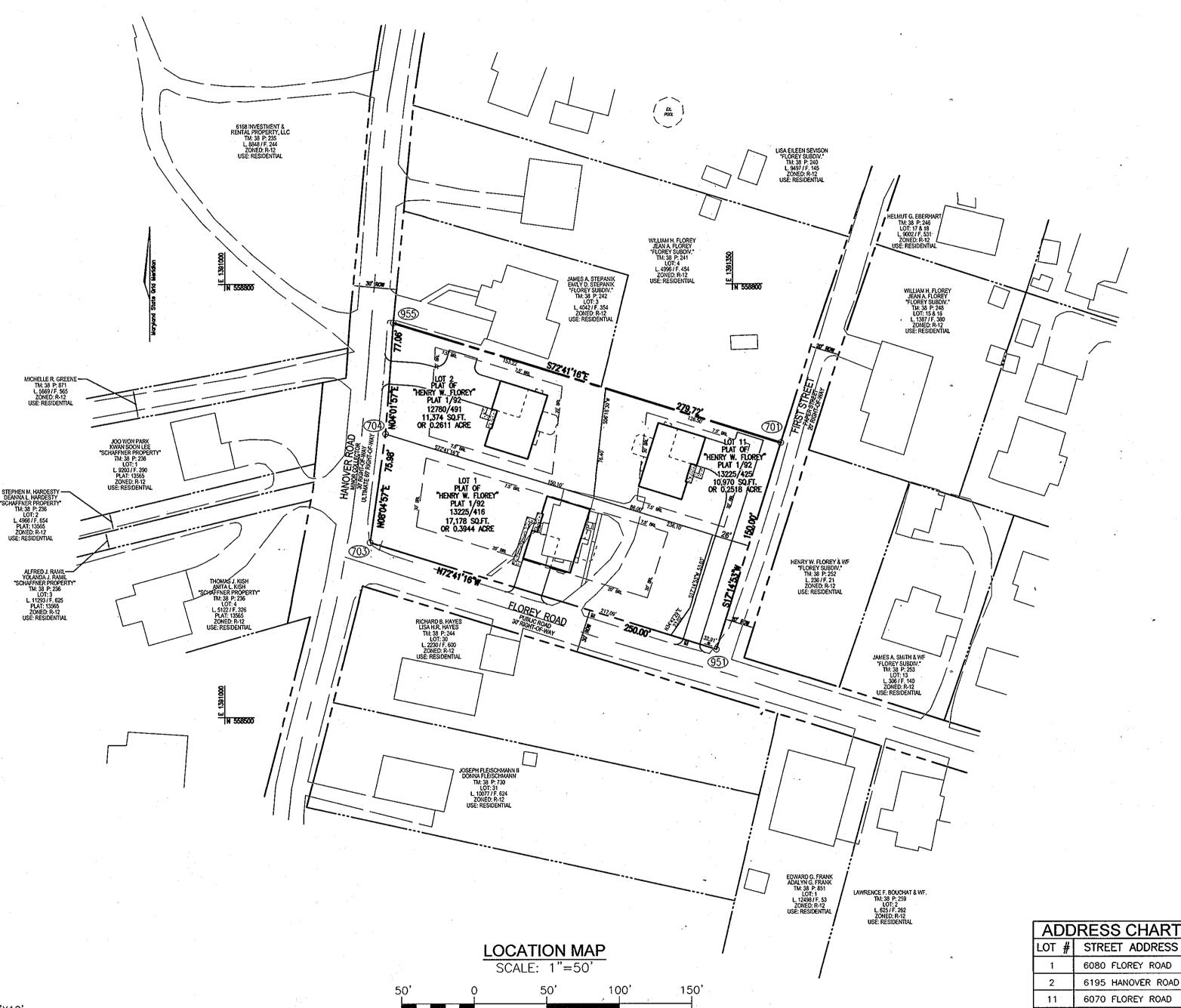
GENERAL NOTES

- 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 START OF WORK.
- THE CONTRACTOR IS TO NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST FIVE DAYS BEFORE STARTING
 - BELL ATLANTIC TELEPHONE CO: HOWARD COUNTY BUREAU OF UTILITIES: 313-2366 393-3553 VERIZON CABLE LOCATION DIVISION: B.G.&E. CO. CONTRACTOR SERVICES: 850-4620 B.G.&E. CO. UNDERGROUND DAMAGE CONTROL: 787-4620
- THE EXISTING TOPOGRAPHY SHOWN HEREON IS BASED ON A TOPOGRAPHIC SURVEY PREPARED BY ROBERT H. VOGEL ENGINEERING, INC., DATED AUGUST 18, 2010. OFFSITE TOPOGRAPHY FROM HOWARD COUNTY GIS.
- THE PROJECT BOUNDARY IS BASED ON A BOUNDARY SURVEY PREPARED BY ROBERT H. VOGEL
- ENGINEERING, INC., DATED AUGUST 18, 2010.
- THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL WHICH IS BASED UPON THE MARYLAND STATE PLANE COORDINATE SYSTEM. HOWARD COUNTY MONUMENT NOS. 38R2 AND 38R3 WERE USED FOR THIS
- EXISTING UTILITIES LOCATED FROM TOPOGRAPHIC SURVEY AND AS-BUILT DRAWINGS. 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 PUBLIC RIGHT-OF-WAY, PAVING, OR EXISTING UTILITIES WILL BE CORRECTED AT THE CONTRACTOR'S EXPENSE.
- 3. FOR DRIVEWAY ENTRANCE DETAILS REFER TO THE HOWARD COUNTY DESIGN MANUAL, VOLUME IV, STANDARD DETAIL R-6.03.
- THE SUBJECT PROPERTY IS ZONED "R-12" IN ACCORDANCE WITH THE 2/2/04 COMPREHENSIVE ZONING PLAN AND THE COMP. LITE ZONING AMENDMENTS ON 7/28/06.
- . 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.
- . NO GRADING, REMOVAL OF VEGETATIVE COVER OR TREES, PAVING AND NEW STRUCTURES SHALL BE PERMITTED WITHIN THE REQUIRED WETLANDS, STREAM(S) OR THEIR BUFFERS, FOREST CONSERVATION EASEMENT AREAS AND 100-YEAR FLOODPLAIN.
- DRIVEWAYS SHALL BE PROVIDED PRIOR TO ISSUANCE OF A USE AND OCCUPANCY PERMIT FOR ANY NEW DWELLINGS TO INSURE SAFE ACCESS FOR FIRE AND EMERGENCY VEHICLES PER THE FOLLOWING MINIMUM REQUIREMENTS: A) WIDTH - 12' (16' IF SERVING MORE THAN ONE RESIDENCE);
- B) SURFACE 6" OF COMPACTED CRUSHER RUN BASE WITH TAR AND CHIP COATING (1-1/2" MIN.);
- C) GEOMETRY MAXIMUM 15% GRADE, MAXIMUM 10% GRADE CHANGE, AND MINIMUM 45' TURNING RADIUS; D) STRUCTURES (CULVERTS/ BRIDGES) - CAPABLE OF SUPPORTING 25 GROSS TONS (H25 LOADING);
- 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.
- 5. NO WETLANDS OR STREAMS ARE LOCATED ONSITE. NO FLOODPLAIN IS LOCATED ONSITE.
- 4. NO STEEP SLOPES OVER 20,000 SF CONTIGUOUS ARE LOCATED ONSITE.
- . THIS PROJECT IS EXEMPT FROM THE REQUIREMENTS OF SECTION 16.1202(b)(1)(i) OF THE HOWARD COUNTY CODE FOR FOREST CONSERVATION BECAUSE THE THREE LOTS HAVE A COMBINED AREA OF 39,522 SQUARE FEET WHICH
- IS BELOW THE 40,000 REQUIREMENT THRESHOLD. WATER AND SEWER HOUSE CONNECTION LOCATIONS DETERMINED BY BUREAU OF UTILITIES AUGUST 31, 2010.
- 3. THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH SECTION 16.124 OF THE HOWARD COUNTY CODE AND LANDSCAPE MANUAL. A FINANCIAL SURETY IN THE AMOUNT OF \$5,400.00 FOR THE REQUIRED 13 SHADE
- TREES AND 10 EVERGREEN TREES SHALL BE POSTED WITH THE GRADING PERMIT FOR THIS PLAN. . STORMWATER MANAGEMENT REQUIREMENTS HAVE BEEN PROVIDED BY ON LOT MICRO-BIO RETENTION FACILITIES
- AND ROOF TOP DISCONNECTS. SEE SHEET 3 FOR SWM CHART. THIS PLAN IS SUBJECT TO THE AMENDED FIFTH EDITION OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS
- AS AMENDED UNDER COUNCIL BILL #45-2003 DEVELOPMENT OR CONSTRUCTION OF THESE LOTS MUST COMPLY WITH SETBACK AND BUFFER REGULATIONS IN EFFECT AT THE TIME OF SUBMISSION OF THE SITE DEVELOPMENT PLAN, WAIVER PETITION APPLICATION, OR BUILDING/GRADING PERMIT APPLICATIONS
- THIS SUBDIVISION IS SUBJECT TO THE FOLLOWING DPZ FILES: ECP-11-019, WP-11-146.
- THE DEPARTMENT OF PLANNING AND ZONING HAS DETERMINED SINCE THERE ARE NO SIDEWALKS IN THE VICINITY OF THE SITE, AND ADJACENT DEVELOPMENT (RECORD PLAT) HAS BEEN SUBSTANTIALLY COMPLETED WITHOUT SIDEWALKS, PURSUANT TO PRIOR APPROVALS, AND THERE IS NO NEED FOR SIDEWALKS TO SERVE COMMERCIAL OR INSTITUTIONAL USES, SCHOOLS, PARKS, OR OTHER PUBLIC FACILITIES, OR MAKE CONNECTIONS TO NEARBY STREETS OR TRANSIT SERVICE THAT SIDEWALKS WOULD NOT BE REQUIRED FOR THIS PROJECT IN ACCORDANCE WITH SECTION 16.134(b)(2) OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS.
- THIS PLAN IS SUBJECT TO WAIVER PETITION WP-11-146 APPROVED APRIL 5, 2011 TO REQUEST RELIEF OF SECTION 16.147 OF THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS TO MAKE LOT LINE ADJUSTMENTS BY RECORDING AN "ADJOINDER DEED" WITHIN THE LAND RECORDS OF HOWARD COUNTY. APPROVAL IS SUBJECT TO THE FOLLOWING CONDITIONS:
- THE 'ADJOINER DEED' SHALL BE RECORDED IN THE LAND RECORDS OFFICE OF HOWARD COUNTY, MARYLAND AND SHALL BE SUBMITTED TO THIS DEPARTMENT BEFORE OR CONCURRENT WITH THE SITE DEVELOPMENT PLAN ORIGINAL MYLAR SUBMISSION.
- 2. THE 'ADJOINER DEED' SHALL REFERENCE THIS WAIVER.
- 3. APPROVAL OF THIS WAIVER IS FOR THE RESUBDIVISION OF LOTS 1 & 11 FOR THE PURPOSE OF PROVIDING PUBLIC NO NEW DEVELOPMENT, CONSTRUCTION OT IMPROVEMENTS ARE PERMITTED UNDER THIS REQUEST.
- THE SMALLER OF THE TWO EXISTING STRUCTURES HAS BEEN REMOVED FROM THIS PROPERTY. THE REMAINING HOUSE AND ALL OTHER EXISTING FEATURES NOTED TO BE REMOVED WILL BE REMOVED PRIOR TO SIGNATURE APPROVAL.

SITE DEVELOPMENT PLAN PROPERTY OF "HENRY W. FLOREY"

LOTS 1, 2, & 11 PLAT BOOK 1, FOLIO 92 (SFD RESIDENTIAL) HOWARD COUNTY, MARYLAND



VICINITY MAP

ADC MAP COORDINATE: PG. 4937 E8 & E9

BENCHMARKS

HOWARD COUNTY BENCHMARK - 38R2 (3/4" IRON ROD) N 557,500.66 E 1,391,227.05 ELEV. 168.79 LOCATION: SOUTHEAST CORNER OF PATUXENT QUARTER ROAD AND HANOVER ROAD.

HOWARD COUNTY BENCHMARK - 38R3 (3/4" IRON ROD) N 557,417.82 E 1,391,983.18 ELEV. 124.65 LOCATION: SOUTH SIDE OF PATUXENT QUARTER ROAD, 65' EAST OF THE CL FOR MILL RIVER COURT.

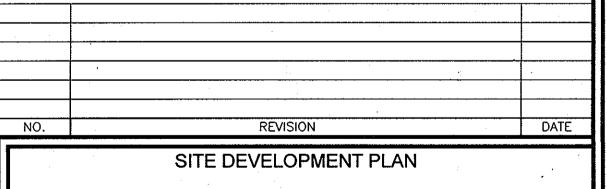
LEGEND

	PROPERTY LINE
	RIGHT-OF-WAY LINE
	ADJACENT PROPERTY LIN
	EXISTING CURB AND GUT
X	EXISTING UTILITY POLE
*	EXISTING LIGHT POLE
$\overline{\Sigma}$	EXISTING MAILBOX

									<u>.</u>
PERMIT INFORMATION CHART									
SUBDIVISION	SECT	ION/ /	AREA	LOT/ PARCEL					
PROPERTY "HENRY W. I	PROPERTY OF "HENRY W. FLOREY"			LOTS 1, 2, & 11 / PARCEL 243			3		
PLAT REF.	BLOCK	NO	ZONE	TAX	MAP	ELECT	DIST.	CENSUS T	R.

PLAT 1/92 | 15 AND 9 | R-12 | 38 | 1ST | 6012.01

DESCRIPTION		SHEET	NO.
COVER SHEET		1 OF	5
SITE LAYOUT	•	2 OF	5
SOILS, GRADING, LANDSCAPE, SEDIMENT AND EROSION CONTROL PLAN		3 -OF	5
LANDSCAPE, SEDIMENT AND EROSION CONTROL, NOTES AND DETAILS	_	4 OF	5
HCSCD/MAA NOTES & DETAILS		5 OF	5

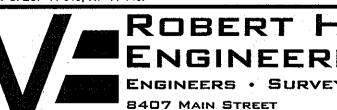


COVER SHEET

PROPERTY OF "HENRY W. FLOREY" LOTS 1, 2, & 11

PLAT BOOK 1, FOLIO 92

(SFD RESIDENTIAL)



Engineering, Inc. Engineers • Surveyors • Planners 8407 MAIN STREET TEL: 410.461.7666 ELLICOTT CITY, MD 21043 FAX: 410.461.8961

TAX MAP: 38, GRID: 15 & 9

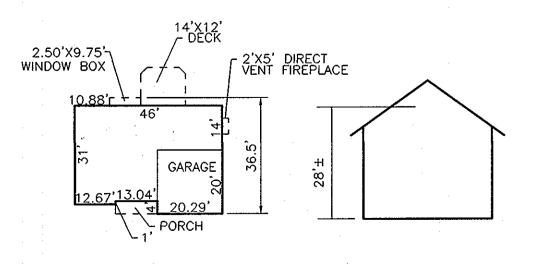
ESIGN BY:	RHV
RAWN BY:	JMR/HS
HECKED BY:	RHV
ATE:	MAY 2011
CALE:	AS SHOWN
v.o. no.:	10-23

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, ANI THAT I AM A DULY LICENSED PROFESSIONA ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 16193 EXPIRATION DATE: 09-27-2012

HOWARD COUNTY, MARYLANI

701	558689.98	1391363.29			
703	558621.12	1391100.15			
704	558696.35	1391110.83			
951	558546.73	1391338.82			
955	558773.22	1391116.25			
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APP	ROVED: HOWA	ARD COUNTY D	EPARTMENT OF	PLANNING	AND ZONING
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	Mille	am	uu		6/16/11
C	Mille	PMENT ENGINE	ERING DIVISION		6/16/11 - DATE

COORDINATE TABLE POINT NORTHING EASTING



SITE ANALYSIS DATA CHART A. TOTAL PROJECT AREA: 39,522 S.F. OR 0.9073 AC. B. AREA OF PLAN SUBMISSION: SAME AS ABOVE 36,166 S.F. OR 0.8302 AC. . LIMIT OF DISTURBED AREA: D. PRESENT ZONING DESIGNATION: RESIDENTIAL SINGLE FAMILY DETACHED HOMES . PROPOSED USES FOR SITE AND STRUCTURES: F. TOTAL NUMBER OF UNITS ALLOWED: F. TOTAL NUMBER OF UNITS PROPOSED: G. DPZ FILE REFERENCES:

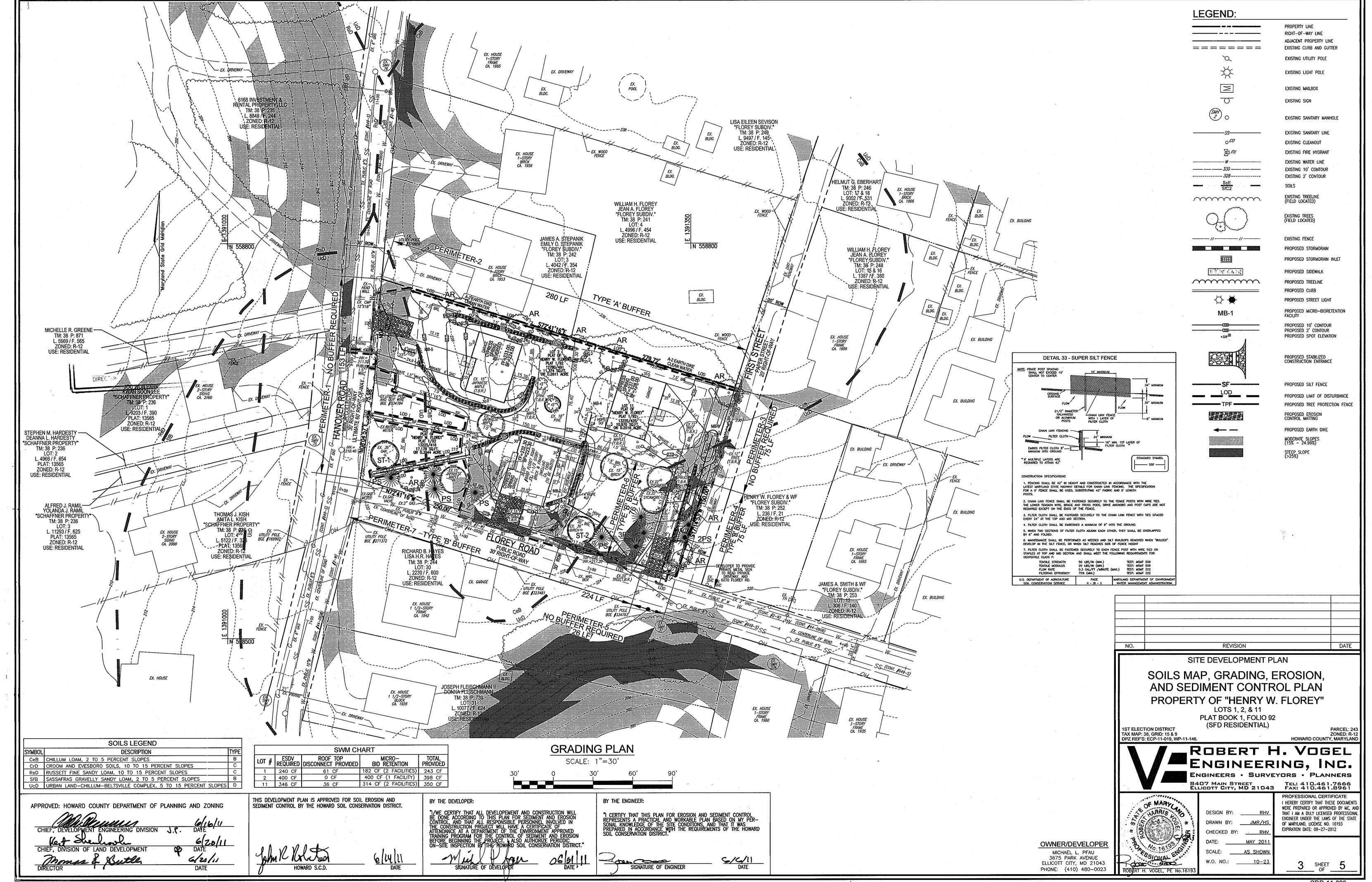
ECP-11-019, WP-11-146 L.12780 / F.491, L.13225 / F.416, L13225 / F.425

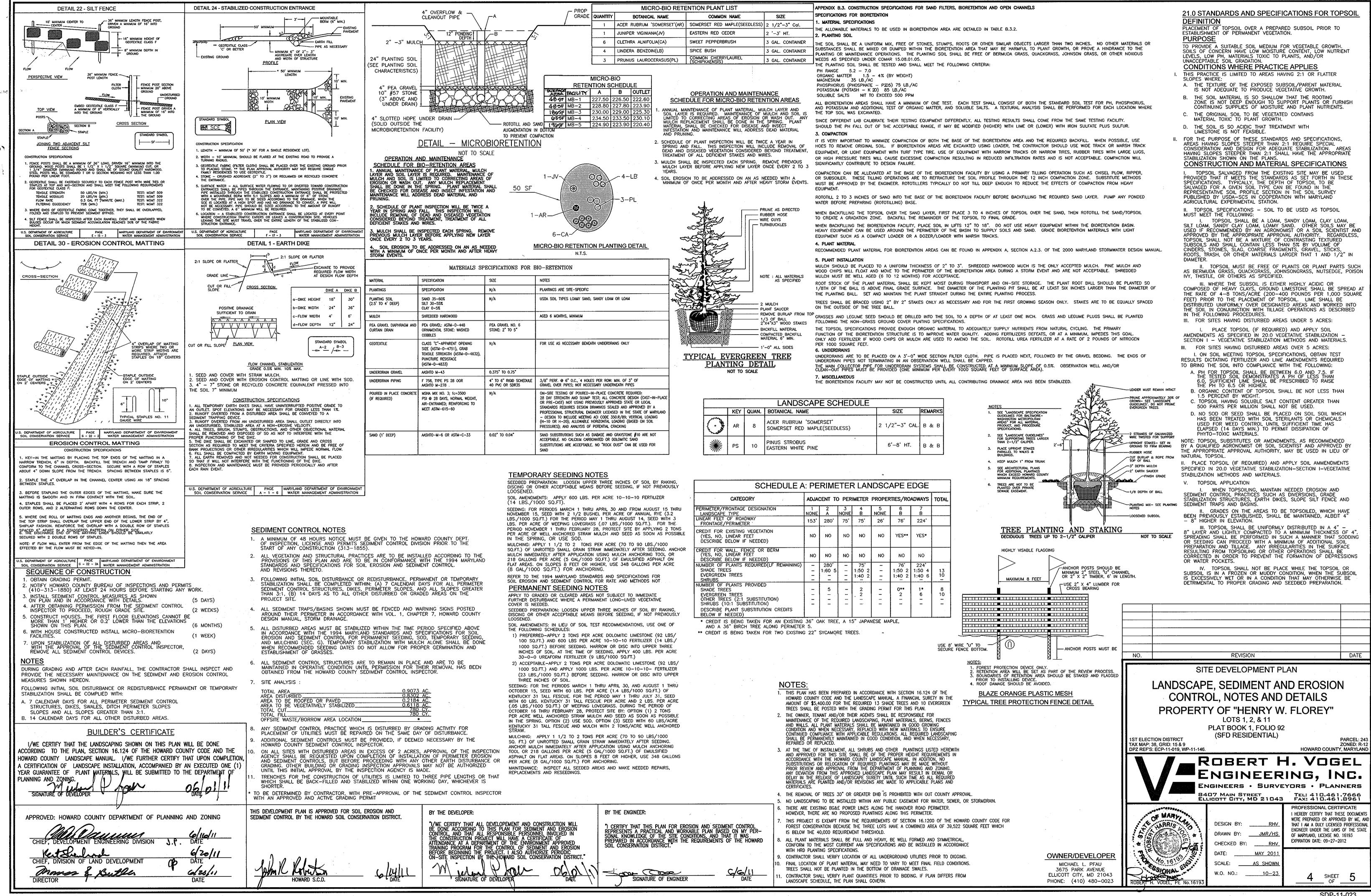
OWNER/DEVELOPE MICHAEL L. PFAU 3675 PARK AVENUE ELLICOTT CITY, MD 21043 PHONE: (410) 480-0023

CYPRESS SPRING

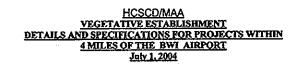


SDP-11-023





HCSCD/MAA VEGETATIVE ESTABLISHMENT DETAILS AND SPECIFICATIONS FOR THE PROJECT WITHIN 4 MILES OF BWI AIRPORT



References to ITEM #s noted below are found in Maryland Aviation ninistration's manual entitled Specifications for Performing Landscap Activities for the Maryland Aviation Administration dated May 2001

SOIL TESTS

- Following initial soil disturbances or re-disturbance, permanent or temporary stabilization shall be completed within seven calendar days for the surface of all perimeter controls, dikes, swales, ditches, perimeter slopes, and all slopes greater than 3 horizontal to 1 vertical (3:1) and fourteen days for all other disturbed or
- graded areas on the project site.

 2. Occurrence of acid sulfate soils (grayish black color) will require covering with a minimum of 12 inches of clean soil with 6 inches minimum capping of top soil.
 No stockpiling of material is allowed. If needed, soil tests should be done before and after a 6-week incubation period to allow oxidation of sulfates.
- 3. The minimum soil conditions required for permanent vegetative
- a. Soil pH shall be between 6.0 and 7.0. . Soluble salts shall be less than 500 parts per million (ppm).
- c. The soil shall contain less than 40% clay but enough fine grained material (> 30% slit plus clay) to provide the capacity
- d. Soil shall contain 1.5% minimum organic matter by weight.
 e. Soil must contain sufficient pore space to permit adequate root
- penetration.

 f. If these conditions cannot be met by soils on site, adding topsoil is required in accordance ITEM 901 or amendments made as

SEEDING item 903 seeding

DESCRIPTION

903-1.1 GENERAL. This item provides specifications for seeding of areas as designated on plans or as directed by the MAA Engineer. The species, mixtures, and methods of application provided in this item have been designed to reduce the attractiveness of airport grounds to wildlife. Only MAA-approved species, mixtures, and rates of application provided in this item may be used to establish vegetation. All activities associated with seeding including soil preparation, seed application, ertilization, and maintenance shall also conform to these approved standards.

903-2.1 SEED. All seed shall comply with the Maryland Seed Law (Agricultural Article of the Annotated Code of Maryland). Only MAA-approved species, mixtures, and rates of application provided in this item may be used to establish vegetation. See will be sampled and tested by an inspector from the Turf and Seed Section, Maryland Department of Agriculture (MDA), Annapolis, Maryland. All lawn and turf seed and mixtures shall be free from the following state-listed restricted noxious weeds:

com cockle (Agrostemma githago), bentgrass (Agrostis spp.)1, redtop (Agrostis gigantea) 1 wild onion (Allium canadense), wild garlic (Allium vineale), bindweed (Calstegia spp.) dodder (Cuscuta spp.), Bermuda grass (Cynodon dactylon) orchardgrass (Dactylis glomerat tall fescue (Festuca arundinaced meadow fescue (Festuca pratensis) annual bluegrass (Poa annua) rough bluegrass (Poa trivialis)

Johnson grass (Sorgum halepense

Restricted noxious-weed seed may not exceed 0.5 percent by weight of any seed mixture in addition, all seeds sold in Maryland shall be free from the following listed prohibited

1 These species may be included as a labeled component of a mixture when each is present in excess of five July 1, 2004

noxious weeds: balloonvine (Cardiospermum halicacabum), quackgrass (Ehtrigia repens), sicklepod (Senna obtusifolia), sorghum (Sorghum spp.), Canada thistle (Cirslum arvense), plumeless thistle (Carduus spp.-includes musk thistle and curled thistle), and

903-2.1.1 APPROVED SPECIES. The following table contains species that are approved by MAA for use in seed mixtures. Purity requirements and germination requirements are also provided.

APPROVED PLANT SPECIES MAA SEED MIXTURES					
	Purity* Not Less than %	Minimum % Germination	Pure Live Seed Factor 1.13		
Certified Turf-Type Tall Fescue (Festuca arundinacea)	98	90			
Certified Kentucky Bluegrass (Poa pratensis)	90	80	1.39		
Hard Fescue (Festuca longifolia)	98	90	1.13		
Chewings Red Fescue (Festuca rubra commutata)	98	90	1.13		
Annual Ryegrass (Lolium multiflorum)	95	85	1.24		
Perennial Ryegrass (Lolium perenne)	90	80	1.39		
Fowl Meadow Grass (Poa palustris)	90	80	1.39		
Little Bluestern (Andropogon scopartus)	62	94	1.71		
their appearance.	-	culture seeds, inert matter, and other st include hard seeds unless specifically			

903-2.1.2 PURITY. All seed shall be free of all state-designated noxious weeds listed in Paragraph 2.1.1 and conform to MAA specifications. To ensure compliance, MAA requires sampling and testing of seed by the Turf and Seed Section, Maryland Department of Agriculture (MDA). The Contractor shall furnish the MAA Engineer with duplicate signed copies of a statement by the Turf and Seed Section certifying that each lot of seed has been laboratory tested within six months of date of delivery. This statement shall include the following information:

name and address of laboratory.

the results of tests as to name, percentages of purity and of germination, percentage of weed content for the seed furnished,

and, in the case of a mixture, the proportions of each kind of seed.

July 1, 2004

Seed shall be furnished in standard containers with the seed name, lot number, not weight, percentages of purity, germination rate and hard seed, and percentage of maximum weed seed content clearly marked. All seed containers shall be tagged with a

903-2.1.3 MIXTURES AND APPLICATION RATES. Only seed mixtures and application rates described in this item may be used unless otherwise approved by the MAA Engineer. Seed mixtures shall meet criteria detailed in Paragraph 903-2.1.2. Seed mixtures have been formulated to minimize the attractiveness of areas to wildlife of common landscape scenarios. The appropriate seed mixture for application will be designated based on environmental conditions and may vary from site to site. All planting rates listed are in pounds of Pure Live Seed (PLS) per acre.

MDA supervised mix program seed tag.

Seed mixtures, application scenarios, and rates for permanent cool-season grasses are as

a. Seed Mixture No. 1 - relatively flat areas (grade less than 4:1) subject to conditions and regular mowing (Application rate = 234 lbs PLS/acre); b. Seed Mixture No. 2 - sloped areas (grade greater than 4:1) not subject to

mowing (Application rate = 115 lbs PLS/acre); and
c. Seed Mixture No. 3 - wetlands and their associated buffer zones (Application 131 lbs PLS/acre).

Seed Mixture No. 1: Relatively flat areas regularly mowed and exposed to normal

s (Application rate = 234 lbs PLS/acre) (lbs of LS/acre) 85% Certified Turf-Type Tall Fescue 0% Certified Kentucky Bluegrass 5% Perennial Ryegrass Supplemental Seed

shall be applied using a high-pressure spray which shall always be directed

upward into the air so that the mixtures will fall to the ground in a uniform

spray. Nozzles or sprays shall never be directed toward the ground in such a manner that might produce erosion or runoff. Particular care shall be exercised

to ensure that the application is made uniformly, at the prescribed rate, and to

sections of known areas. To checks the rate and uniformity of application, the

On surfaces that are to be mulched as indicated by the plans or designated by the MAA Engineer, seed and fertilizer applied by the spray method need not be

raked into the soil or rolled. However, on surfaces on which mulch is not to be

903-3.4 MAINTENANCE OF SEEDED AREAS. The contractor shall protect seeded

areas against traffic or other use by warning signs or barricades, as approved by the Engineer. Surfaces guilled or otherwise damaged following seeding shall be repaired by

regrading and reseeding as directed. The Contractor shall mow, water as directed, and

otherwise maintain seeded areas in a satisfactory condition until final inspection and

out of season, the Contractor will be required to establish a good stand of grass of

uniform color and density to the satisfaction of the Engineer. If at the time when the

contract has been otherwise completed it is not possible to make an adequate determination of the color, density, and uniformity of such stand of grass, payment for

the unaccepted portions of the areas seeded out of season will be withheld until such time

When either the dry or wet application method outlined above is used for work performed

applicator will observe the degree of wetting of the ground or distribute test

sheets of paper or pans over the area at intervals and observe the quantity o

guard against misses and overlapped areas. Predetermined quantities of the mixture shall be used in accordance with specifications to cover specified

Seed Mixture No. 2: Sloped areas not subject to regular mowing (Application rate = 115 lbs PI Slaces)

(lbs of PLS/acre) 75% Hard Fescu 5% Kentucky Bluegras

Seed Mixture No. 3 - Wetland areas and their associated buffer zones (Application rate = 131 lbs PLS/acre)

(lbs of PLS/acre 60% Fowl Meadow Grass 30% Chewings Fescue 10% Perennial Ryegrass

903-2.1.4 SEEDING SEASONS. Application of seed and seed mixtures shall occur within a specified seeding season unless otherwise approved by the MAA Engineer. No

seed or seed mixtures are to be applied on frozen ground or when the temperature is at o below 35 degrees Farenheit (7.2 degrees Centigrade). Under these conditions, a layer of mulch should be applied in accordance with Item 905, Mulching, to stabilize the site, and permanent seeding should occur in the subsequent seeding season. Seed application ma occur during the seeding season dates listed below. Seeding performed after October 20 should be a temporary cover of annual ryegrass and followed by overseeding of the appropriate seed mixture during the spring seeding season.

March I to April 20 and August 1 to October 20, inclusive Temporary Cover of Annual Rye/Redtop March 1 to April 30 and August 1 to November 30, inclusive May 1 to July 31, inclusive. Rate of application should be 13.6 lbs.

Seeding seasons are based on typical years and can be subject to variation, which may be modified by the MAA Engineer based on seasonal trends.

If the time required to complete any of the operations necessary under this item, within the specified planting season or any authorized extensions thereof, extends beyond the Contract period, then such time will be charged against the Contract time, and liquidated

903-2.2 LIME. Lime shall consist of ground limestone and contain at least 85 percent total carbonates. Lime shall be ground to a fineness so that at least 90 percent will pass through a No. 20 mesh sieve and 50 percent will pass through a No. 100 mesh sieve Dolomitic lime or a high magnesium lime shall contain at least 10 percent magnesium oxide. Lime shall be applied by approved methods detailed in Section 903-3.3 of this

903-2.3 FERTILIZER. Fertilizer shall be standard commercial fertilizer (supplied separately or in mixtures) and meet the requirements of applicable state and federal laws (O-F-241) as well as standards of the Association of Official Agricultural Chemists. Nitrogen-Phosphorus-Potassium (N-P-K) concentrations shall be determined from analysis of soil samples. (Approved fertilizer rate: 2) pounds of 10-10-10 per 1,000 square feet.) Methods of fertilizer application shall conform to standards described in Section 903-3.3 of this item. Fertilizer shall be furnished in standard containers that are clearly labeled with name, weight, and guaranteed analysis of the contents (percentage of total nitrogen, available phosphoric acid, and water-soluble potash). Mixed fertilizers shall not contain any hydrated lime or cyanamide compounds. Fertilizers failing to meet the specified analysis may be approved by the MAA Engineer, providing sufficient

The fertilizers may be supplied in the following forms:

a. A dry, free-flowing fertilizer suitable for application by a common fertilizer

MINING OPERATIONS

minimum rate of 0.5 pounds per 1,000 square feet.

For seeding dates of: February I through April 30 and August 15 through October 31, use seed mixture of tall fescue at the rate of 2 pounds per 1,000 square feet and red top at the

NOTE: Use of this information does not preclude meeting all of the requirements of the current Maryland Standards and Specifications for Soil Erosion and Sediment Control.

naterials are applied to conform with the specified nutrients per unit of measure without

b. A finely ground fertilizer soluble in water, suitable for application by power

c. A granular or pellet form suitable for application by blower equipment.

The rate of application will be based on results of soil tests performed by the University of Maryland Soil Testing Laboratory. By law, persons applying fertilizer to State-owned land shall follow the recommendations of the University of Maryland as set forth in the "Plant Nutrient Recommendations Based on Soil Tests for Sod Production" (see Appendix B). Application of the fertilizer shall be in a manner that is consistent with the recommendations of the University of Maryland Cooperative Extension.

CONSTRUCTION METHODS AND EQUIPMENT

903-3.1 GENERAL. This section provides approved methods for the application of and includes standards for seedbed preparation, methods of application, and equipment to be used during the process. Lime and fertilizer shall be applied to seeded areas before the seed is spread. The mixture of seed will be determined for sites based on environmenta conditions as described in Paragraph 903-2.1.3.

903-3.2 ADVANCE PREPARATION. Areas designated for seeding shall be properly prepared in advance of seed application. The area shall be tilled and graded prior to application of lime and fertilizer, and the surface area shall be cleared of any stones larger than I inch in diameter, sticks, stumps, and other debris that might interfere with sowing of seed, growth of grasses, or subsequent maintenance of grass-covered areas. Damage caused by erosion or other forces that occur after the completion of grading shall be repaired prior to the application of fertilizer and lime. The Contractor will repair such damage, which may include filling gullies, smoothing irregularities, and repairing other incidental damage before beginning the application of fertilizer and ground limestone.

If an area to be seeded is sparsely sodded, weedy, barren and unworked, or packed and hard, all grass and weeds shall first be cut or otherwise satisfactorily disposed of, and the soil then scarified or otherwise loosened to a depth not less than 5 inches (125 mm). Clods shall be broken and the top 3 inches (75 mm) of soil shall be worked into a satisfactory condition by discing or by use of cultipackers, rollers, drags, harrows, or

An area to be seeded shall be considered a satisfactory seedbed (without requiring additional treatment) if it has recently been thoroughly loosened and worked to a depth of not less than 5 inches; the top 3 inches of soil is loose, friable, and is reasonably free tro large clods, rocks, large roots, or other undesirable matter, appropriate amounts of rtilizer and lime have been added; and, if it has been shaped to the required grade amediately prior to seeding. For slope areas steeper than 3:1 (three horizontal to one

After completion of tilling and grading, lime and fertilizer shall be applied within 48 hours coording to the specified rate (Paragraphs 903-2.2 and 2.3) and methods

vertical), the subsoil shall be loose to a depth of 1 inch.

(Paragraphs 903-3.3.1 and 903-3.3.2) approved by MAA. The seeding mixture shall be applied within 48 hours after application of lime and fertilizer. To firm the seeded areas, cultipacking shall occur immediately after seeding.

903-3.3 METHODS OF APPLICATION. Lime, fertilizer, and seed mixes shall be applied by either the dry or wet application methods that have been approved by MAA

903-3.3.1 DRY APPLICATION METHOD

a. Liming. If soil test results indicate that lime is needed, the following procedures will be used: following advance preparation of the seedbed, lime shall be applied prior to the application of any fertilizer or seed and only on seedbeds that have been prepared as described in paragraph 903-3.2. The lim shall be uniformly spread and worked into the top 2 inches of soil, after which the seedbed shall be properly graded again.

b. Fertilizing. Following advance preparations (and liming if necessary), fertilizer shall be spread uniformly at the specified rate to provide no less than the minimum quantity stated in Paragraph 903-2.3.

e. Seeding. Seed mixtures shall be sown immediately after fertilization of the seedbed. The fertilizer and seed shall be lightly raked to a depth of 1 inch for newly graded and disturbed areas.

d. Rolling. After the seed has been properly covered, the seedbed shall be immediately compacted using a cultipacker or an approved lawnroller.

903-3.3.2 WET APPLICATION METHOD/HYDROSEEDING a. General. The Contractor may elect to apply seed and fertilizer as per

Paragraphs c and d of this section in the form of an aqueous mixture by spraying over the previously prepared seedbed using methods and equipment approved be MAA. The rates of application shall be as specified in Paragraphs 903-2.1

 Spraying Equipment. The spraying equipment shall have a container or water tank equipped with a liquid level gauge capable of reading increments or 50 gallons or less over the entire range of the tank capacity. The liquid leve gauge shall be mounted so as to be visible to the nozzle operator at all times. container or tank shall also be equipped with a mechanical power-driven agitator capable of keeping all the solids in the mixture in complete suspensio

The spraying equipment shall also include a pressure pump capable of delivering 100 gallons per minute at a pressure of 100 pounds per square inch. The

pressure pump assemblage shall be configured to allow the mixture to flow through the tank when not being sprayed from the nozzle. All pump passages and pipelines shall be capable of providing clearance for 5/8-inch solids. The power unit for the pump and agitator shall have controls mounted so as to be accessible to the nozzle operator. A pressure gauge shall be connected to and

The nozzle pipe shall be mounted on an elevated supporting stand in such a manner that it can be rotated through 360 degrees horizontally and inclined vertically from at least 20 degrees below to at least 60 degrees above the horizontal. There shall be a quick-acting, three-way control valve connecting the recirculating line to the nozzle pipe and mounted so that the nozzle operat can control and regulate the amount of flow of mixture to be supplied so that nixtures may be properly sprayed over a distance varying from 20 feet to 100 feet. One shall be a close-range ribbon nozzle, one a medium-range ribbon nozzle, and one a long-range jet nozzle. For ease of removal and cleaning, all nozzles shall be connected to the nozzle pipe by means of quick-release couplings. In order to reach areas inaccessible to the regular equipment, an extension hose at least 50 feet in length shall be provided to which the nozzles

c. Mixtures. Lime shall be applied separately in the quantity specified, prior to the fertilizing and seeding operations. Lime should be added to and mixed with of water. After lime has been applied, the tank should be emptied and rinsed with fresh water. Seed and fertilizer shall be mixed together in the relative proportions specified, but the resulting concentration should not exceed 220 pounds of mixture per 100 gallons of water and should be applied within 30

All water used shall be obtained from fresh water sources and shall be free from injurious chemicals and other toxic substances harmful to plant life. Brackish water shall not be used at any time. The Contractor shall identify all sources of water to the MAA Engineer at least two weeks prior to use. The Engineer may take samples of the water at the source or from the tank at any time and have a

are finally applied to the seedbed. All such mixtures shall be used within 30 minutes from the time they were mixed or they shall be wasted and disposed of

d. Spraying. Lime shall be sprayed upon previously prepared seedbeds on which the lime, if required, shall have been worked in already. The mixture

Mulch shall be applied as per ITEM 905.

TEMPORARY SEEDING

100 pounds of dolomitic limestone per 1,000 square feet. 15 pounds of 10-10-10 per 1,000 square feet.

Per ITEM 903 Mulch shall be applied as per ITEM 905.

No fills may be placed on frozen ground. All fill to be placed in approximately horizontal layers, each layer having a loose thickness of not more than 8 inches. All fill in roadways and parking areas is to be classified Type 2 as per Anne Arundel County Code - Article 21, Section 2-308, and compacted to 90% density; compaction to be determined by ASTM D-1557-66T (Modified Proctor). Any fill within the building area is to be compacted to a minimum of 95% density as determined by methods previously mentioned. Fills for pond embankments shall be compacted as per MD-378 Construction Specifications. All other fills shall be compacted sufficiently so

Installation of sod should follow permanent seeding dates. Seedbed preparation for sod shall be as noted above. Lime and fertilizer per permanent seeding specifications and lightly irrigate soil prior to laying sod. Sod is to be laid on the contour with all ends tightly abutting. Joints are to be staggered between rows. Water and roll or tamp sod to insure positive root contact with the soil. All slopes steeper than 3:1, as shown, are to be permanently sodded or protected with an approved erosion control netting. Additional watering for establishment may be required. Sod is not to be installed on frozen ground. Sod shall not be transplanted when moisture content (dry or wet) and/or extreme temperature may adversely affect its survival. In the absence of adequate rainfall, irrigation should be performed to ensure establishment of sod.

THE PROPOSED PROJECT IS LOCATED IN HOWARD COUNTY, MARYLAND ON TAX MAP 38, BLOCK 15 & 9, PARCEL 243, THE PROPOSED PROJECT IS LOCATED NEAR

1. SEDIMENT BASINS AND TRAPS ARE PROPOSED FOR SEDIMENT AND EROSION

2. SEDIMENT TRAPS AND BASINS MUST BE DRAINED COMPLETELY THROUGH A FILTERING DEVICE TO A CLEAR WATER OUTFALL WITHIN 24 HOURS FOLLOWING ANY RAINFALL EVENT.

ANY DEVIATION TO PLANT SPECIES AND VEGETATION USED ON THESE PLANS NEED

BWI AIRPORT NOISE ZONE:

THE SITE FOR THIS PROJECT IS LOCATED OUTSIDE THE BOUNDARIES OF THE

5. THE ALLOWABLE HEIGHT FOR ANY PERMANENT OR TEMPORARY STRUCTURES TALLER THAN 277 FEET ABOVE MEAN SEA LEVEL NEED OBSTRUCTION ANALYSIS REVIEW AND PERMIT FOR

OF ACTIVE RUNWAYS OR WITHIN 5 MILES OF AN APPROACH SURFACE MUST DRAIN WITHIN 24 HOURS FOLLOWING . THE 1 OR 2 YEAR STORM EVENTS AND WITHIN 48 REVISION

SITE DEVELOPMENT PLAN

HCSCD/MAA NOTES & DETAILS

PROPERTY OF "HENRY W. FLOREY" LOTS 1, 2, & 11

PLAT BOOK 1, FOLIO 92 (SFD RESIDENTIAL) 1ST ELECTION DISTRICT

TAX MAP: 38, GRID: 15 & 9

NGINEERING, INC. ENGINEERS • SURVEYORS • PLANNERS 8407 MAIN STREET TEL: 410.461.7666 ELLICOTT CITY, MD 21043 FAX: 410.461.8961

T HEREBY CERTIFY THAT THESE DOCUMENTS THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 16193 EXPIRATION DATE: 09-27-2012

PARCEL: 24

HOWARD COUNTY, MARYLAND

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

laboratory test the samples for chemical and saline content. The Contractor shall not use any water from any source that is disapproved by the Engineer following All mixtures shall be constantly agitated from the time they are mixed until they

MULCHING Mulch shall be applied to all seeded areas immediately after seeding. During the time periods when seeding is not permitted, mulch shall be applied immediately after

acceptance of the work.

as these requirements have been met.

THE BALTIMORE WASHINTON INTERNATIONAL THURGOOD MARSHALL AIRPORT (BWI), APPROXIMATELY 14,000 FEET NORTH OF RUNWAY 15R-33L.

CONTROL DURING CONSTRUCTION.

3. LANDSCAPING & STORM WATER POND LANDSCAPING ON SITE:

APPROVAL FROM HCSCD/MAA. THE PLANT SPECIES USED ON THIS SITE ARE TO AVOID ITS POTENTIAL TO ATTRACT WILDLIFE THAT COULD POSE STRIKE HAZARD TO AIRCRAFT.

AIRPORT NOISE ZONE.

THE AIRPORT ZONE. 6. THE STORM WATER MANAGEMENT FACILITIES WITHIN 10,000 FEET

HOURS FOLLOWING. THE 10 OR 100 YEAR STORM

OWNER/DEVELOPER MICHAEL L. PFAU 3675 PARK AVENUE ELLICOTT CITY, MD 21043 PHONE: (410) 480-0023

DRAWN BY: