

The process of preparing the soils to sustain adequate vegetative stabilization.

Conditions Where Practice Applies: Where vegetative stabilization is to be established

To provide a suitable soil medium for vegetative growth.

A. Soil Preparation

1. Temporary Stabilization a. Seedbed preparation consists of loosening soil to a depth of 3 to 5 inches by means of suitable agricultural or construction equipment, such as disc harrows or chisel plows or rippers mounted on construction equipment. After the soil is loosened, it must not be rolled or dragged smooth but left in the roughened condition. Slopes 3:1 or flatter are to be tracked with ridges running parallel to the contour of the slope.

b. Apply fertilizer and lime as prescribed on the plans. c. Incorporate lime and fertilizer into the top 3 to 5 inches of soil by disking or other suitable

2. Permanent Stabilization a. A soil test is required for any earth disturbance of 5 acres or more. The minimum soil conditions required for permanent vegetative establishment are: i. Soil pH between 6.0 and 7.0.

u. Soluble salts less than 500 parts per milion (ppm). III. Soil contains less than 40 percent clay but enough fine grained material (greater than 30 percent silt plus clay) to provide the capacity to hold a moderate amount of moisture. An exception: if lovegrass will be planted, then a sandy soil (less than 30 percent silt plus clay) would be acceptable.

iv. Soil contains 1.5 percent minimum organic matter by weight. v. Soil contains sufficient pore space to permit adequate root penetration b. Application of amendments or topsoil is required if on-site soils do not meet the above

c. Graded areas must be maintained in a true and even grade as specified on the approved plan, then scarified or otherwise loosened to a depth of 3 to 5 inches. B.13 d. Apply soil amendments as specified on the approved plan or as indicated by the results of a soil

e. Mix soil amendments into the top 3 to 5 inches of soil by disking or other suitable means. Rake lawn areas to smooth the surface, remove large objects like stones and branches, and ready the area for seed application. Loosen surface soil by dragging with a heavy chain or other equipment to roughen the surface where site conditions will not permit normal seedbed preparation. Track slopes 3:1 or flatter with tracked equipment leaving the soil in an irregular condition with indiges running parallel to the contour of the slope. Leave the top 1 to 3 inches of soil loose and fnable. Seedbed loosening may be unnecessary on newly disturbed areas.

1. Topsoil is placed over prepared subsoil prior to establishment of permanent vegetation. The purpose is to provide a suitable soil medium for vegetative growth. Soils of concern have low moisture content, low nutrient levels, low pH, materials toxic to plants, and/or unacceptable soil gradation. 2. Topsoil salvaged from an existing site may be used provided it meets the standards as set forth in these specifications. Typically, the depth of topsoil to be salvaged for a given soil type can be found

3. Topsoiling is limited to areas having 2:1 or flatter slopes where: a. The texture of the exposed subsoil/parent material is not adequate to produce vegetative growth. b. The soil material is so shallow that the rooting zone is not deep enough to support plants or

in the representative soil profile section in the Soil Survey published by USDA-NRCS.

furnish continuing supplies of moisture and plant nutrients. c. The original soil to be vegetated contains material toxic to plant growth

d. The soil is so acidic that treatment with limestone is not feasible. 4. Areas having slopes steeper than 2:1 require special consideration and design. 5. Topsoil Specifications: Soil to be used as topsoil must meet the following criteria: a. 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 the appropriate approval authority. Topsoil must not be a mixture of contrasting textured 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 11/2 inches in diameter.

b. Topsoil must be free of noxious plants or plant parts such as Bermuda grass, quack grass, Johnson grass, nut sedge, poison ivy, thistle, or others as specified. c. Topsoil substitutes or amendments, as recommended by a qualified agronomist or soil scientist and approved by the appropriate approval authority, may be used in lieu of natural topsoil. 6. Topsoil Application

a. Erosion and sediment control practices must be maintained when applying topsoil. b. Uniformly distribute topsoil in a 5 to 8 inch layer and lightly compact to a minimum thickness of 4 inches. Spreading is to be performed in such a manner that sodding or seeding can proceed with a minimum of additional soil preparation and tillage. Any irregularities in the surface resulting from topsoiling or other operations must be corrected in order to prevent the formation of depressions or water pockets.

subsoil is excessively wet or in a condition that may otherwise be detrimental to proper grading B. 14 and seedbed preparation C. Soil Amendments (Fertilizer and Lime Specifications) 1. Soil tests must be performed to determine the exact ratios and application rates for both lime and fertilizer on sites having disturbed areas of 5 acres or more. Soil analysis may be performed by a

c. Topsoil must not be placed if the topsoil or subsoil is in a frozen or muddy condition, when the

recognized private or commercial laboratory. Soil samples taken for engineering purposes may also be used for chemical analyses. 2. Fertilizers must be uniform in composition, free flowing and suitable for accurate application by appropriate equipment. Manure may be substituted for fertilizer with prior approval from the appropriate approval authority. Fertilizers must all be delivered to the site fully labeled according to the applicable laws and must bear the name, trade name or trademark and warranty of the producer 3. Lime materials must be ground limestone (hydrated or burnt lime may be substituted except 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 pass through a #100

mesh sieve and 98 to 100 percent will pass through a #20 mesh sieve. 4. Lime and fertilizer are to be evenly distributed and incorporated into the top 3 to 5 inches of soil by 5. 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 placement of topsoil.

B-4-3 STANDARDS AND SPECIFICATIONS FOR SEEDING AND MULCHING

The application of seed and mulch to establish vegetative cover.

To protect disturbed soils from erosion during and at the end of construction.

Conditions Where Practice Applies

To the surface of all permeter controls, slopes, and any disturbed area not under active grading A. Seeding

1. Specifications

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 months immediately preceding the date of sowing such material on any project. Refer to Table B.4 regarding the quality of seed. Seed tags must be available upon request to the inspector to verify type of seed and seeding rate. b. Mulch alone may be applied between the fall and spring seeding dates only if the ground is frozen. The appropriate seeding mixture must be applied when the ground thaws.

c. Inoculants: The inoculant for treating legume seed in the seed mixtures must be a pure culture of nitrogen fixing bacteria prepared specifically for the species. Inoculants must not be used later than the date indicated on the container. Add fresh inoculants as directed on the package. Use four times the recommended rate when hydroseeding. Note: It is very important to keep moculant as cool as possible until used. Temperatures above 75 to 80 degrees Fahrenheit can weaken bacteria and make the inoculant less effective.

d. Sod or seed must not be placed on soil which has been treated with soil stenlants or chemicals used for weed control until sufficient time has elapsed (14 days min.) to permit dissipation of phyto-toxic materials. 2. Application

a. Dry Seeding: This includes use of conventional drop or broadcast spreaders. i. Incorporate seed into the subsoil at the rates prescribed on Temporary Seeding Table B. I., Permanent Seeding Table B.3, or site-specific seeding summanes. 11. Apply seed in two directions, perpendicular to each other. Apply half the seeding rate in each direction. Roll the seeded area with a weighted roller to provide good seed to soil

contact, B.16 b. Drill or Cultipacker Seeding: Mechanized seeders that apply and cover seed with soil. i. Cultipacking seeders are required to bury the seed in such a fashion as to provide at least 1/4 inch of soil coverna. Seedbed must be firm after planting. 11. Apply seed in two directions, perpendicular to each other. Apply half the seeding rate in each direction.

c. Hydroseeding: Apply seed uniformly with hydroseeder (slurry includes seed and fertilizer) 1. If fertilizer is being applied at the time of seeding, the application rates should not exceed the following: nitrogen, 100 pounds per acre total of soluble nitrogen; P2 200 pounds per acre; K2

O (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 time. Do not use burnt or hydrated lime when hydroseeding. III. Mix seed and fertilizer on site and seed immediately and without interruption

iv. When hydroseeding do not incorporate seed into the soil. I. Mulch Materials (in order of preference) a. Straw consisting of thoroughly threshed wheat, rye, oat, or barley and reasonably bright in color. Straw is to be free of noxious weed seeds as specified in the Maryland Seed Law and not

musty, moldy, caked, decayed, or excessively dusty. Note: Use only sterile straw mulch in areas where one species of arass is desired. b. Wood Cellulose Fiber Mulch (WCFM) consisting of specially prepared wood cellulose processed into a uniform fibrous physical state.

1. WCFM is to be dyed green or contain a green dye in the package that will provide an appropriate color to facilitate visual inspection of the uniformly spread slurry.

APPROVED HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT

Hardiness Zone (from Figure B.3): 65

Seeding Dates

Seed Mixture (from Table B.3):

Application Rate (lb/ac)

DUST CONTROL METHOD FOR THIS SITE TO PREVENT BLOWING AND MOVEMENT OF DUST FROM EXPOSED SOIL SURFACES: CALCIUM CHLORIDE SHALL BE APPLIED TO EXPOSED SURFACES AT A RATE THAT WILL KEEP SURFACE MOIST UNTIL SOIL IS STABILIZED ACCORDING TO VEGETATIVE SPECS. FOR THIS SITE AND AREAS TO

(10-20-20)

45 pounds

per acre

(1.0 lb/ (le 000

P205

90 lb/ac (2

lb/1000 sf)

Lime Rate

90 lb/ac (90) 2 tons/ac lb/1000 sf) (90 lb/

11. WCFM, including dye, must contain no germination or growth inhibiting factors. 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 blend with seed, fertilizer and other additives to form a homogeneous slurry. The mulch material must form a blotter-like ground cover, on application, having moisture absorption and percolation properties and must cover and hold grass seed in contact with the soil without inhibiting the growth of the grass seedlings. iv. WCFM material must not contain elements or compounds at concentration levels that will

v. WCFM must conform to the following physical requirements: fiber length of approximately 10 millimeters, diameter approximately 1 millimeter, pH range of 4.0 to 8.5, ash content of 1.6 percent maximum and water holding capacity of 90 percent minimum. B.17

2. Application a. Apply mulch to all seeded areas immediately after seeding. b. When straw mulch is used, spread it over all seeded areas at the rate of 2 tons per acre to a uniform loose depth of 1 to 2 inches. Apply mulch to achieve a uniform distribution and depth so that the soil surface is not exposed. When using a mulch anchoring tool, increase the application rate to 2.5 tons per acre. c. Wood cellulose fiber used as mulch must be applied at a net dry weight of 1500 pounds per

acre. Mix the wood cellulose fiber with water to attain a mixture with a maximum of 50 pounds

a. Perform mulch anchoring immediately following application of mulch to minimize loss by wind or water. This may be done by one of the following methods (listed by preference), depending upon the size of the area and erosion hazard: 1. A mulch anchoring tool is a tractor drawn implement designed to punch and anchor mulch into the soil surface a minimum of 2 inches. This practice is most effective on large areas, but is limited to flatter slopes where equipment can operate safely. If used on sloping land, this practice should follow the contour.

II. Wood cellulose fiber may be used for anchoring straw. Apply the fiber binder at a net dry weight of 750 pounds per acre. Mix the wood cellulose fiber with water at a maximum of 50 pounds of wood cellulose fiber per 100 gallons of water. 11. 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 manufacturer, Application of liquid binders needs to be heavier at the edges where wind

iv. Lightweight plastic netting may be stapled over the mulch according to manufacturer recommendations. Netting is usually available in rolls 4 to 15 feet wide and 300 to 3,000

catches mulch, such as in valleys and on crests of banks. Use of asphalt binders is strictly

B-4-4 STANDARDS AND SPECIFICATIONS FOR TEMPORARY STABILIZATION

To stabilize disturbed soils with vegetation for up to 6 months.

of wood cellulose fiber per 100 gallons of water.

To use fast growing vegetation that provides cover on disturbed soils.

Exposed soils where ground cover is needed for a period of 6 months or less. For longer duration of time, Permanent stabilization practices are required.

Select one or more of the species or seed mixtures listed in Table B.1 for the appropriate Plant Hardiness Zone (from Figure B.3), 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 plan and completed, then Table B. I plus fertilizer and lime rates must be put on

For sites having soil tests performed, use and show the recommended rates by the testing

	agency. Don tests an	e not required for Temp	orary Deealing.		
3.	When stabilization is r	equired outside of a se	eding season, apply:	seed and mulch or straw	
٠.				til the next seeding season.	

		diness Zone (from Figure B.3): ed Mixture (from Table B.1):	Fertilizer Rate	Lime Rate			
No.	Species	Application Rate (lb/ac)	Seeding Dates	Seeding Depths	(10-20-20)	LING 1000	
	ANNUAL RYEGRASS	40	MAR. 1 - MAY 15 AUG. 1 - OCT. 15	0.5 INCHES	100 11 1	2 tons/ac (90 lb/1000 sf)	
	FOXTAIL MILLET	30	JUNE 1 - JULY 31	0.5 INCHES	436 lb/ac (10 lb/1000 sf)		
		·					

B-4-5 STANDARDS AND SPECIFICATIONS FOR PERMANENT STABILIZATION

To stabilize disturbed soils with permanent vegetation.

To use long-lived perennial grasses and legumes to establish permanent ground cover on disturbed soils. Conditions Where Practice Applies: Exposed soils where ground cover is needed for 6 months or more.

 General Use Select one or more of the species or mixtures listed in Table B.3 for the appropriate Plant Hardiness Zone (from Figure B.3) and based on the site condition or purpose found on Table B.2. Enter selected mixture(s), application rates, and seeding dates in the

Permanent Seeding Summary. The Summary is to be placed on the plan. Additional planting specifications for exceptional sites such as shorelines, stream banks or dunes or for special purposes such as wildlife or aesthetic treatment may be found in USDA-NRCS Technical Field Office Guide, Section 342 - Critical Area Planting.

For sites having disturbed area over 5 acres, use and show the rates recommended by the soil testing agency. For areas receiving low maintenance, apply urea form fertilizer (46-0-0) at 3 1/2 pounds per 1000 square feet (150 pounds per acre) at the time of seeding in addition to the

soil amendments shown in the Permanent Seeding Summary . 2. Turfarass Mixtures Areas where turfarass may be desired include lawns, parks, playarounds, and commercial sites which will receive a medium to high level of maintenance.

Select one or more of the species or mixtures listed below based on the site conditions or purpose. Enter selected mixture(s), application rates, and seeding dates in the Permanent Seeding Summary. The summary is to be placed on the plan. Kentucky Bluegrass: Full Sun Mixture: For use in areas that receive intensive management. Irrigation required in the areas of central Maryland and Eastern Shore, Recommended Certified Kentucky Bluearass Cultivars Seeding Rate: 1.5 to 2.0 pounds per 1000 square feet. Choose a minimum of three Kentucky

bluegrass cultivars with each ranging from 10 to 35 percent of the total mixture by Kentucky Bluearass/Perennial Rye: Full Sun Mixture: For use in full sun areas where B.22 rapid establishment is necessary and when turf will receive medium to intensive management. Certified Perennial Ryegrass Cultivars/Certified Kentucky Bluegrass Seeding Rate: 2 pounds mixture per 1000 square feet. Choose a minimum of three Kentucky bluegrass cultivars with each ranging from 10 to 35 percent of the total muture by weight.
Tall Fescue/Kentucky Bluegrass: Full Sun Mixture: For use in drought prone areas

and/or for areas receiving low to medium management in full sun to medium shade. Recommended mixture includes; Certified Tall Fescue Cultivars 95 to 100 percent, Certified Kentucky Bluegrass Cultivars 0 to 5 percent. Seeding Rate: 5 to 8 pounds per 1000 square feet. One or more cultivars may be blended. Kentucky Bluegrass/Fine Fescue: Shade Mixture: For use in areas with shade in Bluegrass lawns. For establishment in high quality, intensively managed turf area.

Mixture includes; Certified Kentucky Bluegrass Cultivars 30 to 40 percent and Certified Fine Fescue and 60 to 70 percent. Seeding Rate: 11/2 to 3 pounds per 1000 square feet.

Select turfgrass varieties from those listed in the most current University of Maryland Publication, Agronomy Memo #77, Turfgrass Cultivar Recommendations for Maryland Choose certified material. Certified material is the best guarantee of cultivar punty. The certification program of the Maryland Department of Agriculture, Turf and Seed Section, provides a reliable means of consumer protection and assures a pure genetic line

Ideal Times of Seeding for Turf Grass Mixtures Western MD: March 15 to June 1, August I to October I (Hardiness Zones: 5b, 6a) Central MD: March I to May 15, August 15 o October 15 (Hardiness Zone: 6b) Southern MD, Eastern Shore: March 1 to May 15, ugust 15 to October 15 (Hardiness Zones: 7a, 7b)

Till areas to receive seed by disking or other approved methods to a depth of 2 to 4 inches, level and rake the areas to prepare a proper seedbed. Remove stones and debris over 11/2 inches in diameter. The resulting seedbed must be in such condition that future mowing of grasses will pose no difficulty.

If soil moisture is deficient, supply new seedings with adequate water for plant growth (1/2 to 1 inch every 3 to 4 days depending on soil texture) until they are firmly established. This is especially true when seedings are made late in the planting season, in abnormally dry or hot seasons, or on adverse sites.

Seeding Depths

1/4-1/2 in

1/4-1/2 in

B. Sod: To provide quick cover on disturbed areas (2:1 grade or flatter).

General Specifications a. Class of turfgrass sod must be Maryland State Certified. Sod labels must be made available

to the job foreman and inspecto Sod must be machine cut at a uniform soil thickness of 34 inch, plus or minus 14 inch, at the

time of cutting. Measurement for thickness must exclude top growth and thatch. Broken pads and torn or uneven ends will not be acceptable. Standard size sections of sod must be strong enough to support their own weight and retain their size and shape when suspended vertically with a firm grasp on the upper 10 percent of

d. Sod must not be harvested or transplanted when moisture content (excessively dry or wet) may adversely affect its survival. Sod must be harvested, delivered, and installed within a period of 36 hours. Sod not

transplanted within this period must be approved by an agronomist or soil scientist prior to its

Sod Installation

a. During periods of excessively high temperature or in areas having dry subsoil, lightly imgate the subsoil immediately prior to laying the sod.

Lay the first row of sod in a straight line with subsequent rows placed parallel to it and tightly wedged against each other. Stagger lateral joints to promote more uniform growth and strength. Ensure that sod is not stretched or overlapped and that all joints are butted tight in order to prevent voids which would cause air drying of the roots. Wherever possible, lay sod with the long edges parallel to the contour and with staggering

joints. Roll and tamp, peg or otherwise secure the sod to prevent slippage on slopes. Ensure solid contact exists between sod roots and the underlying soil surface. d. Water the sod immediately following rolling and tamping until the underside of the ne

as necessary to maintain moist soil to a depth of 4 inches. Water sod during the heat of the to prevent wilting. b. After the first week, sod watering is required as necessary to maintain adequate moisture

c. Do not mow until the sod is firmly rooted. No more than [] of the grass leaf must be removed by the initial cutting or subsequent cuttings. Maintain a grass height of at least 3 inches unless otherwise specified

a. In the absence of adequate rainfall, water daily during the first week or as often and sufficiently

SEQUENCE OF CONSTRUCTION

OBTAIN ALL REQUIRED GRADING, MDE PERMITS, APPROVALS AND LICENSES FROM APPROPRIATE AGENCIES. (APPROXIMATE TIME-ONE MONTH)

NOTIFY THE DEPARTMENT OF PUBLIC WORKS/ BUREAU OF ENGINEERING/ CONSTRUCTION INSPECTION DIVISION AT (410) 313-1880 AT LEAST (5) WORKING DAYS PRIOR TO THE START OF WORK.

NOTIFY SEDIMENT CONTROL INSPECTOR AT LEAST THREE (3) WORKING DAYS PRIOR TO STARTING WORK FOR THE PURPOSE OF A PRE-CONSTRUCTION MEETING.

NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.

CLEARING AND GRUBBING AS NECESSARY FOR THE INSTALLATION OF PERIMETER CONTROLS (STABILIZED CONSTRUCTION ENTRANCE AND SUPER SILT FENCE). (APPROXIMATE TIME-ONE WEEK)

INSTALL STABILIZED CONSTRUCTION ENTRANCE AND SUPER SILT FENCE AS SHOWN IN THE SEDIMENT CONTROL PLAN. STABILIZE DISTURBED AREAS. (APPROXIMATE TIME-ONE WEEK)

CLEARING AND GRUBBING AS NECESSARY OF REMAINING AREA WITHIN INSTALLED PERIMETER CONTROLS. (APPROXIMATE TIME-ONE

WIDEN USE-IN-COMMON DRIVEWAY. (APPROXIMATE TIME-TWO WEEKS)

TIME-NINE MONTHS) 10. FINAL GRADING, LANDSCAPING AND STABILIZATION OF ALL

DISTURBED AREAS. (APPROXIMATE TIME-ONE MONTH)

CONSTRUCT INDIVIDUAL DRIVEWAY AND HOUSE. (APPROXIMATE

11. UPON APPROVAL OF SEDIMENT CONTROL INSPECTOR; REMOVE ALL TEMPORARY SEDIMENT CONTROL DEVICES. FILL ALL DISTURBED AREAS AND STABILIZE AREAS IN ACCORDANCE WITH THE MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL. (APPROXIMATE TIME-ONE WEEK)

EARTHWORK CUT AND FILL QUANTITIES AND AREA OF DISTURBANCE INDICATED ON THIS PLAN ARE SHOWN FOR PURPOSE OF OBTAINING SEDIMENT CONTROL PLAN APPROVAL AND ARE NOT TO BE USED FOR

TABLE - STONE SIZE

SIZE	RANGE	D ₅₀	D100	AASHTO	WEIGHT
NUMBER 57*	3/8*-1 1/2"	1/2"	1 1/2"	M-43	N/A
NUMBER I	2" - 3"	2 1/2"	3*	M-43	N/A
RIP-RAP**	4" - 7"	2 1/2'	7*	N/A	N/A
CLASS I	N/A	9 1/2"	15*	N/A	150 LB MAX
CLASS II	ŊΆ	16"	24"	N/A	700 LB MAX
CLASS III	N/A	23*	34"	N/A	2000 LB MAX

THIS CLASSIFICATION IS TO BE USED ON THE INSIDE FACE OF STONE

OUTLETS AND CHECK DAMS

** THIS CLASSIFICATION IS TO BE USED WHENEVER SMALL RIP-RAP IS REQUIRED. THE STATE HIGHWAY ADMINISTRATION DDESIGNATION FOR THIS STONE IS STONE FOR GABIONS (905.01.04)

CLASS F GEOTEXTILE FABRICS FOR SILT FENCE SHALL HAVE A 50 LB/IN. MINIMUM TENSILE STRENGTH AND A 20 LB/IN. MINIMUM TENSILE MODULES WHEN TESTED IN ACCORDANCE WITH MSMT 609. THE MATERIAL SHALL ALSO HAVE A 0.3 GAL/FT2/MIN. FLOW RATE AND SEVENTY-FIVE PERCENT (75%) MINIMUM FILTERING EFFICIENCY WHEN TESTED IN ACCORDANCE WITH MSMT 322.

GEOTEXTILE FABRICS USED IN THE CONSTRUCTION OF SILT FENCE SHALL RESIST DETERIORATION FROM ULTRAVIOLET EXPOSURE. THE FABRIC SHALL CONTAIN SUFFICENT AMOUNTS OF ULTRAVIOLET RAY INHIBTORS AND STABILIZATIONS TO PROVIDE A MINIMUM OF 12 MONTHS OF EXPECTED USABLE CONSTRUCTION LIFE AT A TEMPERATURE RANGE OF 0 TO 120 DEGREES F STONE FOR GABION BASKETS

Basket Thickness SIZE OF INDIVIDUAL STONES INCHES MM INCHES

VEGETATIVE SPECIFICATIONS AND NOTES

1. DISTURB AS SMALL AN AREA OF THE PRESENT COVER AS POSSIBLE WHILE PERFORMING GRADING. 2. LIMIT DURATION OF EXPOSURE OF BARE EARTH FROM GRADING OPERATION TO 7 DAYS BY THE ESTABLISHMENT OF TEMPORARY VEGETATION (OR MULCHING IF APPROPRIATE) OR BY

COMPLETING PERMANENT SEEDING WITHIN 14 DAYS. 3. ESTABLISH PERMANENT VEGETATIVE COVER IMMEDIATELY AFTER FINAL GRADING IS COMPLETED. (THIS INCLUDES ALL GRADING ON OR OFF THIS SITE THAT IS AFFECTED BY THIS CONSTRUCTION.) IF FINAL GRADING IS COMPLETED AT A TIME OTHER THAN THE SEEDING

SEASON, A TEMPORARY GROUND COVER SUCH AS MULCHING WILL BE USED TO STABILIZE THE

4. RECOMMENDED TEMPORARY SEED MIXTURE: SEED: BALBOA RYE AT 150 LBS. PER ACRE 2 TONS GROUND LIMESTONE PER ACR STRAW AT 1.5 TONS PER ACRE

55-1 OR EQUIVALENT AT 200 GAL, PER ACRI

5. RECOMMENDED PERMANENT SEED MIXTURE: KY-31 FESCUE AT 60 LBS. PER ACRE 2 TONS GROUND LIMESTONE PER ACR 10-10-10 AT 1,000 LBS. PER ACRE STRAW AT 1.5 TONS PER ACRE 55-1 OR EQUIVALENT AT 200 GAL. PER ACRE

ACRES BEFORE REMOVAL OF SEDIMENT CONTROLS.

OPENING SIZE

0.40-0.80*

-GRAB TENSILE STRENGTH ASTM D 1682:4X8" SPECIMEN, 1X2" CLAMPS.

NOTE: RECYCLED CONCRETE EQUIVALENT MAY BE SUBSTITUTED FOR

CLASSIFICATION, SHALL CONTAIN NO STEEL REINFORCEMENT, AND

ALL STONE CLASSIFICATIONS. RECYCLED CONCRETE EQUIVALENT SHALL BE BROKEN INTO SIZES MEETING THE PROOPRIATE

SHALL HAVE A DENSITY OF 150 POUNDS PER CUBIC FOOT

12'MIN. STRAIN RATE IN BOTH PRINCIPAL DIRECTIONS OF GEOTEXTILE FABRIC

TABLE GEOTEXTILE FABRICS

F (SILT FENCE)

US STD SIEVE CW-02215

APPARENT OPENING SIZE MST323

-BURST STRENGTH ASTM D 3786

DETERIORATION FROM ULTRAVIOLITE EXPOSURE

6. ALL POINTS OF CONSTRUCTION INGRESS AND EGRESS SHALL BE PROTECTED BY 50 FT. (LINEAR) OF CRUSHED STONE TO PREVENT TRACKING OF MUD ONTO PUBLIC ROADS.

STABILIZATION (SPECIFIED ON PLANS) SHALL BE COMPLETED WITHIN SEVEN CALENDAR DAYS AS

TO THE SURFACE OF ALL PERIMETER CONTROL, DIKES, SWALES, DITCHES, PERIMETER SLOPES,

UNTIL THIS INITIAL APPROVAL BY THE INSPECTION AGENCY IS MADE. APPROVAL SHALL BE

REQUESTED UPON FINAL STABILIZATION OF ALL SITES WITH DISTURBED AREAS IN EXCESS OF 2

THE PROPERTIES SHALL BE DETERMINED IN ACCORDANCE WITH THE FOLLOWING PROCEDURES:

THE FABRIC SHALL BE INERT TO COMMONLY ENCOUNTERED CHEMICALS AND HYDROCARBONS, AND WILL BE ROT AND MILDEW RESISTANT. IT SHALL BE MANUFACTURED FROM FIBERS CONSISTING OF

LONG CHAIN SYNTHETIC POLYMERS, AND COMPOSED OF A MINIMUM OF 85% BY WEIGHT OF

IN ADDITION, CLASSES A THROUGH E SHALL HAVE A 0.01 CM/SEC. MINIMUM PERMEABILITY WHEN

TESTED IN ACCORDANCE WITH MSMT 507, AND APPARENT MINIMUM ELONGATION OF 20 PERCENT

(20%) WHEN TESTED IN ACCORDANCE WITH THE GRAB TENSILE STRENGTH REQUIREMENTS LISTED

POLYOLEPHINS, POLYOLESTERS, OR POLYAMIDES. THE GEOTEXTILE FABRIC SHALL RESIS

LB. MIN.

90

PSI. MIN.

190

7. FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY

AND ALL SLOPES GREATER THAN 3 HORIZONTAL, TO 1 VERTICAL (3:1) AND FOURTEEN DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE CONSTRUCTION SPECIFICATIONS 8. 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 PLACE STABILIZED CONSTRUCTION ENTRANCE IN ACCORDANCE WITH THE APPROVED PLAN. VEHICLES AND SEDIMENT CONTROLS, BUT BEFORE PROCEEDING WITH ANY OTHER EARTH DISTURBANCE OR GRADING OTHER BUILDING OR GRADING INSPECTION APPROVALS MAY NOT BE AUTHORIZE

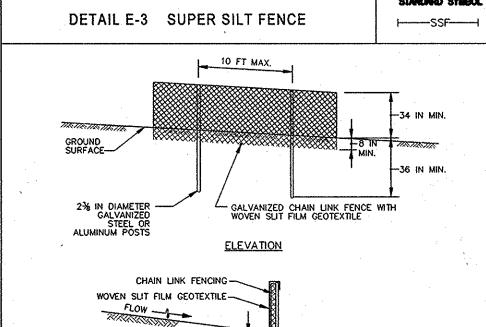
. PREPARE SUBGRADE AND PLACE NONWOVEN GEOTEXTILE. AS SPECIFIED IN SECTION H-1 MATERIALS

DETAIL B-1 STABILIZED CONSTRUCTION

REBAR) AT LEAST 6 INCHES DEEP OVER THE LENGTH AND WIDTH OF THE SCE

SPECIFIED DIMENSIONS. IMMEDIATELY REMOVE STONE AND/OR SEDIMENT SPILLED, 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

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL MARYLAND DEPARTMENT OF ENVIRONMENT
WATER MANAGEMENT ADMINISTRATION U.S. DEPARTMENT OF AGRICULTURE
TURAL RESOURCES CONSERVATION SERVICE



CONSTRUCTION SPECIFICATIONS

INSTALL 2% INCH DIAMETER GALVANIZED STEEL POSTS OF 0.095 INCH WALL THICKNESS AND SIX FOOT LENGTH SPACED NO FURTHER THAN 10 FEET APART. DRIVE THE POSTS A MINIMUM OF 36 INCHES INTO THE GROUND.

CROSS SECTION

2. FASTEN 9 GAUGE OR HEAVIER GALVANIZED CHAIN LINK FENCE (2% INCH MAXIMUM OPENING) 42 INCHES IN HEIGHT SECURELY TO THE FENCE POSTS WITH WIRE TIES OR HUG RINGS. 5. FASTEN WOVEN SUT FILM GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS, SECURELY TO THE 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 MINIMUM OF 8 INCHES INTO THE GROUND.

WHERE ENDS OF THE GEOTEXTILE COME TOGETHER, THE ENDS SHALL BE OVERLAPPED BY 6 INCHES FOLDED, AND STAPLED TO PREVENT SEDIMENT BY PASS.

PROVIDE MANUFACTURER CERTIFICATION TO THE INSPECTION/ENFORCEMENT AUTHORITY SHOWING THAT GEOTEXTILE USED MEETS THE REQUIREMENTS IN SECTION H-1 MATERIALS. REMOVE ACCUMULATED SEDIMENT AND DEBRIS WHEN BULGES DEVELOP IN FENCE OR WHEN SEDIMENT REACHES 25% OF FENCE HEIGHT. REPLACE GEOTEXTILE IF TORN. IF UNDERMINING OCCURS, REINSTALL CHAIN LINK FENCING AND GEOTEXTILE.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL FROSION AND SEDIMENT CONTROL MARYLAND DEPARTMENT OF ENVIRONMENT
WATER MANAGEMENT ADMINISTRATION

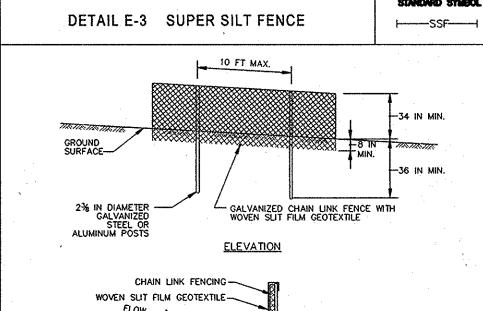
SCE SCE **ENTRANCE** 50 FT MIN EXISTING PAVEMENT 3 FT _ -EARTH FILL PIPE (SEE NOTE 6) PROFILE 50 FT MIN. LENGTH 1 PLAN VIEW

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 EXISTING ROAD TO PROVIDE A TURNING RADIUS.

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 MINIMUM 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

PLACE CRUSHED AGGREGATE (2 TO 3 INCHES IN SIZE) OR EQUIVALENT RECYCLED CONCRETE (WITHOUT

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



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.

U.S. DEPARTMENT OF AGRICULTURE

THAN 3 HORIZONTAL TO 1 VERTICAL (3:1); AND B. SEVEN (7) CALENDAR DAYS AS TO ALL OTHER

STANDARD STABILIZATION NOTE

FOLLOWING INITIAL SOIL DISTURBANCE OR

STABILIZATION MUST BE COMPLETED WITHIN:

RE-DISTURBANCE, PERMANENT OR TEMPORARY

A. THREE (3) CALENDAR DAYS AS TO THE SURFACE

OF ALL PERIMETER DIKES, SWALES, DITCHES,

PERIMETER SLOPES, AND ALL SLOPES STEEPER

DISTURBED OR GRADED AREAS ON THE PROJECT

HOWARD SOIL CONSERVATION DISTRICT STANDARD SEDIMENT CONTROL NOTES

graded areas on the project site.

6) Site Analysis:

Total Cut

Total Fill

Total Area of Site

Area to be roofed or paved

the inspection agency is made.

whichever is shorter.

Area to be vegetatively stabilized

Offsite waste/borrow area location

Area Disturbed

1) A minimum of 48 hours notice must be given to the Howard County

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 SEDIMENT CONTROL*, and revisions thereto.

temporary stabilization shall be completed within: a) 3 calendar days

for all perimeter sediment control structures, dikes, perimeter slopes

and all slopes greater than 3:1, b) 7 days as to all other disturbed or

4) All disturbed areas must be stabilized within the time period specified

CONTROL for permanent seeding (Sec. B-4-5), temporary seeding

do not allow for proper germination and establishment of grasses.

5) All sediment control structures are to remain in place and are to be

7) Any sediment control practice which is disturbed by grading activity

8) Additional sediment control must be provided, if deemed necessary

9) 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 controls, but before proceeding

with any other earth disturbance or grading. Other building or grading inspection approvals may not be authorized until this initial approval by

O) Trenches for the construction of utilities is limited to three pipe lengths

reviewed and approved by the plan approval authority prior to proceeding

or that which can be back filled and stabilized within on working day,

1) Any changes or revisions to the sequence of construction must be

2) A project is to be sequenced so that grading activities begin on one

grading unit (maximum acreage of 20 ac. per grading unit) at a time.

percent of the disturbed area in the preceding grading unit has been stabilized and approved by the enforcement authority. Unless otherwise

specified and approved by the approval authority, no more than 30 acres cumulatively may be disturbed at a given time.

HOWARD SOIL CONSERVATION DISTRICT ADDITIONAL PROJECT SPECIFIC SEDIMENT CONTROL NOTES

13) Seeding and stabilization is to be performed at the direction of the

14) Sediment Control along the use-in-common driveway will be at the

by the standard notes, whichever is more restrictive.

direction of the sediment control inspector.

the sediment control inspector or at the minimum intervals required

Work may proceed to a subsequent grading unit when at least 50

for placement of utilities must be repaired on the same day of

by the Howard County Sediment Control Inspector.

(Sec. B-4-4) and mulching (Sec. B-4-3). Temporary stabilization with

with mulch alone can only be done when recommended seeding dates

maintained in operative condition until permission for their removal has

7.14 Acres

1.20 Acres 0.28 Acres

0.92 Acres 135 Cu. Yds. 135 Cu. Yds.

been obtained from the Howard County Sediment Control Inspector.

above in accordance with the 2011 MARYLAND STANDARDS

AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT

Following initial soil disturbance or re-disturbance, permanent or

Division prior to the start of any construction, (313-1855).

Department of Inspections, Licenses and Permits, Sediment Control

DEVELOPER'S CERTIFICATE:

SITE NOT UNDER ACTIVE GRADING.

"WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT FOR SEDIMENT AND EROSION CONTROL, 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 INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT." · / wheel

DEVELOPER

ENGINEER'S CERTIFICATE: "I HEREBY CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION

SUPPLEMENTAL PLAN

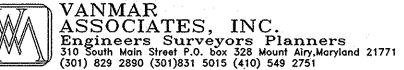
SEDIMENT AND EROSION CONTROL NOTES # DETAILS

LOTS | \$ 2 SCALE: AS SHOWN

TAX MAP: 7 GRID: 14 PARCEL NO: 353

EX. ZONING: RC-DEO

DATE: APRIL, 2014 SHEET 2 OF 4



JOB NO.B2-5335 8

F-14-041

4-14-14

I hereby certify that these documents were prepared or approved by me, and that I am a duly licenced professional engineer under the laws of the State of Maryland, License No. 43203

, Expiration Date: 12-20-14

FOR UTILITY WORK ONLY OR FOR OFF-SITE UTILITY WORK

ANY SEDIMENT CONTROL MEASURES DISTURBED BY

CONSTRUCTION WILL BE REPAIRED THE SAME DAY.

PLACE ALL EXCAVATED MATERIAL ON HIGH SIDE OF TRENCH.

ONLY DO AS MUCH WORK AS CAN BE DONE IN ONE DAY SO

BACKFILLING, FINAL GRADING, SEEDEING AND MULCHING CAN

ALL STOCKPILES LEFT AT THE END OF THE NEXT DAY NEED TO BE

CAN NOT EXCEED 5,000 SQUARE FEET

NO STOCKPILING ALLOWED ON ASPHALT.

STABILIZED UNTIL THE NEXT REDISTURBANCE.

SITE FARTHWORK HAS BEEN BALANCED SUCH THAT A TEMPORARY

STOCKPILE SHOULD NOT BE NECESSARY, SHOULD THE CONTRACTOR

DECIDE TO USE A STOCKPILE, THE STOCKPILE SHOULD BE PLACED ON

SUITABLE AREA OF THE SITE, INSIDE OF THE LIMIT OF DISTURBANCE

TEMPORARY STOCKPILE NOTE

AND FOLLOW TEMPORARY STABILIZATION NOTES.

PROFESSIONAL CERTIFICATION

STOCKPILE NOTES:

DATE REVISIONS

OWNER / DEVELOPER

BACH VAN VU

HEIDI DANG VU

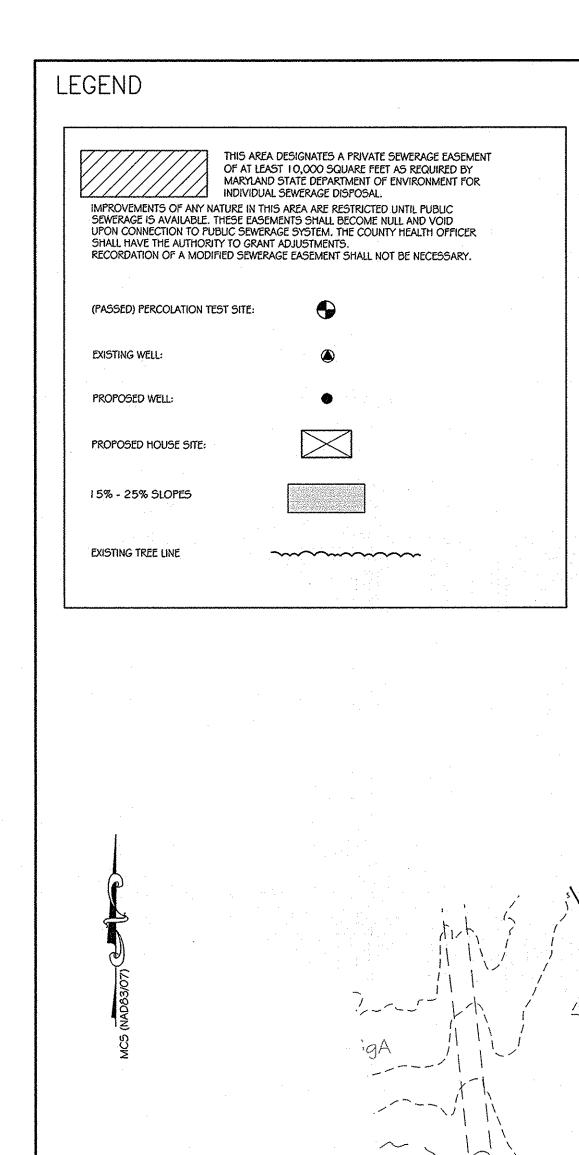
20316 SEABROOK DR.

MONTGOMERY VILLAGE, MD 20886

301-651-3036

ELECTION DISTRICT: No. 4

HOWARD COUNTY, MARYLAND



APPROVED

HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

CHIEF, DIVISION OF LAND DEVELOPMENT

5-16-14

4.30.14

FOREST

MAP SYMBOL

McD

GmB

GgA, GgB

WHITE PINE HEDGE ROW

HOWARD COUNTY SOILS MAP NO. 2

MAPPING UNIT

GLENELG loam

GLENVILLE silt loam

SOIL LEGEND

SLOPE

15-25%

0-8%

3-8%∞

8-15%

0.24

0.32

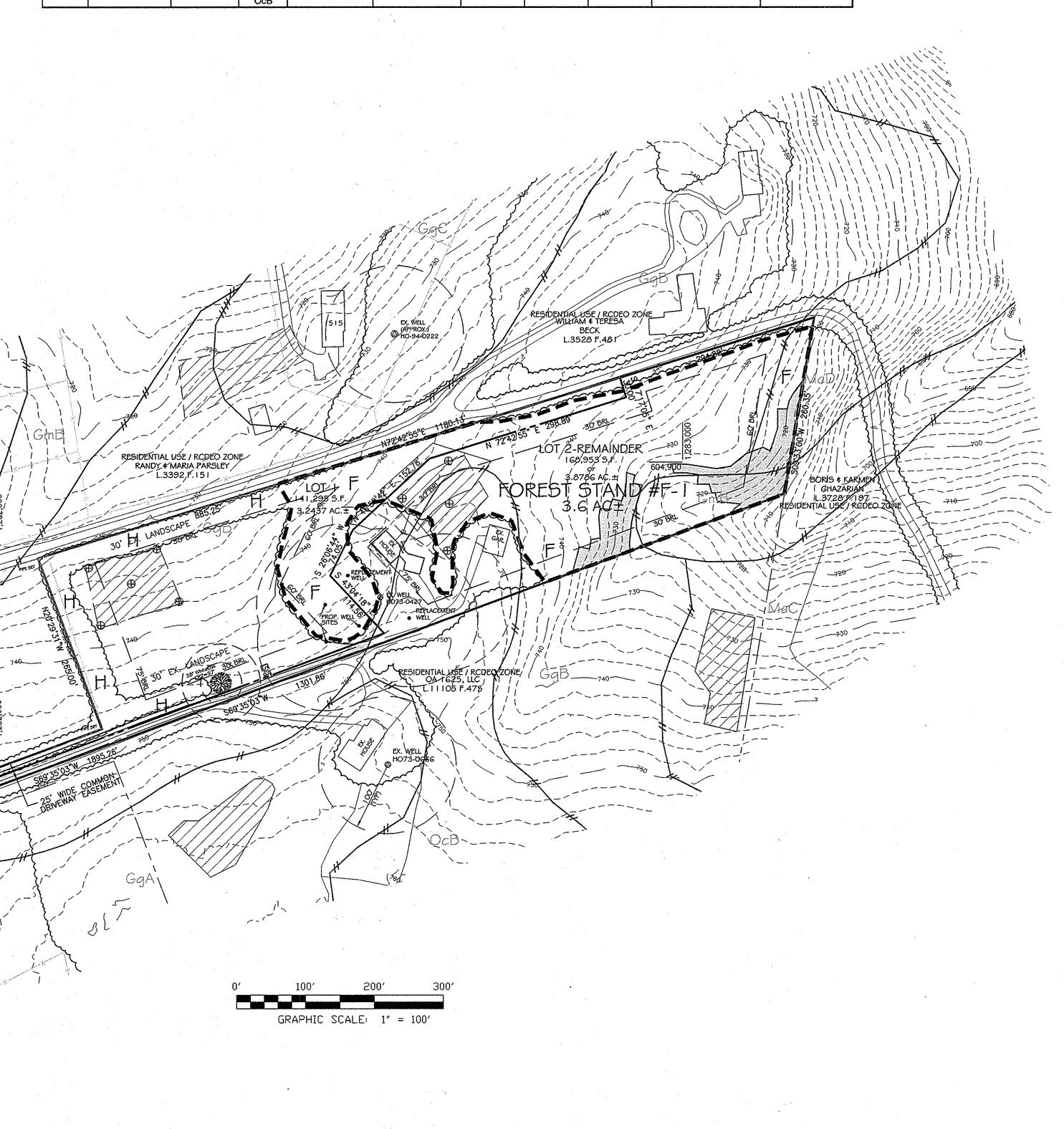
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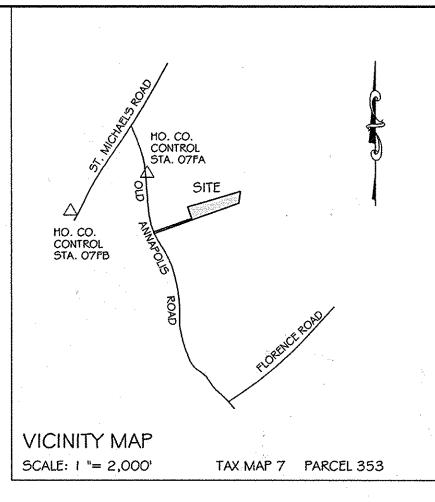
RESIDENTIAL USE / RCDEO ZONE
HELEN GIBSON
L. 72640 F.454 604,500

NO.

HYDROLOGIC SOIL GROUP

FOREST NARRATIVE	y construction and construction of constructio	allemagg uus liber as sammin derholder valmolderk vanhanderholde de laken sein heidelikkele		mangangan kapa kangan kangan ang kapangan and kangangan kangan kangan kangan kangan kangan kangan kangan kanga		-duning on a superior and following showing the body and the following the superior and the following	andry franken o de nakasando o hall esta anakasando andre anakasando andre anakasando andre anakasando andre a				
 THERE IS ONE STAND OF FOREST ON THE VU PROPERTY. IT IS A 3.6 AC± MIX OF HARDWOODS; MOSTLY OAK, HICKORY, AND RED MAPLE. THE PREDOMINENT SIZE IS 18-24" DBH WITH DENSE SEEDLING GROWTH ON THE FOREST FLOOR. FOREST HEALTH IS GOOD. NO INVASIVES WERE OBSERVED. CANOPY CLOSURE IS 90-100%. 						EXHIBIT 3-2	polaricana.				
					FORE	ST STAND ANALYSIS	STABLE				
	- Schert - Schert - Schert - Schert - Schert - Francisco		Applicant: Ba	ach Van Vu	P	roject Name: Vu Prop	erty		Submission N	lo.: F-14-041	
3. NO SPECIMEN TREES WERE FOUND IN THE FOREST STAND. IN A HEDGE ROW ALONG THE LAWN ON WEST OF THE STAND, ONE SINGLE SPECIMEN WHITE OAK,	KEY	A. TYPE OF	B. AREA C. SC		I IFORMATION	D. EXISTING	E. STAND CHARACTERIS		ics	F. FOREST AREA IN	G. HABITAT VALUE
38"DBH, WAS FOUND AND HAS BEEN SHOWN ON THE PLAN. THE HEALTH OF THE		COMMUNITY	ITY	1. Soil Types	2. Typical forest cover for soil type	VEGETATION (Dominant Species	1. Size (Diam)	2. Age	3. General Conditions	SENSITIVE ENVIRONMENTS (Acres)	
WHITE OAK IS GOOD.					•	and Approx. %)				(Acres)	'
	F-1	CHESTNUT OAK	3.6 ac	GgB	Hardwood	and Approx. %) Oak 75%	18"-24"	15-20 yrs	Good	(Acres)	Good





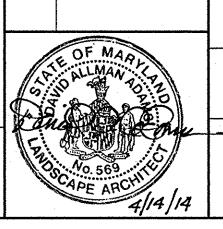
GENERAL NOTES

- OWNER: BACH VAN VU & HEIDI DANG VU, TRUSTEES DEED REFERENCE: LIBER 14035 AT FOLIO 19 DATE: MAY 21, 2012 GRANTOR: PAUL J. COHEN, SUBSTITUTE TRUSTEE
- TAX MAP: 7 GRID: 14 PARCEL: 353
- NEAREST POTABLE WATER SUPPLY: MT. AIRY DISTANCE: 3.0 MILES ±.
- THE SUBJECT PROPERTY IS NOT LOCATED IN SPECIAL FLOOD HAZARD AREA PER NATIONAL FLOOD INSURANCE PROGRAM, FLOOD INSURANCE RATE MAP, COMMUNITY PANEL NO. 240044 0007B*.
- TOPOGRAPHY & PLANIMETRIC FEATURES SHOWN HEREON TAKEN FROM COPYRIGHTED GIS DATA FROM HOWARD COUNTY, SUPPLEMENTED WITH FIELD LOCATIONS BY VANMAR ASSOCIATES, INC. CONTOUR INTERVAL IS 2 FEET. VERTICAL DATUM IS NAVD88.
- THE BASIS OF BEARINGS FOR THIS PLAN IS THE MARYLAND COORDINATE SYSTEM (NAD83/91) PER HOWARD COUNTY SURVEY CONTROL STATIONS SHOWN BELOW. DISTANCES SHOWN HEREON ARE GROUND DISTANCES. 07FA N604,392.216 E1,288,044.[92] O7FB N605,463.426 E1,289,326.119
- THERE ARE NO WELLS OR SEPTIC SYSTEMS WITHIN 100' OF THE PROPERTY BOUNDARY UNLESS OTHERWISE SHOWN HEREON.
- THE EXISTING WELLS SHOWN ON THIS PLAN HAVE BEEN FIELD LOCATED BY VANMAR ASSOCIATES OR TAKEN FROM AVAILABLE RECORDS AND ACCURATELY SHOWN.
- SOIL TYPE: GLENELG (GgA, GgB), GLENVILLE (GmB), MANOR (McD), OCCOQUAN (OcB). HOWARD COUNTY SOILS MAP GRID NO. 2.
- THE SUBJECT PROPERTY IS ZONED "RC-DEO" PER THE 10/06/13 COMPREHENSIVE ZONING PLAN.
- 11. THE LOTS SHOWN HEREON COMPLY WITH THE MINIMUM OWNERSHIP WIDTH AND LOT AREAS REQUIRED BY THE MARYLAND DEPARTMENT OF THE ENVIRONMENT.
- 12. THERE ARE NO HISTORIC SITES OR CEMETERIES ON THIS PROPERTY.
- 13. NO ENVIRONMENTAL FEATURES EXIST WITHIN THE LOD.
- 14. NO SPECIMEN TREES ARE PROPOSED FOR REMOVAL.
- 15. NO RARE, THREATENED, OR ENDANGERED SPECIES WERE SEEN.
- 16. WATER SHED NAME: Brighton Dam. DNR LISTING NUMBER: 02131108
- 17. THIS SUBDIVISION IS EXEMPT FROM FOREST CONSERVATION
- REQUIREMENTS PER SECTION 16.1202(b)(1)(viii) OF THE SUBDIVISION REGULATIONS BECAUSE IT IS A MINOR SUBDIVISION THAT ONLY CREATES ONE ADDITIONAL LOT AND HAS NO FURTHER SUBDIVISION POTENTIAL.

OWNER / DEVELOPER BACH VAN VU HEIDI DANG VU 20316 SEABROOK DR. MONTGOMERY VILLAGE, MD 20886 301-651-3036

PROFESSIONAL CERTIFICATION

I hereby certify that these documents were prepared or approved by me, and that I am a duly licenced professional landscape architect under the laws of the State of Maryland, License No. 569, Expiration Date: 08-16-15



DATE | REVISIONS

FOREST STAND DELINEATION VU PROPERTY

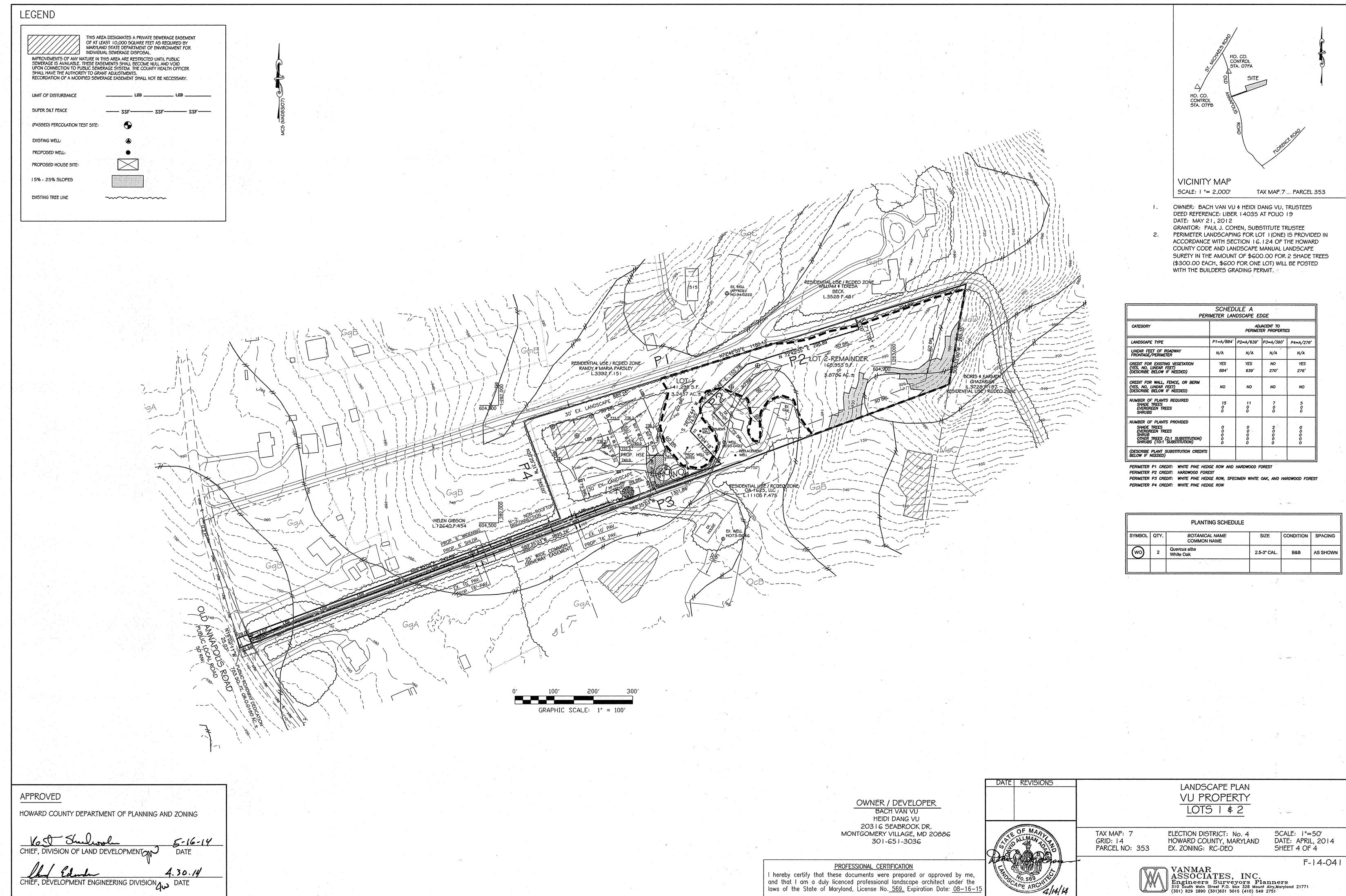
TAX MAP: 7 GRID: 14 PARCEL NO: 353

ELECTION DISTRICT: No. 4 HOWARD COUNTY, MARYLAND EX. ZONING: RC-DEO

SCALE: 1"=100" DATE: APRIL, 2014 SHEET 3 OF 4

F-14-041

VANMAR
ASSOCIATES, INC.
Engineers Surveyors Planners
310 South Main Street P.O. box 328 Mount Airy, Maryland 21771
(301) 829 2890 (301)831 5015 (410) 549 2751



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JOB NO.B2-5335