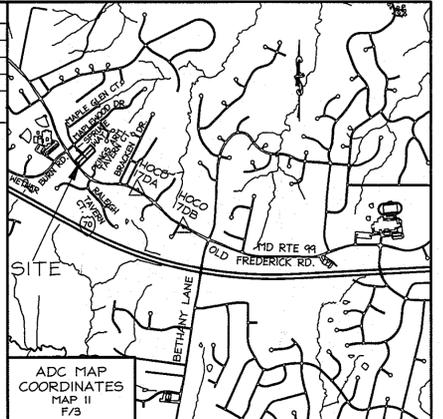


| NO. | TITLE |
|-----|--|
| 1 | Site Development Plan and Landscape Plan |
| 2 | Grading, Sediment Control and Soils Plan |
| 3 | Sediment Control & Construction Notes & Details |
| 4 | Stormwater Management Notes, Details & Landscape Schedule, Notes & Details |

GENERAL NOTES

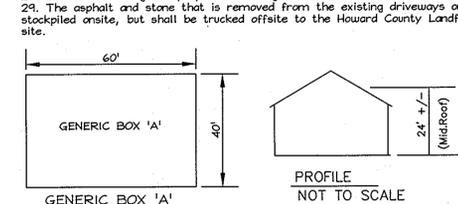
- The contractor shall notify the Department of Public Works / Bureau of Engineering / Construction Inspection Division at 410-313-1880 at least five (5) working days prior to the start of work.
- The subject property is zoned R-20 per the 2/2/04 Comprehensive Zoning Plan.
- The contractor shall notify 'Miss Utility' at 1-800-257-7777 at least 48 hours prior to any excavation work being done.
- The topography shown hereon is taken from a field run topographic survey with two (2) foot contour intervals prepared by LDE, Inc. in April, 2004.
- The boundary management is based on a field run boundary survey by LDE, Inc., dated April, 2004.
- These Coordinates are based on NAD 83, Maryland State Plane Coordinate System, as projected from Howard County control stations 17DA & 17DB. Station values taken from Maplewood Overlook Lots 1 thru 3 Plat #14346. Sta. 17DA N 595410.845 E 1351641.146 Sta. 17DB N 595241.556 E 1352272.586
- Any damage to the County's right-of-way shall be corrected at the developer's expense.
- For driveway entrance details refer to the Howard County Design Manual, Volume IV, Standard Detail R-6.06.
- Site Analysis Data Chart:
 - Owner: Wayne and Denise Smoot and Helen Smoot
 - Subdivision: Maplewood Overlook, Lots 4 - 7
 - Plot No.: 18443
 - Dead References: Lot 4 - 10676/630, Lot 5 - 10329/625, Lot 6 - 10676/636, Lot 7 - 10676/633
 - Purpose Note: The purpose of this site development plan is to provide construction documents for the development of lots 6 & 7 and the relocation of the existing driveways for lots 4 & 5. Additionally, this plan is designed to provide construction details for the proposed stormwater management facilities.
 - Total Project Area: 2.22 ± Acres
 - Limit of Disturbed Area: 1.40 ± Acres
 - Present Zoning: R-20
 - Total number of units allowed: 1 per lot, 4 Total (two (2) existing, two (2) proposed)
 - Open Space: Met via payment of a fee-in-lieu in the amount of \$1500.00.
 - Stormwater management shall be in accordance with the current Subdivision Regulations (F-05-179)
 - Previous Submittals: F-98-176, WP-00-73, F-00-188, F-00-111, WP-04-131, F-05-179.
 - BRL denotes building restriction line.
 - All areas shown on this plan are ±, more or less.
 - Stormwater management for this subdivision will be met through infiltration trenches and rooftop disconnect credits, as approved under F-05-179. A stormwater management developer's agreement was previously posted under F-05-179. This developer's agreement has been amended and extended for SDP-09-42. Surety amounts remain unchanged from those originally posted under F-05-179.
 - No wetlands were located on-site as approved under F-05-179.
 - Landscaping surety for this subdivision was previously posted under a developer's agreement in the amount of \$3,300.00 for F-05-179. This developer's agreement has been amended and extended for SDP-09-42. Surety amounts remain unchanged from those originally posted under F-05-179.
 - Development Regulations per Council Bill No. 45 - 2003 effective October 2, 2003. Development or construction on this lot must comply with the setback and buffer regulations in effect at the time of submission of this site development plan, waiver petition application or building permit applications.
 - In accordance with approved WP-04-091, the common driveway is permitted to have Nine (9) users. The existing common driveway must be reconstructed in accordance with the private access place standards. However, no Private Access Place agreement will be required. Additionally, the subject waiver approval requires that the existing lot 4 & 5 driveways that access Old Frederick Road be removed. Lots 4 & 5 will derive vehicular access from the common driveway out Spruce Way.
 - Water and sewer lots, remain in common. Access to Lots 4 & 5 will be granted under the provisions of Section 18.122.B of the Howard County Code. Lots 4 & 5 presently are connected to public water and sewer. The lot 4 & 5 WHCs and SHCs shall remain.
 - Public water and sewerage allocation will be granted for lots 6 & 7 at the time of issuance of the building permits if capacity is available at that time.
 - In accordance with Section 128 of the Howard County Zoning Regulations, bay windows, chimneys or exterior stairways not more than 16 feet in width may project not more than 4 feet into any setbacks, porches or decks, open or enclosed may project not more than 10 feet into the front or rear yard setback.
 - The 65dBA noise contour line drawn on this plan is advisory as required by the Howard County Design Manual, Volume II, Chapter 5, revised February, 1992, and cannot be considered to exactly locate the 65dBA noise exposure. The 65dBA noise line was established by Howard County to alert developers, builders and future residents that noise levels beyond this threshold may exceed generally accepted noise levels established by the U.S. Department of Housing and Urban Development.
 - The existing driveways for Lots 4 & 5 onto MD Route 99 (Old Frederick Road) shall be abandoned and removed. The Owner/Developer shall contact Ms. Andrea Abernethy, SHA District 7 Utilities Office at 301-624-8116 to obtain access. The Owner/Developer shall be responsible for the removal of existing driveways along MD. Route 99 for Lots 4 and 5. This area shall be seeded and mulched in accordance with comments from the MD State Highway Administration. Proof that these driveways have been abandoned has been submitted to the Department of Planning and Zoning with the mylars of this SDP for signature approval. Access to Lots 4 and 5 will be onto Spruce Way and new addresses shall be assigned to these lots. The new addresses are shown in the address chart on this sheet.
 - The existing well which once served the existing house on Lot 4 (previously Lot 1) has been sealed and abandoned by a licensed well driller and verification has been submitted to the Health Department.
 - Both the existing and proposed dwellings have inside water meter settings.
 - The asphalt and stone that is removed from the existing driveways on lots 4 and 5 shall not be stockpiled onsite, but shall be trucked offsite to the Howard County Landfill or other approved disposal site.



VICINITY MAP
1" = 2000'
BENCHMARKS
Sta. 17DA N 595410.845 E 1351641.146
Sta. 17DB N 595241.556 E 1352272.586

LEGEND

| | |
|--|----------------------------------|
| | EXISTING CONTOURS |
| | PROPOSED CONTOURS |
| | SOILS DIVIDE |
| | EX. TREELINE |
| | PRO. TREELINE |
| | TREE PROTECTION FENCE |
| | DRAINAGE FLOW ARROWS |
| | PROPOSED PAVING |
| | EXISTING PAVING |
| | EXISTING PAVING TO BE REMOVED |
| | ROOF LEADER |
| | INFILTRATION TRENCH |
| | PROPOSED TREE |
| | EXISTING TREE |
| | SILT FENCE |
| | EROSION CONTROL MATTING |
| | LIMIT OF DISTURBANCE |
| | STABILIZED CONSTRUCTION ENTRANCE |
| | UNMITIGATED 65dBA NOISE LINE |
| | EXISTING EASEMENTS |



MODEL MATRIX

| LOT NO. | GARAGES | | BASEMENT EXITS | |
|---------|-------------|------------|----------------|---------|
| | Front Entry | Side Entry | Areaway | Walkout |
| 6 | No | Yes | Yes | No |
| 7 | Yes | No | Yes | No |

ADDRESS CHART

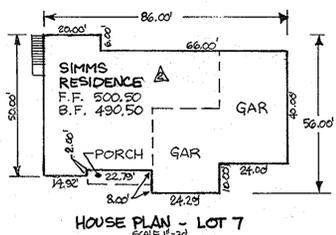
| Lot No. | Street Address |
|---------|------------------|
| 4 | 10189 SPRUCE WAY |
| 5 | 10185 SPRUCE WAY |
| 6 | 10174 SPRUCE WAY |
| 7 | 10178 SPRUCE WAY |

SEE NOTE 26 AND 29 REGARDING REMOVAL OF DRIVEWAYS WITHIN MD. ROUTE 99 R/W

NOTE: ANY PROPOSED HOUSE THAT DOES NOT FIT WITHIN GENERIC BOX 'A', OR WHOSE FOOTPRINT EXCEEDS 2,400 S.F., MAY BE SUBJECT TO ADDITIONAL STORMWATER MANAGEMENT REQUIREMENTS.

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. 19184, EXPIRES 03/31/11.

SIGNED: BRUCE D. BURTON
DATE: 8/26/09



APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION: *9/16/09* DATE

CHIEF, DIVISION OF LAND DEVELOPMENT: *9-17-09* DATE

DIRECTOR: *9-18-09* DATE

DEVELOPER'S / BUILDER'S CERTIFICATION

I certify that the landscaping shown on this plan will be done according to the plan, Section 16.124 of the Howard County Code and the Howard County Landscape Manual. I further certify that upon completion a Letter of Landscape Installation, accompanied by an executed One Year Guarantee of Plant Materials will be submitted to the Department of Planning and Zoning.

Wayne A. Smoot 8-26-09
Denise L. Smoot 8-26-09
Signature of Developer / Builder DATE

REVISIONS

| No. | Date | Description |
|-----|--------------------|---|
| 1 | May, 2010 | Revise infiltration trench #1 location and elevations / Show as-built elevations for all private SWM facilities and private tree turn around. |
| 2 | 6/1/2011 LDE, INC. | REVISE HOUSE MODEL LOT 7 / REVISE LOT GRADING LOT 7 |
| 3 | 6/26/12 LDE | REVISE GRADING, DRIVEWAY, DRIVEWAY GULCH, BLACK 3' WALL, INFILTRATION TRENCH |

LDE Inc.
Engineers, Surveyors, Planners
9230 Ramsey Road, Suite 106 Columbia, Maryland - 21045
(410)715-1070 - (301)596-3424 - FAX(410)715-9540

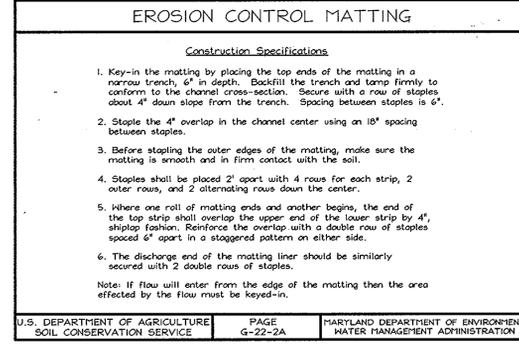
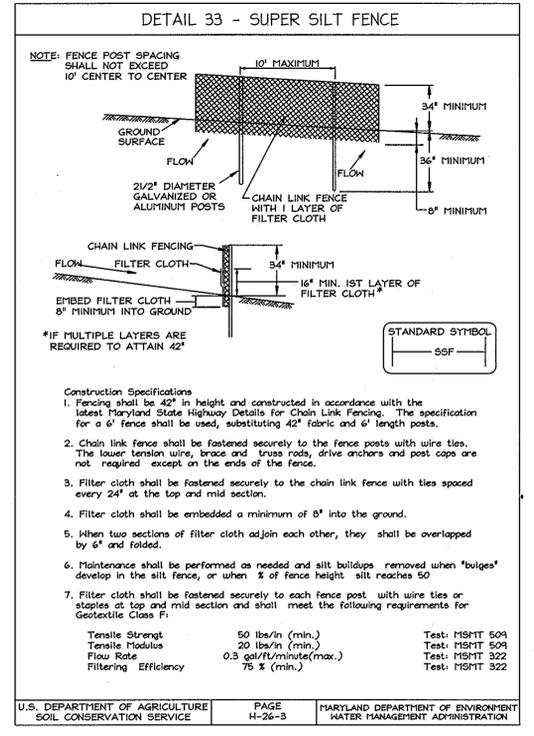
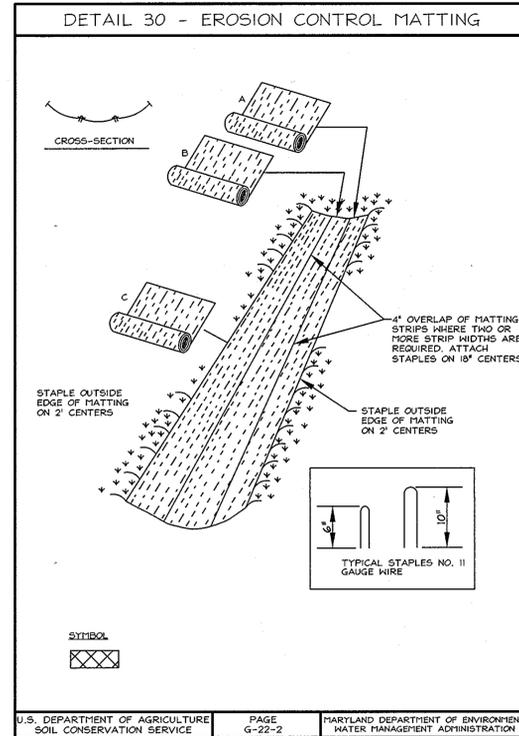
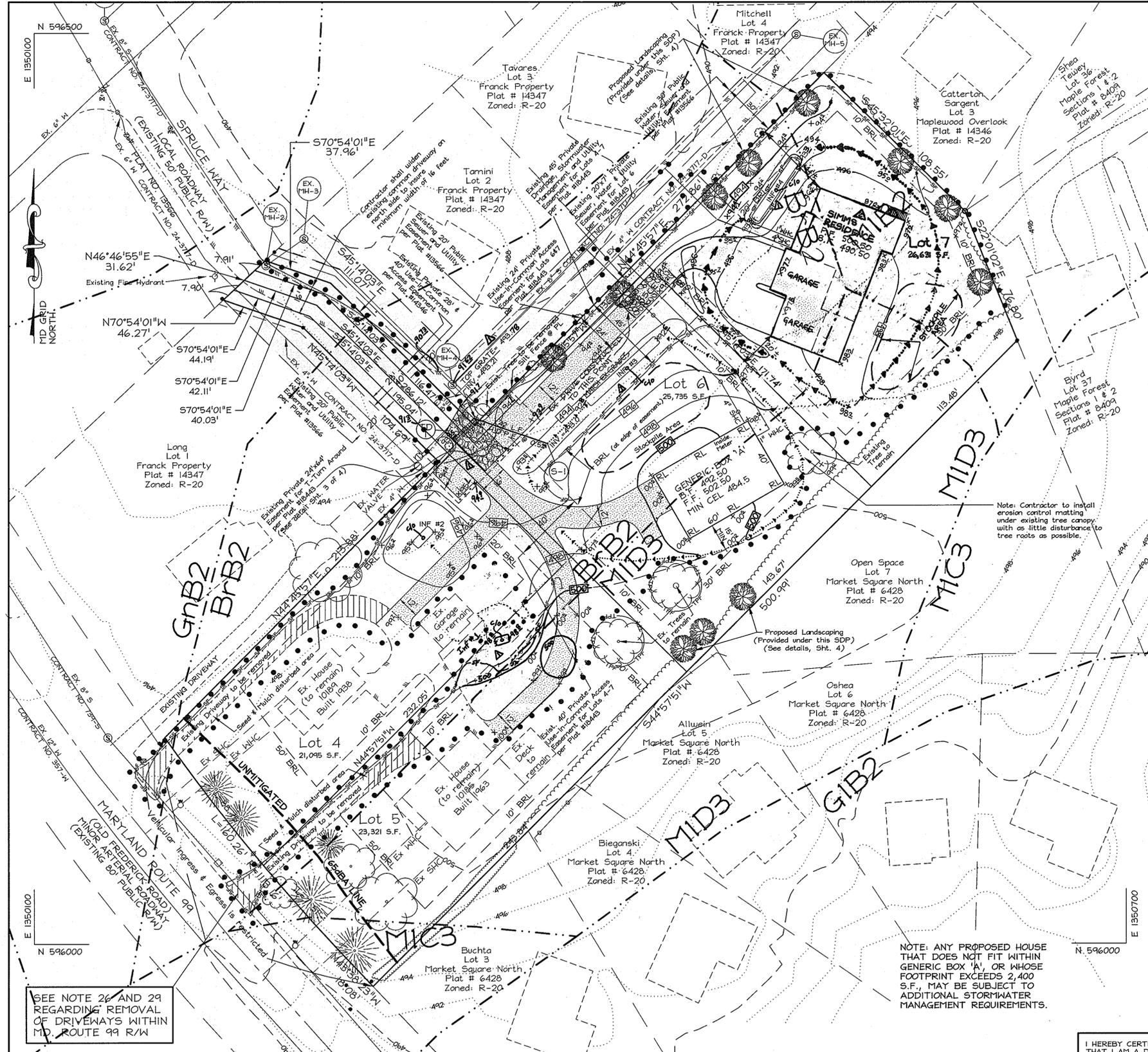
| DESIGNED | S.D.H. | SCALE | 1" = 30' |
|----------|--------|----------|-----------|
| DRAWN | G.D.W. | DRAINING | 1 OF 4 |
| CHECKED | B.D.B. | JOB NO. | 08-004 |
| DATE | 8/2009 | FILE NO. | SDP-09-42 |

SITE DEVELOPMENT PLAN AND LANDSCAPE PLAN
MAPLEWOOD OVERLOOK
LOTS 4 - 7
PLAT NO. 18443
PROPOSED SINGLE FAMILY DETACHED UNITS ON LOTS 6 & 7 AND RELOCATED USE-IN-COMMON DRIVEWAY/STORMWATER MANAGEMENT FOR EXISTING DWELLINGS ON LOTS 4 & 5

Tax Map No. 17 - Grid No. 7 - Parcel 731
2nd Election District - Howard County, Maryland
Previous Submittals: F-98-176, WP-00-73, F-00-188, F-00-111, WP-04-131, F-05-179

OWNER/DEVELOPER:
Helen V. Smoot 10176 Old Frederick Road, Ellicott City, Maryland 21042
Wayne A. Smoot 10182 Old Frederick Road, Ellicott City, Maryland 21042
Denise L. Smoot 410-465-0524

SDP-09-42



SUPER SILT FENCE

| Slope | Slope Steepness | Slope Length (maximum) | Silt Fence Length (maximum) |
|----------|-----------------|------------------------|-----------------------------|
| 0 - 10% | 0 - 1:1 | Unlimited | Unlimited |
| 10 - 20% | 1:1 - 5:1 | 200 feet | 1,500 feet |
| 20 - 33% | 5:1 - 3:1 | 100 feet | 1,000 feet |
| 33 - 50% | 3:1 - 2:1 | 100 feet | 500 feet |
| 50% + | 2:1 + | 50 feet | 250 feet |

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE PAGE H-26-3A MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

NOTE: THE ASPHALT AND STONE THAT IS REMOVED FROM THE EXISTING DRIVEWAYS ON LOTS 4 AND 5 SHALL NOT BE STOCKPILED ONSITE, BUT SHALL BE TRUCKED OFFSITE TO THE HOWARD COUNTY LANDFILL OR OTHER APPROVED DISPOSAL SITE.

NOTE: SILT FENCE IS TO BE REPLACED BY "SUPER" SILT FENCE AT THE DIRECTION OF THE SEDIMENT CONTROL INSPECTOR.

NOTE: ANY PROPOSED HOUSE THAT DOES NOT FIT WITHIN GENERIC BOX 'A', OR WHOSE FOOTPRINT EXCEEDS 2,400 S.F., MAY BE SUBJECT TO ADDITIONAL STORMWATER MANAGEMENT REQUIREMENTS.

SEE NOTE 26 AND 29 REGARDING REMOVAL OF DRIVEWAYS WITHIN MD. ROUTE 99 R/W

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. 19184, EXPIRES 09/30/11.

SIGNED: BRUCE D. BURTON
 BRUCE D. BURTON
 9/16/09

SOILS LEGEND

| HYDROLOGIC SOIL GROUP | SOIL SYMBOL | DESCRIPTION | REMARKS |
|-----------------------|-------------|---|---------|
| B | GIB2 | Glenelg Loam, 3% - 8% slopes, moderately eroded. | |
| B | M1C3 | Manor loam, 8% - 15% slopes, Severely eroded. | |
| B | M1D3 | Manor loam, 15% - 25% slopes, Severely eroded. | |
| C | BrB2 | Brandywine loam, 3% - 8% slopes, Moderately eroded. | |
| C | GnB2 | Glenville silt loam, 3% - 8% slopes, Moderately eroded. | |

LDE Inc.
 Engineers, Surveyors, Planners
 9250 Ramsey Road, Suite 106 Columbia, Maryland - 21045
 (410)715-1070 - (301)596-3424 - FAX(410)715-9340

DESIGNED: S.D.H.
 DRAWN: G.D.W.
 CHECKED: B.D.B.
 DATE: 8/2009

GRADING, SEDIMENT CONTROL AND SOILS PLAN
MAPLEWOOD OVERLOOK
 LOTS 4 - 7
 PLAT NO. 18443
 PROPOSED SINGLE FAMILY DETACHED UNITS ON LOTS 4 & 7 AND RELOCATED USE-IN-COMMON DRIVEWAY/STORMWATER MANAGEMENT FOR EXISTING Dwellings ON LOTS 4 & 5

SCALE: 1" = 30'
 DRAWING: 2 OF 4
 JOB NO.: 08-004
 FILE NO.: SDP-09-42

Tax Map No. 17 - Grid No. 7 - Parcel 731
 2nd Election District - Howard County, Maryland
 Previous Submittals: F90-176, WFO-73, F00-188, F00-111, WFO-131, F-05-179

OWNER/DEVELOPER:
 Helen V. Smoot
 10176 Old Frederick Road
 Ellicott City, Maryland 21042

Wayne A. Smoot
 Denise L. Smoot
 10182 Old Frederick Road
 Ellicott City, Maryland 21042

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

9/16/09
 CHIEF, DEVELOPMENT ENGINEERING DIVISION

9-17-09
 CHIEF, DIVISION OF LAND DEVELOPMENT

9-18-09
 DIRECTOR, DEP.

DEVELOPER'S / BUILDER'S CERTIFICATION

I certify that the landscaping shown on this plan will be done according to the plan, Section 16.124 of the Howard County Code and the Howard County Landscape Manual. I further certify that upon completion a Letter of Landscape Installation, accompanied by an executed One Year Guarantee of Plant Materials will be submitted to the Department of Planning and Zoning.

Wayne Smoot
 8-26-09
 SIGNATURE OF DEVELOPER / BUILDER DATE

John R. Roberts
 9/9/09
 HOWARD SOIL CONSERVATION DISTRICT DATE

ENGINEER'S CERTIFICATE

I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

BRUCE D. BURTON
 8/16/09
 SIGNATURE OF ENGINEER DATE

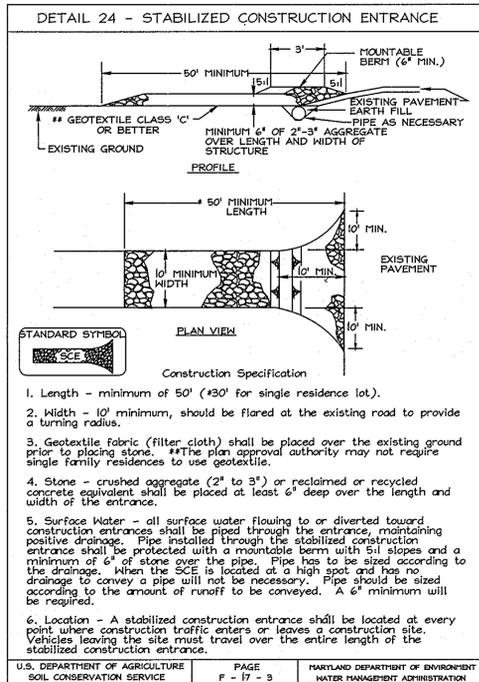
DEVELOPER'S CERTIFICATE

I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS 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 OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY.

Wayne Smoot
 8-26-09
 SIGNATURE OF DEVELOPER DATE

REVISIONS

| No. | Date | Description |
|-----|-----------|---|
| 1 | May, 2010 | Revise infiltration trench # 1 location and elevations / Show as-built elevations. For all private SWM facilities and private tree turn around. Revise LDD. |
| 2 | 6/1/2011 | REVISE HOUSE MODEL LOT 7 / REVISE LOT GRADING LOT 7 |

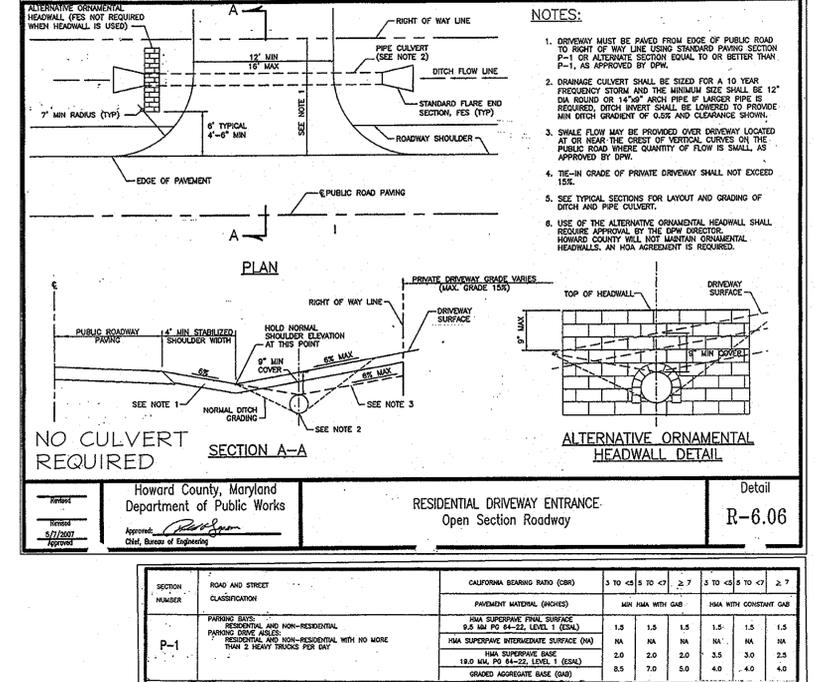
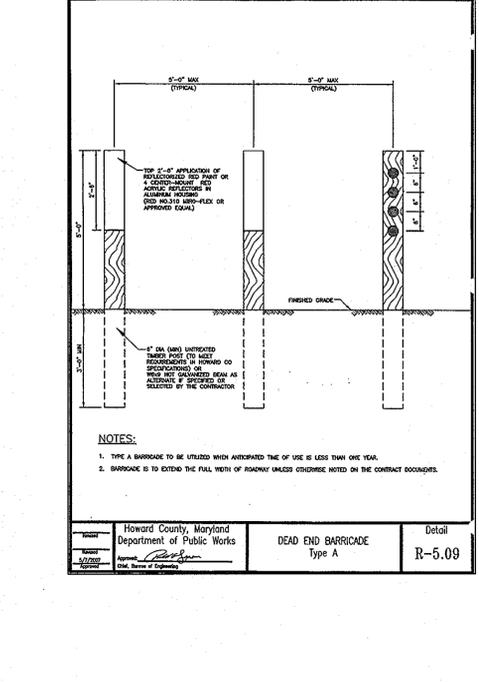
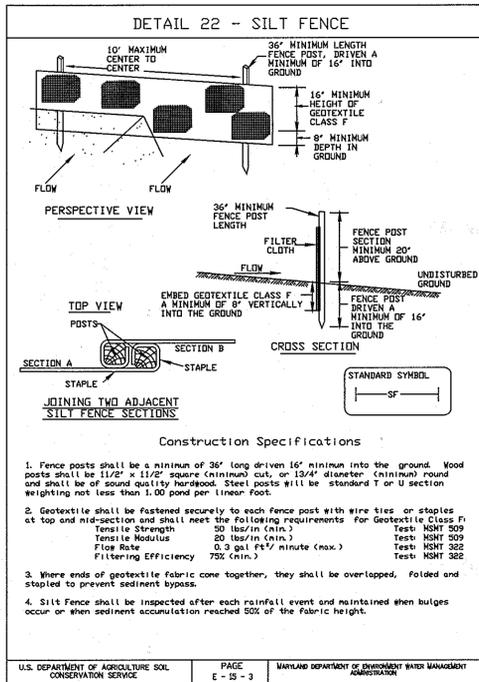


SILT FENCE

Silt Fence Design Criteria

| Slope Steepness | (Maximum) Slope Length | (Maximum) Silt Fence Length |
|-------------------|------------------------|-----------------------------|
| Flatter than 50:1 | unlimited | unlimited |
| 50:1 to 10:1 | 125 Feet | 1,000 Feet |
| 10:1 to 5:1 | 100 Feet | 750 Feet |
| 5:1 to 3:1 | 60 Feet | 500 Feet |
| 3:1 to 2:1 | 40 Feet | 250 Feet |
| 2:1 and steeper | 20 Feet | 125 Feet |

Note: In areas of less than 2% slope and sandy soils (USDA general classification system, soil Class A) maximum slope length and silt fence length will be unlimited. In these areas a silt fence may be the only perimeter control required.



2.0 STANDARD AND SPECIFICATIONS FOR TOPSOIL

Definition: Placement of topsoil over a prepared subsoil prior to establishment of permanent vegetation.

Purpose: 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.

Conditions Where Practice Applies:

- This practice is limited to areas having 2:1 or flatter slopes where:
 - The texture of the exposed subsoil/parent material is not adequate to produce vegetative growth.
 - 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.
 - The original soil to be vegetated contains material toxic to plant growth.
 - The soil is so acidic that treatment with limestone is not feasible.
- For the purpose of these Standards and Specifications, areas having slopes steeper than 2:1 require special consideration and design for adequate stabilization. Areas having slopes steeper than 2:1 shall have the appropriate stabilization shown on the plan.

Construction and Material Specifications:

- Topsoil salvaged from the existing site may be used provided that 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-SCS in cooperation with Maryland Agricultural Experimental Station.
- Topsoil Specifications - Soil to be used as topsoil must meet the following:
 - Topsoil shall be a loam, sandy loam, clay loam, silt loam, sandy clay loam, loamy sand. Other soils may be used if recommended by an agronomist or soil scientist and approved by the appropriate approval authority. Regardless, topsoil shall not be a mixture of contrasting textured subsoils and shall contain less than 5% by volume of cinders, stones, slag, coarse fragments, gravel, sticks, roots, trash, or other materials larger than 1/2" in diameter.
 - Topsoil must be free of plants or plant parts such as bermuda grass, quackgrass, Johnsongrass, nutgrass, poison ivy, thistle, or others as specified.
 - Where the subsoil is either highly acidic or composed of heavy clays, ground limestone shall be spread at the rate of 4-8 tons/acre (200-400 pounds per 1,000 square feet) prior to the placement of topsoil. Lime shall be distributed uniformly over designated areas and worked into the soil in conjunction with tillage operations as described in the following procedures.
- For sites having disturbed areas under 5 acres:
 - Place topsoil (if required) and apply soil amendments as specified in 2.0.0 Vegetative Stabilization - Section 1 - Vegetative Stabilization Methods and Materials.
- For sites having disturbed areas over 5 acres:
 - On soil meeting Topsoil specifications, obtain test results dictating fertilizer and lime amendments required to bring the soil into compliance with the following:
 - pH for topsoil shall be between 6.0 and 7.5. If the tested soil demonstrates a pH of less than 6.0, sufficient lime shall be prescribed to raise the pH to 6.5 or higher.

IV. (Continued)

- Organic content of topsoil shall be not less than 1.5 percent by weight.
- Topsoil having soluble salt content greater than 500 parving salts per million shall not be used.
- No sod or seed shall 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.

Note: 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.

- Place topsoil (if required) and apply soil amendments as specified in 2.0.0 Vegetative Stabilization - Section 1 - Vegetative Stabilization Methods and Materials.
- Topsoil Application
 - When topsoiling, maintain needed erosion and sediment control practices such as diversions, Grade Stabilization Structures, Earth Dikes, Slope Silt Fence and Sediment Traps and Basins.
 - Grades on the areas to be topsoiled, which have been previously established, shall be maintained, albeit 4" - 8" higher in elevation.
 - Topsoil shall be uniformly distributed in a 4" - 8" layer and lightly compact to a minimum thickness of 4". Spreading shall 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 shall be corrected in order to prevent the formation of depressions or water pockets.
- Topsoil shall not be placed while 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 seedbed preparation.
- Alternative for Permanent Seeding - Instead of applying the full amounts of lime and commercial fertilizer, composted sludge and amendments may be applied as specified below:
 - Composted Sludge Material for use as a soil conditioner for sites having disturbed areas over 5 acres shall be tested to prescribe amendments and for sites having disturbed areas under 5 acres shall conform to the following requirements:
 - Composted sludge shall be supplied by, or originate from, a person or persons that are permitted (at the time of acquisition of the compost) by the Maryland Department of the Environment under COMAR 26.04.06.
 - Composted sludge shall contain at least 1 percent nitrogen, 1.5 percent phosphorus, and 0.2 percent potassium and have a pH of 7.0 to 8.0. If compost does not meet these requirements, the appropriate constituents must be added to meet the requirements prior to use.
 - Composted sludge shall be applied oil sterilant at a rate of 1 ton / 1,000 square feet.
 - Composted sludge shall be amended with a potassium fertilizer applied at the rate of 4 lb/1,000 square feet, and 1/3 the normal lime application rate.

References: Guideline Specifications, Soil Preparation and Sodding, MD-VA, Pub. #1, Cooperative Extension Service, University of Maryland and Virginia Polytechnic Institutes. Revised 1973.

HOWARD SOIL CONSERVATION DISTRICT PERMANENT SEEDING NOTES

Apply to graded or cleared areas not subject to immediate further disturbance where a permanent long-lived vegetative cover is needed.

SEEDBED PREPARATION: Loosen upper three inches of soil by raking, disking, or other acceptable means before seeding, if not previously loosened.

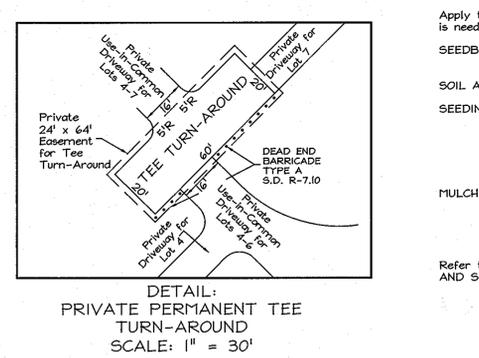
SOIL AMENDMENTS: In lieu of soil test recommendations, use one of the following schedules:

- PREFERRED** -- Apply 2 tons per acre dolomitic limestone (42 lbs/1000sq. ft.) and 600 lbs per acre 10-10-10 fertilizer (14 lbs/1000 sq. ft.) before seeding. Harrow or disk into three inches of soil. At time of seeding, apply 400 lbs per acre 30-0-0 ureaform fertilizer (9 lbs/1000sq. ft.) and 1000 lbs per acre 10-10-10 fertilizer (23 lbs/1000 sq. ft.) before seeding. Harrow or disk into upper three inches of soil.
- ACCEPTABLE** -- Apply 2 tons per acre dolomitic limestone (42 lbs/1000sq. ft.) and 1000 lbs per acre 10-10-10 fertilizer (23 lbs/1000 sq. ft.) before seeding. Harrow or disk into upper three inches of soil.

SEEDING -- For the periods March 1 thru April 30, and August 1 thru October 15, seed with 60 lbs per acre (1.4 lbs/1000sq. ft.) of Kentucky 31 Tall Fescue. For the period May 1 thru July 31, seed with 60 lbs per acre (1.4 lbs/1000sq. ft.) of Kentucky 31 Tall Fescue and 2 lbs. per acre (.05 lbs/1000sq. ft.) of weeping lovegrass. During the period of October 16 thru February 28, protect site by: Option (1) - 2 tons per acre of well anchored straw mulch and seed as soon as possible in the spring. Option (2) - Use sod. Option (3) - Seed with 60 lbs. per acre Kentucky 31 Tall Fescue and mulch 2 tons / acre well anchored straw.

MULCHING -- Apply 1-1/2 to 2 tons per acre (70 to 90 lbs/1000sq. ft.) of unrattled small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gallons per acre (5 gal/1000sq. ft.) of emulsified asphalt on flat areas. On slopes 8 feet or higher, use 348 gallons per acre (8 gal/1000sq. ft.) for anchoring.

MAINTENANCE -- Inspect all seeding areas and make needed repairs, replacements and reseedings.



HOWARD SOIL CONSERVATION DISTRICT TEMPORARY SEEDING NOTES

Apply to graded or cleared areas likely to be redistributed where a short-term vegetative cover is needed.

SEEDBED PREPARATION: -- Loosen upper three inches of soil by raking, disking, or other acceptable means before seeding, if not previously loosened.

SOIL AMENDMENTS: -- Apply 600 lbs per acre 10-10-10 fertilizer (14 lbs/1000sq. ft.).

SEEDING -- For periods March 1 thru April 30, and from August 15 thru October 15 seed with 2-12 bushels per acre of annual rye (3.2 lbs/1000sq. ft.). For the period May 1 thru August 14, seed with 3 lbs. per acre of weeping lovegrass (.07 lbs/1000sq. ft.). For the period November 16 thru February 28, protect site by applying 2 tons per acre of well anchored straw mulch and seed as soon as possible in the spring, or use sod.

MULCHING -- Apply 1-1/2 to 2 tons per acre (70 to 90 lbs/1000sq. ft.) of unrattled weed free small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gallons per acre (5 gal/1000sq. ft.) of emulsified asphalt on flat areas. On slopes 8 feet or higher, use 348 gallons per acre (8 gal/1000sq. ft.) for anchoring.

Refer to the 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for additional rates and methods not covered.

SEQUENCE OF CONSTRUCTION

- Obtain grading permit. 1 Day
- Notify the Howard County Department of Public Works/ Bureau of Engineering/Construction Inspection Division at 410-318-1880 at least 24 hours prior to the start of work. 1 Day
- The contractor shall notify "Miss Utility" at 1-800-257-7777 at least 48 hours prior to any excavation work being done. 1 Day
- Install stabilized construction entrance and silt fence in accordance with the approved grading and sediment control plan. 1 Day
- Install tree protection fencing around all trees to remain, as shown on the approved site development plan. 1 Day
- Obtain permission from the sediment control inspector to proceed. 1 Day
- Grade site for proposed tee turn around, common and private driveways, house pads, private stormwater management infiltration trenches in accordance with the approved grading and sediment control plan. 1 Week
- Insure all areas not to be roofed or paved are immediately stabilized in accordance with the temporary seeding notes shown on sheet 3. Daily
- Install utilities, including trench drain and outfall pipe and private water and sewer house connections for lots 6 & 7. 1 Week
- Final grade for tee turn around, common driveway and private driveways. Immediately stabilize all areas not to be roofed or paved. 2 Days
- Obtain permission from the sediment control inspector to proceed. 1 Day
- Install stone base for areas to be paved, including widening of existing common drive to the northwest of the site. Insure that lots 4 & 5 have unobstructed vehicular access to Spruce Way over stone / gravel. 2 Days
- Remove existing driveways for lots 4 & 5 in accordance with the approved site development plan and grading and sediment control plan. The existing asphalt and stone that is removed shall not be stockpiled onsite but shall be trucked offsite to the Howard County landfill or other approved disposal site. 2 Days
- With permission from the sediment control inspector, remove silt fence in the front yards of lots 4 & 5. 1 Day
- Immediately stabilize the disturbed areas associated with the removed driveways in accordance with the permanent seeding notes on sheet 3. 1 Day
- Install paving base for existing common driveway widening, tee turn around, new common driveway and private driveways. 1 Day
- Final grade for and construct private stormwater management infiltration trenches in accordance with the approved grading and sediment control plan and the details shown on sheet 4. 1 Week
- Immediately stabilize all remaining disturbed areas in accordance with the permanent seeding notes on sheet 3. 1 Day
- Construct new houses on lots 6 & 7. 4 Months
- Immediately stabilize all remaining disturbed areas in accordance with the permanent seeding notes on sheet 3. 1 Day
- Once houses are completed, obtain permission from the sediment control inspector to install surface paving. 1 Day
- Install surface paving for widening of existing common driveway, tee turn around, new common driveway and private driveways. 1 Day
- Insure that all remaining disturbed areas are stabilized in accordance with the permanent seeding notes on sheet 3. With the permission of the sediment control inspector, remove all remaining sediment control devices (silt fence). 1 Day
- Install proposed landscaping trees. 1 Day
- TOTAL ESTIMATED CONSTRUCTION TIME: 6 Months, 1 Week

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION: *[Signature]* 9/16/09

CHIEF, DIVISION OF LAND DEVELOPMENT: *[Signature]* 9-17-09

DIRECTOR: *[Signature]* 9-18-09

DEVELOPER'S / BUILDER'S CERTIFICATION

I certify that the landscaping shown on this plan will be done according to the plan, Section 16.04 of the Howard County Code and the Howard County Landscape Manual. I further certify that upon completion a Letter of Landscape Installation, accompanied by an executed One Year Guarantee of Plant Materials will be submitted to the Department of Planning and Zoning.

Signature of Developer / Builder: *[Signature]* 9/19/09

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

ENGINEER'S CERTIFICATE

I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE. THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

Signature of Engineer: *[Signature]* 8/26/09

DEVELOPER'S CERTIFICATE

I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS 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 OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY.

Signature of Developer: *[Signature]* 8-26-09

DEVELOPER'S CERTIFICATE

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. 19184, EXPIRES 08/26/11.

SIGNED: *[Signature]* 8/26/09

BRUCE D. BURTON

| No. | Date | Description |
|-----|------|-------------|
| | | |

| DESIGNED | S.D.H. | SCALE |
|----------|--------|-----------|
| | | AS SHOWN |
| DRAWN | G.D.W. | DRAWING |
| | | 3 OF 4 |
| CHECKED | B.D.B. | JOB NO. |
| | | 08-004 |
| DATE | 8/2009 | FILE NO. |
| | | SDP-09-42 |

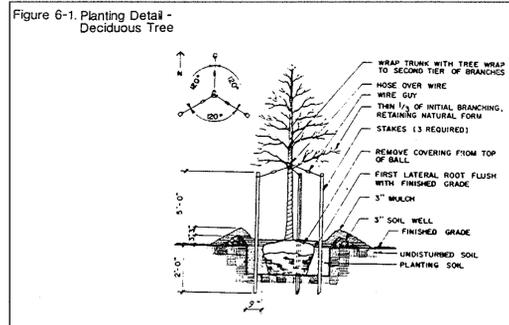
LDE Inc.
Engineers, Surveyors, Planners
9250 Ramsey Road, Suite 106 Columbia, Maryland - 21045
(410)715-1070 - (301)596-3424 - FAX (410)715-9540

MAPLEWOOD OVERLOOK
LOTS 4 - 7
PLAT NO. 18443
PROPOSED SINGLE FAMILY DETACHED UNITS ON LOTS 4 & 7 AND RELOCATED SEE-IN-COPTION DRIVEWAY/STORMWATER MANAGEMENT FOR EXISTING DWELLINGS ON LOTS 4 & 5
Tax Map No. 17 - Grid No. 7 - Parcel 731
2nd Election District - Howard County, Maryland
Previous Submittals: P98-176, W900-73, F00-188, F00-111, W904-131, F-05-174
OWNER/DEVELOPER:
Helen V. Smoot
1076 Old Frederick Road
Ellicott City, Maryland 21042
Denise L. Smoot
10182 Old Frederick Road
Ellicott City, Maryland 21042
410-465-0829

| SCHEDULE A PERIMETER LANDSCAPE EDGE | | |
|--|----------------------|----------------------------------|
| Category | Adjacent to Roadways | Adjacent to Perimeter Properties |
| Landscape Type | B | A |
| Linear Feet of Roadway Frontage/Perimeter | N/A | 717* |
| Credit for Existing Vegetation (Yes, No, Linear Feet) (Describe below if needed) | N/A | YES 73 L.F. |
| Credit for Wall, Fence or Berm (Yes, No, Linear Feet) (Describe below if needed) | N/A | NO |
| Number of Plants Required Shade Trees Evergreen Trees Shrubs | N/A | Using 644 L.F. 160=11 |
| Number of Plants Provided Shade Trees Evergreen Trees Other Trees (21 substitution) Shrubs (101 substitution) (Describe plant substitution credits below if needed) | N/A | 11 Shade |

Comments: * 717 L.F. - 73 L.F. = 644 L.F. required perimeter to be planted.
644 L.F. = 11 Shade @ 160' TYPE 'A'

| LANDSCAPE PERIMETER TABLE | | | | |
|---------------------------|------------------|-------------|-------------------|--|
| Perimeter No. | Perimeter Length | Buffer Type | Adjacent Land Use | |
| 1 | 273 L.F. | A | SFD | |
| 2 | 184 L.F. | A | SFD | |
| 3 | 258 L.F. | A | OPEN SPACE | |
| Total | 717 L.F. | | | |

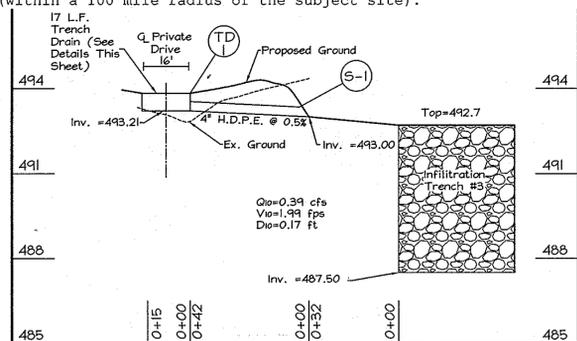


| INFILTRATION TRENCH DIMENSIONS | | | | |
|--------------------------------|---------------------------|-------|--------|-----------|
| TRENCH NO. | DIMENSIONS Length x Width | DEPTH | INVERT | TOP ELEV. |
| 1 | 8.6' X 5' | 5.5' | 493.3 | 498.8 |
| 2 | 12.6' X 5' | 6.0' | 489.5 | 495.5 |
| 3 | 51.6' X 5' | 5.2' | 487.5 | 492.7 |
| 4 | 40' X 5' | 6.5' | 486.8 | 493.3 |

| LANDSCAPE SCHEDULE | | | | | |
|--------------------|------|----------------------------|-----------------|-------------------------|---------|
| SYMBOL | QNTY | COMMON NAME | SCIENTIFIC NAME | SIZE | REMARKS |
| | 11 | Red Maple October Glory | Acer rubrum | 2 1/2" Caliper to 3" | B & B |

LANDSCAPE NOTES

- This plan has been prepared in accordance with the provisions of Section 16.124 of the Howard County Code and Landscape Manual.
- The Owner/Developer is responsible for the planting of all plant material required to meet the standards established by the Howard County Landscape Manual. Planting shall be provided under this site development plan.
- Landscaping surety for this subdivision was previously posted under a developer's agreement in the amount of \$3,300.00 for F-05-179. This developer's agreement has been amended and extended for SDP-09-42. Surety amounts remain unchanged from those originally posted under F-05-179.
- All plant materials shall be in good condition and be obtained locally (within a 100 mile radius of the subject site).

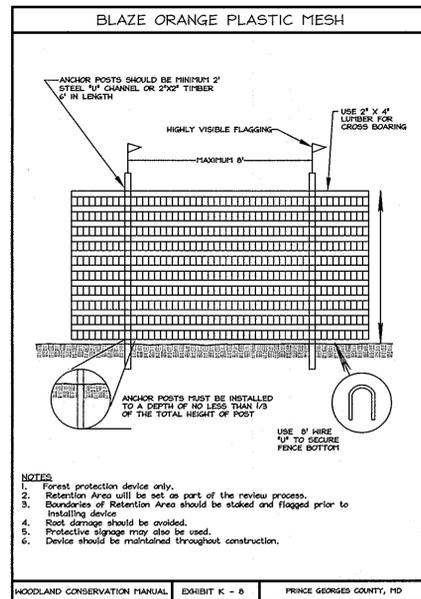


PRIVATE STORM DRAIN PROFILE

SCALE: H: 1"=30'
V: 1"=3'

STRUCTURE SCHEDULE

| STRUCTURE NO. | TYPE | INVERT IN | INVERT OUT | TOP ELEV. | REMARKS |
|---------------|----------------------|-----------|------------|-----------|------------------------------|
| TD-1 | Trench Drain | - | 493.21 | 493.85 | See details, this sheet |
| S-1 | H.D.P.E. End Section | 493.01 | 493.00 | 493.50 | Std. 4" H.D.P.E. End Section |



NOTES

- Forest protection device only.
- Retention Area will be set as part of the review process.
- Boundaries of Retention Area should be staked and flagged prior to installing device.
- Root damage should be avoided.
- Protective slope may also be used.
- Device should be maintained throughout construction.

Chapter 3. Performance Criteria for Urban BMP Design Stormwater Infiltration

3.3.1 Infiltration Feasibility Criteria

To be suitable for infiltration, underlying soils shall have an infiltration rate (I) of 0.52 inches per hour or greater, as initially determined from NRCS soil textural classification and subsequently confirmed by field geotechnical tests. Approved geotechnical testing procedures for feasibility and design are outlined in Appendix D.1. The minimum geotechnical testing is one test hole per 3000 sq. ft. with a minimum of two borings per facility (taken within the proposed limits of the facility).

Soils should also have a clay content of less than 20% and a silt/clay content of less than 40%.

Infiltration cannot be located on slopes greater than 15% or within fill soils.

To protect groundwater from possible contamination, runoff from designated hotspot land uses or activities cannot be infiltrated without proper pretreatment to remove hydrocarbons, trace metals, or nutrients. A list of designated stormwater hotspots is provided in Section 2.8.

Infiltration may be prohibited within areas of karst topography. If a site overlies karst geology, the local approval authority should be consulted for specific design requirements. Recommended procedures for determining whether a site overlies karst are provided in Appendix D.2.

The bottom of the infiltration facility shall be separated by at least four feet vertically from the seasonally high water table or bedrock layer, as documented by on-site soil testing. This distance is reduced to 2 feet on the Lower Eastern Shore (see Figure 4.1).

Infiltration facilities should be located a minimum of 100 feet horizontally from any water supply well.

The maximum contributing area to an individual infiltration practice should generally be less than 5 acres.

Infiltration practices should not be placed in locations that cause water problems to downgradient properties. Infiltration facilities should be setback 25 feet (10 feet for dry wells) downgradient from structures.

3.3.2 Infiltration Conveyance Criteria

A conveyance system shall be included in the design of all infiltration practices in order to ensure that excess flow is discharged at non-erosive velocities.

The overland flow path of surface runoff exceeding the capacity of the infiltration system shall be evaluated to preclude erosive concentrated flow. If computed flow velocities do not exceed

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SIGNED: 8/26/09
BRUCE D. BURTON

| No. | Date | Description |
|-----|-----------|--|
| 1 | May, 2010 | Revise infiltration trench table to show as-built elevations / Show as-built trench drain elevations |

TRENCH DRAIN

NEENAH FOUNDRY COMPANY

R-4995 - R-4996 Type M Trench Frame with Solid or Grated Cover

Cast Iron Trench Assemblies - Medium or Heavy Duty - For Use in Sidewalks, Driveways, Garages, Loading Docks, etc.

Read Carefully Before Ordering

Specify:

- Complete catalog number.
- Medium or heavy duty.
- Overall length of cover required.
- Lid solid, flat grated, or diagonally barred convex grate.
- Location of outlet, side, bottom-outlet (give dimensional location and pipe size).
- Whether one-end or both ends are to be open-ended.
- Perma-Grip surface if required. (See page 227.)

Illustrating Type M frame with grated cover. Standard with 4-inch outside couk-outlet. Can be equipped for inside couk if specified.

Trench covers are used over areas requiring long drainage assemblies. Can be supplied in a variety of sizes and lengths to meet special needs. For trenches of irregular pattern, arrangements can be made to furnish cover to fit.

Standard 4-inch outlet at end of drain. Special size outlets are available on special order. Side and bottom outlets optional and furnished only when specified.

Sections Thru Drains, Type M

Coloq. Description Dimensions in inches Length

| No. | Description | A | B | C | D | Length |
|----------------------------------|-------------------|--------|--------|----|-------|------------|
| Standard Sizes | | | | | | |
| R-4995-A1 | with grated cover | 11 1/2 | 11 1/2 | 10 | 6 3/4 | as ordered |
| R-4995-A2 | with grated cover | 7 | 7 | 3 | 4 1/4 | as ordered |
| R-4995-B1 | with solid cover | 11 1/2 | 11 1/2 | 10 | 6 3/4 | as ordered |
| R-4995-B2 | with solid cover | 7 | 7 | 3 | 4 1/4 | as ordered |
| Standard Sizes Heavy Duty | | | | | | |
| R-4996-A1 | with grated cover | 11 1/2 | 11 1/2 | 10 | 6 | as ordered |
| R-4996-A2 | with grated cover | 7 | 7 | 3 | 4 1/4 | as ordered |
| R-4996-B1 | with solid cover | 11 1/2 | 11 1/2 | 10 | 6 | as ordered |
| R-4996-B2 | with solid cover | 7 | 7 | 3 | 4 1/4 | as ordered |
| R-4996-B3 | with solid cover | 11 1/2 | 11 1/2 | 10 | 12 | as ordered |

Above Standard Frames made in 4-foot sections, covers in 2-foot lengths.

*Available with Type "B" grate only (see page 216).

**Frames and covers furnished in 3-foot lengths.

* USE R-4996-A1 DIMENSIONS

A = 11 1/2"
B = 11 1/2"
C = 10"
D = 6"

Total Length = 17 ft

238

NOTE: The trench drain shall be formed and cast in place to insure the proper design dimensions, slopes and elevations. Use of a pre-cast structure will require review by the engineer prior to the contractor ordering the structure. Grate shall be traffic bearing, with side opening (Heavy Duty).

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

9/16/09
CHIEF, DEVELOPMENT ENGINEERING DIVISION

9-17-09
CHIEF, DIVISION OF LAND DEVELOPMENT

9-18-09
DIRECTOR, DEP.

DEVELOPER'S / BUILDER'S CERTIFICATION

I certify that the landscaping shown on this plan will be done according to the plan, Section 16.124 of the Howard County Code and the Howard County Landscape Manual. I further certify that upon completion a Letter of Landscape Installation, accompanied by an executed One Year Guarantee of Plant Materials will be submitted to the Department of Planning and Zoning.

8-26-09
SIGNATURE OF DEVELOPER / BUILDER

9/9/09
HOWARD SOIL CONSERVATION DISTRICT

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8/26/09
SIGNATURE OF ENGINEER

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8-26-09
SIGNATURE OF DEVELOPER

LDE Inc.
Engineers, Surveyors, Planners
9250 Ramsey Road, Suite 106 Columbia, Maryland - 21045
(410)715-1070 - (301)596-3424 - FAX (410)715-9510

DESIGNED: S.D.H.

DRAWN: G.D.W.

CHECKED: B.D.B.

DATE: 8/2009

SCALE: AS SHOWN

DRAWING: 4 OF 4

JOB NO.: 08-004

FILE NO.: SDP-09-42

STORMWATER MANAGEMENT NOTES, DETAILS & LANDSCAPE SCHEDULE, NOTES & DETAILS
MAPLEWOOD OVERLOOK

LOTS 4 - 7
PLAT NO. 18443
PROPOSED SINGLE FAMILY DETACHED UNITS ON LOTS 6 & 7 AND RELOCATED USE-IN-COMMON DRIVEWAY/STORMWATER MANAGEMENT FOR EXISTING DWELLINGS ON LOT 5

Tax Map No. 17 - Grid No. 7 - Parcel 731
2nd Election District - Howard County, Maryland
Previous Submittals: F98-176, W900-73, F00-186, F00-111, W904-131, F-05-179

OWNER/DEVELOPER:
Helen V. Smart
10182 Old Frederick Road
Ellicott City, Maryland 21042

DATE: 8/2009

OWNER/DEVELOPER:
Wayne A. Smart
10182 Old Frederick Road
Ellicott City, Maryland 21042