

LEGEND

PROPOSED SEPTIC SYSTEM

SUPER SILT FENCE SSF

LIMIT OF DISTURBANCE LOD

STABILIZED CONSTRUCTION ENTRANCE SCE

(PASSED) PERCOLATION TEST SITE:

(FAILED) PERCOLATION TEST SITE:

EXISTING WELL:

PROPOSED HOUSE SITE:

PROPOSED WELL SITE:

N-2 NON-ROOFTOP DISCONNECTION

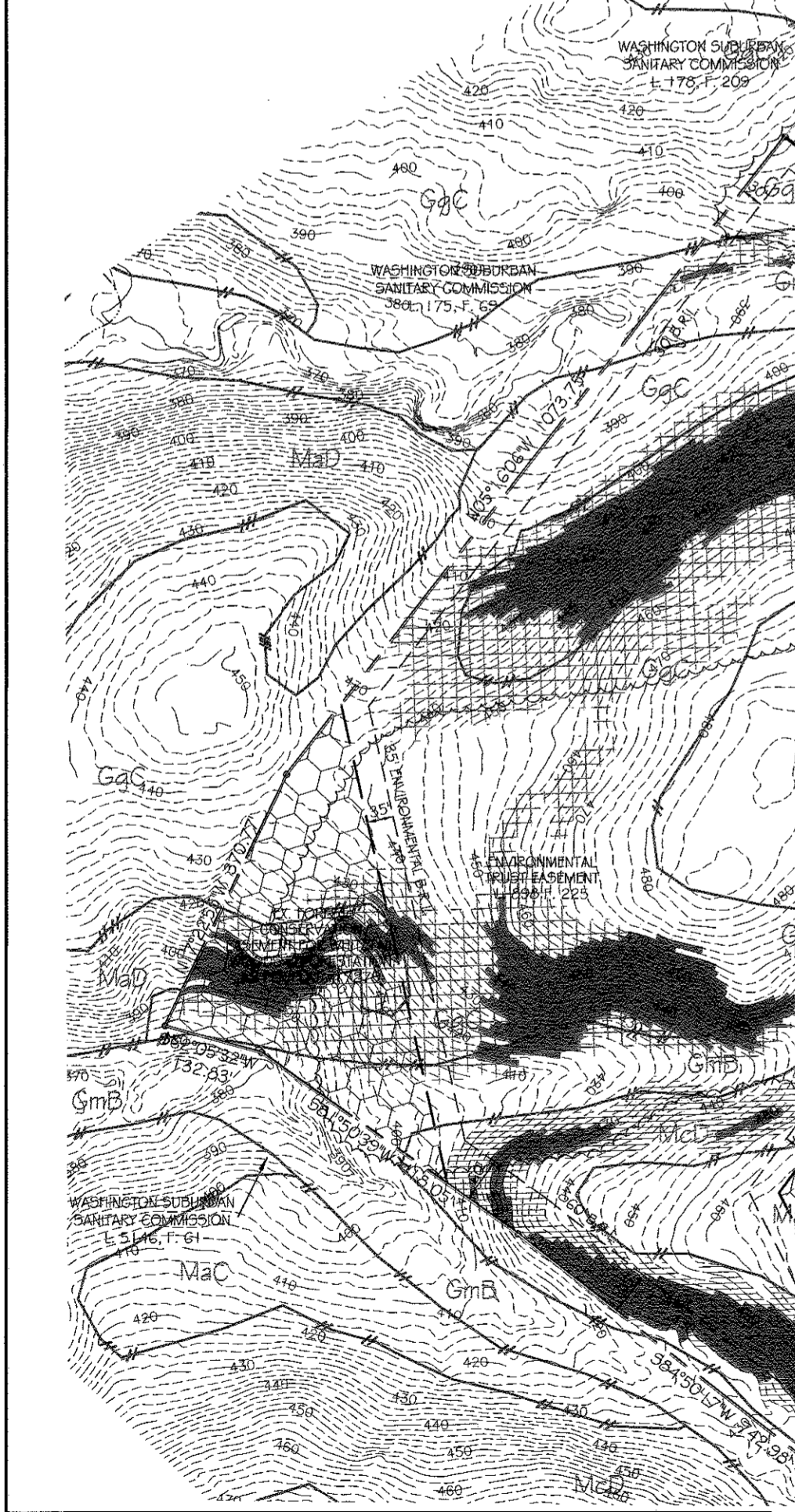
EXISTING TREE LINE

"STEEP" SLOPES AS DEFINED BY HOWARD COUNTY SCD (>20%)

25% OR GREATER

FOREST CONSERVATION EASEMENT

CURVE	RADIUS	ARC LENGTH	DELTA ANGLE	CHORD BEARING	CHORD LENGTH	TANGENT
C1	187.37	118.37	36°11'50"	S30°08'20"W	116.41'	61.24'
C2	25.00	15.75	36°09'15"	S30°11'37"W	15.49'	8.14'
C3	112.62	83.82	17°12'29"	N01°05'11"E	33.69'	17.28'
C4	338.54	213.15	36°04'25"	S00°45'10"E	209.64'	110.24'
C5	151.53	108.48	41°00'01"	S40°05'09"W	106.18'	56.69'
C6	13.00	8.35	41°12'00"	S40°45'00"W	8.15'	4.25'
C7	730.33	137.50	10°49'00"	N40°47'25"E	137.70'	69.16'
C8	25.00	17.50	41°12'00"	N40°45'00"E	17.50'	9.40'
C9	139.59	99.89	41°00'01"	N40°50'59"E	95.12'	52.13'

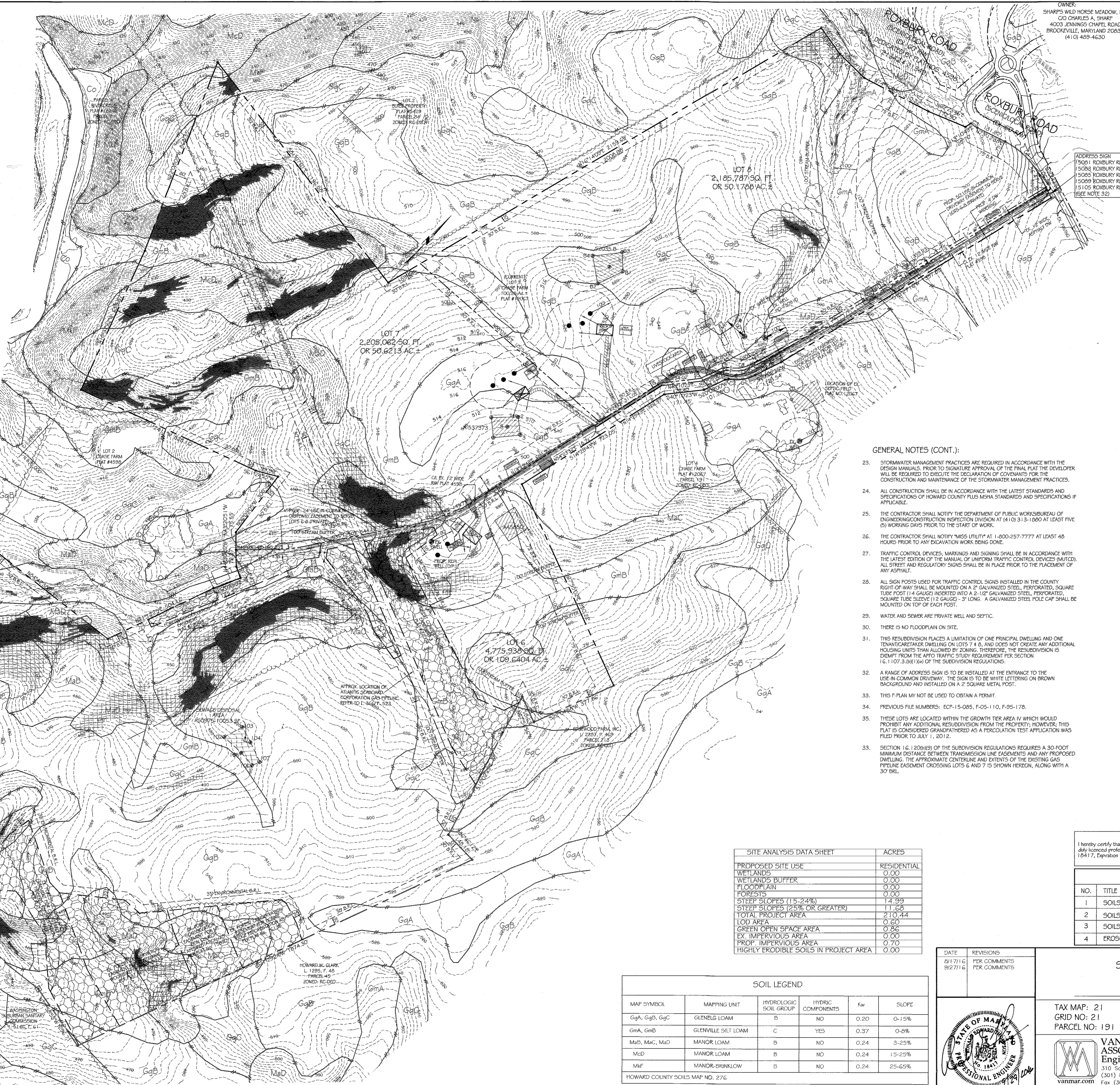


APPROVED

HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Karl Schubert 10-6-16
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

David Chander 10-5-16
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE



OWNER: SHARPS WILD HORSE MEADOW, LLC
4003 JENNINGS CHAPEL ROAD
BROOKVILLE, MARYLAND 20833
(410) 469-4630

ADDRESS SIGN
1508 ROXBURY RD.
1508 ROXBURY RD.
1508 ROXBURY RD.
15105 ROXBURY RD.
(SEE NOTE 32)

ADC MAP: 23; GRID: D2

VICINITY MAP
SCALE: 1" = 2000' TAX MAP 21 PARCEL 191

- GENERAL NOTES:**
- OWNER: SHARPS WILD HORSE MEADOW, LLC
DEED REFERENCE: LIBER. 14906 AT FOLIO 130
DATE: DECEMBER 29, 2012
GRANTOR: CHARLES A. SHARP & DENISE DODGER SHARP
 - TAX MAP: 21; GRID: 21; PARCEL: 191
 - NEAREST POTABLE WATER SUPPLY: CLARKSVILLE; DISTANCE: 6.0 MILES ±
 - THE SUBJECT PROPERTY IS NOT LOCATED IN SPECIAL FLOOD HAZARD AREA PER NATIONAL FLOOD INSURANCE PROGRAM. FLOOD INSURANCE RATE MAP COMMUNITY PANEL NOS. 24027C01 1GD AND 24027C0045D.
 - TOPOGRAPHY & PLANNING FEATURES SHOWN HEREON TAKEN FROM COPYRIGHTED GIS DATA FROM HOWARD COUNTY, SUPPLEMENTED WITH MAXIMUM TWO FOOT CONTOUR INTERVALS PREPARED BY VANMAR ASSOCIATES, INC. DATED JUNE, 2015.
 - THE BASIS OF BEARINGS FOR THIS PLAN IS THE MARYLAND COORDINATE SYSTEM (NAD83/2011) AS ESTABLISHED VIA THE SMARTNET REAL-TIME GPS NETWORK. AT THE TIME OF THIS SURVEY (JUNE, 2015) POSITIONS FOR SMARTNET REFERENCE STATIONS WERE ADJUSTED TO NAD 83(2011), EPOCH 2010.00. PRIMARY (MASTER) REFERENCE STATIONS AND LOCAL HOWARD COUNTY SURVEY CONTROL USED FOR THIS WORK: STA. ANAPOLIS - JUNCTION, MD (6370) N. 533,359.606 E. 1,371,726.002 ELEV. 221.95 HOCO 2 (HA ROAD 8307) N. 578,325.129 E. 1,303,579.898 ELEV. 550.68 DISTANCES SHOWN HEREON ARE GROUND DISTANCES.

- GENERAL NOTES (CONT.):**
- 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: GLENDEL LOAM (GgA, GgB, GgC), GLENDEL SILT LOAM (GmA, GmB), MANOR LOAM (MaB, MaC, MaD, MaE) MANOR-BRINKLOW (MfB). HOWARD COUNTY SOILS MAP NO. 276
 - THE SUBJECT PROPERTY IS ZONED RC-DEO PER THE 106/13 COMPREHENSIVE ZONING REGULATIONS.
 - ALL WELLS TO BE DRILLED PRIOR TO FINAL PLAT SIGNATURE. IT IS THE DEVELOPER'S RESPONSIBILITY TO SCHEDULE THE WELL DRILLING PRIOR TO THE FINAL PLAT SUBMISSION. IT WILL NOT BE CONSIDERED "GOVERNMENT DELAY" IF THE WELL DRILLING HOLDS-UP THE HEALTH DEPARTMENT SIGNATURE OF THE RECORD PLAT.
 - THE LOTS SHOWN HEREON COMPLY WITH THE MINIMUM OWNERSHIP WIDTH AND LOT AREAS REQUIRED BY THE MARYLAND DEPARTMENT OF THE ENVIRONMENT.
 - THERE ARE NO HISTORIC SITES OR CEMETERIES ON THIS PROPERTY.
 - THERE ARE EXISTING STRUCTURES ON LOT 8 TO REMAIN. NO NEW BUILDINGS, EXTENSIONS, OR ADDITIONS TO THE EXISTING STRUCTURES ARE TO BE CONSTRUCTED AT A DISTANCE LESS THAN THE ZONING REGULATIONS REQUIRE.
 - THIS PROJECT IS CONDITIONALLY EXEMPT FROM THE REQUIREMENTS OF SECTION 16.1200 OF THE HOWARD COUNTY CODE FOR FOREST CONSERVATION WITH THE FILING OF A DECLARATION OF INTENT FOR AGRICULTURAL ACTIVITY.
 - THESE LOTS ARE LOCATED IN A PERPETUAL MARYLAND ENVIRONMENTAL TRUST EASEMENT AND TREATED AS AN AGRICULTURAL PRESERVATION EASEMENT. THE CREATION OF THIS NEW LOT IS PURSUANT TO SECTION 104.D.4 OF THE HOWARD COUNTY ZONING REGULATIONS.
 - THIS SUBDIVISION IS EXEMPT FROM WETLAND AND STREAM DELINEATION REQUIREMENTS PER SECTION 16.116(A)(4) WHICH STATES THAT AGRICULTURAL SUBDIVISIONS ARE EXEMPT FROM WETLAND AND STREAM DELINEATION REQUIREMENTS IF PROPOSED LOTS DEVELOPMENT. A PROFESSIONAL CERTIFICATION HAS BEEN PROVIDED.
 - LANDSCAPING REQUIREMENTS ARE TO BE ADDRESSED IF WHEN LOTS ARE RESUBDIVIDED.
 - NO GRADING, REMOVAL OR VEGETATIVE COVER OF TREES, PAVING AND NEW STRUCTURES SHALL BE PERMITTED WITHIN THE LIMITS OF WETLANDS, STREAMS, OR THEIR BUFFERS, FLOODPLAIN AND FOREST CONSERVATION EASEMENT AREAS.
 - THE DRIVEWAY ENTRANCE MEETS STOPPING SIGHT DISTANCE (SSD) REQUIREMENTS.
 - DRIVEWAYS SHALL BE PROVIDED PRIOR TO ISSUANCE OF A USE AND OCCUPANCY PERMIT FOR AN NEW DRIVELINE TO ENSURE SAFE ACCESS FOR FIRE AND EMERGENCIES PER THE FOLLOWING MINIMUM REQUIREMENTS:
a) Width - 12' (16' serving more than one residence).
b) Surface - 6" of compacted crushed rock base with tar and chip coating - 1-1/2" min.
c) Geometry - Maximum 15% grade, maximum 10% grade change and minimum 45-foot turning radius.
d) Structures (culvert / bridges) - Capable of supporting 25 gross tons (H25 loading).
e) Drainage Elements - Capable of safely passing 100-Year flood with no more than one-foot depth over driveway surfaces.
f) Structure clearances - minimum 12 feet.
g) Maintenance - sufficient to ensure all weather use.
 - FOR FLAG OR PIPESTEM LOTS, REFUSE COLLECTION, SNOW REMOVAL, AND ROAD MAINTENANCE ARE PROVIDED TO THE JUNCTION OF THE FLAG OR PIPESTEM LOT DRIVEWAY AND THE ROAD RIGHT OF WAY LINE ONLY AND NOT ONTO THE FLAG OR PIPESTEM LOT DRIVEWAY.

SITE ANALYSIS DATA SHEET

PROPOSED SITE USE	ACRES
WETLANDS	0.00
WETLANDS BUFFER	0.00
FLOODPLAIN	0.00
FORESTS	0.00
STEEP SLOPES (15-24%)	14.99
STEEP SLOPES (25% OR GREATER)	11.68
TOTAL PROJECT AREA	210.44
LOD AREA	0.60
GREEN OPEN SPACE AREA	0.86
EX. IMPERVIOUS AREA	0.00
PROP. IMPERVIOUS AREA	0.70
HIGHLY ERODIBLE SOILS IN PROJECT AREA	0.00

SOIL LEGEND

MAP SYMBOL	MAPPING UNIT	HYDROLOGIC SOIL GROUP	HYDRIC COMPONENTS	Kw	SLOPE
GgA, GgB, GgC	GLENDEL LOAM	B	NO	0.20	0-15%
GmA, GmB	GLENDEL SILT LOAM	C	YES	0.37	0-6%
MaB, MaC, MaD	MANOR LOAM	B	NO	0.24	3-25%
McD	MANOR LOAM	B	NO	0.24	15-25%
MfB	MANOR-BRINKLOW	B	NO	0.24	25-65%

HOWARD COUNTY SOILS MAP NO. 276

DATE: 8/17/16
8/27/16

REVISIONS:
PER COMMENTS
PER COMMENTS

STATE OF MARYLAND
PROFESSIONAL ENGINEER

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. 18417, Expiration Date: 08-18-2017.

SHEET INDEX

NO.	TITLE
1	SOILS, TOPOGRAPHY & OVERALL PLAN
2	SOILS/TOPOGRAPHY/GRADING/STORMWATER MANAGEMENT - 1"=50'
3	SOILS/TOPOGRAPHY/GRADING/STORMWATER MANAGEMENT - 1"=50'
4	EROSION AND SEDIMENT CONTROL NOTES AND DETAILS

SUPPLEMENTAL PLAN
SOILS, TOPOGRAPHY & OVERALL PLAN
LOTS 6-8
CHASE FARM

TAX MAP: 21
GRID NO: 21
PARCEL NO: 191

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

SCALE: 1" = 200'
DATE: AUGUST 2016
SHEET 1 OF 4

VANMAR ASSOCIATES, INC.
Engineers Surveyors Planners
310 South Main Street Mount Airy, Maryland 21771
(301) 829-2890 (301) 831-5015 (410) 549-2751
Fax (301) 831-5603 ©Copyright, Latest Date Shown

F-16-100

LEGEND

PROPOSED SEPTIC SYSTEM

SUPER SILT FENCE SSF

LIMIT OF DISTURBANCE LOD

STABILIZED CONSTRUCTION ENTRANCE SCE

(PASSED) PERCOLATION TEST SITE:

(FAILED) PERCOLATION TEST SITE:

EXISTING WELL:

PROPOSED HOUSE SITE:

PROPOSED WELL SITE:

N-2 NON-ROOFTOP DISCONNECTION

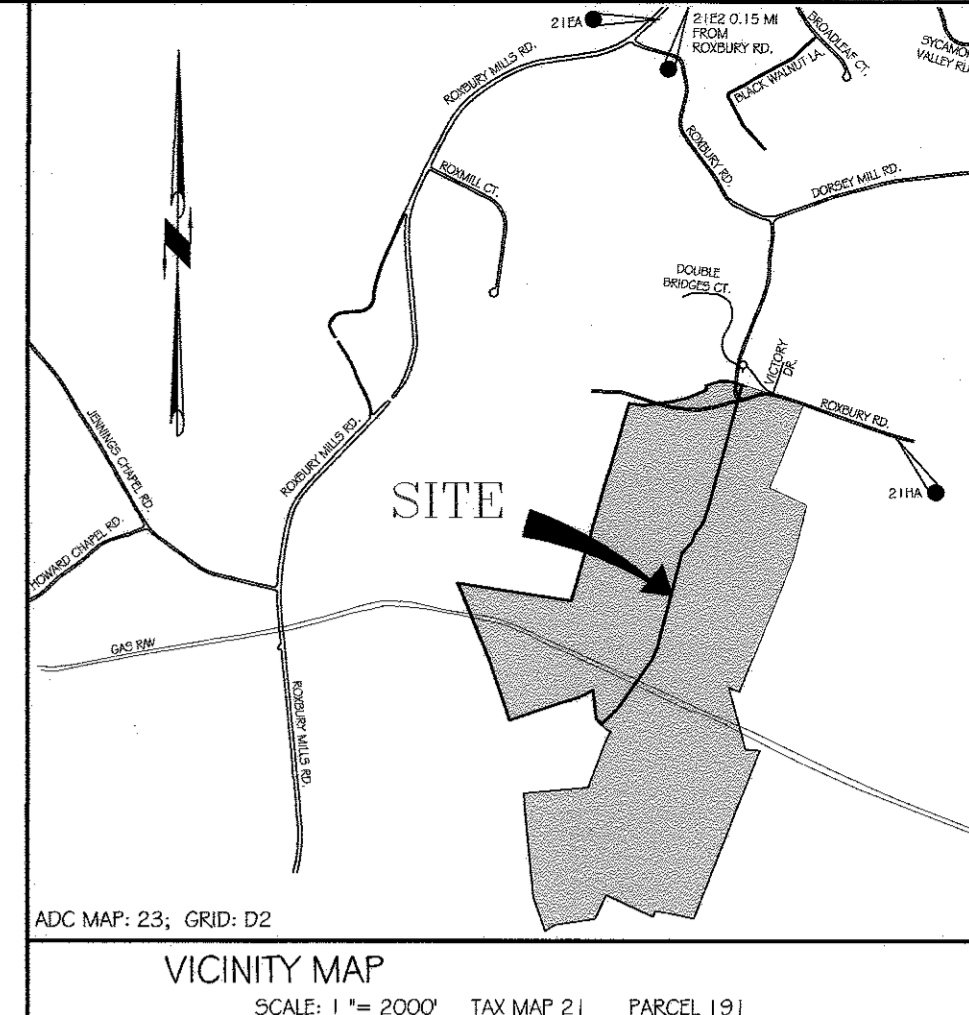
EXISTING TREE LINE

STEEP SLOPES AS DEFINED BY HOWARD COUNTY SCD (>20%)

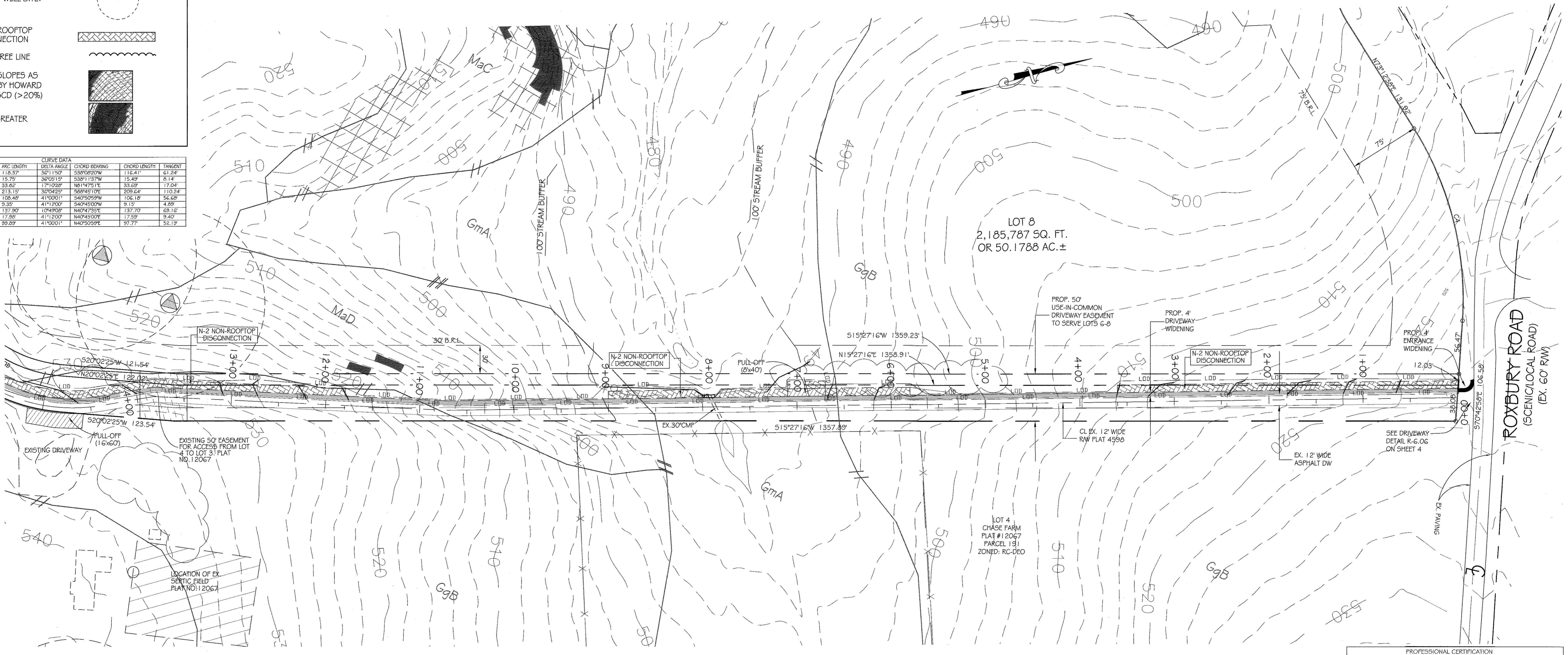
25% OR GREATER

STORMWATER MANAGEMENT PRACTICES - CHASE FARM LOTS 6-8																
Lot Number	ADDRESS	GREEN ROOFS	PERMEABLE PAVEMENTS	REINFORCED TURF	DISCONNECTION OF ROOFTOP RUNOFF	N OF NON-ROOFTOP RUNOFF	SHEETFLOW TO CONSERVATION AREA	RAINWATER HARVESTING	SUBMERGED CHANNELS WETLANDS	LANDSCAPE INFILTRATION	INFILTRATION BERMS	DRY WELLS	MICRO-BIORETENTION	RAIN GARDENS	SWALES	ENHANCED FILTERS
		A-1 (Y/N)	A-3 (Y/N)	A-5 (Y/N)	M-1 (Y/N)	M-2 (Y/N)	M-3 (Y/N)	M-4 (NUMBER)	M-5 (NUMBER)	M-6 (NUMBER)	M-7 (NUMBER)	M-8 (NUMBER)	M-9 (NUMBER)	M-10 (NUMBER)	M-11 (NUMBER)	M-12 (NUMBER)
6	15099 Roxbury Rd.	N	N	N	Y	Y	N	0	0	0	0	0	0	0	0	0
7	15098 Roxbury Rd.	N	N	N	Y	Y	N	0	0	0	0	0	0	0	0	0
8	15097 Roxbury Rd.	N	N	N	Y	Y	N	0	0	0	0	0	0	0	0	0

OWNER:
SHARPS WILD HORSE MEADOW, LLC
C/O CHARLES A. SHARP
4003 JENNINGS CHAPEL ROAD
BROOKVILLE, MARYLAND 20633
(410) 469-4630



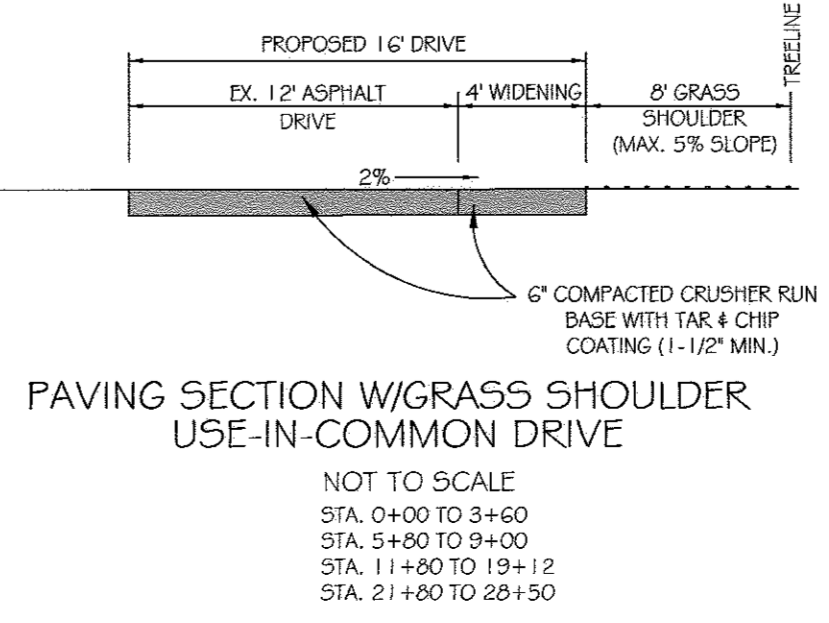
CURVE DATA				
CURVE	RADIUS	ARC LENGTH	DELTA ANGLE	TANGENT
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C8	25.00'	17.58'	41°12'00"	9.40'
C9	138.59'	99.69'	41°00'01"	52.13'



DESIGN NARRATIVE

- THERE ARE NO WATERWAYS, FLOODPLAINS, WETLANDS OR BUFFERS ON THE PROPERTY.
- NATURAL FLOW PATTERNS WILL NOT BE AFFECTED BY THE PROPOSED SUBDIVISION.
- IMPERVIOUS AREAS HAVE BEEN REDUCED THROUGH THE USE OF NON-STRUCTURAL STORMWATER MANAGEMENT PRACTICES.
- THE DESIGN ACHIEVES INTEGRATION OF EROSION AND SEDIMENT CONTROLS INTO THE SWM STRATEGY BY LIMITING THE AMOUNT OF DISTURBED AREA, BY MAINTAINING NATURAL VEGETATION AND MAINTAINING NATURAL DRAINAGE PATTERNS.
- STORMWATER MANAGEMENT REQUIREMENTS WILL BE ADDRESSED USING ROOFTOP DISCONNECTION (N-1), NON-ROOFTOP (N-2) DISCONNECTION AND A DRYWELL (M-5). SWM IS IN ACCORDANCE WITH THE 2009 REVISIONS OF THE 2000 MD STORMWATER DESIGN MANUAL AND ADDRESSES ESD TO THE MFP.
- THERE ARE NO WAIVER PETITIONS PROPOSED.

SWM TREATMENT SUMMARY			
Practice	Area	Methodology	Volume (ESDv)
N-1: Rooftop Disconnection (75' @ 5%)	7,500	ESDv = P _r * R _v * DA/12 where P _r =1.0" & R _v =0.95	594 cft
N-2: Non-Rooftop Disconnection	10,124	ESDv = P _r * R _v * DA/12 where P _r =1.0" & R _v =0.95	802 cft
N-2: Non-Rooftop Disconnection	33,312	ESDv = P _r * R _v * DA/12 where P _r =0.4" & R _v =0.95	1,055 cft
M-5: Drywells	1,000	ESDv = P _r * R _v * DA/12 where P _r =1.0" & R _v =0.95	80 cft
Total ESDv Provided =			2,531 cft
ESDv Required =			2,416 cft



DATE	REVISIONS
8/17/16	PER COMMENTS
9/27/16	PER COMMENTS

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. 18417, Expiration Date: 9-18-2017.

SUPPLEMENTAL PLAN
SOILS, TOPOGRAPHY, GRADING & STORMWATER MANAGEMENT PLAN
LOTS 6-8
CHASE FARM

TAX MAP: 21 ELECTION DISTRICT: No. 4 SCALE: 1" = 50'
GRID NO: 21 HOWARD COUNTY, MARYLAND DATE: AUGUST 2016
PARCEL NO: 191 EX. ZONING: RC-DEO SHEET 2 OF 4

VANMAR ASSOCIATES, INC.
Engineers Surveyors Planners
310 South Main Street Mount Airy, Maryland 21771
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F-16-100

APPROVED

HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Kurt Selbach 10-6-16
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

Chad Edwards 10-5-16
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

I:\Andrew\060819-0308 Chase Farm Lot 3\DWG\GP 6.8 & 7.dwg 9/27/2016 2:22:20 PM, 11

B-4-2 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:
A. 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 discing 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 plan.
c. Incorporate lime and fertilizer into the top 3 to 5 inches of soil by disking 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 500 parts per million (ppm).
iii. Soil contains less than 10 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 loess 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.
vi. Soil contains amendments or topsoil in required 10:1 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 scarified or otherwise loosened to a depth of 3 to 5 inches. B. 1.3
d. 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 disking or other suitable means. Make 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 seeded preparation. Track slopes 3:1 or flatter with tracked equipment leaving the soil in an irregular condition with ridges turning 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.
B. 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, material levels to plants, low permeability and/or low organic matter.
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 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.
e. Areas having slopes steeper than 2:1 require special consideration and design.
4. 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 stones, clods, stumps, slag, coarse fragments, gravel, chocks, roots, trash, or other materials larger than 1 1/2 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 substitution 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.
5. Topsoil Application
a. Erosion and sediment control practices must be maintained when applying topsoil.
b. Uniformly distribute topsoil in a 5 to 6 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 at a minimum of additional soil preparation and tillage. Any preparation and tillage resulting from topsoiling or other operations must be conducted in order to prevent the formation of depressions 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, B. 4 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 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) but be substituted except when hydrosodding which contains at least 50 percent total oxides (calcium and magnesium) and 100 percent mesh. 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 disking 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 10 tons/acre (200-400 pounds per 1,000 square feet) prior to the placement of topsoil.

B-4-4 STANDARDS AND SPECIFICATIONS FOR TEMPORARY STABILIZATION

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

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

Conditions Where Practice Applies:
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.

Criteria:
1. Select one or more of the species or seed mixtures listed in Table B.1 for the appropriate Plant Hardness 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.1 plus fertilizer and lime rates must be put on the plan.
2. For sites having soil tests performed, use and show the recommended rates by the testing agency. Soil tests are not required for Temporary Seeding.
3. When stabilization is required outside of a seeding season, apply seed and mulch or straw mulch alone as prescribed in Section B-4-3, A.1, and maintain until the next seeding season.

B-4-5 STANDARDS AND SPECIFICATIONS FOR PERMANENT STABILIZATION

Definition:
To stabilize disturbed soils with permanent vegetation.

Purpose:
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.

Criteria:
A. Seed Mixtures
1. General Use
a. Select one or more of the species or seed mixtures listed in Table B.3 for the appropriate Plant Hardness Zone (from Figure B.3) and based on the site condition or purpose found on Table B.2. Enter selected mixtures(s), application rates, and seeding dates in the Permanent Seeding Summary. The Summary is to be placed on the plan.
b. Additional planting specifications for exceptional sites such as shorelines, stream banks, or dunes or for special purposes such as wildlife or aesthetic treatments may be found in the USDA-NRCS Technical Field Office Guide, Section 342 - Critical Area Planting.
c. For sites having disturbed area over 5 acres, use and show the rates recommended by the soil testing agency.
d. For areas receiving low maintenance, apply area form fertilizer (46-0-0) at 3 1/2 pounds per 1,000 square feet (150 pounds per acre) at the time of seeding in addition to the soil amendments shown in the Permanent Seeding Summary.
2. Turfgrass Mixtures
a. Areas where turfgrasses may be desired include lawns, parks, playgrounds, and commercial sites which will receive a medium to high level of maintenance.
b. Select one or more of the species or mixtures listed below based on the site conditions or purpose. Enter selected mixtures(s), application rates, and seeding dates in the Permanent Seeding Summary. The summary is to be placed on the plan.
i. Kentucky Bluegrass: Full Sun Mixture: For use in areas that receive intensive management. Irrigation required in the areas of central Maryland and Eastern Shore.
ii. Certified Kentucky Bluegrass Cultivars Seeding Rate: 1.5 to 2.0 pounds per 1,000 square feet. Choose a minimum of three Kentucky bluegrass cultivars with each ranging from 10 to 35 percent of the total mixture by weight.
iii. Kentucky Bluegrass/Perennial Ryegrass: Full Sun Mixture: For use in full sun areas where B.2.2 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 1,000 square feet. Choose a minimum of three Kentucky bluegrass cultivars with each ranging from 10 to 35 percent of the total mixture by weight.
iv. Tall Fescue/Kentucky Bluegrass: Full Sun Mixture: For use in drought prone areas and/or for areas receiving low to medium maintenance 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 1,000 square feet. One or more cultivars may be blended.
v. Kentucky Bluegrass/Fescue Shade Mixture: For use in areas with shade in full sun to medium shade. 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: 1 1/2 to 3 pounds per 1,000 square feet.
Notes:
Select turfgrass varieties from those listed in the most current University of Maryland Publication, Agronomy Memo #777, "Turfgrass Cultivar Recommendations for Maryland" Choose certified material. Certified material is the best guarantee of cultivar purity. 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.
c. Ideal Times of Seeding for Turf Grass Mixtures Western MD: March 15 to June 1, August 1 to October 1 (Hardness Zones: 5b, 6a) Central MD: March 1 to May 15, August 15 to October 15 (Hardness Zones: 5a) Southern MD, Eastern Shore: March 1 to May 15, August 15 to October 15 (Hardness Zones: 7a, 7b)
d. 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 1/2 inches in diameter. The resulting seedbed must be in such a condition that future mowing of grasses will pose no difficulty.
e. Soil moisture is deficient, supply new seedlings with adequate water for plant growth time. Do not use liquid or dry fertilizer on soil (soil) until they are firmly established. This is especially true when seedlings are made late in the planting season, in abnormally dry or hot seasons, or in adverse sites.

B-4-3 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:
A. Seeding
1. Specifications
a. All seed must meet the requirements of the Maryland State Seed Law. All seed must be subject to 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 hydrosodding. Note: It is very important to keep inoculants 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 chemical used for weed control until sufficient time has elapsed (14 days min) to permit dissipation of phytotoxic material.
2. Application
a. Dry Seeding: This includes use of conventional drag or broadcast spreading.
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. B. 1.6
b. Disk or Cultivator Seeding: Mechanized seeders that apply and cover seed with soil.
i. Cultivator seeders are required to bury the seed in such a fashion as to provide at least 1/4 inch of soil covering. Seeded must be firm after planting.
ii. Apply seed in two directions, perpendicular to each other. Apply half the seeding rate in each direction.
c. Hydrosodding: Apply seed uniformly with hydrosodder (applies includes seed and fertilizer). 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 O5 (phosphorous), 25 pounds per acre; K2 O (potassium), 200 pounds per acre.
d. Lime: Use only ground agricultural limestone (up to 3 tons per acre) may be applied by hydrosodding. Normally, not more than 2 tons are applied by hydrosodding at any one time. Do not use liquid or dry fertilizer on soil (soil) until they are firmly established.
e. Mix seed and fertilizer on site and seed immediately and without interruption.
f. When hydrosodding do not incorporate seed into the soil.
B. Mulching
1. 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 moldy, mucky, caked, decayed, or excessively dusty. 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 fiber 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 uniform spread slurry.
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 seeds, 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 retarding 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 1/10 millimeter, diameter approximately 1 millimeter, pH range of 4.0 to 8.5, ash content of 1.6 percent maximum and water holding capacity of 50 percent minimum. B. 1.7
2. Application
a. Apply mulch to all seeded areas immediately after seeding.
b. When straw mulch is used, spread it over 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 1,500 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.
3. Anchoring
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:
i. A mulch anchoring tool is a tractor drawn 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, the 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.
iii. Synthetic binders such as Acrylic DUX (Ago-Tack), DCA-70, Petrosol, Terra Tix, Terra Tack-AR or other approved resins 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 much, such as valleys and on crests of ridges. 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. Sod Installation
a. During periods of excessively high temperature or in areas having dry subsoil, lightly irrigate the subsoil immediately prior to laying the sod.
b. 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 stratified or overlapped and that all joints are butted tight in order to prevent voids which would cause an drying of the roots.
c. Where 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 sod is moist.
C. Soil Maintenance
1. In the absence of adequate rainfall, water daily during the first week or so often and sufficiently to maintain moist soil to a depth of 4 inches. Water sod during the heat of the day.
2. Synthetic binders such as Acrylic DUX (Ago-Tack), DCA-70, Petrosol, Terra Tix, Terra Tack-AR or other approved resins 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 much, such as valleys and on crests of ridges. Use of asphalt binders is strictly prohibited.
3. Do not mow until the sod is firmly rooted. No more than 1/2 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.

Hardness Zone (from Figure B.3):		Fertilizer Rate (10-20-20)		Lime Rate	
No.	Species	Application Rate (lb/ac)	Seeding Dates	Seeding Depths	
1	KENTUCKY BLUEGRASS	20	MAR. 1 - MAY 15 AUG. 1 - OCT. 15	1/4-1/2 in 1/4-1/2 in 1/4-1/2 in	45 pounds per acre 90 lb/ac (2 1/2 lb/1000 sq ft) 90 lb/ac (90 lb/1000 sq ft)

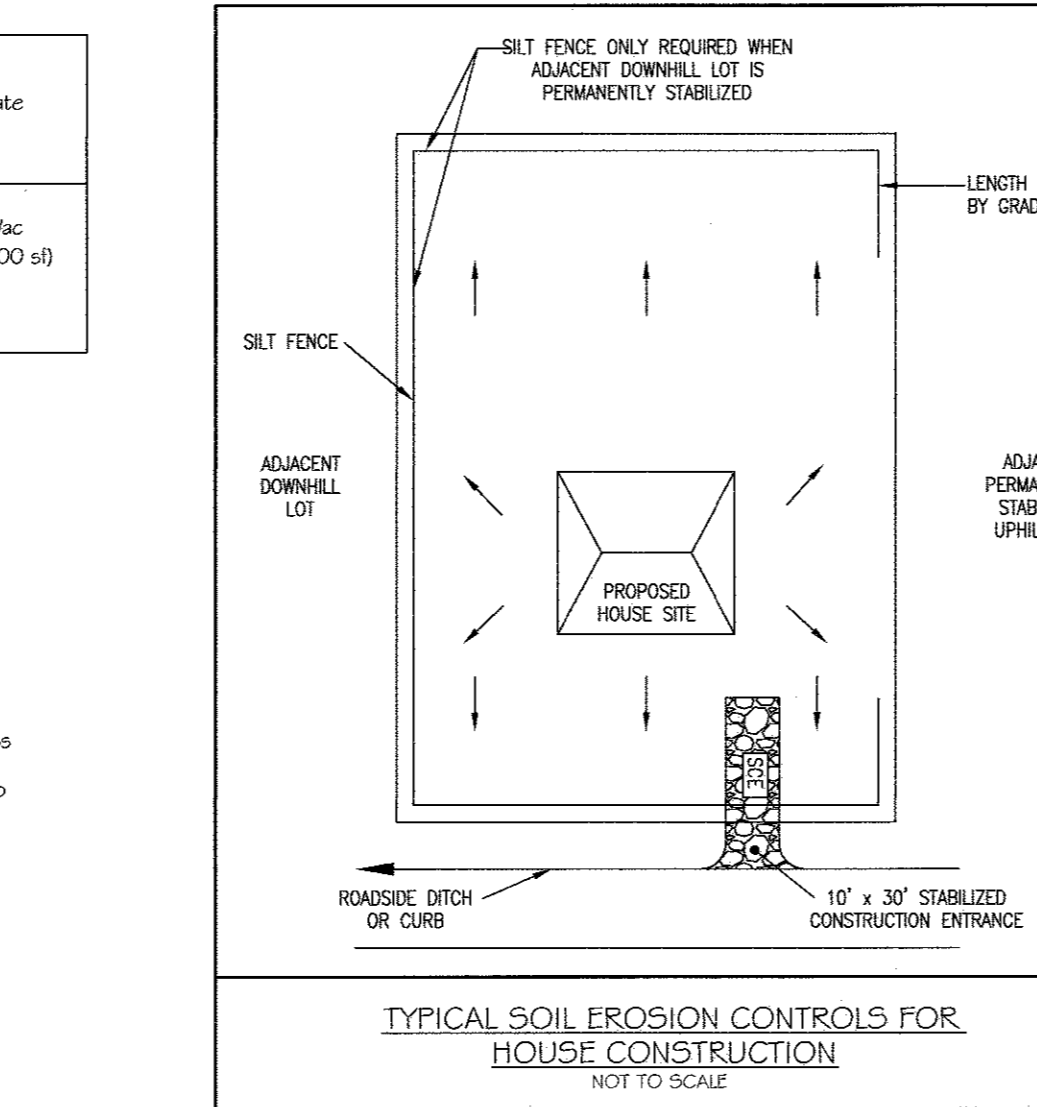
B. Sod: To provide quick cover on disturbed areas (2:1 grade or flatter).

General Specifications
1. Class of sod for sodding must be Maryland State Certified. Sod labels must be made available to the job foreman and inspector.
2. Sod must be machine cut at a uniform soil thickness of 3/4 inch, plus or minus 1/4 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.
3. 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 the sections.
4. Sod must not be harvested or transplanted when moisture content (excessively dry or wet) may adversely affect its survival.
5. 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 installation.
Sod Installation
1. During periods of excessively high temperature or in areas having dry subsoil, lightly irrigate the subsoil immediately prior to laying the sod.
2. 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 stratified or overlapped and that all joints are butted tight in order to prevent voids which would cause an drying of the roots.
3. Where 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.
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Soil Maintenance
1. In the absence of adequate rainfall, water daily during the first week or so often and sufficiently to maintain moist soil to a depth of 4 inches. Water sod during the heat of the day.
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3. Do not mow until the sod is firmly rooted. No more than 1/2 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.

TABLE - STONE SIZE

SIZE RANGE	D ₅₀	D ₁₀₀	ASTM	WEIGHT
NUMBER 5**	3/8" - 1/2"	1/2"	1 1/2"	M-43
NUMBER 1	2" - 3"	2 1/2"	3"	M-43
RIP-RAP**	4" - 7"	2 1/2"	7"	N/A
CLASS I	N/A	9 1/2"	5"	150 LB MAX
CLASS II	N/A	6"	24"	700 LB MAX
CLASS III	N/A	2"	34"	2000 LB MAX

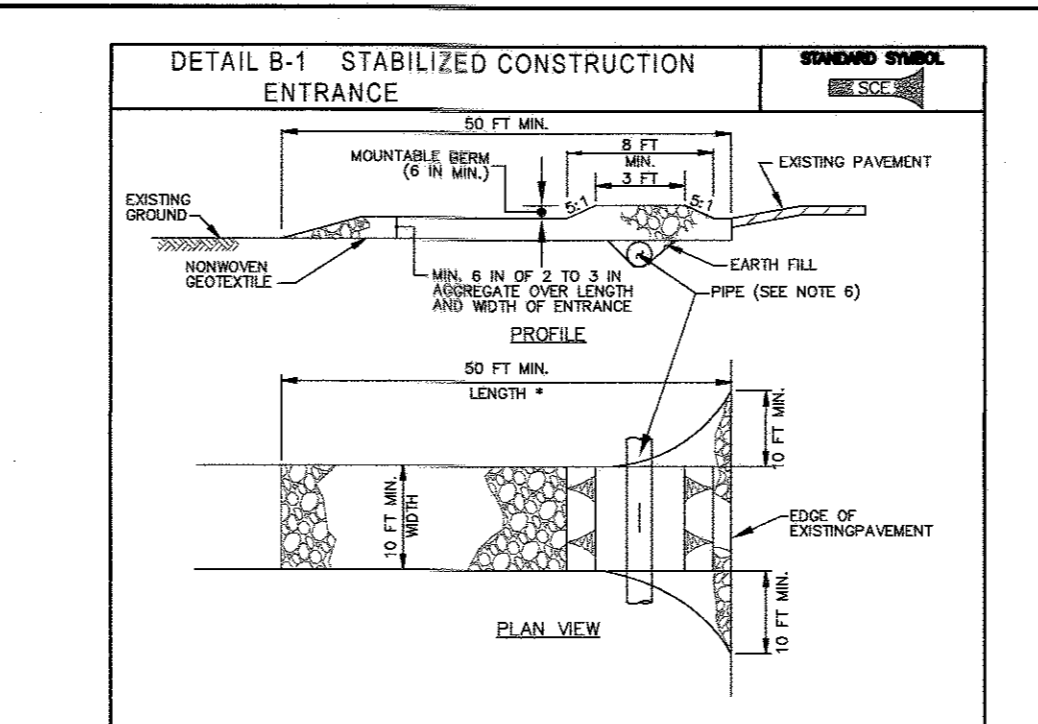
* THIS CLASSIFICATION IS TO BE USED ON THE INSIDE FACE OF STONE CURBS AND CHECK DAMS.
* THIS CLASSIFICATION IS TO BE USED WHENEVER SMALL RIP-RAP IS REQUIRED. THE STATE HIGHWAY ADMINISTRATION DESIGNATION FOR THIS STONE IS STONE FOR GARDENS (905.01.04)



FOR UTILITY WORK ONLY OR FOR OFF-SITE UTILITY WORK
1. CAN NOT EXCEED 5,000 SQUARE FEET
2. PLACE ALL EXCAVATED MATERIAL ON HIGH SIDE OF TRENCH.
3. ONLY AS MUCH WORK AS CAN BE DONE IN ONE DAY SHOULD BACKFILLING, FINAL GRADING, SEEDING AND MULCHING CAN OCCUR.
4. ANY SEDIMENT CONTROL MEASURES DISTURBED BY CONSTRUCTION WILL BE REPAIRED THE SAME DAY.

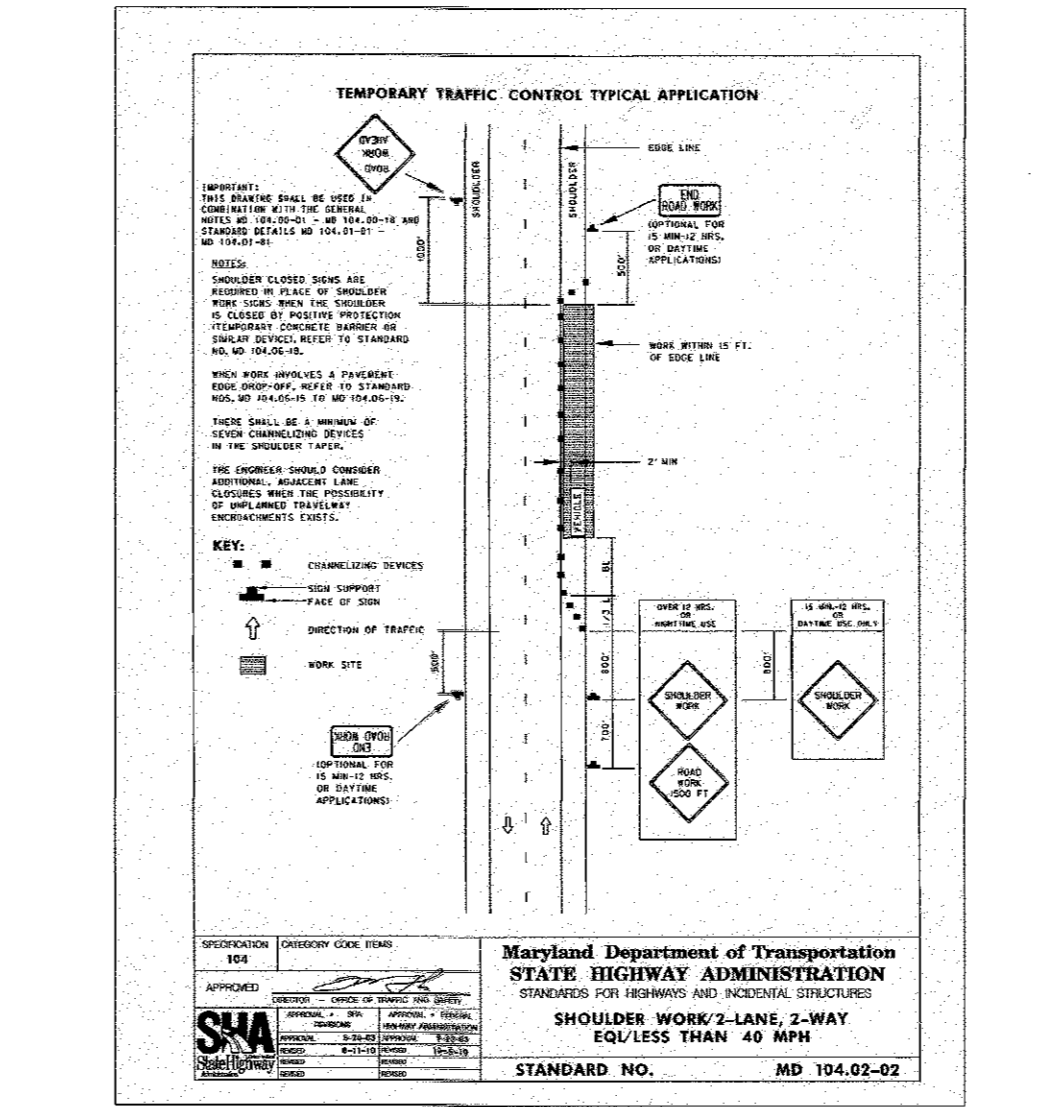
STOCKPILE NOTES:
1. NO STOCKPILING ALLOWED ON ASPHALT.
2. ALL STOCKPILES LEFT AT THE END OF THE NEXT DAY NEED TO BE STABILIZED UNTIL THE NEXT RESTORATION.
3. SHOULD THE STOCKPILE AREA EXCEED 15 FEET IN HEIGHT, IT MUST BE BENCHED.

SEQUENCE OF CONSTRUCTION
1. OBTAIN ALL REQUIRED GRADING, MDE PERMITS, APPROVALS AND LICENSES FROM APPROPRIATE AGENCIES. (1 WEEK)
2. NOTIFY SEDIMENT CONTROL INSPECTOR AT LEAST THREE (3) WORKING DAYS PRIOR TO STARTING WORK. (1 DAY)
3. INSTALL STABILIZED CONSTRUCTION ENTRANCES. INSTALL SUPER SILT FENCE AS SHOWN IN THE SEDIMENT CONTROL PLAN. (1 WEEK)
4. STABILIZE ALL THE GRADED AREAS UP TO 20' OUTSIDE OF THE LIMIT OF GRADING AS PER PERMANENT SEEDING NOTES. (2 WEEKS)
5. ONCE THE SEDIMENT CONTROL DEVICES ARE INSTALLED THE PERMITTEE MUST OBTAIN APPROVAL FROM THE INSPECTOR BEFORE PROCEEDING WITH ADDITIONAL CLEARING, GRUBBING OR GRADING. (1 WEEK)
6. ANY AREAS THAT CAN BE TEMPORARILY SEEDED DURING CONSTRUCTION MUST BE TEMPORARILY STABILIZED PER SEEDING NOTES.
7. CONSTRUCT HOME AND DRIVEWAY (6 MONTHS)
8. FINAL GRADING OF SITE, STABILIZE DISTURBED AREAS PER PERMANENT SEEDING NOTES.
9. UPON APPROVAL OF SEDIMENT CONTROL INSPECTOR, REMOVE ALL TEMPORARY SEDIMENT CONTROL DEVICES FOR HOUSE CONSTRUCTION.
10. NOTIFY INSPECTOR FOR FINAL INSPECTION.



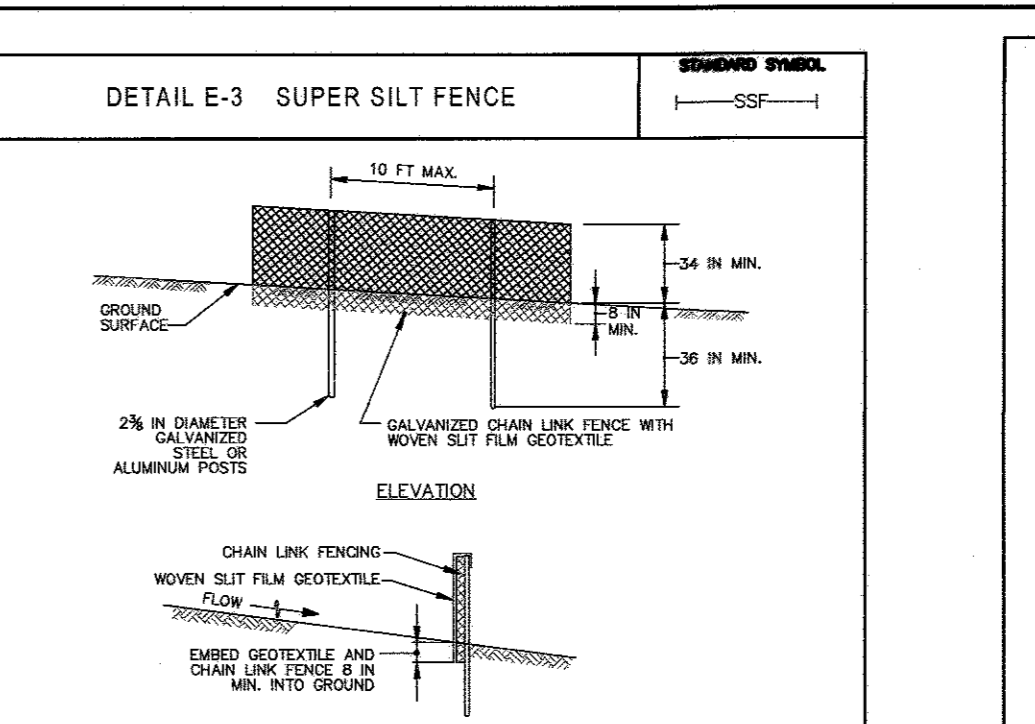
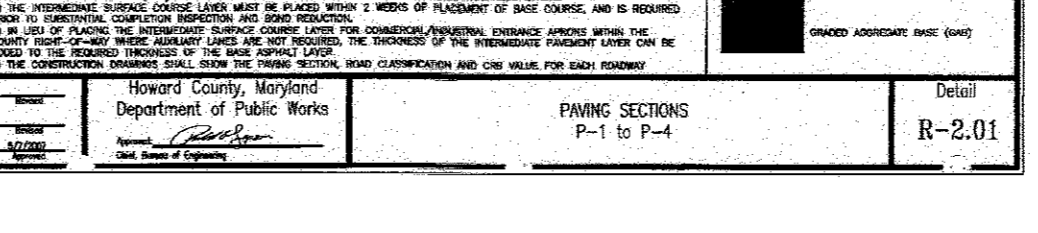
CONSTRUCTION SPECIFICATIONS
1. PLACE STABILIZED CONSTRUCTION ENTRANCE IN ACCORDANCE WITH THE APPROVED PLAN. VEHICLES MUST TRAVEL OVER THE ENTIRE LENGTH OF THE SIZE. USE MINIMUM LENGTH OF 50 FEET (50 FEET FOR SINGLE RESIDUAL LOT) USE MINIMUM WIDTH OF 30 FEET. FLARE SIZE TO BE MINIMUM OF 36 INCHES TO PROVIDE A TURNING RADIUS.
2. PIPE ALL SURFACE WATER FLOWING TO OR DIVERTED TOWARD THE SITE UNDER THE ENTRANCE. MAINTAIN POSITIVE DRAINAGE. PROTECT PIPE INSTALLED THROUGH THE SITE 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 SIZE IS LOCATED AT A HIGH SPOT AND HAS NO BARRIER TO CONVEY, A PIPE IS NOT NECESSARY. A MOUNTABLE BERM IS REQUIRED WHEN SIZE 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 (2 TO 3 INCHES IN SIZE) OR EQUIVALENT RECYCLED CONCRETE (WITHOUT REBAR) AT LEAST 6 INCHES DEEP OVER THE LENGTH AND WIDTH OF THE SIZE.
5. MAINTAIN ENTRANCE IN A CONDITION THAT MINIMIZES TRACKING OF SEDIMENT AND STONE OR MAKE OTHER REPAIRS AS CONDITIONS DEMAND TO MAINTAIN CLEAN SURFACE, MOUNTABLE BERM, AND SPECIFIED DIMENSIONS. MATERIALS MUST BE CLEAN AND FREE OF DEBRIS, SPILLS, DROPPED, TRACKED ONTO ADJACENT ROADWAY BY WAGTAILS, SCRAPING, AND/OR SHEETING. WASHING TRUCKS TO BEARER AND TRACKS ONTO PAVEMENT IS NOT ACCEPTABLE UNLESS WASH WATER IS DIRECTED TO AN APPROVED SEDIMENT CONTROL PRACTICE.

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION
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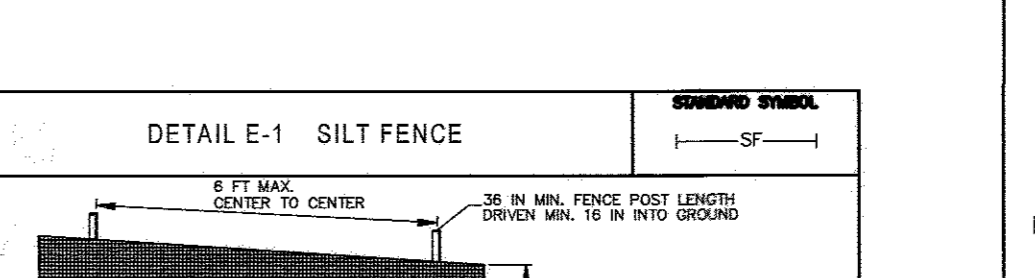
PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 16417, EXPIRATION DATE: 9-18-2017

SECTION NUMBER	NO. AND DATE OF REVISION	DATE	BY	REVISION
P-1	1	9/29/2016	CH	ADD PERMITS AND APPROVALS
P-2	1	9/29/2016	CH	ADD PERMITS AND APPROVALS
P-3	1	9/29/2016	CH	ADD PERMITS AND APPROVALS
P-4	1	9/29/2016	CH	ADD PERMITS AND APPROVALS

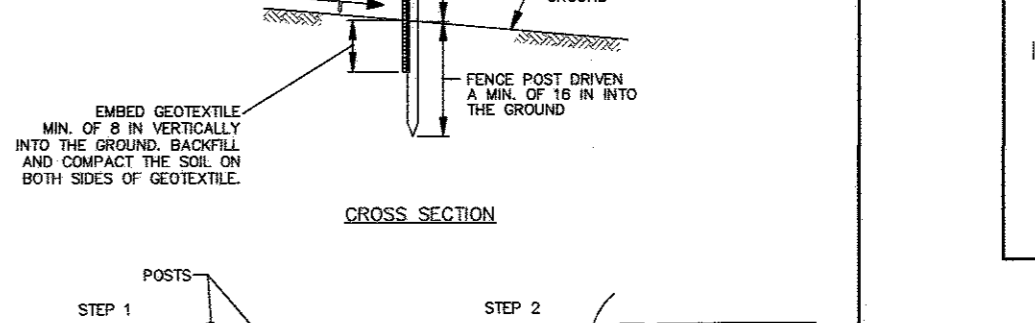


CONSTRUCTION SPECIFICATIONS
1. INSTALL 2 1/2 INCH DIAMETER GALVANIZED STEEL POSTS OF 6.00 INCH WALL THICKNESS AND SIX FOOT LENGTH SPACED NO FURTHER THAN 10 FEET WITH A MINIMUM OF 36 INCHES TO THE GROUND.
2. FASTEN 6 GAUGE OR HEAVIER GALVANIZED CHAIN LINK FENCE (2 1/2 INCH MAXIMUM OPENING) 42 INCHES IN HEIGHT SECURELY TO THE FENCE POSTS WITH WIRE LIPS OR HUG RINGS.
3. FASTEN WOVEN SILT FENCE GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS SECURELY TO THE UPSIDE SIDE OF CHAIN LINK FENCE WITH TIES SPACED 8 FEET ON CENTER AT THE TOP AND BOTTOM. ENDS OF GEOTEXTILE AND CHAIN LINK FENCE A MINIMUM OF 8 INCHES INTO THE GROUND.
4. WHERE ENDS OF THE GEOTEXTILE COME TOGETHER, THE ENDS SHALL BE OVERLAPPED BY 6 INCHES, FOLDED, AND STAPLED TO PREVENT SEDIMENT BY PASS.
5. EXTEND BOTH ENDS OF THE SUPER SILT FENCE A MINIMUM OF FIVE HORIZONTAL FEET UPSLOPE AT 40 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/ENFORCEMENT 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 SEDIMENT REACHES 20% OF FENCE HEIGHT. REPLACE GEOTEXTILE IF TORN, IF UNDERMINING OCCURS, REINSTALL CHAIN LINK FENCING AND GEOTEXTILE.

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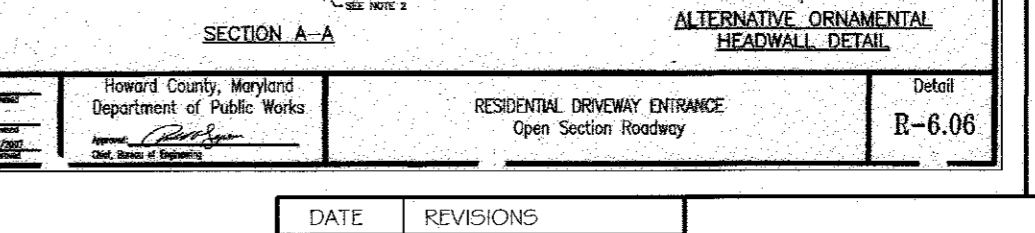
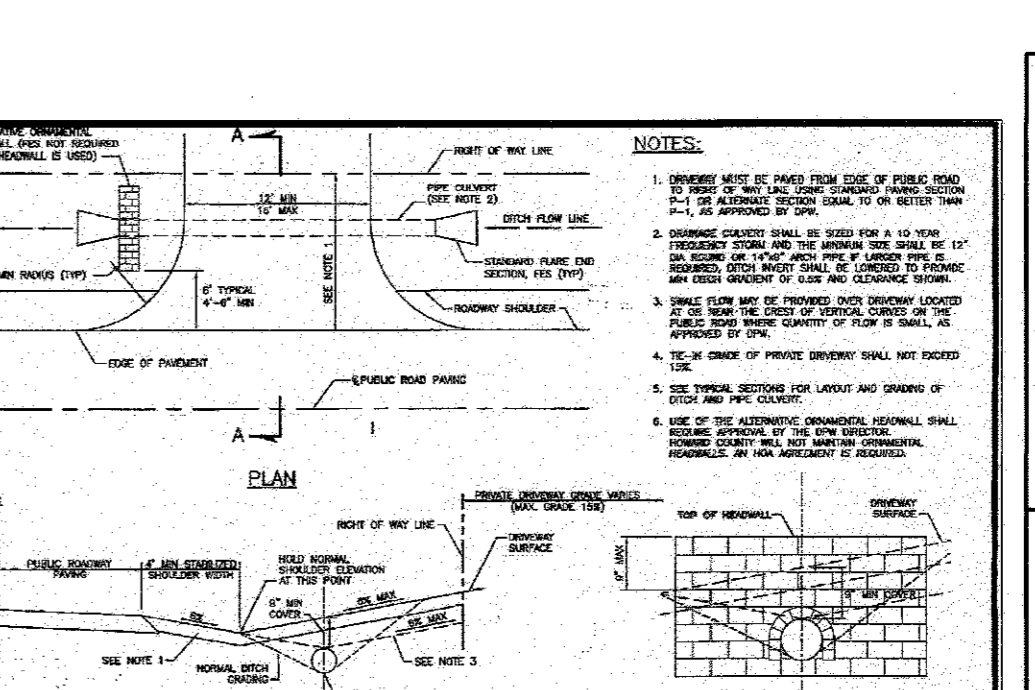


CONSTRUCTION SPECIFICATIONS
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ENGINEER'S CERTIFICATE:
"I HEREBY CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT AND THE 2011 MARYLAND STANDARDS & SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL."
Ronald E. Thompson, P.E.
9/29/2016



TAX MAP: 21
GRID NO: 21
PARCEL NO: 191
ELECTION DISTRICT: No. 4
HOWARD COUNTY, MARYLAND
EX. ZONING: RC-DEO
SCALE: AS SHOWN
DATE: AUGUST 2016
SHEET 4 OF 4

HOWARD SOIL CONSERVATION DISTRICT STANDARD SEDIMENT CONTROL NOTES

- A minimum of 48 hours notice must be given to the Howard County Department of Inspections, Licenses and Permits, Sediment Control Division prior to the start of any construction, (313-1855).
- 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 THE SOIL EROSION AND SEDIMENT CONTROL", and revisions thereto.
- 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.
- 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 (Sec. B-4-4), temporary seeding (Sec. B-4-4) and mulching (Sec. B-4-3). Temporary stabilization with mulch alone can only be done when recommended seeding dates do not allow for proper germination and establishment of grasses.
- 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.
- Site Analysis:

Total Area of Site	210.44 Acres.
Area Disturbed	2.10 Acres.
Area to be roofed or paved	0.70 Acres.
Area to be vegetatively stabilized	1.40 Acres.
Total Cut	- Cu. Yds.
Total Fill	- Cu. Yds.

 Offsite waste/borrow area location N/A.
Location must have active grading permit and as approved by inspector.
- Any sediment control practice which is disturbed by grading activity for placement of utilities must be repaired on the same day of disturbance.
- Additional sediment control must be provided, if deemed necessary by the Howard County Sediment Control Inspector.
- 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.
- Trenches for the construction of utilities is limited to three pipe lengths or that which can be back filled and stabilized within one working day, whichever is shorter.
- Any changes or revisions to the sequence of construction must be reviewed and approved by the plan approval authority prior to proceeding with construction.
- 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. Work may proceed to a subsequent