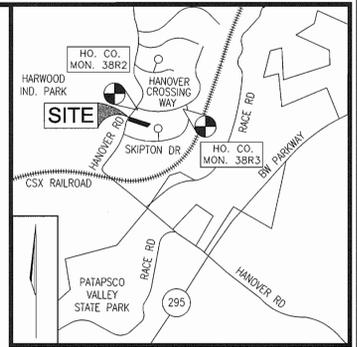


GENERAL NOTES

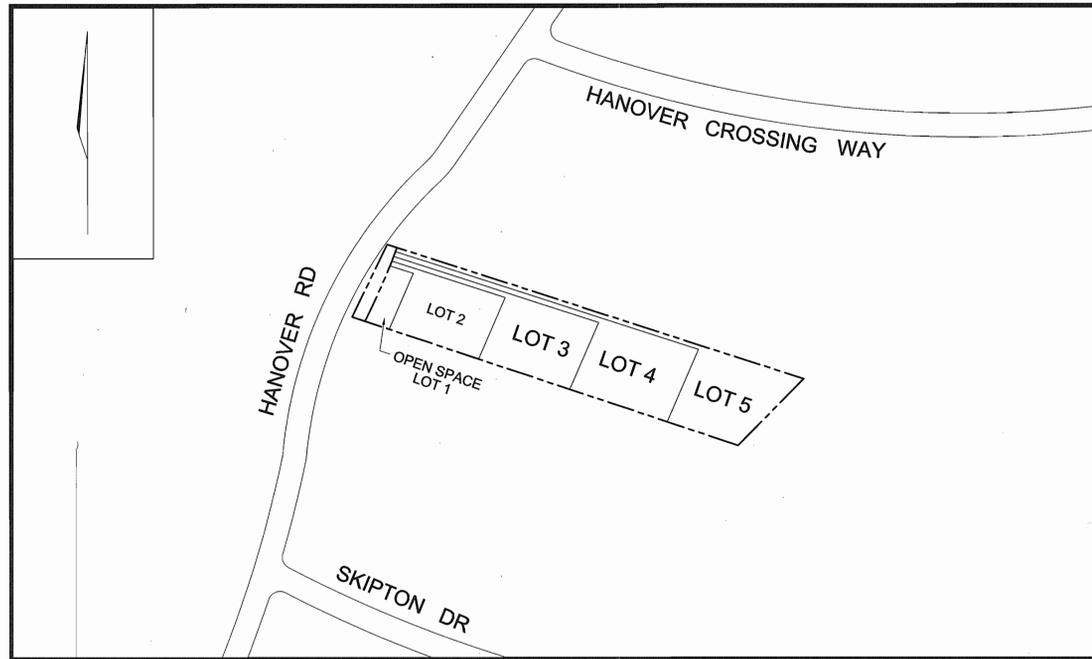
- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLUS MSHA STANDARDS AND SPECIFICATIONS, IF APPLICABLE.
- THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK.
- THE CONTRACTOR IS TO NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST FIVE DAYS BEFORE STARTING WORK ON THESE DRAWINGS:
 MISS UTILITY 1-800-257-7777
 BELL ATLANTIC TELEPHONE CO. 725-9976
 HOWARD COUNTY BUREAU OF UTILITIES: 313-2366
 AT&T CABLE LOCATION DIVISION: 393-3553
 B.G.&E. CO. CONTRACTOR SERVICES: 850-4620
 B.G.&E. CO. UNDERGROUND DAMAGE CONTROL: 787-4620
 STATE HIGHWAY ADMINISTRATION: 531-5533
- THE SUBJECT PROPERTY IS ZONED R-12 AS PER THE 10/18/93 COMPREHENSIVE ZONING PLAN.
- SITE ANALYSIS:
 AREA OF SITE: 48,572 SF (1.12 AC)
 AREA OF PLAN SUBMISSION: 36,302 SF (0.83 AC)
 TOTAL NUMBER OF BUILDABLE LOTS: 3
 TOTAL NUMBER OF CREDITED OPEN SPACE LOTS: 0
 TOTAL NUMBER OF NON-CREDITED OPEN SPACE LOTS: 0
 PRESENT ZONING: R-12
 LIMIT OF DISTURBANCE: 25,384 SF±
 PROPOSED USE OF SITE: SINGLE FAMILY DWELLING
 TOTAL UNITS ALLOWED: 3
 TOTAL UNITS PROPOSED: 3
- PROJECT BACKGROUND:
 LOCATION: TAX MAP: 38 PARCEL: 267 BLOCK: 15
 ZONING: R-12
 WEST POINT
 DEED REFERENCE: LIBER 5289 FOLIO 422
 DPZ REFERENCE: F-01-171
- 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 START OF WORK.
- ANY DAMAGE TO PUBLIC RIGHTS-OF-WAY, PAVING, OR EXISTING UTILITIES WILL BE CORRECTED AT THE CONTRACTOR'S EXPENSE.
- EXISTING UTILITIES LOCATED FROM ROAD CONSTRUCTION PLANS AND AVAILABLE RECORD DRAWINGS. APPROXIMATE LOCATION OF EXISTING UTILITIES ARE SHOWN FOR THE CONTRACTORS INFORMATION. CONTRACTOR SHALL LOCATE EXISTING UTILITIES WELL IN ADVANCE OF CONSTRUCTION ACTIVITIES AND TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND TO MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE TO THE COUNTY'S RIGHT OF WAY INCURRED DUE TO CONTRACTOR'S OPERATION SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTORS EXPENSE.
- TRAFFIC CONTROL DEVICES, MARKINGS AND SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). ALL STREET AND REGULATORY SIGNS SHALL BE IN PLACE PRIOR TO THE PLACEMENT OF ANY ASPHALT.
- ESTIMATES OF EARTHWORK QUANTITIES ARE PROVIDED SOLELY FOR THE PURPOSE OF CALCULATING FEES.
- SOIL COMPACTION SPECIFICATIONS, REQUIREMENTS, METHODS AND MATERIALS ARE TO BE IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE PROJECT GEOTECHNICAL ENGINEER. GEOTECHNICAL ENGINEER TO CONFIRM ACCEPTABILITY OF PROPOSED PAVING SECTION, BASED ON SOILS TEST.
- COORDINATES AND ELEVATIONS ARE BASED ON HOWARD COUNTY MONUMENT NO'S. 38R2 AND 38R3.
- EXISTING TOPOGRAPHY IS BASED ON PLANS PREPARED BY A FIELD SURVEY PREPARED BY FREDERICK WARD ASSOCIATES DATED FEBRUARY 2001.
- ACCESS TO WATER HAS BEEN PROVIDED UNDER CONTRACT NO. 14-1381-D. ACCESS TO SEWER HAS BEEN PROVIDED UNDER CONTRACT NO. 578-S.
- THERE ARE NO STEEP SLOPES LOCATED ON THIS PROPERTY.
- NO BURIAL GROUNDS OR CEMETERIES ARE LOCATED ON THIS PROPERTY.
- THERE ARE NO STREAMS OR WETLANDS ON SITE.
- THERE IS NO 100-YR FLOODPLAIN ON SITE.
- 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.
- DRIVEWAYS SHALL BE PROVIDED PRIOR TO RESIDENT OCCUPANCY TO INSURE SAFE ACCESS FOR FIRE AND EMERGENCY VEHICLES PER THE FOLLOWING MINIMUM REQUIREMENTS:
 A) WIDTH - 12 FEET (14 FEET IF SERVING MORE THAN ONE RESIDENCE)
 B) SURFACE - 6 INCHES OF COMPACTED CRUSHER RUN BASE WITH TAR AND CHIP COATING
 C) GEOMETRY - MAXIMUM 15% GRADE, MAXIMUM 10% GRADE CHANGE, AND MINIMUM 45 FOOT TURNING RADIUS
 D) STRUCTURES (CULVERTS/BRIDGES) - MUST SUPPORT 25 GROSS TON LOADING (H25 LOADING)
 E) DRAINAGE ELEMENTS - CAPABLE OF SAFELY PASSING 100 YEAR FLOOD EVENTS WITH NO MORE THAN 1 FOOT DEPTH OVER DRIVEWAY SURFACE
 F) STRUCTURE CLEARANCES - MINIMUM 12 FEET
 G) MAINTENANCE - SUFFICIENT TO INSURE ALL WEATHER USE
- ALL DRIVEWAY APRONS TO BE PER HOWARD COUNTY STANDARD DETAIL NO.'S R-6.05 & R-6.01 UNLESS OTHERWISE NOTED.
- LANDSCAPING IS PROVIDED IN ACCORDANCE WITH SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL. FINANCIAL SURETY FOR THE REQUIRED 15 SHADE TREES IN THE AMOUNT OF \$4500.00 TO BE PAID AS PART OF THE BUILDERS GRADING PERMIT.
 REQUIRED FINANCIAL SURETY PER LOT:
 LOT 3: \$600.00 FOR 2 SHADE TREES
 LOT 4: \$600.00 FOR 2 SHADE TREES
 LOT 5: \$3,300.00 FOR 11 SHADE TREES
- THIS PROJECT COMPLIES WITH THE REQUIREMENTS OF SECTION 16.1200 OF THE HOWARD COUNTY CODE FOR FOREST CONSERVATION BY A FEE-IN-LIEU PAYMENT FOR THE ENTIRE SUBDIVISION FOR TO THE HOWARD COUNTY FOREST CONSERVATION FUND UNDER F-01-171.
- A FEE-IN-LIEU IN THE AMOUNT OF \$4500.00 HAS BEEN PAID BY THE DEVELOPER FOR THE REQUIRED 0.34 ACRES OF OPEN SPACE FOR THE ENTIRE SUBDIVISION UNDER F-01-171.
- THIS SUBDIVISION IS SUBJECT TO THE MARYLAND AVIATION ADMINISTRATION FOUR MILE HEIGHT RESTRICTION ZONE. UNDER AIRPORT ZONING PERMIT NO. 01-99, THE MARYLAND AVIATION ADMINISTRATION HAS APPROVED THE CONSTRUCTION OF PROPOSED STRUCTURES ON THIS PROPERTY BASED ON THE FACT THAT THE PROPOSED STRUCTURES WILL NOT PENETRATE ANY NAVIGATIONAL AIRSPACE.
- AS A CONSEQUENCE OF THIS PLAN'S SUBMISSION ON JULY 12, 2002, THIS SITE DEVELOPMENT PLAN IS SUBJECT TO THE FIFTH EDITION OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS.
- STORMWATER MANAGEMENT REQUIREMENTS FOR THE ENTIRE SUBDIVISION WERE PROVIDED UNDER F-01-171. WQV AND Rev ARE MET BY UTILIZATION OF THE DRY SWALE LOCATED ON OPEN SPACE LOT 1 AND THE PROPOSED ROOFTOP DISCONNECTS FOR LOTS 3-5. Cpv IS NOT REQUIRED FOR THIS MINOR SUBDIVISION. THE DRY SWALE IS TO BE OWNED AND MAINTAINED BY THE HOA.

SITE DEVELOPMENT PLAN
WEST POINT
LOTS 3-5
HOWARD COUNTY, MARYLAND



VICINITY MAP
 SCALE: 1"=2000'

BENCHMARKS			
NO.	NORTHING	EASTING	ELEVATION
38R2	557,500.663	1,391,227.052	168.79
38R3	557,417.823	1,391,983.177	124.65



LOCATION PLAN
 SCALE: 1"=100'

ADDRESS CHART	
LOT #	STREET ADDRESS
3	6393 HANOVER ROAD
4	6389 HANOVER ROAD
5	6385 HANOVER ROAD

PERMIT INFORMATION CHART					
PROJECT NAME		SECTION/AREA		PARCEL NUMBER	
WEST POINT		N/A		267	
PLAT REF.	BLOCK NO.	ZONE	TAX MAP	ELECT. DIST.	CENSUS TR.
15555	15	R-12	38	1ST	601201
WATER CODE: A01			SEWER CODE: 2150300		

SHEET INDEX	
DESCRIPTION	SHEET NO.
COVER SHEET	1 OF 3
SITE DEVELOPMENT PLAN	2 OF 3
DETAILS	3 OF 3

NO.	REVISION	DATE

COVER SHEET
WEST POINT
LOTS 3-5
SINGLE FAMILY DETACHED UNITS
 TAX MAP 38 BLOCK 15 PARCEL 267
 1ST ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 REF.: F-01-171

FREDERICK WARD ASSOCIATES, INC.
 ENGINEERS 7125 Riverwood Drive Columbia, Maryland 21046-2354
 ARCHITECTS Phone: 410-290-9550 Fax: 410-720-6226
 SURVEYORS Bel Air, Maryland Columbia, Maryland Warrenton, Virginia

OWNER / DEVELOPER
 MICHAEL PFAU
 3675 PARK AVENUE, SUITE 301
 ELLICOTT CITY, MD 21043
 (410) 977-3032

DESIGN BY: DM
 DRAWN BY: JT
 CHECKED BY: RHW
 DATE: OCTOBER 2002
 SCALE: AS SHOWN
 W.O. NO.: 2017180

1 SHEET OF 3

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE: 11/12/02	REVIEWED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS USA-NATURAL RESOURCE CONSERVATION SERVICE DATE: 11/7/02	ENGINEERS CERTIFICATE I CERTIFY THAT THIS PLAN FOR SEDIMENT AND EROSION CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. SIGNATURE OF ENGINEER ROBERT H. VOGEL DATE: 10/22/02	DEVELOPER'S CERTIFICATE I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN FOR SEDIMENT AND EROSION CONTROL, AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT. SIGNATURE OF DEVELOPER MICHAEL PFAUF DATE: 10/23/02
APPROVED: DIVISION OF LAND DEVELOPMENT CHIEF, DIVISION OF LAND DEVELOPMENT DATE: 11/12/02	THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT JOHN K. ROBERTSON DATE: 11/12/02	SIGNATURE OF ENGINEER ROBERT H. VOGEL DATE: 10/22/02	SIGNATURE OF DEVELOPER MICHAEL PFAUF DATE: 10/23/02

PLANT LIST			
QTY	BOTANICAL NAME / COMMON NAME	SIZE	ROOT
1*	ACER RUBRUM "AUTUMN FLAME" RED MAPLE	2-1/2"-3" CAL	B & B

NOTE: SEE SHEET 3 FOR PLANTING RESTRICTIONS AND DETAILS
 NOTE: THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL.

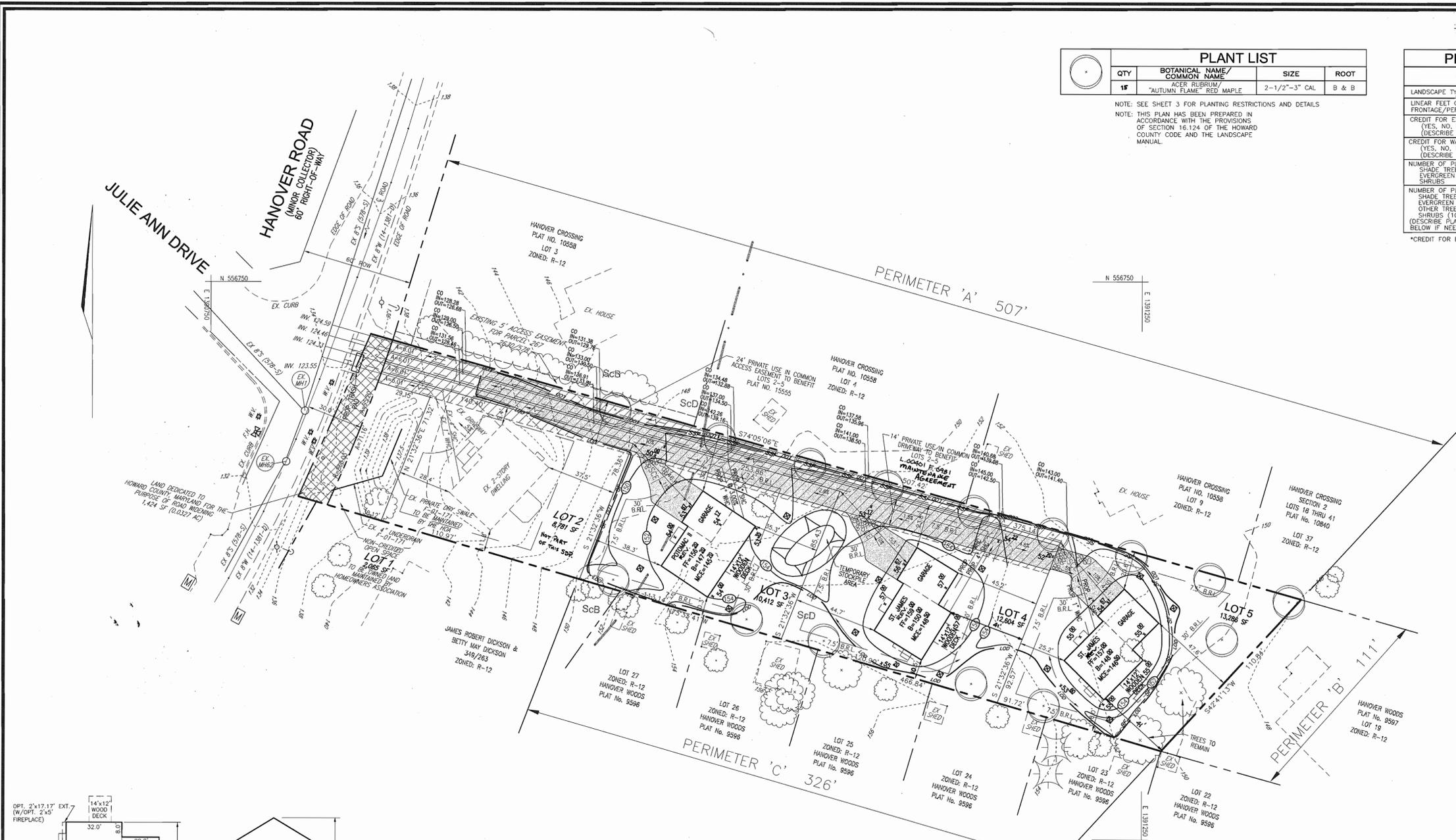
PERIMETER LANDSCAPE EDGE SCHEDULE A				
CATEGORY	ADJACENT TO ROADWAYS	ADJACENT TO PERIMETER PROPERTIES	ADJACENT TO PERIMETER PROPERTIES	ADJACENT TO PERIMETER PROPERTIES
LANDSCAPE TYPE	NONE REQUIRED	TYPE 'A'	TYPE 'A'	TYPE 'A'
LINEAR FEET OF ROADWAY FRONTAGE/PERIMETER	0	507' (A)	111' (B)	326' (C)
CREDIT FOR EXISTING VEGETATION (YES, NO; LINEAR FEET) (DESCRIBE BELOW IF NEEDED)	NO	NO	YES* 60'	YES* 60'
CREDIT FOR WALL, FENCE OR BERM (YES, NO; LINEAR FEET) (DESCRIBE BELOW IF NEEDED)	NO	NO	NO	NO
NUMBER OF PLANTS REQUIRED	0	1:60 9	1:60 1	2:66 5
SHADE TREES	0	0	0	0
EVERGREEN TREES	0	0	0	0
SHRUBS	0	0	0	0
NUMBER OF PLANTS PROVIDED	0	9	1	5
SHADE TREES	0	0	0	0
EVERGREEN TREES	0	0	0	0
OTHER TREES (2:1 SUBSTITUTION)	0	0	0	0
SHRUBS (10:1 SUBSTITUTION)	0	0	0	0
(DESCRIBE PLANT SUBSTITUTION CREDITS BELOW IF NEEDED)				

*CREDIT FOR EXISTING TREES TO REMAIN ALONG PERIMETER B & C

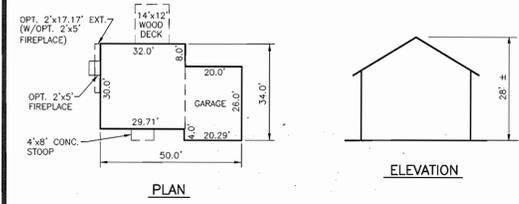
NOTES

THE PROPERTY OUTLINE IS BASED ON A FIELD RUN BOUNDARY SURVEY VERIFIED BY FREDRICK WARD ASSOCIATES, INC. IN JUNE, 2000.
 THE EXISTING FEATURES AND CONTOURS SHOWN HEREON ARE BASED ON FIELD RUN TOPOGRAPHY PERFORMED BY FREDRICK WARD ASSOCIATES IN FEBRUARY 2001.
 DRIVEWAY(S) SHALL BE PROVIDED PRIOR TO RESIDENTIAL OCCUPANCY TO INSURE SAFE ACCESS FOR FIRE AND EMERGENCY VEHICLES PER THE FOLLOWING (MINIMUM) REQUIREMENTS:
 A) WIDTH - 12 FEET, 14 FEET IF SERVING MORE THAN ONE RESIDENCE
 B) SURFACE - (P-1) STANDARD PAVING
 C) GEOMETRY - MAXIMUM 15% GRADE, MAXIMUM 10% GRADE CHANGE AND
 D) STRUCTURES (BRIDGES/CULVERTS) - CAPABLE OF SUPPORTING 25 GROSS
 E) DRAINAGE ELEMENTS - CAPABLE OF SAFELY PASSING 100 YEAR FLOOD WITH NO MORE THAN 1 FOOT DEPTH OVER DRIVEWAY SURFACE;
 F) MAINTENANCE - SUFFICIENT TO INSURE ALL WEATHER USE.

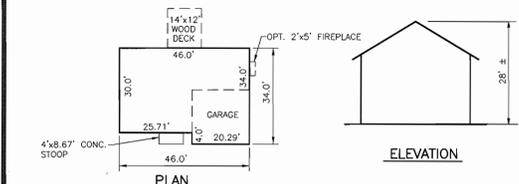
LEGEND	
	EXISTING WATER LINE
	EXISTING SEWER LINE
	PROPOSED SEWER LINE
	SOIL TYPE DIVISION LINE
	EXISTING 2 FT CONTOUR
	EXISTING 380 CONTOUR
	EXISTING 336 CONTOUR
	PROPOSED CONTOUR
	LIMIT OF DISTURBANCE
	SALT FENCE
	STABILIZED CONSTRUCTION ENTRANCE
	DRY WELL
	PROPOSED SHADE TREE
	EXISTING VEGETATION



PLAN
SCALE = 1" = 30'



"THE ST. JAMES"



"THE POTOMAC II" HOUSE TYPES
SCALE: 1" = 30'

SOILS LEGEND		
SYMBOL	NAME/DESCRIPTION	TYPE
ScB	SANDY AND CLAYEY LAND, GENTLY SLOPING	C
ScD	SANDY AND CLAYEY LAND, MODERATELY SLOPING	C

NOTE: TAKEN FROM HOWARD SOIL SURVEY

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
 [Signature] 11/8/02
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 [Signature] 11/15/02
 CHIEF, DIVISION OF LAND DEVELOPMENT
 [Signature] 11/15/02
 DIRECTOR

REVIEWED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS
 [Signature] 11/7/02
 USF - NATURAL RESOURCE CONSERVATION SERVICE
 THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT
 [Signature] 11/7/02
 JOHN R. ROBERTSON
 HOWARD SCD

ENGINEER'S CERTIFICATE
 I CERTIFY THAT THIS PLAN FOR SEDIMENT AND EROSION CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.
 [Signature] 10/22/02
 SIGNATURE OF ENGINEER
 ROBERT H. VOGEL

DEVELOPER'S CERTIFICATE
 I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN FOR SEDIMENT AND EROSION CONTROL, AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT.
 [Signature] 10/23/02
 SIGNATURE OF DEVELOPER

OWNER / DEVELOPER
 MICHAEL PFAU
 3675 PARK AVENUE, SUITE 301
 ELIJOTT CITY, MD 21043
 (410) 977-3032

FREDERICK WARD ASSOCIATES, INC.
 ENGINEERS ARCHITECTS SURVEYORS
 7125 Riverwood Drive Columbia, Maryland 21046-2354
 Phone: 410-290-9550 Fax: 410-720-6226
 Bel Air, Maryland Columbia, Maryland Warrenton, Virginia

STATE OF MARYLAND PROFESSIONAL ENGINEERS
 [Seal]
 DESIGN BY: DM
 DRAWN BY: JT
 CHECKED BY: RHV
 DATE: OCTOBER 2002
 SCALE: AS SHOWN
 W.O. NO.: 2017160

21.0 STANDARDS 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 vegetable 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.

ii. 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 plans.

CONSTRUCTION AND MATERIAL SPECIFICATIONS

I. 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.

II. Topsoil Specifications - Soil to be used as topsoil must meet the following:

i. 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 a 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 and 1/2" in diameter.

ii. Topsoil must be free of plants or plant parts such as Bermuda grass, quackgrass, Johnsongrass, nutsedge, poison ivy, thistle, or others as specified.

iii. 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.

II. For sites having disturbed areas under 5 acres:

i. Place topsoil (if required) and apply soil amendments as specified in 20.0 Vegetative Stabilization - Section I - Vegetative Stabilization Methods and Materials.

SEDIMENT CONTROL NOTES

- A minimum of 48 hours notice must be given to the Howard County Department of Inspection, License and Permits Sediment Control Division prior to the start of any construction (313-1855).
- All vegetation and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, and revisions thereto.
- Following initial soil disturbance or redistribution, permanent or temporary stabilization shall be completed within: (a) 7 calendar days for all perimeter sediment control structures, dikes, perimeter slopes, and all slopes greater than 3:1, (b) 14 days as to all other disturbed or graded areas on the project site.
- All sediment traps/basins shown must be fenced and warning signs posted around their perimeter in accordance with Vol. 1, Chapter 7, HOWARD COUNTY DESIGN MANUAL, Storm Drainage.
- All disturbed areas must be stabilized within the time period specified above in accordance with the 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for permanent seeding, sod, temporary seeding, and mulching (Sec. G). Temporary stabilization with mulch alone shall be done when recommended seeding dates do not allow for proper germination and establishment of grasses.
- 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	48,572 SF
Area Disturbed	25,384 SF
Area to be roofed or paved	11,060 SF
Area to be vegetatively stabilized	14,324 SF
Total Cut	760 CY
Total Fill	380 CY

 Offsite waste/borrow area location
- 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 controls 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 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 shall be back-filled and stabilized within one working day, whichever is shorter.

* To be determined by contractor, with pre-approval of the Sediment Control Inspector with an approved and active grading permit.

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, discing 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 (92 lbs./100 sq.ft.) and 600 lbs per acre 10-10-10 fertilizer (14 lbs./1000 sq.ft.) before seeding. Harrow or disc into upper three inches of soil. At the time of seeding, apply 400 lbs. per acre 30-0-0 ureaform fertilizer (9 lbs./1000 sq.ft.).
- Acceptable-Apply 2 tons per acre dolomitic limestone (92 lbs./1000 sq.ft.) and apply 1000 lbs. per acre 10-10-10 fertilizer (23 lbs./1000 sq.ft.) before seeding. Harrow or disc 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./1000 sq.ft.) of Kentucky 31 Tall Fescue. For the period May 1 thru July 31, seed with 60 lbs. Kentucky 31 Tall Fescue per acre and 2 lbs. per acre (0.5 lbs./1000 sq.ft.) of weeping lovegrass. During the period of October 15 thru February 28, protect site by: Option (1) 2 tons per acre well anchored straw mulch and seed as soon as possible in the spring. Option (2) Use sod. Option (3) Seed with 60 lbs/acre Kentucky 31 Tall Fescue and mulch with 2 tons/acre well anchored straw.

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

MAINTENANCE: Inspect all seeded areas and make needed repairs, replacements and reseeds.

TEMPORARY SEEDING NOTES

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

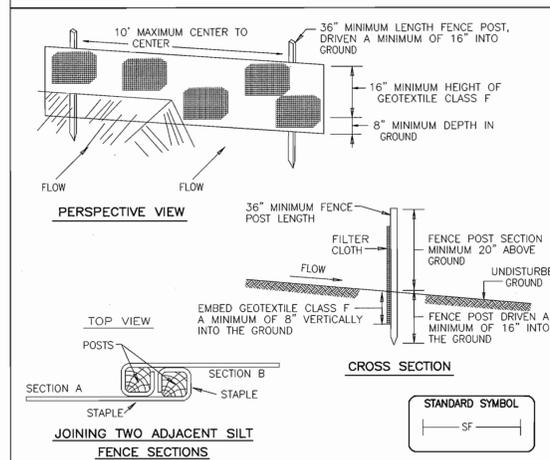
SOIL AMENDMENTS: Apply 600 lbs. per acre 10-10-10 fertilizer (14 lbs./1000 sq.ft.).

SEEDING: For periods March 1 thru April 30 and from August 15 thru November 15, seed with 2 1/2 bushel per acre of annual ryegrass (3.2 lbs./1000 sq.ft.) For the period May 1 thru August 14, seed with 3 lbs. per acre of weeping lovegrass (0.7 lbs./1000 sq.ft.). For the period November 1 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./1000 sq. ft.) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gallons per acre (5 gal/1000 sq.ft.) of emulsified asphalt on flat areas. On slopes 8 feet or higher, use 348 gallons per acre (8 gal/1000 sq.ft.) for anchoring.

REFER TO THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR RATE AND METHODS NOT COVERED.

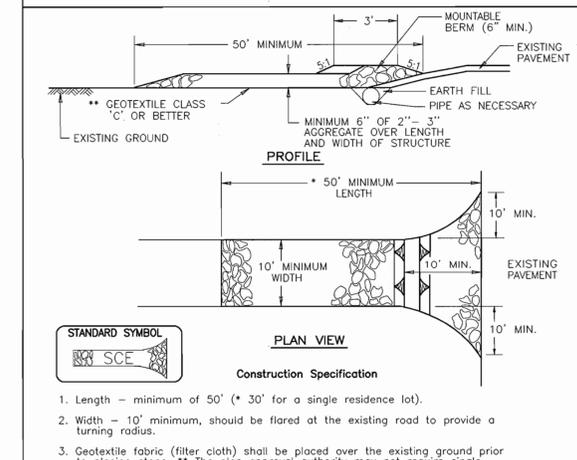
DETAIL 22 - SILT FENCE



- Construction Specifications
- Fence posts shall be a minimum of 36" long, driven 16" minimum into the ground. Wood posts shall be 1 1/2" x 1 1/2" square (minimum) cut, or 3/4" diameter (minimum) round and shall be of sound quality hardwood. Steel posts will be standard T or U section weighing not less than 1.00 pound per linear foot.
 - Geotextile shall be fastened securely to each fence post with wire ties or staples at top and mid-section and shall meet the following requirements for Geotextile Class F:

Tensile Strength	50 lbs/in (min.)	Test: MSMT 509
Tensile Modulus	20 lbs/in (min.)	Test: MSMT 509
Flow Rate	0.3 gal ft ² /minute (max.)	Test: MSMT 322
Filtering Efficiency	75% (min.)	Test: MSMT 322
 - Where ends of geotextile fabric come together, they shall be overlapped, folded and stapled to prevent sediment bypass.
 - Silt Fence shall be inspected after each rainfall event and maintained when bulges occur or when sediment accumulation reaches 50% of the fabric height.
- | | | |
|--|-----------------|--|
| U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE | PAGE E - 15 - 3 | MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION |
|--|-----------------|--|

DETAIL 24 - STABILIZED CONSTRUCTION ENTRANCE



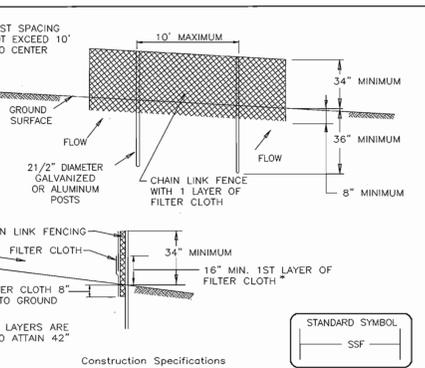
- Construction Specification
- Length - minimum of 50' (* 30' for a single residence lot).
 - Width - 10' minimum, should be flared at the existing road to provide a turning radius.
 - Geotextile fabric (filter cloth) shall be placed over the existing ground prior to placing stone. ** The plan approval authority may not require single family residences to use geotextile.
 - Stone - crushed aggregate (2" to 3") or reclaimed or recycled concrete equivalent shall be placed at least 6" deep over the length and width of the entrance.
 - Surface Water - all surface water flowing to or diverted toward construction entrances shall be piped through the entrance, maintaining positive drainage. Pipe installed through the stabilized construction entrance shall be protected with a mountable berm with 5:1 slopes and a minimum of 6" of stone over the pipe. Pipe has to be sized according to the drainage. When the SCE is located at a high spot and has no drainage to convey, a pipe will not be necessary. Pipe should be sized according to the amount of runoff to be conveyed. A 6" minimum will be required.
 - Location - A stabilized construction entrance shall be located at every point where construction traffic enters or leaves a construction site. Vehicles leaving the site must travel over the entire length of the stabilized construction entrance.
- | | | |
|--|-----------------|--|
| U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE | PAGE F - 17 - 3 | MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION |
|--|-----------------|--|

SEQUENCE OF CONSTRUCTION

- Obtain grading permit.
- Notify Howard County Bureau of Inspections and Permits (410.313.1880) at least 24 hours before starting any work.
- Construct Stabilized Construction Entrances. (1 day)
- Install silt fence.
- After obtaining permission from the sediment control inspector to proceed, rough grade site. (4 days)
- Construct house. The first floor elevation cannot be more than 1' higher or 0.2' lower than the elevations shown on this plan. (4 months)
- Final lot grade to be in substantial conformance with site development plan. Stabilize site with topsoil and seeding. (3 days)
- Install drywells. (2 days)
- Upon stabilization of all disturbed areas and with the approval of the sediment control inspector, remove all sediment control devices.

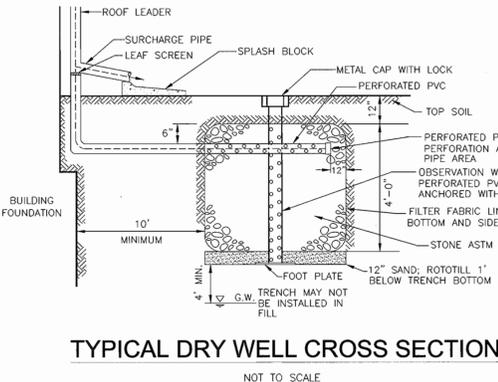
- NOTES:
- During grading and after each rainfall, the contractor shall inspect and provide the necessary maintenance on the sediment and erosion control measures shown hereon.
 - Following initial soil disturbance or redistribution permanent or temporary stabilization shall be complied with:
 - 7 calendar days for all perimeter sediment control
 - 14 calendar days for all other disturbed areas, structures, dikes, swales, ditch perimeter slopes and all slopes greater than 3:1.

DETAIL 33 - SUPER SILT FENCE



- Construction Specifications
- Fencing shall be 42" in height and constructed in accordance with the latest Maryland State Highway Details for Chain Link Fencing. The specification for a 6' fence shall be used, substituting 42" fabric and 6' length posts.
 - Chain link fence shall be fastened securely to the fence posts with wire ties. The lower tension wire, brace and truss rods, drive anchors and post caps are not required except on the ends of the fence.
 - Filter cloth shall be fastened securely to the chain link fence with ties spaced every 24" at the top and mid-section.
 - Filter cloth shall be embedded a minimum of 8" into the ground.
 - When two sections of filter cloth adjoin each other, they shall be overlapped by 6" and folded.
 - Maintenance shall be performed as needed and silt buildups removed when "bulges" develop in the silt fence, or when silt reaches 50% of fence height.
 - Filter cloth shall be fastened securely to each fence post with wire ties or staples at top and mid section and shall meet the following requirements for Geotextile Class F:

Tensile Strength	50 lbs/in (min.)	Test: MSMT 509
Tensile Modulus	20 lbs/in (min.)	Test: MSMT 509
Flow Rate	0.3 gal/ft ² /minute (max.)	Test: MSMT 322
Filtering Efficiency	75% (min.)	Test: MSMT 322
- | | | |
|--|-----------------|--|
| U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE | PAGE H - 26 - 3 | MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION |
|--|-----------------|--|



TYPICAL DRY WELL CROSS SECTION

- NOTES
- SEE "LANDSCAPE SPECIFICATION GUIDELINES FOR BALTIMORE-WASHINGTON METROPOLITAN AREAS" FOR ALL MATERIAL, PRODUCT, AND PROCEDURE SPECIFICATIONS.
 - SEE "LANDSCAPE GUIDELINES" FOR SUPPORTING TREES LARGER THAN 2-1/2" CALIPER.
 - PLACE UPRIGHT STAKES PARALLEL TO WALKS & BUILDINGS.
 - KEEP MULCH 1" FROM TRUNK
 - SEE ARCHITECTURAL PLANS 2'-6" FOR ADDITIONAL PLANTINGS WHICH EXCEED HOWARD COUNTY MINIMUM REQUIREMENTS.
 - TREES ARE NOT TO BE PLANTED OVER PRIVATE SEWAGE EASEMENT.
-

TREE PLANTING AND STAKING

(DECIDUOUS TREES UP TO 2-1/2" CALIPER)

OWNER / DEVELOPER
MICHAEL PFAU
3675 PARK AVENUE, SUITE 301
ELLCOTT CITY, MD 21043
(410) 977-3032

DRY WELL CHART				
LOT No.	DRY WELL STONE VOLUME REQ.	DRY WELL STONE VOLUME PROV.	No. WELLS	WELL SIZE
3	27	27	4	3'x3'x3'
4	27	27	4	3'x3'x3'
5	27	27	4	3'x3'x3'

NO.	REVISION	DATE

DETAIL SHEET
WEST POINT
LOTS 3-5
SINGLE FAMILY DETACHED UNITS
TAX MAP 38 BLOCK 15 PARCEL 267
1ST ELECTION DISTRICT HOWARD COUNTY, MARYLAND
REF.: F01-171

FREDERICK WARD ASSOCIATES, INC.
7125 Riverwood Drive Columbia, Maryland 21046-2354
Phone: 410-290-9550 Fax: 410-720-6226
Bel Air, Maryland Columbia, Maryland Warrenton, Virginia

DESIGN BY: DM
DRAWN BY: JT
CHECKED BY: RHW
DATE: OCTOBER 2002
SCALE: AS NOTED
W.O. NO.: 2017160
3 SHEET OF 3