

DEPT. OF INSPECTIONS, LICENSES AND PERMITS 5430 COURT HOUSE DRIVE ELLICOTT CITY, MD 21043 PERMITS (410) 313-3455 INSPECTIONS (410) 313-1810 AUTOMATED INFORMATION (410) 313-3800		HOWARD COUNTY PERMIT APPLICATION	PERMIT NUMBER B13001264	recd 4-5-13
Building Address 11342 Willow Ridge Lane ELLICOTT CITY, MD 21042		Property Owner's Name MITCHELL & HEIDI STUPE Address 11342 Willow Ridge Lane City ELLICOTT CITY State MD Zip Code 21042 Home Phone _____ Work Phone 443-717-0804 Applicant's Name & Mailing Address, (if other than stated herein): 10572 HAWSLAW DRIVE WOODSTOCK, MD 21163		
Suite/Apt. #: _____ SDP/WP/Petition #: _____ Census Tract _____ Subdivision Willow Ridge Section _____ Area _____ Lot 4 Tax Map 116 Parcel _____ Grid 15 Zoning R1D0 Map Coordinates _____ Lot Size 37,881 sq ft		Phone 443-717-0804 Fax _____ Contractor Company CLASSIC HOMES OF MD Contact Person RYAN KAY SUE 405 Address 50 W. EDMONDSON DRIVE City ROCKVILLE State MD Zip Code 20850 License No. BC 3500 Phone 301-251-2001 Fax 301-251-1222 Engineer or Architect Company FSH ASSOCIATES Contact Person ZACH FISCH Address 6339 HAROLD LANE City ELLICOTT CITY State MD Zip Code 21075 Phone 410-527-5200 Fax 410-716-1922		
Existing Use N/A Proposed Use NEW SINGLE FAMILY HOME Estimated Construction Cost \$ 350,000 Description of Work CONSTRUCTION OF NEW SINGLE FAMILY HOME ON EMPTY LOT IN THE WILLOW RIDGE SUBDIVISION		Occupant or Tenant MITCHELL & HEIDI STUPE Contact Name MITCHELL STUPE Address 11342 Willow Ridge Lane City ELLICOTT CITY State MD Zip Code 21042 Phone 443-717-0804 Fax _____		

BUILDING DESCRIPTION - COMMERCIAL		BUILDING DESCRIPTION - RESIDENTIAL	
Building Characteristics Height: _____ No. of stories: _____ Gross area, sq. ft. per floor: _____ Use group: _____ Construction type: <input type="checkbox"/> Reinforced Concrete <input type="checkbox"/> Structural Steel <input type="checkbox"/> Masonry <input type="checkbox"/> Wood Frame <input type="checkbox"/> State Certified Modular	Utilities Water Supply: <input type="checkbox"/> Public <input type="checkbox"/> Private Sewage Disposal: <input type="checkbox"/> Public <input type="checkbox"/> Private Electric Yes <input type="checkbox"/> No <input type="checkbox"/> Gas Yes <input type="checkbox"/> No <input type="checkbox"/> Heating System: Electric <input type="checkbox"/> Oil <input type="checkbox"/> Natural Gas <input type="checkbox"/> Propane Gas <input type="checkbox"/> Sprinkler system: N/A <input type="checkbox"/> <input type="checkbox"/> Full <input type="checkbox"/> Partial <input type="checkbox"/> Other Suppression <input type="checkbox"/> # of Heads	Building Characteristics SF Dwelling <input checked="" type="checkbox"/> SF Townhouse <input type="checkbox"/> Depth _____ Width _____ 1 st floor: 4' x 26' D x W 2 nd floor: 36' x 96' D x W Basement: _____ Finished Basement <input type="checkbox"/> Unfinished Basement <input checked="" type="checkbox"/> Crawl space <input type="checkbox"/> Slab in Grade <input type="checkbox"/> No. of Bedrooms 4 Multi-family dwellings: No. of efficiency units: _____ No. of 1 BR units: _____ No. of 2 BR units: _____ No. of 3 BR units: _____ Other Structure: _____ Dimensions: _____ Footings: _____ Roof: _____ <input type="checkbox"/> State Certified Modular <input type="checkbox"/> Manufactured Home	Utilities Water Supply: <input checked="" type="checkbox"/> Public <input type="checkbox"/> Private Sewage Disposal: <input type="checkbox"/> Public <input checked="" type="checkbox"/> Private Electric Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Gas Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Heating System: Electric <input checked="" type="checkbox"/> Oil <input type="checkbox"/> Natural Gas <input checked="" type="checkbox"/> Propane Gas <input type="checkbox"/> Sprinkler system: N/A <input type="checkbox"/> <input type="checkbox"/> NFPA #13D <input type="checkbox"/> NFPA #13R <input type="checkbox"/> Other: _____

THE UNDERSIGNED HEREBY CERTIFIES AND AGREES AS FOLLOWS: (1) THAT HE/SHE IS AUTHORIZED TO MAKE THIS APPLICATION; (2) THAT THE INFORMATION IS CORRECT; (3) THAT HE/SHE WILL COMPLY WITH ALL REGULATIONS OF HOWARD COUNTY WHICH ARE APPLICABLE THERETO; (4) THAT HE/SHE WILL PERFORM NO WORK ON THE ABOVE REFERENCED PROPERTY NOT SPECIFICALLY DESCRIBED IN THIS APPLICATION; (5) THAT HE/SHE GRANTS COUNTY OFFICIALS THE RIGHT TO ENTER ONTO THIS PROPERTY FOR THE PURPOSE OF INSPECTING THE WORK PERMITTED AND POSTING NOTICES.

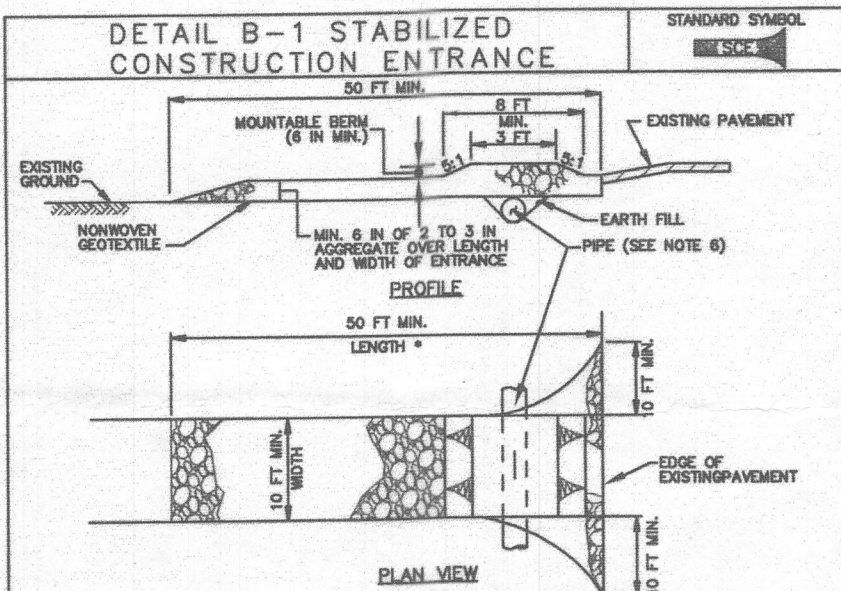
Applicant's Signature RYAN KAY Email Address RYAN@CLASSICMD.NET Title/Company CLASSIC HOMES OF MARYLAND	Print Name RYAN KAY Date 4/5/13	RECEIVED APR 05 2013 LICENSES & PERMITS DIVISION
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Checks payable to: DIRECTOR OF FINANCE OF HOWARD COUNTY
 PLEASE WRITE NEATLY AND LEGIBLY.

AGENCY	DATE	SIGNATURE	APPROVAL	DPZ SETBACK INFORMATION	PROPERTY ID #
Land Development, DPZ				Front: _____	100
State Highways				Rear: _____	
Building Officials				Side: _____	
Dev. Engineering, DPZ				Side St: _____	
Health	4/30/13	Nancy Smith		All minimum setbacks met? YES <input type="checkbox"/> NO <input type="checkbox"/>	
Fire Protection				Is Entrance Permit Required? YES <input type="checkbox"/> NO <input type="checkbox"/>	
Is Sediment Control approval required prior to issuance? YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>				Historic District? YES <input type="checkbox"/> NO <input type="checkbox"/>	
CONTINGENCY CONSTRUCTION START: <input type="checkbox"/>				Lot Coverage for New Town Zone SDP/Red-line approval date _____	
Distribution of Copies					
Operations/Updated forms					

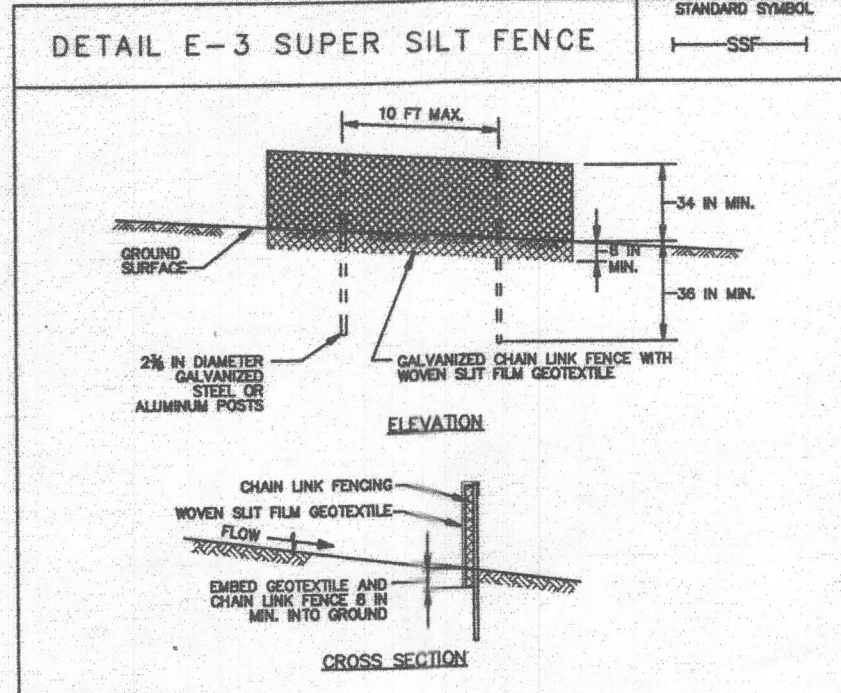
Filing fee \$ _____
 Permit fee \$ _____
 Excise tax \$ _____
 Add'l per fee \$ _____
 TOTAL FEES \$ **18372**
 Sub-total paid \$ _____
 Balance due \$ _____
 Check # **313675**
 Validation **AKH**
 Accepted by **AKH**

White: Building Officials
 Green: LDD, DPZ
 Yellow: DED, DPZ
 Pink: Health
 Gold: SHA



- CONSTRUCTION SPECIFICATIONS**
1. PLACE STABILIZED CONSTRUCTION ENTRANCE IN ACCORDANCE WITH THE APPROVED PLAN. VEHICLES MUST TRAVEL OVER THE ENTIRE LENGTH OF THE ENTRANCE. THE MINIMUM LENGTH OF 50 FEET (15 M) FOR WHEEL RESISTANCE (W.R.) USE MINIMUM WIDTH OF 10 FEET. PLACE CURB TO FEET MINIMUM AT THE EXISTING ROAD TO PROVIDE A TURNING RADIUS.
 2. PIPE ALL SURFACE WATER FLOWING TO OR DIVERTED TOWARD THE ENTRANCE UNDER THE ENTRANCE. MAINTAIN POSITIVE DRAINAGE. PROTECT PIPE EXPOSED THROUGH THE ENTRANCE WITH A MOUNTABLE BERM WITH 6" GUTTER AND A MINIMUM OF 12" IS LOCATED AT A HIGH SPOT AND HAS NO OBSTACLES TO CONVEY. A PIPE IS NOT NECESSARY. A MOUNTABLE BERM IS REQUIRED WHEN A PIPE IS NOT LOCATED AT A HIGH SPOT.
 3. PREPARE SUBGRADE AND PLACE NONWOVEN GEOTEXTILE, AS SPECIFIED IN SECTION H-1 MATERIALS.
 4. PLACE CRUSHED AGGREGATE (20 TO 30 INCHES IN SIZE) OR EQUIVALENT RECYCLED CONCRETE (WITHOUT REBAR) AT LEAST 4 INCHES DEEP OVER THE LENGTH AND WIDTH OF THE ENTRANCE.
 5. MAINTAIN ENTRANCE IN A CONDITION THAT MINIMIZES TRACKING OF SEDIMENT, AGGREGATE OR MAKE OTHER REPAIRS AS CONDITIONS DEMAND TO PROVIDE CLEAR AND OPEN ENTRANCE. IMMEDIATELY REMOVE STONE AND/OR SEDIMENT SPILLED, DROPPED, OR TRACED ON ADJACENT ROADWAY BY WATER. TRACKING OF SEDIMENT, AGGREGATE OR MAKE OTHER REPAIRS AS CONDITIONS DEMAND TO PROVIDE CLEAR AND OPEN ENTRANCE. IMMEDIATELY REMOVE STONE AND/OR SEDIMENT SPILLED, DROPPED, OR TRACED ON ADJACENT ROADWAY BY WATER. TRACKING OF SEDIMENT, AGGREGATE OR MAKE OTHER REPAIRS AS CONDITIONS DEMAND TO PROVIDE CLEAR AND OPEN ENTRANCE. IMMEDIATELY REMOVE STONE AND/OR SEDIMENT SPILLED, DROPPED, OR TRACED ON ADJACENT ROADWAY BY WATER.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL
U.S. DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE 2011



- CONSTRUCTION SPECIFICATIONS**
1. INSTALL 24 IN. DIAMETER GALVANIZED STEEL POSTS OF 60 IN. MIN. WALL THICKNESS AND SIX FOOT LENGTH SPACED NO FURTHER THAN 10 FEET APART. DRIVE THE POSTS A MINIMUM OF 36 INCHES INTO THE GROUND.
 2. FASTEN A DRAIN OR HEAVY GALVANIZED CHAIN LINK FENCE (24 IN. MAXIMUM OPENING) 42 INCHES IN HEIGHT SECURELY TO THE FENCE POSTS WITH WIRE TIES OR HOOD RINGS.
 3. FASTEN WHEN SILT FILL GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS, SECURELY TO THE UPSIDE OF CHAIN LINK FENCE WITH TIES SPACED EVERY 24 INCHES AT THE TOP AND BOTTOM. SECTION. EMBED GEOTEXTILE AND CHAIN LINK FENCE A MINIMUM OF 8 INCHES INTO THE GROUND.
 4. WIDE ENDS OF THE GEOTEXTILE SHALL BE SECURED BY PASSING THE ENDS SHALL BE OVERLAPPED BY 6 INCHES, FOLDED, AND STAPLED TO PREVENT SEDIMENT BYPASS.
 5. EXTEND BOTH ENDS OF THE SUPER SILT FENCE A MINIMUM OF FIVE HORIZONTAL FEET UPSTREAM AT 45 DEGREES TO THE MAIN FENCE. ALIGNMENT TO PREVENT RUNOFF FROM GOING AROUND THE ENDS OF THE SUPER SILT FENCE.
 6. PROVIDE MANUFACTURER CERTIFICATION TO THE INSPECTION/PERMITTING AUTHORITY SHOWING THAT GEOTEXTILE USED MEETS THE REQUIREMENTS IN SECTION H-1 MATERIALS.
 7. REMOVE ACCUMULATED SEDIMENT AND DEBRIS WHEN BUILDS UP IN FENCE OR WHEN REMOVAL REQUIRES REMOVAL OF FENCE. REPLACE AND GEOTEXTILE TO TOP. IF UNDERMINING OCCURS, REINSTALL CHAIN LINK FENCING AND GEOTEXTILE.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL
U.S. DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE 2011

SEDIMENT CONTROL NOTES

1. A minimum of 48 hours notice must be given to the Howard County Department of Inspection, License and Permits Sediment Control Division prior to the start of any construction (410-315-1055).
2. All vegetation and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL and revisions thereto.
3. Following initial soil disturbance or redistribution, permanent or 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 graded areas on the project site.
4. All sediment traps/basins shall be fenced and warning signs posted around their perimeter in accordance with Vol. 1, Chapter 7, HOWARD COUNTY DESIGN MANUAL, Storm Drainage.
5. All disturbed areas must be stabilized within the time period specified above in accordance with the 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for permanent seeding, soil, temporary seeding, and mulching (Sec. G). Temporary stabilization with mulch alone shall be done when recommended seeding dates do not allow for proper germination and establishment of grasses.
6. All sediment control structures are to remain in place and are to be maintained in operative condition until permission for their removal has been obtained from the Howard County Sediment Control Inspector.
7. Site Analysis:
 - Total Area: 0.870 Acres
 - Area Disturbed: 0.533 Acres
 - Area to be roofed or paved: 0.094 Acres
 - Area to be vegetatively stabilized: 0.464 Acres
 - Total Cut: 250 CY±
 - Total Fill: 250 CY±
 - Off-site waste/borrow area location:
8. Any sediment control practice which is disturbed by grading activity for placement of utilities must be repaired on the same day of disturbance.
9. Additional sediment controls must be provided, if deemed necessary by the Howard County Sediment Control Inspector.
10. On all sites with disturbed areas in excess of 2 acres, approval of the inspection agency shall be requested upon completion of installation of perimeter erosion and sediment 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 the inspection agency is made.
11. Trenches for the construction of utilities is limited to three pipe lengths or that which shall be back-filled and stabilized within one working day, whichever is shorter.
12. Earthwork quantities are solely for the purpose of calculating fees. Contractor to verify all quantities prior to the start of construction.
13. To be determined by contractor, with pre-approval of the Sediment Control Inspector with an approved and active grading permit.

ENGINEERS CERTIFICATE

"I CERTIFY THAT THIS PLAN FOR SEDIMENT AND EROSION 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 DISTRICT."

Zacharia Y. Fisch 3/21/13
SIGNATURE OF ENGINEER
ZACHARIA Y. FISCH, P.E.
DATE

B-2 STANDARDS AND SPECIFICATIONS

FOR SOIL PREPARATION, TOPSOILING, AND SOIL AMENDMENTS

- Definition**
The process of preparing the soils to sustain adequate vegetative stabilization.
- Purpose**
To provide a suitable soil medium for vegetative growth.
- Conditions Where Practice Applies**
Where vegetative stabilization is to be established.

- Criteria**
- Soil Preparation**
 1. Temporary Stabilization
 - a. Seeded 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 disk or other suitable means.
 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.
 - ii. Soluble salts 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 topsoil will be planted, then a sandy soil (less than 30 percent silt plus clay) would be acceptable.
 - 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 topsoil 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 conditions.
 - c. Graded areas must be maintained in a true and even grade as specified on the approved plan, then seeded or otherwise loosened to a depth of 3 to 5 inches.
 - d. Apply soil amendments as specified on the approved plan or as indicated by the results of a soil test.
 - e. Mix soil amendments into the top 3 to 5 inches of soil by disk or other suitable means. Rake lawn areas to smooth the surface, remove large objects like stones and boulders, 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 seeded preparation. Track slopes 3:1 or flatter with tracked equipment leaving the soil in an angular condition with ridges running parallel to the contour of the slope. Leave the top 1 to 3 inches of soil loose and friable. Seeded loosening may be unnecessary on newly disturbed areas.
 - Topsoiling**
 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 in the representative soil profile section in the Soil Survey published by USDA-NRCS.
 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 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 1 1/2 inches in diameter.
 - b. Topsoil must be free of noxious weeds or plants such as Bermuda grass, quack grass, Johnsongrass, and other weeds, poison ivy, or other noxious species.
 - 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 spreading or other operations must be corrected in order to prevent the formation of depression or water pockets.
 - c. Topsoil must not be placed if the topsoil or subsoil is in a frozen or muddy condition, when the subsoil is excessively wet or in a condition that may otherwise be detrimental to proper grading and seeded 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 recognized private or commercial laboratory. Soil samples taken for engineering purposes may also be used for chemical analysis.
2. Fertilizers must be uniform in composition, free flowing and suitable for accurate application by appropriate equipment. Measures 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 #200 mesh sieve.
4. Lime and fertilizer are to be evenly distributed and incorporated into the top 3 to 5 inches of soil by disk or other suitable means.
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.

Table B.1: Temporary Seeding for Site Stabilization

Plant Species	Seeding Rate ^{1/}		Seeding Depth ^{2/} (inches)	Recommended Seeding Dates by Plant Hardiness Zone ^{3/}			
	lb/acre	lb/1000 ft ²		5b and 6a	6b	7a and 7b	
Annual Ryegrass (<i>Lolium perenne</i> spp. <i>multiflorum</i>)	40	1.0	0.5	Mar 15 to May 31; Aug 1 to Sep 30	Mar 1 to May 15; Aug 1 to Oct 15	Feb 15 to Apr 30; Aug 15 to Nov 30	
Barley (<i>Hordeum vulgare</i>)	96	2.2	1.0	Mar 15 to May 31; Aug 1 to Sep 30	Mar 1 to May 15; Aug 1 to Oct 15	Feb 15 to Apr 30; Aug 15 to Nov 30	
Oats (<i>Avena sativa</i>)	72	1.7	1.0	Mar 15 to May 31; Aug 1 to Sep 30	Mar 1 to May 15; Aug 1 to Oct 15	Feb 15 to Apr 30; Aug 15 to Nov 30	
Wheat (<i>Triticum aestivum</i>)	120	2.8	1.0	Mar 15 to May 31; Aug 1 to Sep 30	Mar 1 to May 15; Aug 1 to Oct 15	Feb 15 to Apr 30; Aug 15 to Nov 30	
Cereal Rye (<i>Secale cereale</i>)	112	2.8	1.0	Mar 15 to May 31; Aug 1 to Oct 31	Mar 1 to May 15; Aug 1 to Nov 15	Feb 15 to Apr 30; Aug 15 to Dec 15	
Forstner Millet (<i>Syntherisma italica</i>)	30	0.7	0.5	Jun 1 to Jul 31	May 16 to Jul 31	May 1 to Aug 14	
Pearl Millet (<i>Pennisetum glaucum</i>)	20	0.5	0.5	Jun 1 to Jul 31	May 16 to Jul 31	May 1 to Aug 14	

NOTES:
1/ Seeding rates for the warm-season grasses are in pounds of Pure Live Seed (PLS). Actual planting rates shall be adjusted to reflect percent seed germination and purity, as noted. Adjustments are usually not needed for the cool-season grasses.
2/ Seeding rates listed above are for temporary seedings, when planted alone. When planted as a nurse crop with permanent seed mixtures, use 1/2 of the seeding rate listed above for both, oats, and wheat. For cool-season grasses (annual ryegrass, pearl millet, Forstner millet), do not exceed more than 75% (by weight) of the overall permanent seed mix. Cereal rye generally should not be used as a nurse crop, unless planting will occur in very late fall beyond the seeding date for other temporary seedings. Consult the seed supplier for the germination and growth of other plants. It must be used as a nurse crop, and at 1/2 of the rate listed above.
3/ See the recommended nurse crop for warm-season grasses.
4/ For steady soils, plant seeds at twice the depth listed above.
5/ The planting dates listed are averages for each zone and may require adjustment to reflect local conditions, especially near the boundaries of the zones.

DEVELOPER'S CERTIFICATE

"I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN FOR SEDIMENT AND EROSION CONTROL AND THAT ALL 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/WE ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT."

D. M. M. S. 3/21/13
SIGNATURE OF DEVELOPER
DATE

B-3 STANDARDS AND SPECIFICATIONS

FOR SEEDING AND MULCHING

- Definition**
The application of seed and mulch to establish vegetative cover.
- Purpose**
To protect disturbed soils from erosion during and at the end of construction.
- Conditions Where Practice Applies**
To the surface of all perimeter controls, slopes, and any disturbed area not under active grading.

- Criteria**
- 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 the four times the recommended rate when hydroseeding. Note: It is very important to keep inoculant as cool as possible until used. Temperatures above 75 to 80 degrees Fahrenheit can weaken bacteria and make the inoculant less effective.
 - d. Soil or seed must not be placed on soil which has been treated with soil sterilants or chemicals used for weed control until sufficient time has elapsed (14 days min) to permit dissipation of phytotoxic materials.
 2. Application
 - i. 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.1, Permanent Seeding Table B.3, or site-specific seeding summaries.
 - ii. 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.
 - ii. Drill or Catapult Seeding: Mechanized seeders that apply and cover seed with soil.
 - i. Catapulting seeders are required to bury the seed in such a fashion as to provide at least 1/4 inch of soil covering. Seed must be firm after planting.
 - ii. Apply seed in two directions, perpendicular to each other. Apply half the seeding rate in each direction.
 - iii. Hydroseeding: Apply seed uniformly with hydroseeder (slurry includes seed and fertilizer).
 - i. 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; P₂O₅ (phosphorus), 200 pounds per acre; K₂O (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.
 - Mulching**
 1. Mulch Materials (in order of preference)
 - a. Straw consisting of thoroughly threshed, ripe, 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, chaffed, decayed, or excessively dirty. Note: Use only sterile straw mulch in areas where one species of grass is desired.
 - b. Wood Cellulose Fiber Mulch (WCFM) consisting of specially prepared wood cellulose processed into a uniform fibrous physical state.
 - i. 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 layer.
 - ii. 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 be phytotoxic.
 - 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.
 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 of wood cellulose fiber per 100 gallons of water.
 - d. Anchoring
 - i. 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 size of the area and erosion hazard:
 - i. A mulch anchoring tool is a tractor driven implement designed to pinch 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 150 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.
 - iii. Synthetic binders such as Acrylic DLR (Ago-Tack), DCA-70, Tetra-Tex, Terra-Tex 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 catches mulch, such as in valleys and on crests of banks. Use of asphalt binders is strictly prohibited.
 - iv. Lightweight plastic netting may be applied over the mulch according to manufacturer recommendations. Netting is usually available in rolls 4 to 15 feet wide and 300 to 3,000 feet long.

B.5 STANDARDS AND SPECIFICATIONS

FOR DUST CONTROL

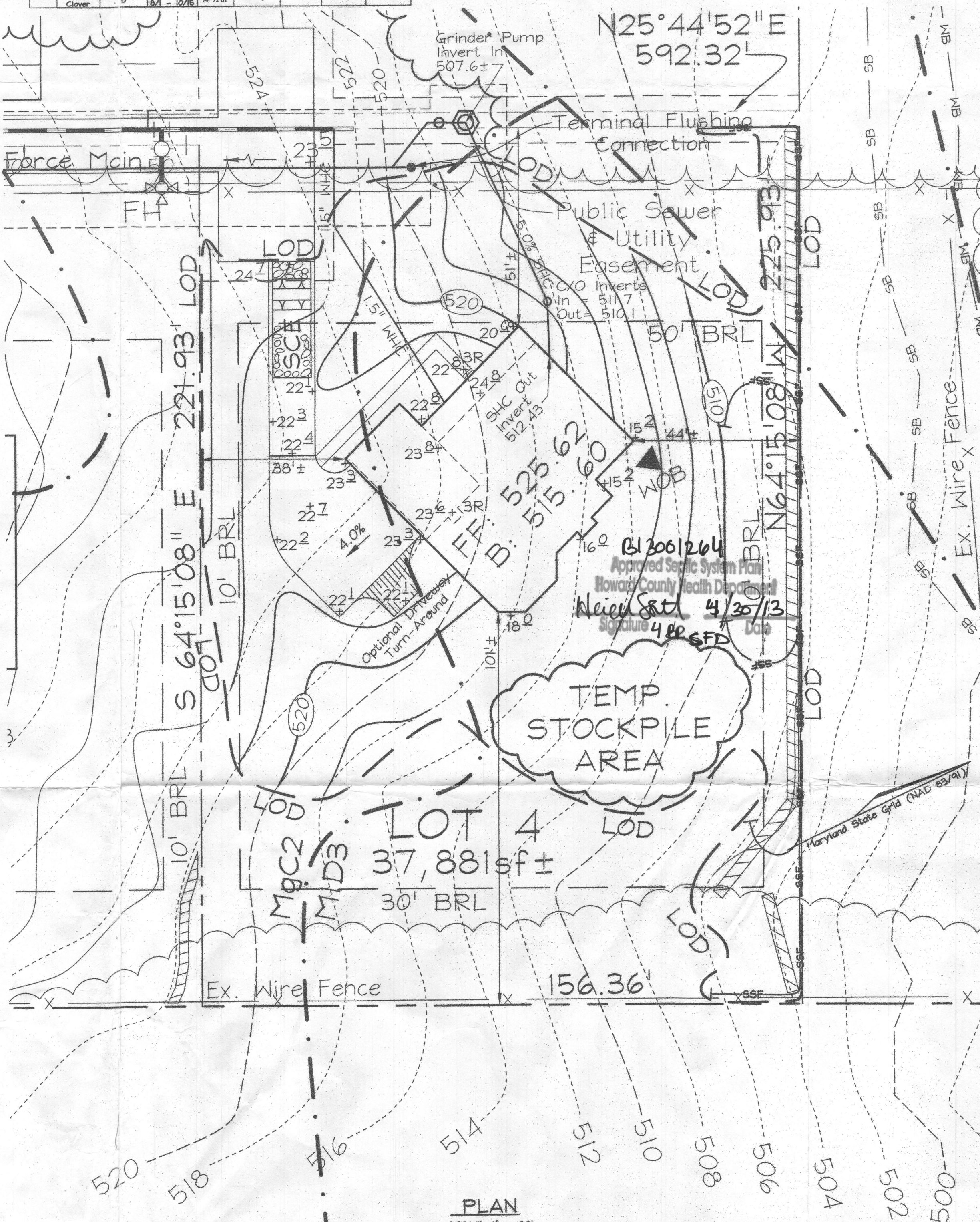
- Definition**
Controlling the suspension of dust particles from construction activities.
- Purpose**
To prevent blowing and movement of dust from exposed soil surfaces to reduce on and off-site damage including health and traffic hazards.
- Conditions Where Practice Applies**
Areas subject to dust blowing and movement where on and off-site damage is likely without treatment.
- Specifications**
1. **Mulches:** See Section B-4.2 Soil Preparation, Topsoiling, and Soil Amendments, Section B-4.3 Seeding and Mulching, and Section B-4.4 Temporary Stabilization. Mulch must be anchored to prevent blowing.
 2. **Vegetative Cover:** See Section B-4.4 Temporary Stabilization.
 3. **Tillage:** Till to roughen surface and bring clods to the surface. Begin plowing on windward side of site. Chisel-type plows spaced about 12 inches apart, spring-toothed harrows, and similar plows are examples of equipment that may produce the desired effect.
 4. **Interruption:** Seepage site with water until the surface is moist. Repeat as needed. The site must not be irrigated to the point that runoff occurs.
 5. **Barriers:** Solid board fences, slit fences, snow fences, burlap fences, straw bales, and similar material may be used to control air currents and soil blowing.
 6. **Chemical Treatment:** Use of chemical treatment requires approval by the appropriate plan review authority.

HOWARD SOIL CONSERVATION DISTRICT

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT

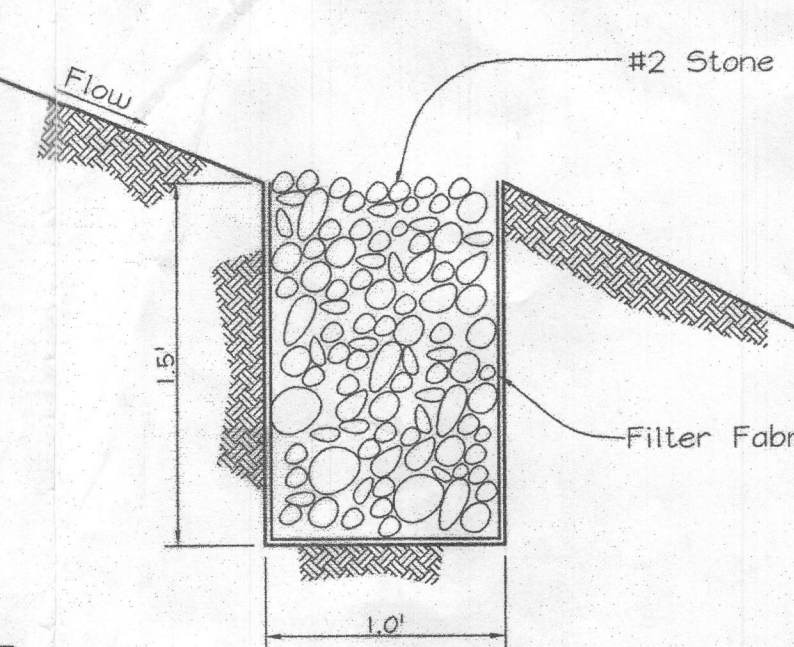
John R. Roberts 3/21/13
HOWARD SCD
DATE

Hardiness Zone (from Figure B.3):		Seeding Rate (lb/acre)		Seeding Depth (inches)		Fertilizer Rate (lb/20-30)		Lime Rate	
No.	Species	Application Rate (lb/acre)	Seeding Rate (lb/acre)	Seeding Depth (inches)	Seeding Rate (lb/acre)	N	P ₂ O ₅	K ₂ O	Lime Rate
6	Tall Fescue	40	3 1/2 - 5 1/2	1/2 - 1 1/2	43 pounds per acre (1.0 lb/1000 sq ft)	90 lb/acre (2 lb/1000 sq ft)	90 lb/acre (2 lb/1000 sq ft)	2 tons/acre (1000 lb/acre)	2 tons/acre (1000 lb/acre)
	Perennial Ryegrass	45	3 1/2 - 5 1/2	1/2 - 1 1/2	43 pounds per acre (1.0 lb/1000 sq ft)	90 lb/acre (2 lb/1000 sq ft)	90 lb/acre (2 lb/1000 sq ft)	2 tons/acre (1000 lb/acre)	2 tons/acre (1000 lb/acre)
	Annual Ryegrass	5	3 1/2 - 5 1/2	1/2 - 1 1/2	43 pounds per acre (1.0 lb/1000 sq ft)	90 lb/acre (2 lb/1000 sq ft)	90 lb/acre (2 lb/1000 sq ft)	2 tons/acre (1000 lb/acre)	2 tons/acre (1000 lb/acre)



PLAN

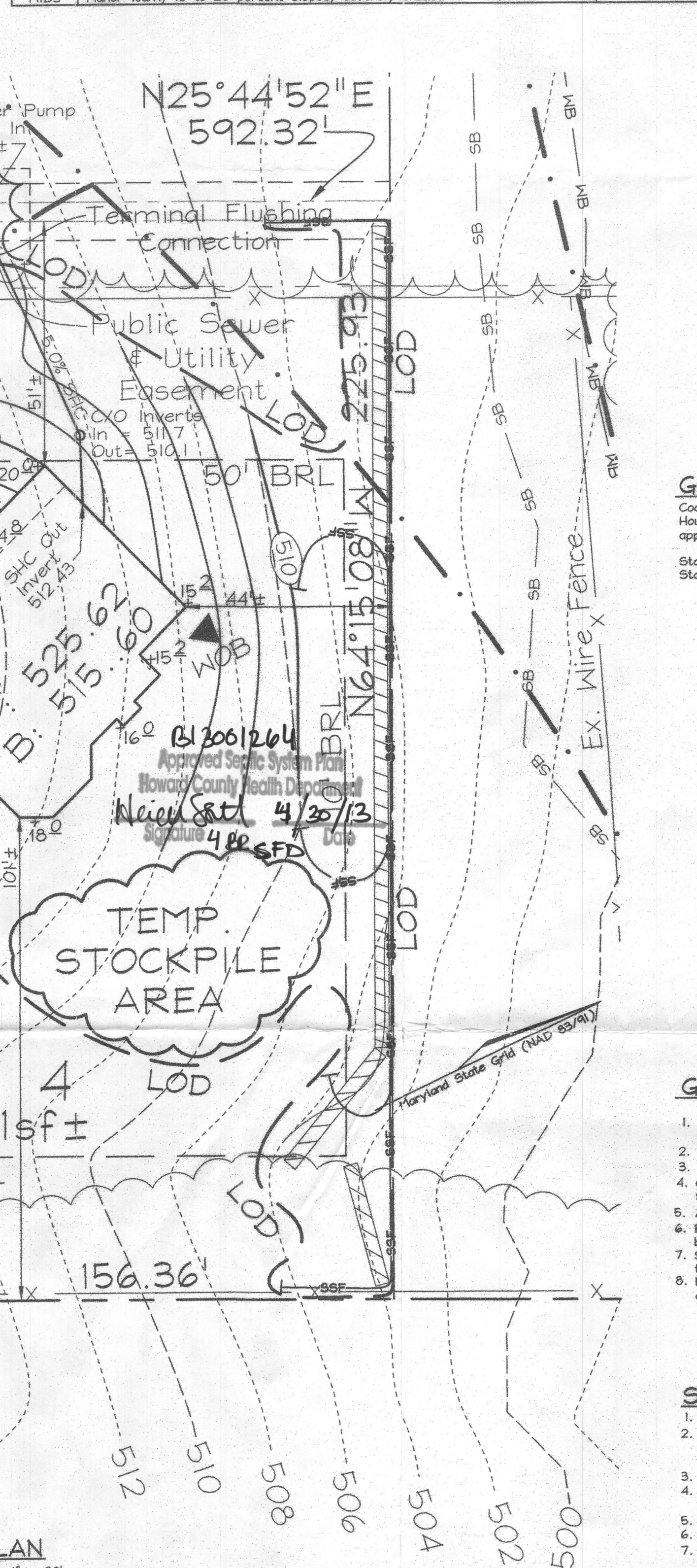
SCALE: 1" = 20'



TYPICAL LEVEL SPREADER

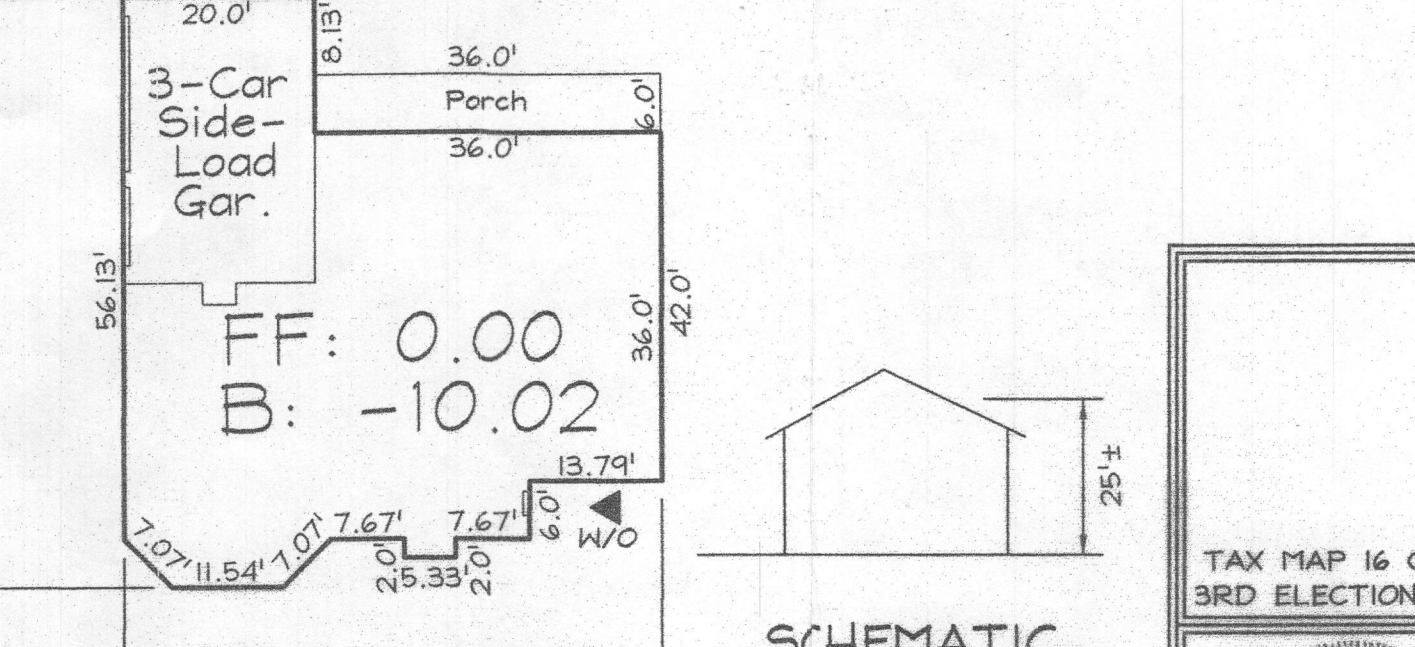
NOT TO SCALE
See plan for level spreader lengths

SYMBOL		NAME / DESCRIPTION		SOIL GROUP	
MqC2	Minor	gravelly loam, 8 to 15 percent slopes, moderately eroded		B	
MID3	Major	loam, 15 to 25 percent slopes, severely eroded		B	



SCHEMATIC ELEVATION

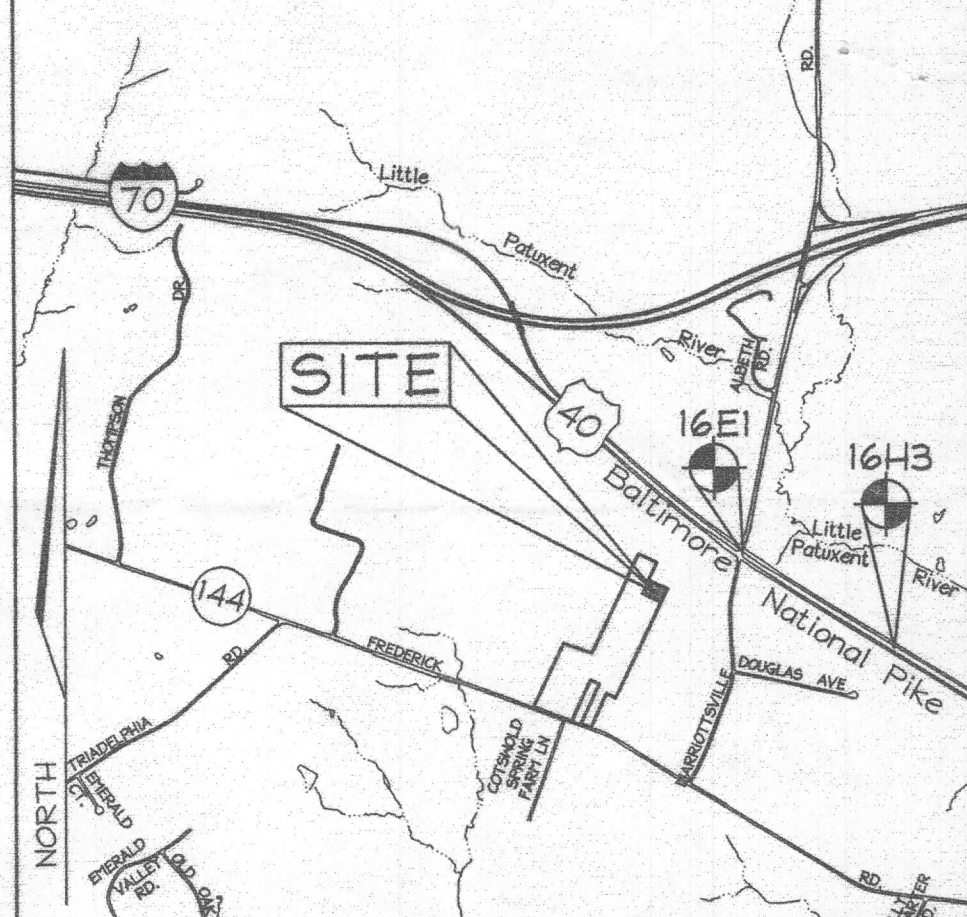
10' TO SCALE



HOUSE PLAN

SCALE: 1" = 20'

PROFESSIONAL CERTIFICATION
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. #22418, Expiration Date: 07/29/2013.



VICINITY MAP

SCALE: 1" = 2000'
ADC MAP 10 K5

GEODETIC CONTROL STATIONS

Coordinates based on NAD'83, Maryland coordinate system as projected by Howard County geodetic control stations no. 16E1 and no. 16H3 denotes approximate location (see vicinity map).

Sta. 16E1 N 549,250.9630 E 1,340,192.7010 El.: 463.893
Sta. 16H3 N 542,408.0425 E 1,341,523.7677 El.: 464.712

LEGEND

- Super Silt Fence
- Silt Fence
- Limit of Disturbance
- Soil Boundary
- Walk Out Basement
- Utility Poles
- Existing Contour
- Proposed Contour
- Direction of Flow
- Existing Spot Elevation
- Proposed Spot Elevation
- Existing Trees
- Level Spreader

GENERAL NOTES

1. This property is zoned "RR-DEO" per the 02/02/04 Comprehensive Zoning Plan and the Comp. Local Zoning Regulations Amendments effective 07/28/06.
2. Total area of property = 0.870 Acres
3. Public water and public shared septic system will serve this lot.
4. On-site topography and existing utilities based on a Field Run Topographic Survey prepared by FSH Associates in July, 2003 with two foot contours.
5. A stockpile will not be permitted on site.
6. Per F-06-050 approved Final plans, Stormwater Management is provided by sheet flow to buffer via level spreaders.
7. Super silt fence is to be placed along the southern LOD at the direction of the sediment control inspector, in the area of the proposed contour 520.
8. No section of super silt fence is to exceed 50' in length before curling into the LOD.

SEQUENCE OF CONSTRUCTION

1. Obtain grading permit.
2. Notify Howard County Department of Inspections, License and Permits at (410) 315-1880 at least 48 hours before starting construction.
3. Install Stabilized Construction Entrance and Super Silt Fence.
4. After receiving permission from the sediment control inspector, rough grade site and begin building construction.
5. Construct driveway and finish building construction.
6. Fine grade site permanently stabilize site.
7. Upon stabilization of all disturbed