMOVE MUD TRACKED ONTO PAVEMENT IS NOT ACCEPTABLE UNLESS WASH WATER IS DIRECTED TO AN APPROVED SEDIMENT CONTROL PRACTICE. 3. RUNOFF FROM THE STOCKPILE AREA MUST DRAIN TO A SUITABLE SEDIMENT CONTROL PRACTICE. a. APPLY MULCH TO ALL SEEDED AREAS IMMEDIATELY AFTER SEEDING IMMEDIATELY (7 DAYS). b. WHEN STRAW MULCH IS USED, SPREAD IT OVER ALL SEEDED AREAS AT THE RATE OF 2 TONS PER ACRE 4. ACCESS THE STOCKPILE AREA FROM THE UPGRADE SIDE EROSION AND SEDIMENT CONTROL PRACTICES MUST BE MAINTAINED WHEN APPLYING TOPSO TO A UNIFORM LOOSE DEPTH OF 1 TO 2 INCHES. APPLY MULCH TO ACHIEVE A UNIFORM DISTRIBUTION AND CLEAR AND GRUB SITE (5 DAYS). UNIFORMLY DISTRIBUTE TOPSOIL IN A 5 TO 8 INCH LAYER AND LIGHTLY COMPACT TO A MINIMUM 5. CLEAR WATER RUNOFF INTO THE STOCKPILE AREA MUST BE MINIMIZED BY USE OF A DIVERSION DEVISE SUCH AS DEPTH SO THAT THE SOIL SURFACE IS NOT EXPOSED. WHEN USING A MULCH ANCHORING TOOL, INCREASE THICKNESS OF 4 INCHES. SPREADING IS TO BE PERFORMED IN SUCH A MANNER THAT SODDING OF AN EARTH DIKE, TEMPORARY SWALE OR DIVERSION FENCE. PROVISIONS MUST BE MADE FOR DISCHARGING CONCENTRATED FLOW IN A NON-EROSIVE MANNER. THE APPLICATION RATE TO 2.5 TONS PER ACRE 7. GRADE SITE AS SHOWN ON GRADING AND SEDIMENT CONTROL PLAN (10 DAYS). SEEDING CAN PROCEED WITH A MINIMUM OF ADDITIONAL SOIL PREPARATION AND TILLAGE. ANY c. WOOD CELLULOSE FIBER USED AS MULCH MUST BE APPLIED AT A NET DRY WEIGHT OF 1500 POUNDS PER IRREGULARITIES IN THE SURFACE RESULTING FROM TOPSOILING OR OTHER OPERATIONS MUST BE ACRE. MIX THE WOOD CELLULOSE FIBER WITH WATER TO ATTAIN A MIXTURE WITH A MAXIMUM OF 50 POUNDS WHERE RUNOFF CONCENTRATES ALONG THE TOE OF THE STOCKPILE FILL, AN APPROPRIATE EROSION/SEDIMENT 8. CONSTRUCT 12" HDPE CULVERT AT THE ENTRANCE, UPGRADE EXISTING McCANN FARM ROAD MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTRO CORRECTED IN ORDER TO PREVENT THE FORMATION OF DEPRESSIONS OR WATER POCKETS OF WOOD CELLULOSE FIBER PER 100 GALLONS OF WATER. TOPSOIL MUST NOT BE PLACED IF THE TOPSOIL OR SUBSOIL IS IN A FROZEN OR MUDDY CONDITION. WHEN CONTROL PRACTICE MUST BE USED TO INTERCEPT THE DISCHARGE. TEE-TURNAROUND. (6 DAYS) 2011 THE SUBSOIL IS EXCESSIVELY WET OR IN A CONDITION THAT MAY OTHERWISE BE DETRIMENTAL TO PROPER 7. STOCKPILE MUST BE STABILIZED IN ACCORDANCE WITH THE 3/7 DAY STABILIZATION REQUIREMENT AS WELL AS GRADING AND SEEDBED PREPARATION CONSTRUCT USE-IN-COMMON DRIVEWAY (15 DAYS). a. PERFORM MULCH ANCHORING IMMEDIATELY FOLLOWING APPLICATION OF MULCH TO MINIMIZE LOSS BY WIND Standard B—4—1 incremental stabilization and standard B—4—4 temporary stabilization. DETAIL E-1 SILT FENCE C. SOIL AMENDMENTS (FERTILIZER AND LIME SPECIFICATIONS) OR WATER. THIS MAY BE DONE BY ONE OF THE FOLLOWING METHODS (LISTED BY PREFERENCE), DEPENDING ----SF------1 8. IF THE STOCKPILE IS LOCATED ON AN IMPERVIOUS SURFACE, A LINER SHOULD BE PROVIDED BELOW THE STOCKPILE 10. CONSTRUCT GRASS SWALES (M-8) #1 AND #2 ALONG USE-IN-COMMON DRIVEWAY (4 DAYS) UPON THE SIZE OF THE AREA AND FROSION HAZARD: TO FACILITATE CLEANUP. STOCKPILES CONTAINING CONTAMINATED MATERIAL MUST COVERED WITH IMPERMEABLE 1. SOIL TESTS MUST BE PERFORMED TO DETERMINE THE EXACT RATIOS AND APPLICATION RATES FOR BOTH I. A MULCH ANCHORING TOOL IS A TRACTOR DRAWN IMPLEMENT DESIGNED TO PUNCH AND ANCHOR MULCH CENTER TO CENTER 36 IN MIN. FENCE POST LENGTH DRIVEN MIN. 16 IN INTO GROUND LIME AND FERTILIZER ON SITES HAVING DISTURBED AREAS OF 5 ACRES OR MORE. SOIL ANALYSIS MAY BE 11. DELAY CONSTRUCTION OF MICRO-BIORETENTION (M-6) FACILITIES UNTIL COMPLETION OF THE INTO THE SOIL SURFACE A MINIMUM OF 2 INCHES. THIS PRACTICE IS MOST EFFECTIVE ON LARGE AREAS, PERFORMED BY A RECOGNIZED PRIVATE OR COMMERCIAL LABORATORY. SOIL PROPOSED IMPROVEMENTS WITHIN THE CONTRIBUTING DRAINAGE AREAS. BUT IS LIMITED TO FLATTER SLOPES WHERE EQUIPMENT CAN OPERATE SAFELY. IF USED ON SLOPING LAND, OPERATION AND MAINTENANCE SCHEDULE FOR ENGINEERING PURPOSES MAY ALSO BE USED FOR CHEMICAL ANALYSES THIS PRACTICE SHOULD FOLLOW THE CONTOUR. MICRO-BIORETENTION (M-6), GRASS SWALE (M-8) 12. STABILIZE ALL DISTURBED AREAS (1 DAY). 0 II. WOOD CELLULOSE FIBER MAY BE USED FOR ANCHORING STRAW. APPLY THE FIBER BINDER AT A NET DRY FERTILIZERS MUST BE UNIFORM IN COMPOSITION FREE FLOWING AND SUITABLE FOR ACCURATE APPLICATION "16 IN MIN. HEIGHT OF WOVEN SLIT FILM GEOTEXTILE BY APPROPRIATE EQUIPMENT. MANURE MAY BE SUBSTITUTED FOR FERTILIZER WITH PRIOR APPROVAL FROM THE WEIGHT OF 750 POUNDS PER ACRE. MIX THE WOOD CELLULOSE FIBER WITH WATER AT A MAXIMUM OF 13. UPON THE APPROVAL OF THE SEDIMENT CONTROL INSPECTOR, REMOVE SEDIMENT APPROPRIATE APPROVAL AUTHORITY. FERTILIZERS MUST ALL BE DELIVERED TO THE SITE FULLY LABELED 50 POUNDS OF WOOD CELLULOSE FIBER PER 100 GALLONS OF WATER. ANNUAL MAINTENANCE OF PLANT MATERIAL, MULCH LAYER AND SOIL LAYER IS REQUIRED. MAINTENANCE OF MULCH IN MIN. DEPT CONTROL DEVICES USED FOR CONSTRUCTION OF THE DRIVEWAY ONLY (DIVERSION SWALE #1). LEAVE IN PLACE ALL SEDIMENT CONTROL DEVICES THAT CAN BE USED FOR FUTURE III. SYNTHETIC BINDERS SUCH AS ACRYLIC DLR (AGRO-TACK), DCA-70, PETROSET, TERRA TAX II, TERRA TACK AR OR OTHER APPROVED EQUAL MAY BE USED. FOLLOW APPLICATION RATES AS SPECIFIED BY THE AND SOIL IS LIMITED TO CORRECTING AREAS OF EROSION OR WASH OUT. ANY MULCH REPLACEMENT SHALL BE ACCORDING TO THE APPLICABLE LAWS AND MUST BEAR THE NAME, TRADE NAME OR TRADEMARK AND DONE IN THE SPRING. PLANT MATERIAL SHALL BE CHECKED FOR DISEASE AND INSECT INFESTATION AND VARRANTY OF THE PRODUCER. MANUFACTURER. APPLICATION OF LIQUID BINDERS NEEDS TO BE HEAVIER AT THE EDGES WHERE WIND MAINTENANCE WILL ADDRESS DEAD MATERIAL AND PRUNING. ACCEPTABLE REPLACEMENT PLANT MATERIAL IS CONSTRUCTION OF THE HOUSES. LIME MATERIALS MUST BE GROUND LIMESTONE (HYDRATED OR BURNT LIME MAY BE SUBSTITUTED EXCEPT CATCHES MULCH, SUCH AS IN VALLEYS AND ON CRESTS OF BANKS. IMITED TO THE FOLLOWING: 2000 MARYLAND STORMWATER DESIGN MANUAL VOLUME II, TABLE A.4.1 AND 2. WHEN HYDROSEEDING) WHICH CONTAINS AT LEAST 50 PERCENT TOTAL OXIDES (CALCIUM OXIDE PLUS MAGNESIUM OXIDE). LIMESTONE MUST BE GROUND TO SUCH FINENESS THAT AT LEAST 50 PERCENT WILL USE OF ASPHALT BINDERS IS STRICTLY PROHIBITED. SCHEDULE OF PLANT INSPECTION WILL BE TWICE A YEAR IN SPRING AND FALL. THIS INSPECTION WILL INCLUDE REMOVAL OF DEAD AND DISEASED VEGETATION CONSIDERED BEYOND TREATMENT, TREATMENT OF ALL DISEASED IV. LIGHTWEIGHT PLASTIC NETTING MAY BE STAPLED OVER THE MULCH ACCORDING TO MANUFACTURER PASS THROUGH A #100 MESH SIEVE AND 98 TO 100 PERCENT WILL PASS THROUGH A #20 MESH SIEVE. RECOMMENDATIONS. NETTING IS USUALLY AVAILABLE IN ROLLS 4 TO 15 FEET WIDE AND 300 TO 3,000 FENCE POST 18 IN MIN. — ABOVE GROUND MOVEN SLIT FILM— GEOTEXTILE TREES AND SHRUBS AND REPLACEMENT OF ALL DEFICIENT STAKES AND WIRES. LIME AND FERTILIZER ARE TO BE EVENLY DISTRIBUTED AND INCORPORATED INTO THE TOP 3 TO 5 INCHES OF SOIL BY DISKING OR OTHER SUITABLE MEANS. MULCH SHALL BE INSPECTED EACH SPRING. REMOVE PREVIOUS MULCH LAYER BEFORE APPLYING NEW LAYER ONCE WHERE THE SUBSOIL IS EITHER HIGHLY ACIDIC OR COMPOSED OF HEAVY CLAYS, SPREAD GROUND LIMESTONE AT THE RATE OF 4 TO 8 TONS/ACRE (200-400 POUNDS PER 1,000 SQUARE FEET) PRIOR TO THE SOIL EROSION TO BE ADDRESSED ON AN AS NEEDED BASIS, WITH A MINIMUM OF ONCE PER MONTH AND AFTER DETAIL E-3 SUPER SILT FENCE ----SSF----HEAVY STORM EVENTS. STANDARD SEDIMENT CONTROL NOTES INTO THE GROUND. BACKFILL AND COMPACT THE SOIL ON BOTH SIDES OF GEOTEXTILE. OPERATION AND MAINTENANCE SCHEDULE FOR 1. A PRE-CONSTRUCTION MEETING MUST OCCUR WITH THE HOWARD COUNTY DEPARTMENT OF PUBLIC PRIVATELY OWNED AND MAINTAINED PERMEABLE CROSS SECTION WORKS, CONSTRUCTION INSPECTION DIVISION (CID), 410-313-1855 AFTER THE FUTURE LOD AND 7. ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT PROTECTED AREAS ARE MARKED CLEARLY IN THE FIELD. A MINIMUM OF 48 HOUR NOTICE TO CID OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE. MUST BE GIVEN AT THE FOLLOWING STAGES: OWNER/DEVELOPER PAVEMENT SURFACES SHOULD BE SWEPT AND VACUUMED (IF POROUS CONCRET A. PRIOR TO THE START OF EARTH DISTURBANCE, UPON COMPLETION OF THE INSTALLATION OF TO REDUCE SEDIMENT ACCUMULATION AND ENSURE CONTINUED SURFACE POROSITY ADDITIONAL SEDIMENT CONTROL MUST BE PROVIDED, IF DEEMED NECESSARY NICHOLAS J. LALLY PERIMETER EROSION AND SEDIMENT CONTROLS, BUT BEFORE PROCEEDING WITH ANY OTHER BY THE CID. THE SITE AND ALL CONTROLS SHALL BE INSPECTED BY THE CONTRACTOR SWEEPING SHOULD BE PERFORMED AT LEAST TWICE ANNUALLY WITH A COMMERCIAL EARTH DISTURBANCE OR GRADING 14830 OLD FREDERICK ROAD WEEKLY: AND THE NEXT DAY AFTER EACH RAIN EVENT. A WRITTEN REPORT BY THE CLEANING UNIT. WASHING OR COMPRESSED AIR UNITS SHOULD NOT BE USED TO B. PRIOR TO THE START OF ANOTHER PHASE OF CONSTRUCTION OR OPENING OF ANOTHER GALVANIZED CHAIN LINK FENCE WITH WOVEN SLIT FILM GEOTEXTILE WOODBINE, MARYLAND 21797 CONTRACTOR, MADE AVAILABLE UPON REQUEST, IS PART OF EVERY INSPECTION AND SHOULD PERFORM SURFACE CLEANING. GRADING UNIT 410-489-7744 DRAINAGE PIPES, INLETS, STONE EDGE DRAINS AND OTHER STRUCTURES WITHIN OR C. PRIOR TO THE REMOVAL OR MODIFICATION OF SEDIMENT CONTROL PRACTICES. DRAINING TO THE SUBBASE SHOULD BE CLEANED OUT AT REGULAR INTERVALS. -INSPECTION TYPE (ROUTINE, PRE-STORM EVENT, DURING RAIN EVENT) 3. DEICERS SHOULD BE USED IN MODERATION, DEICERS SHOULD BE NON-TOXIC AND OTHER BUILDING OR GRADING INSPECTION APPROVALS MAY NOT BE AUTHORIZED UNTIL THIS **ENGINEER'S CERTIFICATE** BE APPLIED FITHER AS CALCIUM MAGNESIUM ACETATE OR AS PRETREATED SALT -NAME AND TITLE OF INSPECTOR INITIAL APPROVAL BY THE INSPECTION AGENCY IS MADE. OTHER RELATED STATE AND FEDERAL I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS SNOW PLOWING SHOULD BE DONE CAREFULLY WITH BLADES SET ONE-INCH ABOVE NOVEN SLIT FILM GEOTEXTILE -WEATHER INFORMATION (CURRENT CONDITIONS AS WELL AS TIME AND AMOUNT O PERMITS SHALL BE REFERENCED, TO ENSURE COORDINATION AND TO AVOID CONFLICTS WITH THIS THE SURFACE. PLOWED SNOW PILES AND SNOWMELT SHOULD NOT BE DIRECTED TO A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF LAST RECORDED PRECIPITATION) THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THI FENCE SECTIONS (TOP VIEW) -BRIEF DESCRIPTION OF PROJECT'S STATUS (E.G., PERCENT COMPLETE) AND/OR REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE CURRENT ACTIVITIES MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTRO PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE 2011 MARYLAND -EVIDENCE OF SEDIMENT DISCHARGES STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, AND REVISIONS 1.20.207 -IDENTIFICATION OF PLAN DEFICIENCIES 2011 -IDENTIFICATION OF SEDIMENT CONTROLS THAT REQUIRE MAINTENANCE DATE -IDENTIFICATION OF MISSING OR IMPROPERLY INSTALLED SEDIMENT CONTROLS **DETAIL C-2 TEMPORARY SWALE** SIGNATURE OF ENGINEER STABILIZATION MATTIN INSTALL 2% INCH DIAMETER GALVANIZED STEEL POSTS OF 0.095 INCH WALL THICKNESS AND SIX FO LENGTH SPACED NO FURTHER THAN 10 FEET APART. DRIVE THE POSTS A MINIMUM OF 36 INCHES INTO THE GROUND. CHANNEL APPLICATION FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY (* INCLUDE SHEAR STRESS -compliance status regarding the sequence of construction and STABILIZATION IS REQUIRED WITHIN THREE (3) CALENDAR DAYS AS TO THE SURFACE OF ALL STABILIZATION REQUIREMENTS SAMER A. ALOMER, P.E. PERIMETER CONTROLS, DIKES, SWALES, DITCHES, PERIMETER SLOPES, AND ALL SLOPES STEEPER -PHOTOGRAPHS FASTEN 9 GAUGE OR HEAVIER GALVANIZED CHAIN LINK FENCE (2% INCH MAXIMUM OPENING) 4: INCHES IN HEIGHT SECURELY TO THE FENCE POSTS WITH WIRE TIES OR HUG RINGS. PRINTED NAME OF ENGINEER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1); AND SEVEN (7) CALENDAR DAYS AS TO ALL OTHER -MONITORING/SAMPLING FASTEN WOVEN SLIT FILM GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS, SECURELY TO TH UPSLOPE SIDE OF CHAIN LINK FENCE WITH TIES SPACED EVERY 24 INCHES AT THE TOP AND MID SECTION. EMBED GEOTEXTILE AND CHAIN LINK FENCE A MINIMARY OF 8 INCHES INTO THE GROUND. DISTURBED AREAS ON THE PROJECT SITE EXCEPT FOR THOSE AREAS UNDER ACTIVE GRADING. -MAINTENANCE AND/OR CORRECTIVE ACTION PERFORMED DEVELOPERS CERTIFICATE -OTHER INSPECTION ITEMS AS REQUIRED BY THE GENERAL PERMIT FOR ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN WHERE ENDS OF THE GEOTEXTILE COME TOGETHER, THE ENDS SHALL BE OVERLAPPED BY 6 INCHES, FOLDED, AND STAPLED TO PREVENT SEDIMENT BY PASS. I CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE STORMWATER ASSOCIATED WITH CONSTRUCTION ACTIVITIES (NPDES, MDE). ACCORDING TO THIS PLAN. AND THAT ANY RESPONSIBLE PERSONNE ACCORDANCE WITH THE 2011 MARYLAND STANDARD AND SPECIFICATIONS FOR SOIL EROSION AND ヹ EXTEND BOTH ENDS OF THE SUPER SILT FENCE A MINIMUM OF FIVE HORIZONTAL FEET UPSLOPE AT 45 DEGREES TO THE MAIN FENCE ALIGNMENT TO PREVENT RUNOFF FROM GOING AROUND THE ENDS OF THE SUPER SILT FENCE. INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF CROSS SECTION SEDIMENT CONTROL FOR TOPSOIL (SEC. B-4-2), PERMANENT SEEDING (SEC. B-4-5), 9. TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE PIPE LENGTHS OR THAT ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TEMPORARY SEEDING (SEC. B-4-4) AND MULCHING (SEC. B-4-3). TEMPORARY STABILIZATION WHICH CAN AND SHALL BE BACK-FILLED AND STABILIZED BY THE END OF EACH WORKDAY, TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE WITH MULCH ALONE CAN ONLY BE APPLIED BETWEEN THE FALL AND SPRING SEEDING DATES IF 4 FT MIN. BEGINNING THE PROJECT. HOWARD SOIL CONSERVATION DISTRICT IS AUTHORIZED THE GROUND IS FROZEN. INCREMENTAL STABILIZATION (SEC. B-4-1) SPECIFICATIONS SHALL BE TO CONDUCT PERIODIC ON-SITE INSPECTION CONTINUOUS GRADE 0.5% MIN. TO 10% MAX. SLOPE 10. ANY MAJOR CHANGES OR REVISIONS TO THE PLAN OR SEQUENCE OF CONSTRUCTION MUST BE ENFORCED IN AREAS WITH >15' OF CUT AND/OR FILL. STOCKPILES (SEC. B-4-8) IN EXCESS OF CONSTRUCTION SPECIFICATIONS ISOMETRIC VIEW V V V V V V REVIEWED AND APPROVED BY THE HSCD PRIOR TO PROCEEDING WITH CONSTRUCTION. MINOR 20 FT. MUST BE BENCHED WITH STABLE OUTLET. ALL CONCENTRATED FLOW, STEEP SLOPE, AND -21-21 REVISIONS MAY ALLOWED BY THE CID PER THE LIST OF HSCD-APPROVED FIELD CHANGES. HIGHLY ERODIBLE AREAS SHALL RECEIVE SOIL STABILIZATION MATTING (SEC. B-4-6). MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL USE TEMPORARY SOIL STABILIZATION MATTING MADE OF DEGRADABLE (LASTS 6 MONTHS MINIMUM) NATURAL OR MAN-MADE FIBERS (MOSTLY ORGANIC). MAT MUST HAVE UNFORM THICKNESS AND DISTRIBUTION OF FIBERS THROUGHOUT AND BE SMOLDER RESISTANT. CHEMICALS USED IN THE MAT MUST BE NOW-LEACHING AND NON-TOXIC TO VEGETATION AND SEED GERMINATION AND NON-INJURIOUS TO THE SIGN. IF PRESENT, NETTING MUST BE EXTRUDED PLASTIC WITH A MAXIMUM MESH OPPRING OF 222 INCHES AND SUFFICIENTLY BONDED OR SEWN ON 2 INCH CENTERS ALONG LONGITUDINAL AXIS OF THE MATERIAL TO PREVENT SEPARATION OF THE NET FROM THE PARENT LS. DEPARTMENT OF AGRICULTURE 2011 MARYLAND DEPARTMENT OF ENMISORMEN WATER MANAGEMENT ADMINISTRATION PLAN VIEW DISTURBANCE SHALL NOT OCCUR OUTSIDE THE L.O.D. A PROJECT IS TO BE SEQUENCED SO THAT $E \leq$ ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE, AND ARE TO BE MAINTAINED IN GRADING ACTIVITIES BEGIN ON ONE GRADING UNIT (MAXIMUM ACREAGE OF 20 AC. PER GRADING OPERATIVE CONDITION UNTIL PERMISSION FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE LDEN FLOW CHANNEL STABILIZATION DETAIL E-1 SILT FENCE UNIT) AT A TIME. WORK MAY PROCEED TO A SUBSEQUENT GRADING UNIT WHEN AT LEAST 50 |----SF-----| SEED WITH STRAW MULCH AND TACK. (NOT ALLOWED FOR CLEAR WATER DIVERSION PERCENT OF THE DISTURBED AREA IN THE PRECEDING GRADING UNIT HAS BEEN STABILIZED AND A-2/B-2 SEED WITH SOIL STABILIZATION MATTING OR LINE WITH SOI APPROVED BY THE CID. UNLESS OTHERWISE SPECIFIED AND APPROVED BY THE HSCD, NO MORE -3/8-34 to 7 inch stone or equivalent recycled concrete pressed into soil a minimum of 7 inches and flush with ground. THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT TOTAL AREA OF SITE: THAN 30 ACRES CUMULATIVELY MAY BE DISTURBED AT A GIVEN TIME 10.03 USE WOOD POSTS 1% \pm 1% \pm 1% inch (winding) square cut of sound quality hardwood. As an alternative to wooden post use standard "t" or "u" section steel posts weighing no less than 1 pound per linear foot. CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT. AREA DISTURBED __2.67__ ACRES MI Bo 12. WASH WATER FROM ANY EQUIPMENT, VEHICLES, WHEELS, PAVEMENT, AND OTHER SOURCES AREA TO BE ROOFED OR PAVED: __0.53____ACRES CONSTRUCTION SPECIFICATIONS AREA TO BE VEGETATIVE STABILIZED: __1.65____ACRES MUST BE TREATED IN A SEDIMENT BASIN OR OTHER APPROVED WASHOUT STRUCTURE. Wender Bratchie REMOVE AND DISPOSE OF ALL TREES, BRUSH, STUMPS, OBSTRUCTIONS, AND OTHER OBJECTIONABLE IATERIAL SO AS NOT TO INTERFERE WITH PROPER FUNCTION OF TEMPORARY SWALE. --3,000____CU. YDS. 13. TOPSOIL SHALL BE STOCKPILED AND PRESERVED ON-SITE FOR REDISTRIBUTION ONTO FINAL TOTAL FILL: _3,000_ ___CU. YDS. HOWARD SOIL CONSERVATION DISTRICT DATE OFFSITE WASTE/BORROW AREA LOCATION: PROVIDE MANUFACTURER CERTIFICATION TO THE AUTHORIZED REPRESENTATIVE OF THE INSPECTION/ENFORCEMENT AUTHORITY SHOWING THAT THE GEOTEXTILE USED MEETS THE REQUIREMENTS IN SECTION H-1 MATERIALS. . STABILIZE TEMPORARY SWALE WITHIN THREE DAYS OF INSTALLATION. STABILIZE SWALES USED FOR LEAR WATER DIVERSION WITHIN 24 HOURS OF INSTALLATION. 14. ALL SILT FENCE AND SUPER SILT FENCE SHALL BE PLACED ON-THE-CONTOUR, AND BE APPROVED: DEPARTMENT OF PLANNING AND ZONIN EMBED GEOTEXTILE A MINIMUM OF 8 INCHES VERTICALLY INTO THE GROUND, BACKFILL AND COMPACTHE SOIL ON BOTH SIDES OF FABRIC. HEREBY CERTIFY THAT THESE DOCUMENTS WERE IMBERICATED AT 25' MINIMUM INTERVALS, WITH LOWER ENDS CURLED UPHILL BY 2' IN ELEVATION. PREPARED OR APPROVED BY ME AND THAT I AM OVERLAP OR ABUT THE ROLL EDGES PER MANUFACTURER RECOMMENDATIONS, OVERLAP ROLL ENDS BY 6 INCHES (MINIMUM), WITH THE UPSTREAM MAT OVERLAPPING ON TOP OF THE NEXT DOWNSTREA 15. STREAM CHANNELS MUST NOT BE DISTURBED DURING THE FOLLOWING RESTRICTED TIME 6. MAINTAIN LINE, GRADE, AND CROSS SECTION. REMOVE ACCUMULATED SEDIMENT AND DEBRIS, AND MAINTAIN POSITIVE DRAINAGE. KEEP TEMPORARY SWALE AND POINT OF DISCHARGE FREE OF EROSION, AND CONTINUOUSLY MEET REQUIREMENTS FOR ADEQUATE VEGETATIVE ESTABLISHMENT IN ACCORDANCE WITH SECTION B-4 VEGETATIVE STABILIZATION. A DULY LICENSED PROFESSIONAL ENGINEER EXTEND BOTH ENDS OF THE SILT FENCE A MINIMUM OF FIVE HORIZONTAL FEET UPSLOPE AT 45 DEGREES TO THE MAIN FENCE ALIGNMENT TO PREVENT RUNOFF FROM GOING AROUND THE ENDS OF THE SILT FENCE. 2.19.21 PERIODS (INCLUSIVE): UNDER THE LAWS OF THE STATE OF MARYLAND. CHIEF, DEVELOPMENT ENGINEERING DIVISION / DATE USE I AND IP MARCH 1 - JUNE 15 LICENSE NO. 26859, EXP DATE 08/08/21 USE III AND IIIP OCTOBER 1 - APRIL 30 UPON REMOVAL OF TEMPORARY SWALE, GRADE AREA FLUSH WITH EXISTING GROUND. WITHIN 24 URS OF REMOVAL STABILIZE DISTURBED AREA WITH TOPSOIL, SEED, AND MULCH, OR AS SPECIFIED ON USE IV MARCH 1 - MAY 31 1,20.2021 CHIEF, DIVISION OF LAND DEVELOPMENT DATE 4 OF 5 16. A COPY OF THIS PLAN, THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL SAMER A. ALOMER, P.E. EROSION AND SEDIMENT CONTROL AND ASSOCIATED PERMITS SHALL BE ON-SITE AND MARYLAND DEPARTMENT OF ENVIRONMENT U.S. DEPARTMENT OF AGRICULTURE 2011 U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE 2011 2011 AVAILABLE WHEN THE SITE IS ACTIVE.









OPERATION AND MAINTENANCE SCHEDULE

THE OWNER SHALL INSPECT THE MONITORING WELLS AND STRUCTURES ON A QUARTERLY BASIS AND AFTER EVERY HEAVY STORM EVENT. THE OWNER SHALL RECORD THE WATER LEVELS AND SEDIMENT BUILD-UP IN THE MONITORING WELLS OVER A PERIOD OF SEVERAL DAYS TO ENSURE TRENCH DRAINAGE. THE MAINTENANCE LOG BOOK SHALL BE AVAILABLE TO HOWARD COUNTY FOR INSPECTION

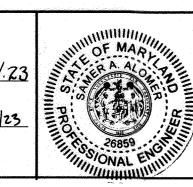
THE PURPOSE OF THIS PLAN IS TO SHOW THE FINAL GRADING, SEDIMENT CONTROL AND STORMWATER MANAGEMENT FOR EACH LOT.

FOR DRY WELLS (M-5)

WHEN THE FACILITY BECOMES CLOGGED SO THAT IT DOES NOT DRAIN DOWN WITHIN A 72-HOUR TIME PERIOD, CORRECTIVE ACTION SHALL BE TAKEN. TO ENSURE COMPLIANCE WITH OPERATION AND MAINTENANCE CRITERIA.

ONCE THE PERFORMANCE CHARACTERISTICS OF THE INFILTRATION FACILITY HAVE BEEN VERIFIED, THE MONITORING SCHEDULE CAN BE REDUCED TO AN ANNUAL BASIS UNLESS THE PERFORMANCE DATA INDICATES THAT A MORE FREQUENT SCHEDULE IS REQUIRED.

APPROVED: DEPARTMENT OF PLANNING AND ZONING CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE CHIEF, DIVISION OF LAND DEVELOPMENT DATE



I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 26859, EXP DATE 08/08/25

SAMER A. ALOMER, P.E.

5 of 5

ASSOC.
Surveyors
), Ellicott City,

MILDENBERG, BOENDER & / Engineers Planners