

DEVELOPER'S/OWNER'S CERTIFICATE
 I/WE CERTIFY THAT THE LANDSCAPING SHOWN ON THIS PLAN WILL BE DONE IN ACCORDANCE WITH THE PLAN, SECTION 16.124 OF THE HOWARD COUNTY CODE, AND THE HOWARD COUNTY LANDSCAPE MANUAL. I/WE FURTHER CERTIFY THAT UPON COMPLETION OF LANDSCAPE INSTALLATION, ACCOMPANIED BY AN EXECUTED ONE YEAR GUARANTEE OF PLANT MATERIALS, WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.

NAME _____ DATE _____

DEVELOPER'S CERTIFICATE
 I CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, 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 OF THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE NATURAL RESOURCE CONSERVATION SERVICE.

SIGNATURE OF DEVELOPER _____ DATE _____

PRINTED NAME OF DEVELOPER _____

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 AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE NATURAL RESOURCE CONSERVATION SERVICE.

SIGNATURE OF ENGINEER _____ DATE _____

PRINTED NAME OF ENGINEER _____

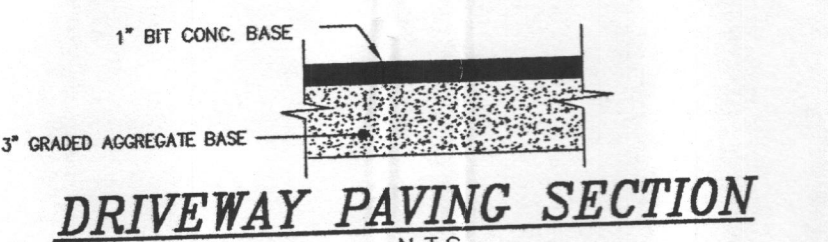
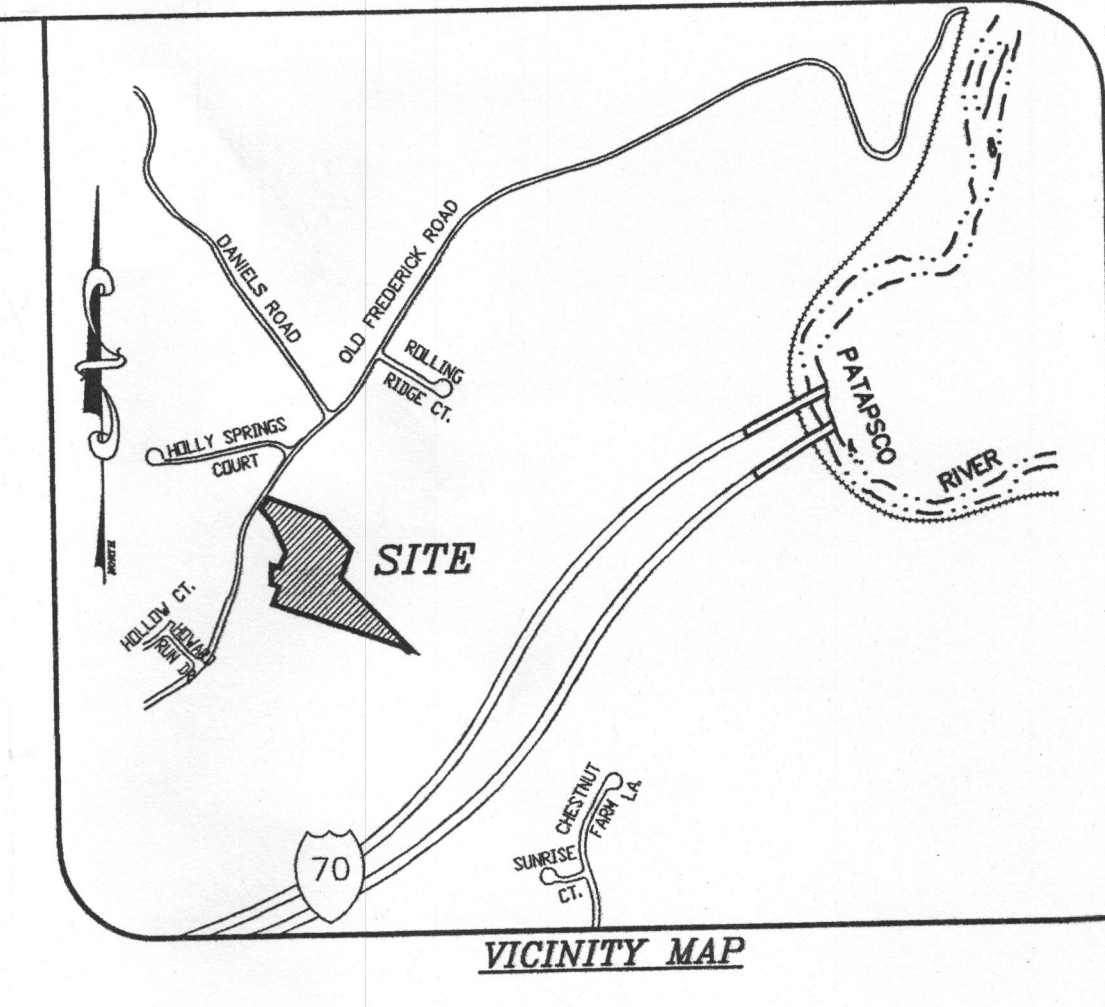
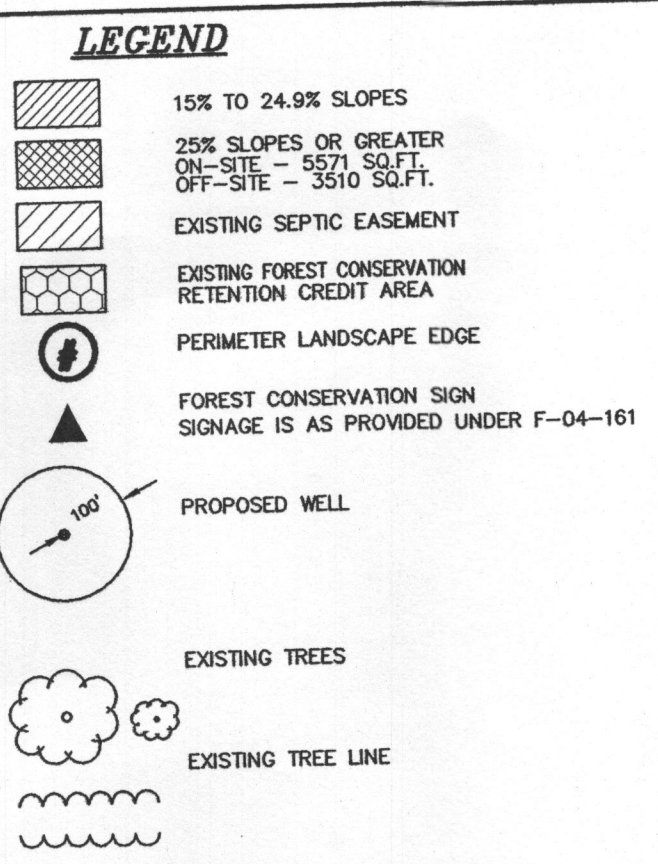
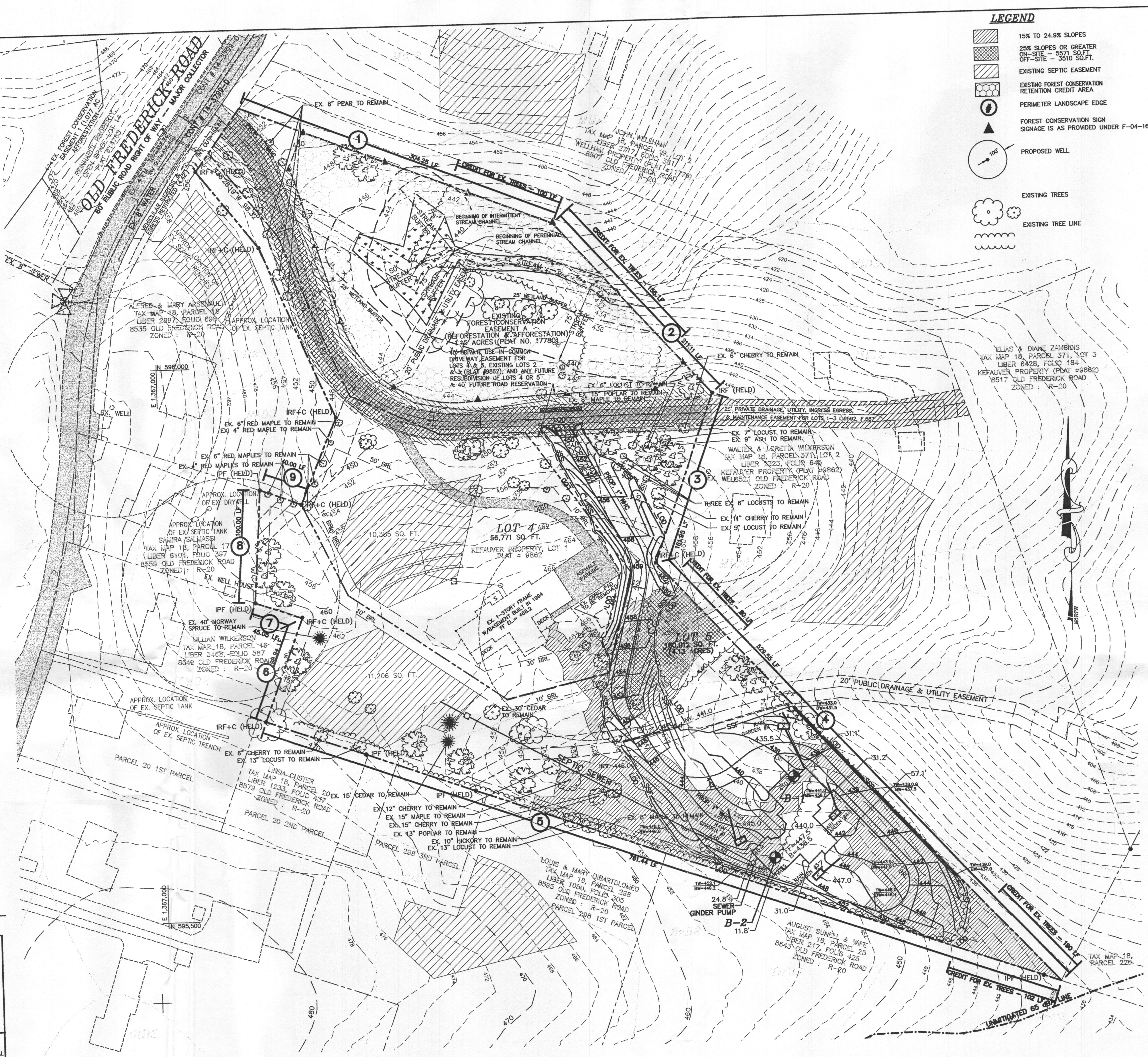
MINUTE PLANS HAVE BEEN REVIEWED FOR THE HOWARD COUNTY CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

APPROVED: DEPARTMENT OF PLANNING AND ZONING _____ DATE _____

CHIEF, DEVELOPMENT ENGINEERING DIVISION _____ DATE _____

CHIEF, DIVISION OF LAND DEVELOPMENT _____ DATE _____

DIRECTOR _____ DATE _____



LANDSCAPE REQUIREMENT PLANTING SCHEDULE

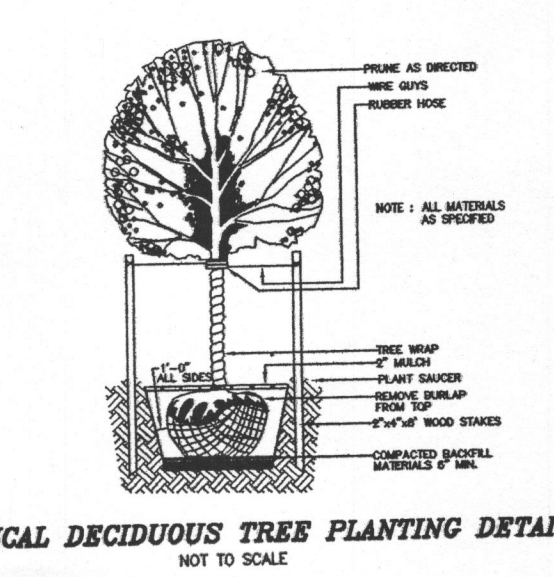
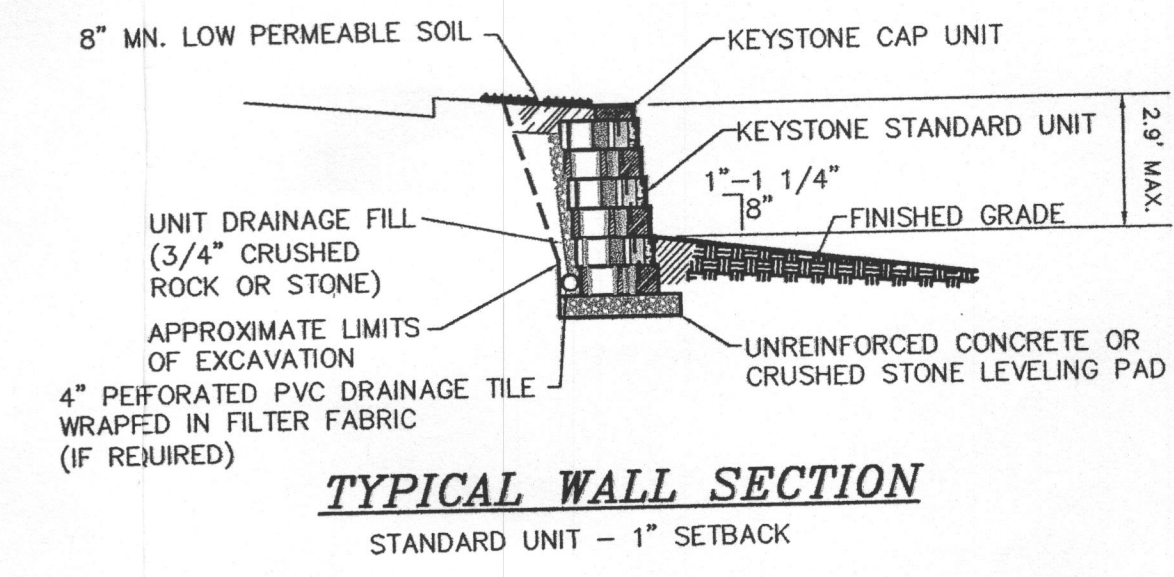
QUANTITY	SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE
17	(Symbol)	ACER RUBRUM 'RED SUNSET'	RED SUNSET RED MAPLE	2 1/2" - 3" CAL.
TOTAL				17 SHADE TREES

FOREST STAND
 FS1 - SUCCESSIONAL STAND

SCHEDULE A: PERIMETER LANDSCAPED EDGE

CATEGORY	ADJACENT TO PERIMETER PROPERTIES									TOTAL
	A (PERIMETER 1)	A (PERIMETER 2)	A (PERIMETER 3)	A (PERIMETER 4)	A (PERIMETER 5)	A (PERIMETER 6)	A (PERIMETER 7)	A (PERIMETER 8)	A (PERIMETER 9)	
LANDSCAPE TYPE	A (PERIMETER 1)	A (PERIMETER 2)	A (PERIMETER 3)	A (PERIMETER 4)	A (PERIMETER 5)	A (PERIMETER 6)	A (PERIMETER 7)	A (PERIMETER 8)	A (PERIMETER 9)	40.00 LF
LINEAR FEET OF PERIMETER	304.19 LF	211.07 LF	161.92 LF	529.55 LF	761.44 LF	45.05 LF	100.00 LF	NO	NO	NO
CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR FEET)	YES, 100 LF OF EX. TREES	YES, 155 LF OF EX. TREES	NO	YES, 178 LF OF EX. TREES	YES, 102 LF OF EX. TREES	NO	NO	NO	NO	NO
NUMBER OF PLANTS REQUIRED	3 SHADE TREES 0 EVERGREEN TREES 0 SHRUBS	1 SHADE TREE 0 EVERGREEN TREES 0 SHRUBS	3 SHADE TREES 0 EVERGREEN TREES 0 SHRUBS	6 SHADE TREES 0 EVERGREEN TREES 0 SHRUBS	11 SHADE TREES 0 EVERGREEN TREES 0 SHRUBS	2 SHADE TREES 0 EVERGREEN TREES 0 SHRUBS	1 SHADE TREE 0 EVERGREEN TREES 0 SHRUBS	2 SHADE TREES 0 EVERGREEN TREES 0 SHRUBS	1 SHADE TREE 0 EVERGREEN TREES 0 SHRUBS	30 SHADE TREES 0 EVERGREEN TREES 0 SHRUBS
CREDIT FOR EXISTING VEGETATION	1 SHADE TREE * 0 EVERGREEN TREES	N/A	3 SHADE TREES * 0 EVERGREEN TREES	N/A	8 SHADE TREES * 0 EVERGREEN TREES	N/A	N/A	N/A	1 SHADE TREE 0 EVERGREEN TREES	13 SHADE TREES 0 EVERGREEN TREES
NUMBER OF PLANTS PROVIDED	2 SHADE TREES 0 EVERGREEN TREES 0 SUBSTITUTION TREES 0 SHRUBS	1 SHADE TREE 0 EVERGREEN TREES 0 SUBSTITUTION TREES 0 SHRUBS	0 SHADE TREES 0 EVERGREEN TREES 0 SUBSTITUTION TREES 0 SHRUBS	6 SHADE TREES 0 EVERGREEN TREES 0 SUBSTITUTION TREES 0 SHRUBS	3 SHADE TREES 0 EVERGREEN TREES 0 SUBSTITUTION TREES 0 SHRUBS	2 SHADE TREES 0 EVERGREEN TREES 0 SUBSTITUTION TREES 0 SHRUBS	1 SHADE TREE 0 EVERGREEN TREES 0 SUBSTITUTION TREES 0 SHRUBS	2 SHADE TREES 0 EVERGREEN TREES 0 SUBSTITUTION TREES 0 SHRUBS	0 SHADE TREES 0 EVERGREEN TREES 0 SUBSTITUTION TREES 0 SHRUBS	17 SHADE TREES 0 EVERGREEN TREES 0 SUBSTITUTION TREES 0 SHRUBS

* PERIMETER 1: CREDIT FOR ONE (1) EX. 8" PEAR; PERIMETER 3: CREDIT FOR ONE (1) EX. 7" LOCUST, ONE (1) EX. 11" CHERRY, AND ONE (1) EX. 5" LOCUST;
 PERIMETER 5: CREDIT FOR ONE (1) EX. 13" LOCUST, ONE (1) EX. 10" HICKORY, ONE (1) EX. 15" CHERRY, ONE (1) EX. 15" MAPLE, AND ONE (1) EX. 12" CHERRY; PERIMETER 9: CREDIT FOR ONE (1) EX. 4" RED MAPLE.



SOILS DESCRIPTION

SYMBOL	DESCRIPTION
B/C2	BRANDYWINE LOAM, 2 TO 8% SLOPES, MODERATELY ERODED --- TYPE C
B/C3	BRANDYWINE LOAM, 4 TO 15% SLOPES, SEVERELY ERODED --- TYPE C
B/D3	BRANDYWINE LOAM, 1% TO 25% SLOPES, SEVERELY ERODED --- TYPE C
ChB2	CHESTER SILT LOAM, 3% TO 8% SLOPES, MODERATELY ERODED --- TYPE B
C/D3	COMUS SILT LOAM, LOCAL ALLUVIUM, 3% TO 8% SLOPES --- TYPE B
EB2	ELLSBORO LOAM, 3% TO 8% SLOPES, MODERATELY ERODED --- TYPE B
MB2	MANOR LOAM, 3% TO 8% SLOPES, MODERATELY ERODED --- TYPE B
MC3	MANOR LOAM, 8% TO 15% SLOPES, SEVERELY ERODED --- TYPE B
MD3	MANOR LOAM, 15% TO 25% SLOPES, SEVERELY ERODED --- TYPE B

OWNER
 ANDREW J. FOEHRKOLB & CHRISTINE W. FOEHRKOLB
 8525 OLD FREDERICK ROAD
 ELLICOTT CITY, MARYLAND 21043

Project	2006-018	date	MAR. 2006
Illustration	JJO	engineering	JJO
scale	1" = 50'	approval	JJO
revisions		CRE	

no.	description	date

KEFAUVER PROPERTY - LOT 5
 SITE DEVELOPMENT PLAN
 TAX MAP 18 - PARCEL 371 - LOT 5
 HOWARD COUNTY, MARYLAND
 SECOND ELECTION DISTRICT
 SITE DEVELOPMENT PLAN

MILDENBERG, BOENDER & ASSOC., INC.
 Engineers Planners Surveyors
 5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21042
 (410) 997-0286 Fax: (301) 621-5521 Wash. (410) 997-0288 Fax.

HOWARD SOIL CONSERVATION DISTRICT

PERMANENT SEEDING NOTES

APPLY TO GRADED OR CLEARED AREAS NOT SUBJECT TO IMMEDIATE FURTHER DISTURBANCE WHERE A PERMANENT LONG-LEIVED 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 ACRES DOLOMITIC LIMESTONE (92 LBS./1000 SQ.FT.) AND 600 LBS. PER ACRE 10-10-10 FERTILIZER (14 LBS./1000 SQ.FT.) BEFORE SEEDING. HARROW OR DISK INTO UPPER THREE INCHES OF SOIL. AT TIME OF SEEDING, APPLY 400 LBS. PER ACRE 30-0-0 UREAFORM FERTILIZER (9 LBS./1000 SQ.FT.).
- ACCEPTABLE - APPLY 2 TONS PER ACRES DOLOMITIC LIMESTONE (92 LBS./1000 SQ.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./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 (.05 LBS./1000 SQ.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./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 SEEDING AREAS AND MAKE NEEDED REPAIRS, REPLACEMENTS AND RESEEDINGS.

TEMPORARY SEEDING NOTES

APPLY TO GRADED OR CLEARED AREAS LIKELY TO BE REDISTURBED 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, FOR 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 OCTOBER 15, SEED WITH 2-1/2 BUSHEL PER ACRE OF ANNUAL RYE (3.2 LBS./1000 SQ.FT.) FOR THE PERIOD MAY 1 THRU AUGUST 14, SEED WITH 3 LBS. PER ACRE OF WEEPING LOVEGRASS (.07 LBS./1000 SQ.FT.). FOR THE PERIOD NOVEMBER 16 THRU NOVEMBER 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 WEED FREE SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 218 GAL PER ACRE (5 GAL/1000 SQ.FT.) OF EMULSIFIED ASPHALT ON FLAT AREAS. ON SLOPES 8 FEET OR HIGHER, USE 348 GAL PER ACRE (8 GAL/1000 SQ.FT.) FOR ANCHORING.

REFER TO THE 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR ADDITIONAL RATES AND METHODS NOT COVERED.

STANDARD SEDIMENT CONTROL NOTES

- A MINIMUM OF 48 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS, SEDIMENT CONTROL DIVISION PRIOR TO THE START OF ANY CONSTRUCTION. (313-1855).
- ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE MOST CURRENT MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, AND REVISIONS THERETO.
- FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, 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 12, OF THE HOWARD COUNTY DESIGN MANUAL, STORM DRAINAGE.
- ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR PERMANENT SEEDING (SEC.51), SOD (SEC. 54), TEMPORARY SEEDING (SEC. 50) AND MULCHING (SEC.52). TEMPORARY STABILIZATION WITH MULCH ALONE CAN ONLY BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER GERMINATION AND ESTABLISHMENT OF GRASSES.
- ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE AND ARE TO BE MAINTAINED IN OPERATIVE CONDITION UNTIL PERMISSON FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
- SITE ANALYSIS:
TOTAL AREA OF SITE: 4.13 ACRES
AREA DISTURBED: 1.15 ACRES
AREA TO BE ROOFED OR PAVED: 0.29 ACRES
AREA TO BE VEGETATIVELY STABILIZED: 0.86 ACRES
TOTAL CUT: 2500 CU. YDS.
TOTAL FILL: 2500 CU. YDS.
TOTAL WASTE/BORROW AREA LOCATION: N/A
THESE QUANTITIES ARE FOR PERMIT PURPOSES ONLY. CONTRACTOR IS REQUIRED TO PROVIDE HIS OWN QUANTITIES MEASUREMENTS.
- ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.
- ADDITIONAL SEDIMENT CONTROL MUST BE PROVIDED, IF DEEMED NECESSARY BY THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
- ON ALL SITES WITH DISTURBED AREAS IN EXCESS OF 2 ACRES, APPROVAL OF THE INSPECTION AGENCY SHALL BE REQUESTED UPON COMPLETION OF INSTALLATION OF PERIMETER EROSION AND SEDIMENT CONTROLS, BUT BEFORE PROCEEDING WITH ANY OTHER EARTH DISTURBANCE OR GRADING. OTHER BUILDING OR GRADING INSPECTION APPROVALS MAY NOT BE AUTHORIZED UNTIL THIS INITIAL APPROVAL BY THE INSPECTION AGENCY IS MADE.
- TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE PIPE LENGTHS OR THAT WHICH CAN BE BACK FILLED AND STABILIZED WITHIN ONE WORKING DAY, WHICHEVER IS SHORTER.

RAIN GARDEN DESIGN DATA

RAIN GARDEN	LOCATION	DIMENSIONS	BOTTOM OF RAINGARDEN ELEVATION	PONDING DEPTH	DEPTH OF GRAVEL	UNDERDRAIN INVERT	WEIR ELEVATION
1	FRONT NORTHWEST	5'X10'	445.00	0.5'	2.5'	442.50	445.50
2	FRONT NORTH	5'X10'	435.50	0.5'	2.5'	433.00	436.00
3	REAR SOUTH	5'X10'	447.00	0.5'	2.5'	444.50	447.50
4	SIDE NORTHEAST	5'X10'	440.00	0.5'	2.5'	437.50	440.50

REFORESTATION/AFFORESTATION PLANT LIST

QTY.	SPECIES	SHADE TOL.	MOIST. REGIME	WET. STATUS	MIN.O.C. SPACING	SIZE & REMARKS
25	Acer rubrum Red Maple	VT	D-W	FAC	20'	CONT/B & B 2" CALIPER
3	Amelanchier arborea Spicebush	VT	D-M	FACU	20'	CONT/B & B 2" CALIPER
3	Cercus canadensis Eastern Redbud	VT	D-M	FACU	20'	CONT/B & B 2" CALIPER
3	Cornus florida Flowering Dogwood	VT	D-M	FACU	20'	CONT/B & B 2" CALIPER
3	Ilex opaca American Holly	T	M	FACU	20'	CONT/B & B 2" CALIPER
1	Nyssa sylvatica Black Gum	T	M-W	FAC	20'	CONT/B & B 2" CALIPER
3	Prunus serotina Wild Black Cherry	I	M	FACU	20'	CONT/B & B 2" CALIPER
3	Quercus alba White Oak	I	M-W	FAC+	20'	CONT/B & B 2" CALIPER
8	Quercus palustris Pin Oak	I	M-W	FACW	20'	CONT/B & B 2" CALIPER
8	Quercus phellos Willow Oak	I	M-W	FACW	20'	CONT/B & B 2" CALIPER

TOTAL 69 TREES
(REQUIRED NUMBER OF TREES HAS BEEN REDUCED BASED ON THE EXISTENCE OF 20,000 SQ.FT. OF EXISTING TREES IN THE REFORESTATION/AFFORESTATION AREA. REQUIRED NUMBER OF TREES IS BASED ON 0.69 ACRES)

STANDARD AND SPECIFICATIONS FOR TOPSOIL

DEFINITION

PLACEMENT OF TOPSOIL OVER A PREPARED SUBSOIL PRIOR TO ESTABLISHMENT OF PERMANENT VEGETATION.

PURPOSE

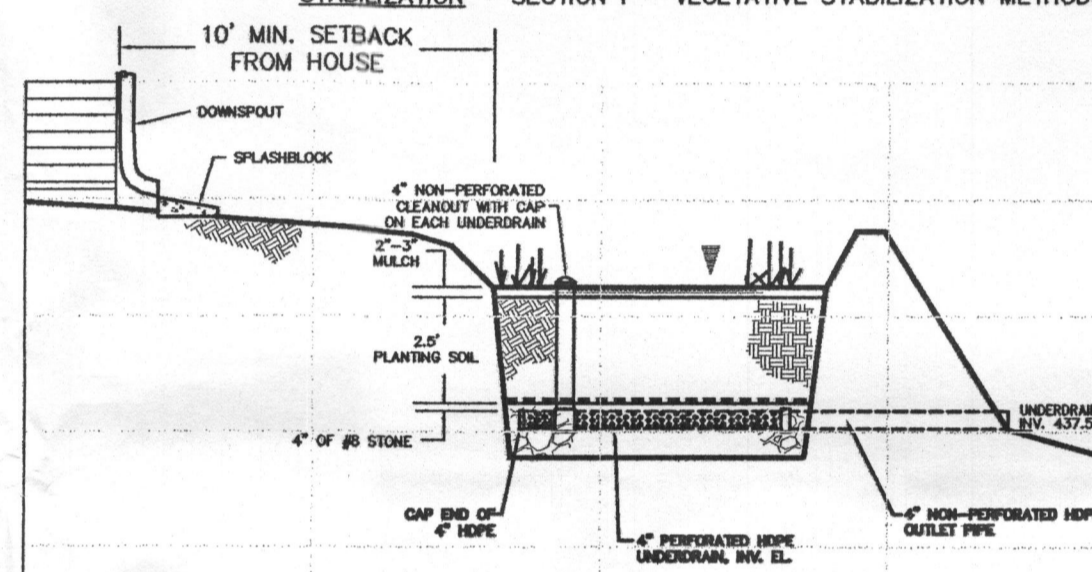
TO PROVIDE A SUITABLE SOIL MEDIUM FOR VEGETATIVE GROWTH. SOILS OF CONCERN HAVE LOW MOISTURE CONTENT, LOW NUTRIENT LEVELS, LOW PH, MATERIALS TOXIC TO PLANTS, AND/OR UNACCEPTABLE SOIL GRADATION.

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 PLANS.

CONSTRUCTION AND MATERIAL SPECIFICATIONS

- TOPSOIL SALVAGED FROM THE EXISTING SITE MAY BE USED PROVIDED THAT IT MEETS THE STANDARDS AS SET FORTH IN THESE SPECIFICATION. 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 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 CON-TRASTING TEXTURED SUBSOILS AND SHALL CONTAIN LESS THAN 5% BY VOLUME OF CONDERS, STONES, SLAG, COARSE FRAGMENTS, GRAVEL, STICKS, ROOTS, TRASH, OR OTHER MATERIALS LARGER THAN 1 1/2" IN DIAMETER.
 - TOPSOIL MUST BE FREE OF PLANTS OR PLANT PARTS SUCH AS BERMUDA GRASS, QUACKGRASS, JOHNSON-SON GRASS, NUTSEDGE, 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 20.0 VEGETATIVE STABILIZATION - SECTION 1 - VEGETATIVE STABILIZATION METHODS AND MATERIALS.

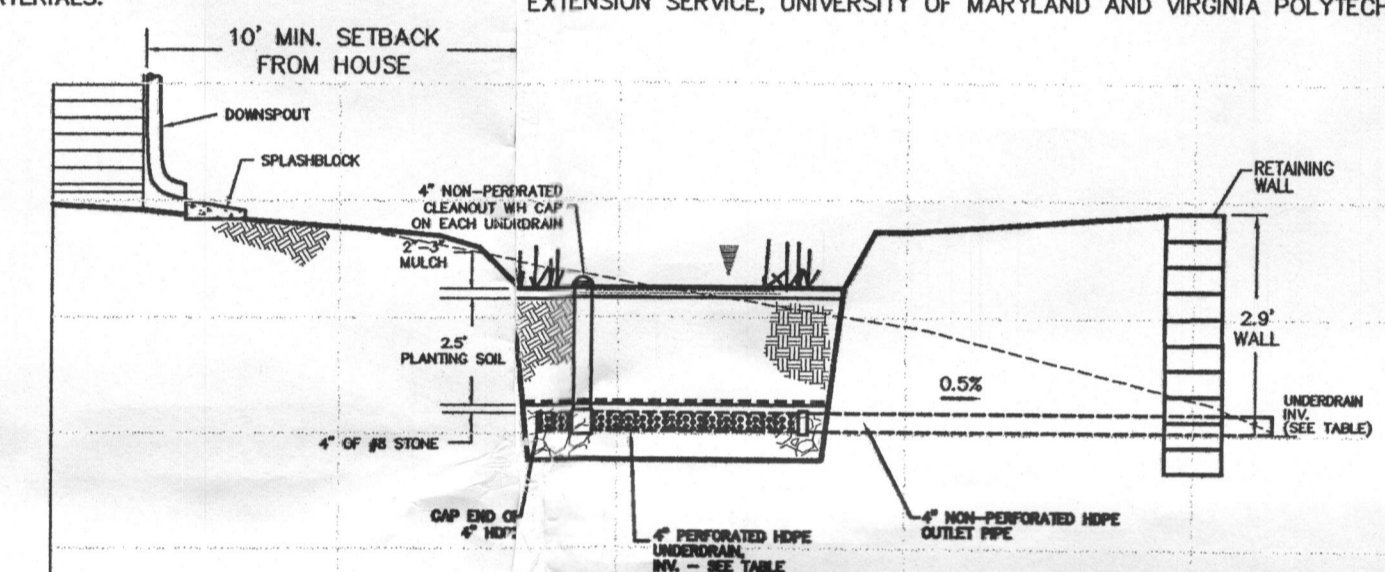


TYPICAL RAIN GARDEN PROFILE

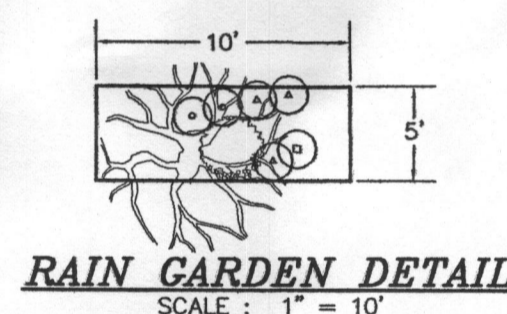
RAIN GARDEN PLANT LIST SCHEDULE

QUANTITY	SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE
1	○	PLATANUS OCCIDENTALIS	AMERICAN SYCAMORE	2-1/2" - 3" CAL.
1	○	ILEX GLABRA	HICK BERRY	2" - 3" HT.
2	○	LOBELIA SIPHERLICA	GREAT BLUE LOBELIA	1 GAL. CONTAINER
2	○	ONOCLEA SENSIBILIS	SENSITIVE FERN	1 GAL. CONTAINER
1	○	ASTER NOVAE-ANGLIAE	NEW ENGLAND ASTER	1 GAL. CONTAINER

TOTAL: 13 PERENNIALS, 1 SHRUB, 1 TREE (PER EACH RAIN GARDEN)

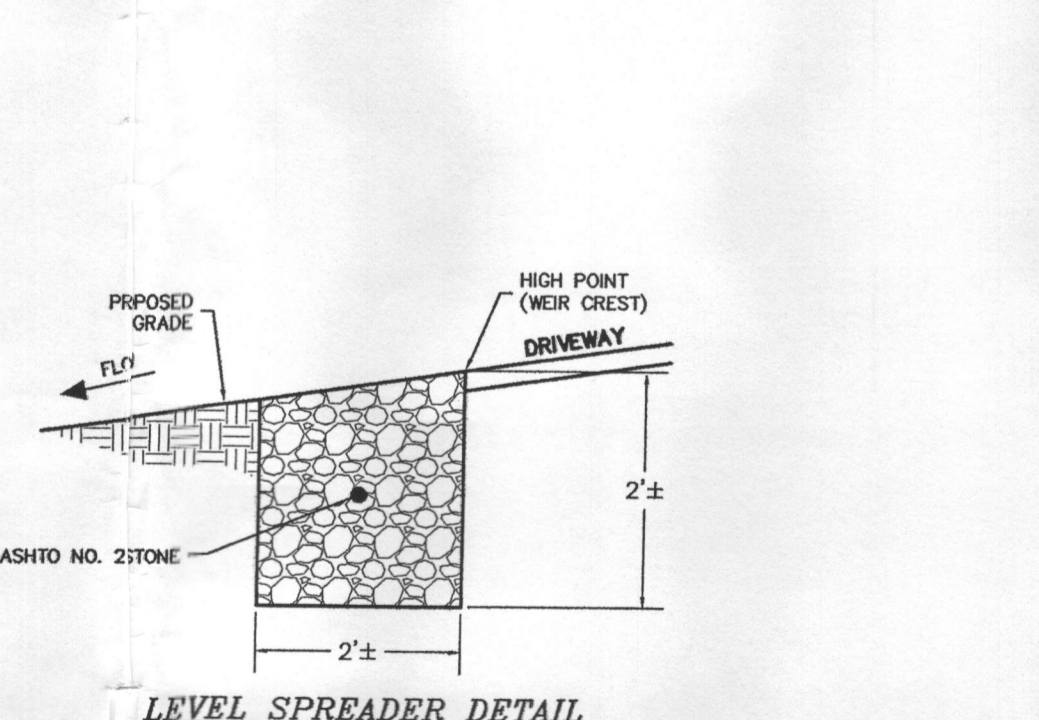


TYPICAL RAIN GARDEN PROFILE WITH RETAINING WALL

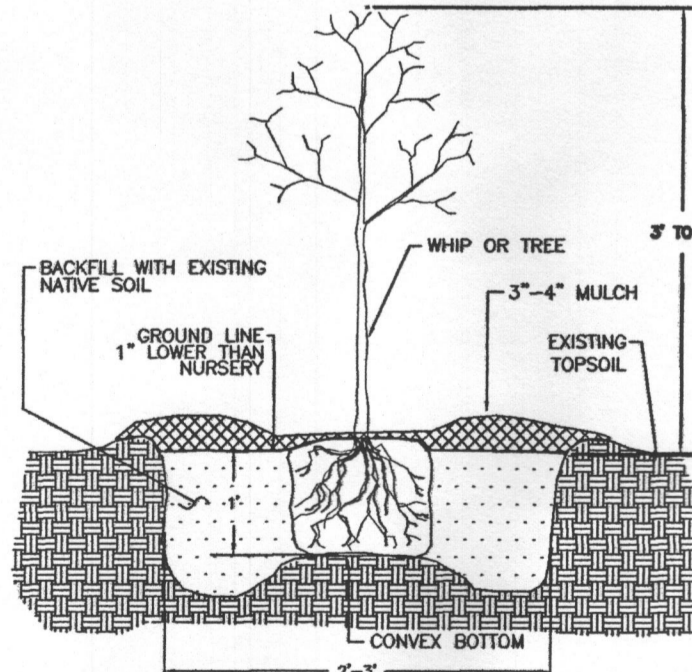


RAIN GARDEN DETAIL

LOT 5 DRIVEWAY CROSS SECTION TREATED BY NON ROOFTOP DISCONNECTION

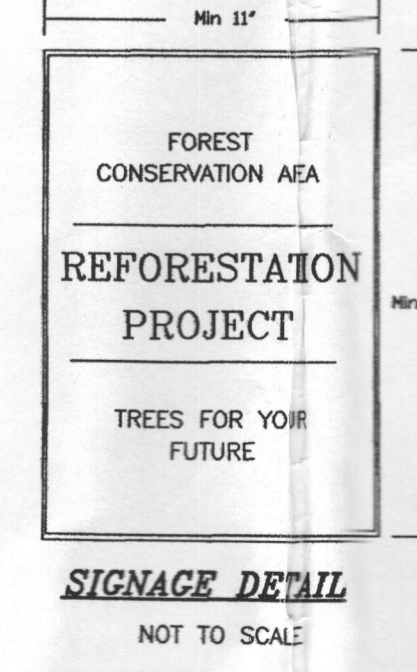


LEVEL SPREADER DETAIL

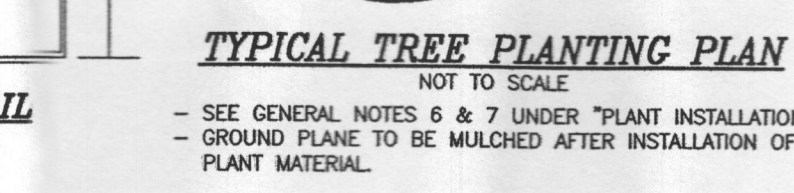


TREE PLANTING DETAIL

BASED ON THE FOLLOWING ASSESSMENT, THE EXISTING GROUND PLANE CONDITIONS CAN REMAIN IN THE REFORESTATION AREA WITHOUT FURTHER TREATMENT:
 > THE "LAWN" AREA WITHIN THE REFORESTATION EASEMENT IS COMPRISED OF A MIX OF GRASSES AND OTHER HERBACEOUS SPECIES.
 > THE AREA IS NOT A WELL ESTABLISHED LAWN THAT WOULD INTERFERE WITH THE SUCCESS OF THE TREE PLANTINGS OR PRECLUDE, ULTIMATELY, THE DEVELOPMENT OF A FOREST HERBACEOUS COMMUNITY.
 > MOVING OF THE UNDERSTORY IS NOT ALLOWED.
 > THE RETENTION OF THE EXISTING HERBACEOUS COMMUNITY WILL INHIBIT THE COLONIZATION OF INVASIVE SPECIES SUCH AS BITTERSWEET AND MULTI-FLORA ROSE. DURING THE EARLY STAGES OF STAND DEVELOPMENT.
 > ONCE THE CANOPY ESTABLISHES, SHADE AND LEAF LITTER WILL KILL OFF ANY REMAINING TURF/LAWN SPECIES.



SIGNAGE DETAIL



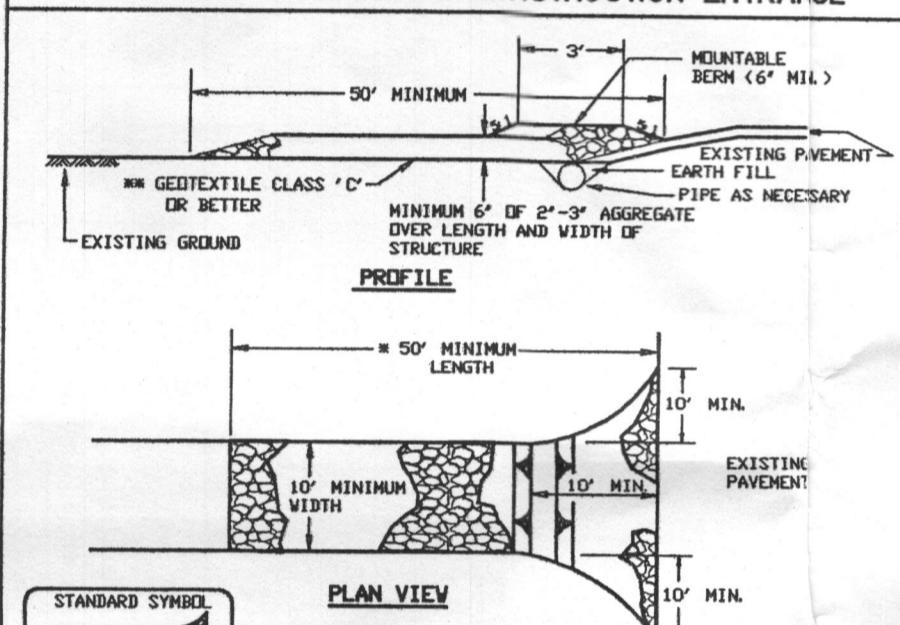
TYPICAL TREE PLANTING PLAN

SEE GENERAL NOTES 6 & 7 UNDER "PLANT INSTALLATION"
 - GROUND PLANE TO BE MULCHED AFTER INSTALLATION OF PLANT MATERIAL.

- 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 TOPSOILS SHALL BE BETWEEN 6.0 AND 7.5. IF THE TESTED SOIL DEMONSTRATES A PH OF LESS THAN 6.0, SUFFICIENT LIME SHALL BE PERSCRIBED TO RAISE THE PH TO 6.5 OR HIGHER.
 - ORGANIC CONTENT OF TOPSOIL SHALL BE NOT LESS THAN 1.5 PERCENT BY WEIGHT.
 - TOPSOIL HAVING SOLUBLE SALT CONTENT GREATER THAN 500 PARTS 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 PHYTO-TOXIC MATERIALS.
 - 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 20.0 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, ALBERT 4" - 8" HIGHER IN ELEVATION.
 - TOPSOIL SHALL BE UNIFORMLY DISTRIBUTED IN A 4" TO 8" LAYER AND LIGHTLY COMPACTED TO A MINIMUM THICKNESS OF 4". SPREADING SHALL BE PERFORMED IN SUCH A MANNER THAT SOODING 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 AREAS UNDER 5 ACRES SHALL CONFORM TO THE FOLLOWING REQUIREMENTS:
 - COMPOSTED SLUDGE SHALL BE SUPPLIED BY, OR ORIGINATE FROM, A PERSON OR PERSONS WHO 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 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 SOODING. MD-VA, PUB. #1. COOPERATIVE EXTENSION SERVICE, UNIVERSITY OF MARYLAND AND VIRGINIA POLYTECHNIC INSTITUTES. REVISED 1973.

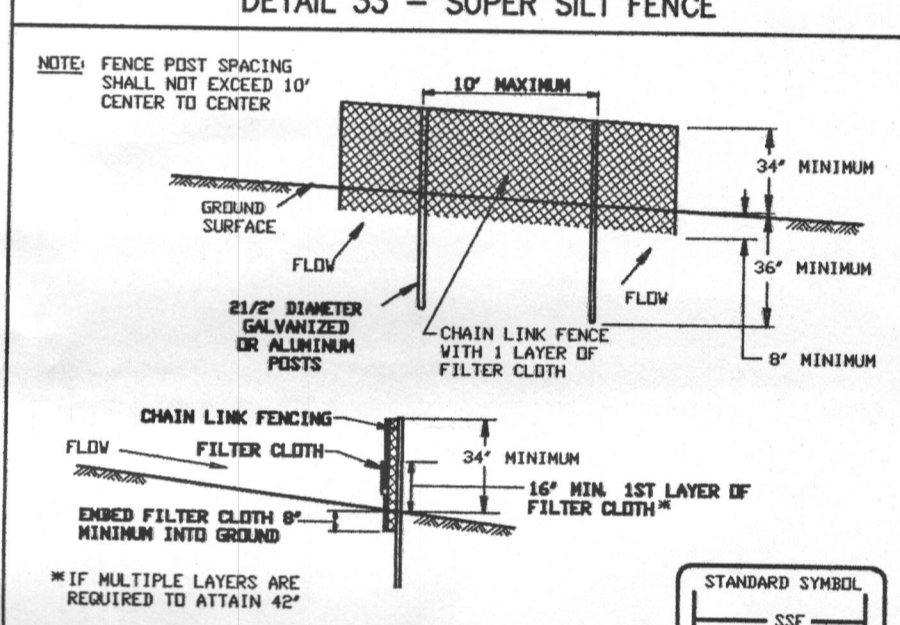
DETAIL 24 - STABILIZED CONSTRUCTION ENTRANCE



- Construction Specification
- Length - minimum of 50' (300' for single residence lots).
 - 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 curb 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 SDC 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

DETAIL 33 - SUPER SILT FENCE



- Construction Specifications
- Fencing shall be 48" 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 48" 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 6" 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 buildup removed when "bumpers" develop in the silt fence, or when silt reaches top 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 P:
 Tensile Strength 50 lbs/in (min.) Test: HST 509
 Tensile Modulus 20 lbs/in (min.) Test: HST 509
 Flow Rate 0.3 gal/minute (max.) Test: HST 302
 Filtering Efficiency 75% (min.) Test: HST 302

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE PAGE F-17-3 MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

SUPER SILT FENCE

Slope	Slope Steepness	Slope Length (feet/min.)	Silt Fence Length (feet/min.)
0 - 10%	0 - 1:1	Unlimited	Unlimited
10 - 30%	1:1 - 3:1	200 Feet	1,500 Feet
20 - 30%	1:1 - 3:1	100 Feet	1,000 Feet
33 - 50%	3:1 - 1:1	100 Feet	500 Feet
50% +	2:1 +	50 Feet	250 Feet

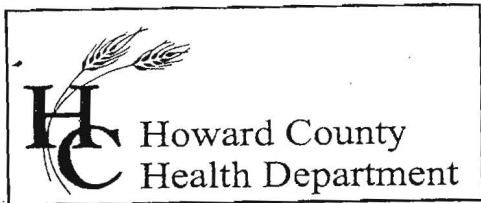
U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE PAGE F-17-3 MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

project	date	approval
05-018	MAR 2008	JJO
illustration	engineering	scale
JJO	JJO	NTS

no.	description	date

KEFAUVER PROPERTY, LOT 5
 SITE DEVELOPMENT PLAN
 TAX MAP 18 PARCEL 371 LOT 5
 HOWARD COUNTY, MARYLAND
 SECOND ELECTION DISTRICT
 SEDIMENT CONTROL NOTES & DETAILS

MILDENBERG, BOENDER & ASSOC., INC.
 Engineers Planners Surveyors
 6072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21042
 (410) 997-0286 Fax: (301) 621-5521 Wash. (410) 997-0286 Fax




Bureau of Environmental Health
7178 Columbia Gateway Drive, Columbia, MD 21046
(410) 313-2640 Fax (410) 313-2648
TDD (410) 313-2323 Toll Free 1-866-313-6300
website: www.hchealth.org

Penny E. Borenstein, M.D., M.P.H., Health Officer

April 4, 2005

TO: Cindy Hamilton
Chief, Division of Land Development

FROM: Kacie Noonan, R.S. 
Well and Septic Program
Development Coordination Section

RE: File Number: F-04-061
Title: Kefauver Property
Lots 4 & 5

The following comments apply to the plan prepared by Mildenberg, Boender & Associates, Inc. Prior to final plat signature, proposed Lot 5 must have either a drilled well with acceptable yield or approval by public utilities for public water hook-up. Applicant is advised to submit either a well completion report for review or receipt of payment for public water hook-up for Lot 5, if available.

KN

*10-14-05 Received receipt
of public water
hookup
- KN*

HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
Division of Land Development

DATE: 3/18/05

DPZ File No. FC4-061

Department of Planning and Zoning

- Transportation Planning
- Historic Preservation
- Public Service and Zoning Administration
- Research
- Address Coordinator

- Environmental and Community Planning (Ag Pres/Route 1)
- Development Engineering Division
- Other
- File

Agencies

- Soil Conservation District
- Department of Inspections, Licenses & Permits
- Department of Fire and Rescue Services
- State Highway Administration
- Health Department
- Public School System
- Recreation and Parks
- WSSC
- MD Aviation Administration

- Tax Assessment
- Verizon
- BGE
- Cable TV
- Police
- MTA
- Finance
- DPW, Real Estate Services
- DPW, Construction and Inspection
- DPW, Bureau of Utilities

REVISED
3/18/05

RE: Kefauver Property, Lots 4&5

ENCLOSED FOR YOUR → Signature Approval
THE ENCLOSED → Original

Review & Comments Files
 Pre-Packaged Plan Set

Plans	# of Sheets
<input type="checkbox"/> Sketch Plan	_____
<input type="checkbox"/> Prel Equiv Sketch Plan	_____
<input type="checkbox"/> Preliminary Plan	_____
<input checked="" type="checkbox"/> Final Plat/Plat of Easement/RE Plat	<u>2</u>
<input type="checkbox"/> Final Constr Plans (RDS)	_____
<input type="checkbox"/> Final Development Plan	_____
<input type="checkbox"/> Site Development Plan	_____
<input type="checkbox"/> Landscape Plan/Supplemental Plan	_____
<input type="checkbox"/> Grading Plan	_____
<input type="checkbox"/> House Type Revision/Walk-Thru Red-Line	_____
<input type="checkbox"/> Water and Sewer Plan	_____

Supplemental Documents
<input type="checkbox"/> Wetlands Report
<input type="checkbox"/> Soils/Topo Map/Drain Area Map
<input type="checkbox"/> FSD/FCP/Worksheet and Application
<input type="checkbox"/> Declaration of Intent (Forest Cons)
<input type="checkbox"/> Drainage and/or Computation/Pond Safety Comps
<input type="checkbox"/> Preliminary Road Profiles
<input type="checkbox"/> APFO Roads Test/Mitigation Plan/Traffic Study
<input type="checkbox"/> Noise Study
<input type="checkbox"/> Sight Distance Analysis/Speed Flow Study
<input type="checkbox"/> Floodplain Study
<input type="checkbox"/> Stormwater Management Comps/Geo-Tech Report
<input type="checkbox"/> Industrial Waste Survey (DPW)
<input type="checkbox"/> Road Poster Form Letter
<input type="checkbox"/> Response Letter
<input type="checkbox"/> Perc Plat
<input type="checkbox"/> Scenic Road Exhibits
<input type="checkbox"/> Deeds
<input type="checkbox"/> Photographs
<input type="checkbox"/> Retaining Wall Comps/Details
<input type="checkbox"/> Poster/Community or HDC Meeting Information
<input type="checkbox"/> Route 1 Details/Summary

Applications	# of Sheets
<input type="checkbox"/> Waiver Petition Applic/Exhibit	_____
<input type="checkbox"/> Planning Board Application	_____
<input type="checkbox"/> ASDP/CSDP Application	_____
<input type="checkbox"/> DED Application/Checklist	_____
<input type="checkbox"/> DED Fee Receipt/Deeds/Cost Estimate	_____

WAS: Received Tentatively Approved
 Received and Revised Approved

Recorded
On 3/18/05

COMMENTS: Lot 5 well needs to be drilled first (K&N)

SRC/Comments Due By: 4/16/05

Check, initial and return to the Department of Planning and Zoning if plan is approved with no comments.

DPZ STAFF INITIALS [Signature]



March 13, 2006

Ms. Marsha McLaughlin, Director
Department of Planning and Zoning
3430 Court House Drive
Ellicott City, MD 21043

Revised

MAR 13 2006

DPZ - Land Dev

RE: Kefauver Property
Revised Site Development Plan

Dear Ms. McLaughlin:

On behalf of our client, Christine and Andrew Foehrkolb, we are hereby submitting the following Revised Site Development Plan for your review and approval:

Division of Land Development

1. Two (2) copies of the revised Site Development Plan.
2. Point by Point Response Letter.

Development Engineering Division

1. Two (2) copies of the revised Site Development Plan.
2. Revised SWM and Geotechnical Report for Rain Gardens.
3. Point by Point Response Letter.

Health Department

3. One (1) copy of the revised Site Development Plan.
4. Point by Point Response Letter.

The following is a point by point response to the comments of your letter dated February 13, 2006:

Division of Land Development

1. The title block was corrected as requested.
2. General Note #1 was corrected as requested.
3. General Note #2 was corrected as requested.
4. General Note #10 was corrected as requested.
5. General Note #19 (Now note #17) was corrected as requested.
6. General Note #23 (Now note #18) was corrected as requested.
7. General Note #24 (Now note #19) was corrected as requested.
8. General Note #26 (Now note #23) was corrected as requested.

9. General Note #39(Now note #29) was corrected as requested.
10. General Note #43 was deleted.
11. In the permit Information Block the plat reference was corrected.
12. For the Model Footprint:
 - Internal lines were removed
 - Overall width and depth dimensions were provided.
 - Indent dimensions were added
 - The garage was labeled
 - Any and all options are shown on the plans
13. The SDP-06-088 was added to the title block
14. All Original Mylar sheets will have a seal and signature of a Maryland registered professional Engineer authorized by the appropriate section of the Annotated Code of Maryland to prepare Site Development Plans.
15. Elevation are provided on the plans for the 2-foot contours.
16. Steep Slopes are shown and the square footage is noted in the legend.
17. Existing easement of record are shown and noted.
18. The centerline and pavement width of Old Frederick Road are shown.
19. The driveway dimensions of 14' and 12' are shown.
20. The Owner of Lot 4 is the Owner of Lot 5, hence a letter of permission is not needed as the owner of lot 4 and lot 5 are the same persons.
21. Dimensions are added to the proposed dwelling as requested.
22. The advisory for accurately computing and staking this lot is understood.
23. The suggested general note was added.
24. Vehicular Access Restrictions were indicated, identified and dimensioned on this plan.
25. Line and pen widths were adjusted as suggested.
26. Rock Outlet Protection was removed from the plans due to the small flow through the pipe.
27. The retaining wall is set 3' behind the property line. A retaining wall easement is not necessary.
28. Due to design changes from the Architect and Owner an additional parking area was provided in the rear of the house.
29. The Forest Conservation Easement symbol was corrected as requested.
30. The septic easements were corrected as requested.
31. Forest Conservation Notes were corrected as requested.
32. The lengths of P3 and P6 were clarified.
33. Schedule "A" P5 was corrected.
34. Three Landscaping trees were moved to accommodate 3 shade trees along P5.
35. Some of the trees were moved to P5 as requested, changing the density of shade trees along P3 and P4.
36. The wording in the Developer's Landscape Certification was changed as requested.
37. The requested Landscape Notes were added to the plans.

Development Engineering Division

- I.4 On sheet 1 General Note 16 was revised as requested.
- II.3 On sheet 2 the WHC and septic sewer are shown.
- III.5 The sewer is private and utilizes a grinder pump, providing the sewage to the septic field. Therefore an MCE is not provided because the sewage is pumped to the septic

field. First Floor and cellar elevations are provided.

General Comments

1. A retaining wall detail is added to the plans. The retaining wall is located entirely on the property, hence a retaining wall easement is not necessary.
2. A geotechnical Report for the proposed rain gardens is included with the revised SWM Report.
3. A construction cost estimate will be provided with the original submission of mylars for signing.

Health Department

The Septic sewer line and grinder pump are shown on the plans.

Howard Soil Conservation Department

1. The F-Plan Number was corrected to F-04-161.
2. Both the Engineer and Developer will sign the Original Mylar Submission.
3. The sequence of construction was changed to reference the installation of the culvert.
4. The super silt fencing was shown to be installed in a "J" configuration on downhill slopes.

Thank you for your time and effort. Should you have any questions or comments, please feel free to call.

Very truly yours,
Mildenberg, Boender & Associates, Inc.



John J. Odum
Project Manager
cc. Christine and Andrew Foehrkolb

From: Michael K. Davis
To: Hamilton, Cindy
Subject: Kefauver Prop. SDP-06-088

Cindy,

Our comment stands. We need confirmation that a wasteline from the house can cross the 20 ft public drainage and utility easement that separates the home from the sewage disposal area. The Health Department has been involved in situations where utility easements (usually BGE or Gas line easements) specifically prohibit digging in the easement.

Mike

HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
Division of Land Development

DATE: 1/11/06

DPZ File No. SDP-06-088

Department of Planning and Zoning

- 1 Transportation Planning
- 1 Historic Preservation
- Public Service and Zoning Administration
- 1 Research
- 1 Address Coordinator

- 1 Environmental and Community Planning (Ag Pres/Route 1)
- 4 Development Engineering Division
- Other
- 2 File

Agencies

- 1 Soil Conservation District
- 1 Department of Inspections, Licenses & Permits
- 2 Department of Fire and Rescue Services
- 1 State Highway Administration
- 1 Health Department
- 1 Public School System
- 1 Recreation and Parks
- WSSC
- MD Aviation Administration

- Tax Assessment
- 2 Verizon
- 2 BGE
- Cable TV
- Police
- MTA
- Finance
- DPW, Real Estate Services
- DPW, Construction and Inspection
- DPW, Bureau of Utilities

RE: KEFAOVER PROP; Lot 4 8525 OLD FREDERICK ROAD

ENCLOSED FOR YOUR → Signature Approval Review & Comments Files

THE ENCLOSED → Original Pre-Packaged Plan Set

<u>Plans</u>	<u># of Sheets</u>	<u>Supplemental Documents</u>
<u> </u> Sketch Plan	<u> </u>	<u> </u> Wetlands Report
<u> </u> Prel Equiv Sketch Plan	<u> </u>	<u> </u> Soils/Topo Map/Drain Area Map
<u> </u> Preliminary Plan	<u> </u>	<u> </u> FSD/FCP/Worksheet and Application
<u> </u> Final Plat/Plat of Easement/RE Plat	<u> </u>	<u> </u> Declaration of Intent (Forest Cons)
<u> </u> Final Constr Plans (RDS)	<u> </u>	<u> </u> Drainage and/or Computation/Pond Safety Comps
<u> </u> Final Development Plan	<u> </u>	<u> </u> Preliminary Road Profiles
<u>25</u> Site Development Plan	<u>3</u>	<u> </u> APFO Roads Test/Mitigation Plan/Traffic Study
<u> </u> Landscape Plan/Supplemental Plan	<u> </u>	<u> </u> Noise Study
<u> </u> Grading Plan	<u> </u>	<u> </u> Sight Distance Analysis/Speed Flow Study
<u> </u> House Type Revision/Walk-Thru Red-Line	<u> </u>	<u> </u> Floodplain Study
<u> </u> Water and Sewer Plan	<u> </u>	<u> </u> Stormwater Management Comps/Geo-Tech Report
<u>Applications</u>		<u> </u> Industrial Waste Survey (DPW)
<u> </u> Waiver Petition Applic/Exhibit	<u> </u>	<u> </u> Road Poster Form Letter
<u> </u> Planning Board Application	<u> </u>	<u> </u> Response Letter
<u> </u> ASDP/CSDP Application	<u> </u>	<u> </u> Perc Plat
<u> </u> DED Application/Checklist	<u> </u>	<u> </u> Scenic Road Exhibits
<u> </u> DED Fee Receipt/Deeds/Cost Estimate	<u> </u>	<u> </u> Deeds
		<u> </u> Photographs
		<u> </u> Retaining Wall Comps/Details
		<u> </u> Poster/Community or HDC Meeting Information
		<u> </u> Route 1 Details/Summary

WAS: Received Tentatively Approved Recorded

 Received and Revised Approved On 1/11/06

COMMENTS: Top 06 Plan needs to show (return) proposed house + septic easement through utility easement (SD) SRC/Comments Due By: 2/2/06

Check, initial and return to the Department of Planning and Zoning if plan is approved with no comments.

DPZ STAFF INITIALS J

HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
Division of Land Development

DATE: 3-13-06

DPZ File No. SDP-06-088

Department of Planning and Zoning

- Transportation Planning
- Historic Preservation
- Public Service and Zoning Administration
- Research *Return to Public*
- Address Coordinator

- Environmental and Community Planning (Ag Pres/Route 1)
- Development Engineering Division
- Other
- File

Revised

Agencies

- Soil Conservation District
- Department of Inspections, Licenses & Permits
- Department of Fire and Rescue Services
- State Highway Administration
- Health Department
- Public School System
- Recreation and Parks
- WSSC
- MD Aviation Administration

- Tax Assessment
- Verizon
- BGE
- Cable TV
- Police
- MTA
- Finance
- DPW, Real Estate Services
- DPW, Construction and Inspection
- DPW, Bureau of Utilities

MAR 13 2006

DPZ - Land Dev

RE: Refused Property Lot 5

ENCLOSED FOR YOUR → Signature Approval Review & Comments Files
 THE ENCLOSED → Original Pre-Packaged Plan Set

Plans	# of Sheets	Supplemental Documents
<input type="checkbox"/> Sketch Plan	_____	<input type="checkbox"/> Wetlands Report
<input type="checkbox"/> Prel Equiv Sketch Plan	_____	<input type="checkbox"/> Soils/Topo Map/Drain Area Map
<input type="checkbox"/> Preliminary Plan	_____	<input type="checkbox"/> FSD/FCP/Worksheet and Application
<input type="checkbox"/> Final Plat/Plat of Easement/RE Plat	_____	<input type="checkbox"/> Declaration of Intent (Forest Cons)
<input type="checkbox"/> Final Constr Plans (RDS)	_____	<input type="checkbox"/> Drainage and/or Computation/Pond Safety Comps
<input type="checkbox"/> Final Development Plan	_____	<input type="checkbox"/> Preliminary Road Profiles
<input checked="" type="checkbox"/> Site Development Plan	<u>3</u>	<input type="checkbox"/> APFO Roads Test/Mitigation Plan/Traffic Study
<input type="checkbox"/> Landscape Plan/Supplemental Plan	_____	<input type="checkbox"/> Noise Study
<input type="checkbox"/> Grading Plan	_____	<input type="checkbox"/> Sight Distance Analysis/Speed Flow Study
<input type="checkbox"/> House Type Revision/Walk-Thru Red-Line	_____	<input type="checkbox"/> Floodplain Study
<input type="checkbox"/> Water and Sewer Plan	_____	<input type="checkbox"/> Stormwater Management Comps/Geo-Tech Report
Applications		<input type="checkbox"/> Industrial Waste Survey (DPW)
<input type="checkbox"/> Waiver Petition Applic/Exhibit	_____	<input checked="" type="checkbox"/> Road Poster Form Letter
<input type="checkbox"/> Planning Board Application	_____	<input type="checkbox"/> Response Letter
<input type="checkbox"/> ASDP/CSDP Application	_____	<input type="checkbox"/> Perc Plat
<input type="checkbox"/> DED Application/Checklist	_____	<input type="checkbox"/> Scenic Road Exhibits
<input type="checkbox"/> DED Fee Receipt/Deeds/Cost Estimate	_____	<input type="checkbox"/> Deeds
		<input type="checkbox"/> Photographs
		<input type="checkbox"/> Retaining Wall Comps/Details
		<input type="checkbox"/> Poster/Community or HDC Meeting Information
		<input type="checkbox"/> Route 1 Details/Summary

WAS: Received Tentatively Approved Recorded
 Received and Revised Approved On 3-13-06

COMMENTS: 3/29/06 Plan needs to show an easement through the utility easement for the septic line. BSA Comments Due By: 3-29-06

Check, initial and return to the Department of Planning and Zoning if plan is approved with no comments.

DPZ STAFF INITIALS *[Signature]*

HEALTH

May 08, 2006

Ms. Marsha McLaughlin, Director
Department of Planning and Zoning
3430 Court House Drive
Ellicott City, MD 21043

Revised
MAY 08 REC'D
DPZ - Land Dev

RE: Kefauver Property
Revised Site Development Plan

Dear Ms. McLaughlin:

On behalf of our client, Christine and Andrew Foehrkolb, we are hereby submitting the following Revised Site Development Plan for your review and approval:

Division of Land Development

1. Two (2) copies of the revised Site Development Plan.
2. Point by Point Response Letter.

Development Engineering Division

1. Two (2) copies of the revised Site Development Plan.
2. Revised SWM and Geotechnical Report for Rain Gardens.
3. Point by Point Response Letter.

Health Department

3. One (1) copy of the revised Site Development Plan.
4. Point by Point Response Letter.

The following is a point by point response to the comments of your letter dated February 13, 2006:

Division of Land Development

1. All sheets of the Original SDP submission will have original seal and signature of a Maryland registered professional engineer.
2. The requested symbols were lightened to make this plan more readable.
3. The plan shows and easement through the utility easement for the septic line. A copy of the recorded easement will be provided at the time of submission of the original site development plan.
4. The recording reference was added as requested.
5. The centerline of Old Frederick Road was labeled.

6. The common-in-use driveway shall be widened to 14' wide through lot 5.
7. The requested boxed note was added as requested.
8. The 3' retaining wall dimension was verified corrected.
9. The horseshoe retaining wall was darkened on the plan view.
10. The front dimension to the house was corrected.
11. The desired additional parking cannot be located in the front of the house because the area beside the driveway is used for stormwater management practices without the appropriate area needed for the additional parking.
12. The shade trees along perimeter 4 were adjusted and corrected.
13. Perimeter 4 has had 8 Leland Cypress trees substituted for 4 shade trees.
14. Perimeter 5 has 6 Leland Cypress trees substituted for 3 shade trees.

Development Engineering Division

General Comments

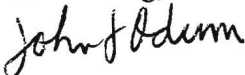
1. Soil Boring B-2 was added to the previous submission and applies for only Rain Gardens #1 and #3. Invert elevations for rain gardens #1 and #3 are 442.5 and 444.5 respectfully. Soil boring B-2 encountered rock at 7.0' below ground surface and has a ground elevation of 449.0. Soil boring B-1 was submitted under F-04-161 with the Stormwater Management submission. I have included a copy of soil boring B-1 record of soil exploration for your use. Invert elevations for rain gardens #2 and #4 are 433.5 and 441.5 respectfully. Soil boring B-2 encountered rock at 8.9' below ground surface and has a proposed ground elevation of 439.0.
2. A construction cost estimate will be submitted with the Original submission. To help expedite the engineering review the estimate shall be provided in electronic spreadsheet form for your use.
3. A revised stormwater management report was not added to this submission because nothing changed.

Health Department

1. The requested septic line easement was added to the plan view.

Thank you for your time and effort. Should you have any questions or comments, please feel free to call.

Very truly yours,
Mildenberg, Boender & Associates, Inc.



John J. Odum
Project Manager
cc. Christine and Andrew Foehrkolb

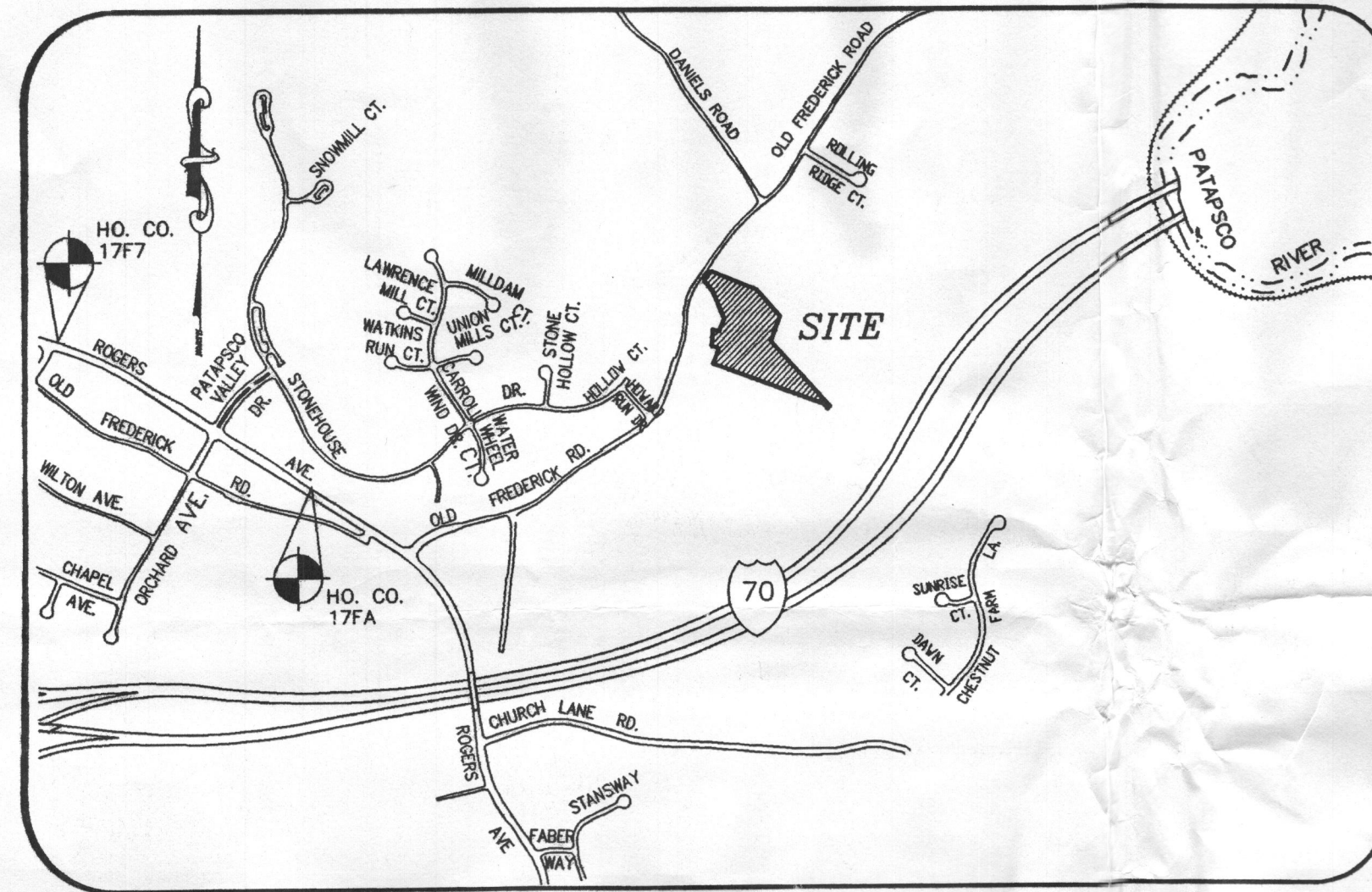
SITE DEVELOPMENT PLAN KEFAUVER PROPERTY, LOT 5 SECOND ELECTION DISTRICT HOWARD COUNTY, MARYLAND

GENERAL NOTES

- SITE ANALYSIS DATA:
TOTAL AREA: 4.13 AC.±
LIMIT OF DISTURBED AREA: 0.59 AC.±
PROPOSED USE: SINGLE FAMILY DETACHED.
UNITS PROPOSED: 1 ELECTION DISTRICT, SECOND
TAX MAP: 18, PARCEL: 371, BLOCK: 7, LOT: 5.
DPZ FILES: F-04-171, WP-91-32, WP-05-20
L 2857, F 5.
- SUBJECT PROPERTY ZONED R-20 PER THE 4/2/2004 COMPREHENSIVE ZONING PLAN.
- BOUNDARY SHOWN HEREON IS BASED ON A FIELD RUN MONUMENTED BOUNDARY SURVEY PERFORMED JANUARY 2004 BY MILDENBERG, BOENDER & ASSOC., INC. TOPOGRAPHIC DATA SHOWN HEREON IS BASED ON FIELD RUN SURVEYS CONDUCTED BY MILDENBERG, BOENDER & ASSOCIATES, INC. IN JANUARY & MARCH 2004.
- COORDINATES BASED ON NAD '83 MARYLAND COORDINATE SYSTEM AS PROJECTED BY HOWARD COUNTY GEODETIC CONTROL STATIONS NO. 17F7 & 17FA.
STA. No. 17F7 N 595,829.624 E 1,363,088.37 ELEV. 469.47
STA. No. 17FA N 594,948.366 E 1,364,626.79 ELEV. 476.79
- DENOTES AN IRON ROD & CAP OR IRON PIPE FOUND.
○ DENOTES AN ANGULAR CHANGE IN BEARING OF BOUNDARY OR RIGHT-OF-WAY.
BRL DENOTES A BUILDING RESTRICTION LINE.
- ALL AREAS ARE MORE OR LESS.
- BASED ON AVAILABLE COUNTY DATA, NO HISTORIC STRUCTURES OR BURIAL GROUNDS EXIST ON-SITE.
- NO FLOODPLAIN EXISTS ON-SITE.
- WETLANDS SHOWN BASED ON FIELD INVESTIGATION BY ECO-SCIENCE PROFESSIONALS, INC. IN FEBRUARY 2004.
- FOREST CONSERVATION OBLIGATIONS FOR LOT 4 & 5 IN ACCORDANCE WITH SECTION 16.1200 OF THE HOWARD COUNTY CODE AND FOREST CONSERVATION MANUAL FOR THIS SUBDIVISION HAS BEEN FULFILLED BY REFORESTATION OF 0.84 ACRES (40,946.5 SQ. FT.) AND AFFORESTATION OF 0.21 ACRES (8,147.6 SQ. FT.) FOR A TOTAL OF 1.15 ACRES OF FOREST AND PAYMENT OF A FEE-IN-LIEU OF AFFORESTATION OF 0.13 ACRES (662.8 SQ. FT.) IN THE AMOUNT OF \$2,831.40. FINANCIAL SURETY FOR THE 1.15 ACRES (50,004 SQ. FT.) OF REFORESTATION AND AFFORESTATION WILL BE POSTED AS PART OF THE DPW DEVELOPERS AGREEMENT IN THE AMOUNT OF \$25,047.00.
- NO SCENIC ROADS ARE ADJACENT TO THIS SITE.
- SOILS DATA BASED ON HOWARD COUNTY SOIL SURVEY DATED 1968, SHEET 10.
- THIS AREA DESIGNATES A PRIVATE SEWERAGE EASEMENT OF AT LEAST 10,000 SQ. FT. AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF ENVIRONMENT FOR INDIVIDUAL SEWERAGE DISPOSAL. IMPROVEMENTS OF ANY NATURE IN THIS AREA ARE RESTRICTED UNTIL PUBLIC SEWERAGE IS AVAILABLE. THIS EASEMENT SHALL BECOME NULL AND VOID UPON CONNECTION TO A PUBLIC SEWERAGE SYSTEM. THE COUNTY HEALTH OFFICER SHALL HAVE THE AUTHORITY TO GRANT ADJUSTMENTS TO THE PRIVATE SEWERAGE EASEMENT, & RECORDATION OF A MODIFIED EASEMENT SHALL NOT BE NECESSARY.
- SITE LOCATION: DEED REFERENCE: 2857/5. SITE AREA: 4.13 ACRES ±.
- DRIVEWAYS SHALL BE PROVIDED PRIOR TO RESIDENTIAL OCCUPANCY TO ENSURE SAFE ACCESS FOR FIRE AND EMERGENCY VEHICLES PER THE FOLLOWING MINIMUM REQUIREMENTS:
A) WIDTH - 12 FEET (14 FEET SERVING MORE THAN ONE RESIDENCE).
B) SURFACE - 6 INCHES OF COMPACTED CRUSHER RUN BASE WITH TAR AND CHIP COATING (1.5" MIN.).
C) GEOMETRY - MAXIMUM 15% GRADE, MAXIMUM 10% GRADE CHANGE AND MINIMUM OF 45-FOOT 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) STRUCTURE CLEARANCES - MINIMUM 12 FEET.
G) MAINTENANCE - SUFFICIENT TO ENSURE ALL WEATHER USE.
- FOR FLAG OR PIPESTEM LOTS, REFUSE COLLECTION, SNOW REMOVAL AND ROAD MAINTENANCE ARE PROVIDED TO THE JUNCTION OF THE FLAG OR PIPESTEM AND ROAD RIGHT-OF-WAY LINE AND NOT TO THE END OF THE DRIVEWAY.
- THERE IS AN EXISTING STRUCTURE ON LOT 4 KNOWN AS 8525 OLD FREDERICK ROAD WHICH IS TO REMAIN. NO NEW BUILDINGS, EXTENSIONS OR ADDITIONS TO THE EXISTING DWELLINGS ARE TO BE CONSTRUCTED AT A DISTANCE FROM THE ZONING REGULATIONS.
- STORMWATER MANAGEMENT REQUIREMENTS WILL BE MET ON-SITE VIA RAIN GARDENS, NON-ROOFTOP DISCONNECT, AND SHEET FLOW TO BUFFER CREDITS IN ACCORDANCE WITH THE 2004 MARYLAND STORMWATER MANAGEMENT DESIGN MANUAL.
- THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY MANUAL, AND THE LANDSCAPE MANUAL. THE ZONING REGULATIONS WILL BE FURTHER REVIEWED UNDER THE SITE DEVELOPMENT PLAN FOR LOT 5, AND IF UNCHANGED, THE FINANCIAL SURETY FOR THE REQUIRED 17 SHADING TREES IN THE AMOUNT OF \$5,000 SHALL BE POSTED AS PART OF THE BUILDER'S GRADING PERMIT APPLICATION FOR LOT 5.
- THIS PROJECT IS SUBJECT TO WP-91-32, APPROVED ON NOVEMBER 6, 1990, WHICH GRANTED DIRECT DRIVEWAY ACCESS TO A WALKWAY (AND OLD FREDERICK ROAD).
- NO GRADING, REMOVAL OF VEGETATIVE COVER OR TREES, OR PLACEMENT OF NEW STRUCTURES IS PERMITTED WITHIN THE LIMITS OF WETLANDS, STREAMS, OR THEIR BUFFERS AND FOREST CONSERVATION RETENTION CREDIT AREAS, UNLESS OTHERWISE APPROVED.
- THIS PLAN IS SUBJECT TO THE AMENDED FIFTH EDITION OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS PER COUNCIL BILL 45-2003 AND THE ZONING REGULATIONS AS AMENDED BY COUNCIL BILL 75-2003. DEVELOPMENT OR CONSTRUCTION ON THESE LOTS MUST COMPLY WITH EASEMENT AND BUFFER REQUIREMENTS IN EFFECT AT THE TIME OF SUBMISSION OF THE SITE DEVELOPMENT PLAN, WAIVER PETITION APPLICATION, OR BUILDING/GRADING PERMIT.
- A USE-IN-COMMON DRIVEWAY MAINTENANCE AGREEMENT FOR LOTS 4, 5, AND EXISTING LOTS 2 AND 3 WILL BE RECORDED CONCURRENTLY WITH THE RECORDING OF THE FINAL PLAT AMONG THE LAND RECORDS OF HOWARD COUNTY, MARYLAND. DECLARATION OF MAINTENANCE OBLIGATION WITH THE EXISTING USE-IN-COMMON DRIVEWAY EASEMENT FOR LOTS 1 THRU 3 WAS RECORDED AMONG THE LAND RECORDS OF HOWARD COUNTY, MARYLAND IN LIBER 2222, FOLIO 514.
- A FEE-IN-LIEU PAYMENT IN THE AMOUNT OF \$1,500 HAS BEEN PAID FOR THE ESTABLISHMENT OF 1 NEW NON-CULVERT SUBDIVISION LOT (LOT 5) IN ACCORDANCE WITH THE OPEN SPACE REQUIREMENTS OF SECTION 16.121(c) OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS.
- THE LOTS SHOWN HEREON COMPLY WITH MINIMUM OWNERSHIP LOT WIDTH AND AREA AS REQUIRED BY MDE. A VARIANCE FROM MDE TO THIS SECTION OF THE REGULATION IS NOT REQUIRED FOR THESE LOTS.
- PRIVATE WATER AND PRIVATE SEWERAGE WILL BE UTILIZED FOR LOT 4. PUBLIC WATER AND PRIVATE SEWERAGE WILL BE UTILIZED FOR LOT 5.
- TO THE BEST OF OUR KNOWLEDGE ALL ADJACENT WELL AND SEPTIC SYSTEMS WITHIN 100 FEET OF THE PROPERTY HAVE BEEN SHOWN.
- THE OWNER, TRANT, AND/OR THEIR AGENTS SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE REQUIRED LANDSCAPING, PLANT MATERIALS, BERMS, FENCES, AND WALLS. ALL PLANT MATERIALS SHALL BE MAINTAINED IN GOOD GROWING CONDITION, AND WHEN NECESSARY, REPLACED WITH NEW MATERIALS TO ENSURE CONTINUED COMPLIANCE WITH APPLICABLE REGULATIONS. ALL OTHER REQUIRED LANDSCAPING SHALL BE PERMANENTLY MAINTAINED IN GOOD CONDITION, AND WHEN NECESSARY, REPAIRED OR REPLACED.
- AT THE TIME OF INSTALLMENT, ALL SHRUBS AND OTHER PLANTINGS HEREWITH LISTED AND APPROVED FOR THIS SITE, SHALL BE OF THE PROPER HEIGHT REQUIREMENTS IN ACCORDANCE WITH THE HOWARD COUNTY LANDSCAPE MANUAL. IN ADDITION, NO SUBSTITUTIONS OR RELOCATION OR REQUIRED PLANTINGS MAY BE MADE WITHOUT PRIOR REVIEW AND APPROVAL FROM THE DEPARTMENT OF PLANNING AND ZONING. ANY DEVIATION FROM THIS APPROVED LANDSCAPE PLAN MAY RESULT IN DENIAL OR DELAY IN THE RELEASE OF LANDSCAPE SURETY UNTIL SUCH TIME AS ALL REQUIRED MATERIALS ARE PLANTED AND/OR REVISIONS ARE MADE TO APPLICABLE PLANS AND SPECIFICATIONS.
- THIS PROJECT IS SUBJECT TO DESIGN MANUAL WAIVER TO SECTION 2.5.2.10 TO ALLOW USE OF STOPPING SIGHT DISTANCE INSTEAD OF INTERSECTION SIGHT DISTANCE, APPROVED BY DEVELOPMENT ENGINEERING DIVISION ON JUNE 8, 2004.
- NO GRADING, REMOVAL OF VEGETATIVE COVER OR TREES, OR PLACEMENT OF NEW STRUCTURES IS PERMITTED WITHIN THE LIMITS OF WETLANDS, STREAMS, OR THEIR BUFFERS AND FOREST CONSERVATION EASEMENT AREAS, UNLESS APPROVED UNDER A WAIVER PETITION.
- THE OFF-SITE 65 DBA NOISE CONTOUR LINE DRAWN ON THIS SUBDIVISION PLAN IS ADVISORY AS REQUIRED BY THE HOWARD COUNTY DESIGN MANUAL, CHAPTER 5, REVISED FEBRUARY, 1992, AND CANNOT BE CONSIDERED TO EXACTLY LOCATE THE 65 DBA NOISE EXPOSURE. THE OFF-SITE 65 DBA NOISE LINE WAS ESTABLISHED BY HOWARD COUNTY TO ALERT DEVELOPERS, BUILDERS, AND FUTURE RESIDENTS THAT AREAS BEYOND THIS THRESHOLD MAY EXCEED GENERALLY ACCEPTED NOISE LEVELS ESTABLISHED BY THE U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT.
- NO CLEARING OF EXISTING VEGETATION IS PERMITTED WITHIN THE LANDSCAPED EDGE, HOWEVER LANDSCAPE MAINTENANCE IS AUTHORIZED.
- THIS PLAN IS SUBJECT TO WP-05-20 APPROVED ON JANUARY 25, 2005, WAIVING SECTION 16.12(c)(4) WHICH REQUIRES RESIDENTIAL LOTS TO BE DESIGNED TO BE USABLE IN TERMS OF BEING REGULAR, GENERALLY RECTANGULAR LOT SHAPE, AND WITH LOT DIMENSIONS GENERALLY NOT EXCEEDING A 3:1 LOT DEPTH TO LOT WIDTH RATIO AND PROHIBITS THE CREATION OF FOREST CONSERVATION EASEMENTS ON A RESIDENTIAL LOT LESS THAN 10 ACRES IN SIZE. APPROVAL IS SUBJECT TO THE FOLLOWING CONDITIONS:
1. APPROVAL AND COMPLIANCE TO ALL COMMENTS GENERATED FROM THE REVIEW OF THE SUBDIVISION, FINAL PLAT - 04-161.
2. TO FULFILL PART OF THE FOREST CONSERVATION OBLIGATION, THE APPLICANT SHALL AMEND THE PLAT AND PLAN FOR F-04-161 TO REFLECT THE CREATION OF A FOREST CONSERVATION EASEMENT.
3. COMPLIANCE WITH THE ENCLOSED HEALTH DEPARTMENT COMMENTS DATED SEPTEMBER 30, 2004.
- THIS PLAN IS SUBJECT TO A DESIGN MANUAL WAIVER APPROVED ON MARCH 31, 2005 TO ALLOW THE EXISTING HOUSE ON LOT 4 TO UTILIZE AN EXISTING PRIVATE WELL IN LIEU OF PROVIDING A PUBLIC WATER CONNECTION. LOT 5 WILL UTILIZE A PUBLIC WATER CONNECTION. THE FOREST CONSERVATION EASEMENTS SHOWN HEREON, HAVE BEEN ESTABLISHED TO FULFILL THE REQUIREMENTS OF SECTION 16.1200 OF THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS, FOREST CONSERVATION ACT, CLEARINGS, GRADING OR CONSTRUCTION IS PERMITTED WITHIN THE FOREST CONSERVATION EASEMENT. ANY UNAUTHORIZED ACTIVITIES THAT RESULT IN ADDITIONAL CLEARING, OR THAT AFFECT PROPOSED PLANTING/RETENTION AREAS SHOWN ON THE FOREST CONSERVATION PLAN MAY RESULT IN A REQUEST FOR RECALCULATION OF FOREST REQUIREMENTS AND DESIGNATION OF ADDITIONAL PLANTING/RETENTION AREAS IF NEEDED TO MEET THE OBLIGATIONS OF THE FOREST CONSERVATION PROGRAM. ANY FUTURE RESUBDIVISION DEVELOPMENT OR CHANGE IN LAND USE MAY BE SUBJECT TO ADDITIONAL REQUIREMENTS OF THE HOWARD COUNTY FOREST CONSERVATION PROGRAM.

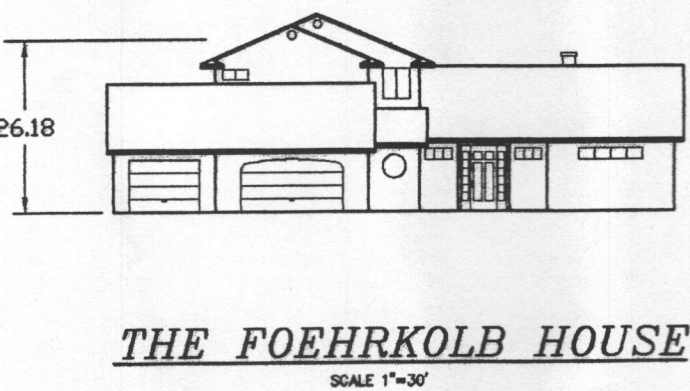
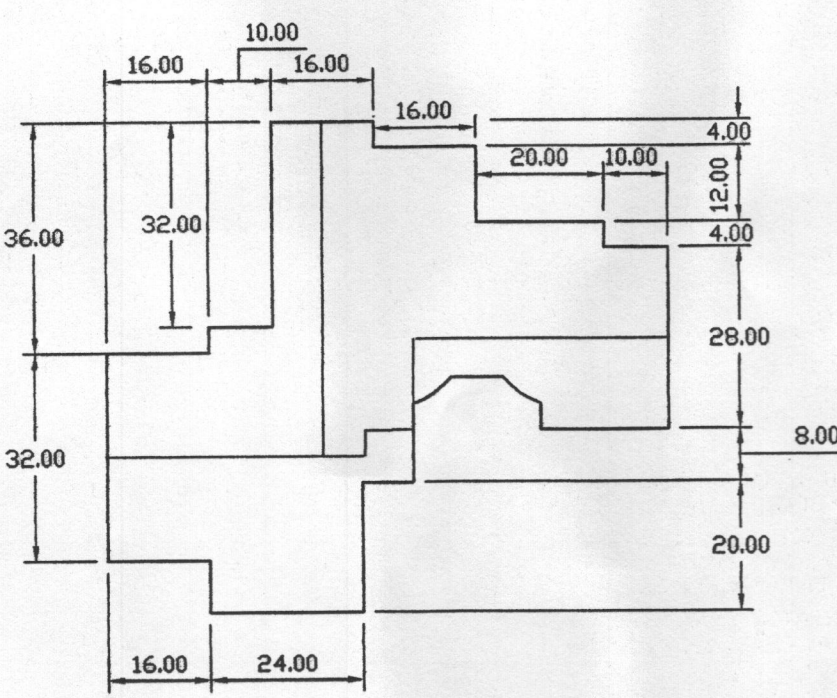
SHEET INDEX	
SHEET	TITLE
1	COVER SHEET
2	SITE DEVELOPMENT PLAN
3	SEDIMENT CONTROL NOTES AND DETAILS

ADDRESS CHART	
LOT NO.	STREET ADDRESS
5	8523 FREDERICK ROAD



VICINITY MAP
SCALE 1"=1000'

PERMIT INFORMATION CHART					
SUBDIVISION NAME		SECTION/AREA	LOT/PARCEL NO.		
KEFAUVER PROPERTY		N/A	LOT 5		
PLAT # OR L/F	GRID #	ZONING	TAX MAP NO.	ELECT. DIST.	CENSUS TRACT
1780	7	R-20	18	SECOND	602100
WATER CODE		SEWER CODE			
HO2		1454850			



THE FOEHRKOLB HOUSE
SCALE 1"=20'

- ### LEGEND
- LANDSCAPE PERIMETER EDGE
 - SHADE TREE
 - RAIN GARDEN
 - EXISTING TREES
 - STABILIZED CONSTRUCTION ENTRANCE
 - LIMIT OF DISTURBANCE
 - SUPER SILT FENCE

DEVELOPER'S/OWNER'S CERTIFICATE

I/WE CERTIFY THAT THE LANDSCAPING SHOWN ON THIS PLAN WILL BE DONE IN ACCORDANCE TO THE PLAN, SECTION 16.124 OF THE HOWARD COUNTY CODE, AND THE HOWARD COUNTY LANDSCAPE MANUAL. I/WE FURTHER CERTIFY THAT UPON COMPLETION A CERTIFICATION OF LANDSCAPE INSTALLATION, ACCOMPANIED BY AN EXECUTED ONE YEAR GUARANTEE OF PLANT MATERIAL, WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.

DEVELOPER'S CERTIFICATE

I CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, 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 OF THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE NATURAL RESOURCE CONSERVATION SERVICE.

SIGNATURE OF DEVELOPER _____ DATE _____

PRINTED NAME OF DEVELOPER _____

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 AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE NATURAL RESOURCE CONSERVATION SERVICE.

SIGNATURE OF ENGINEER _____ DATE _____

PRINTED NAME OF ENGINEER _____

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

USDA - NATURAL RESOURCE CONSERVATION SERVICE DATE _____

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

HOWARD SOIL CONSERVATION DISTRICT DATE _____

APPROVED: DEPARTMENT OF PLANNING AND ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE _____

CHIEF, DIVISION OF LAND DEVELOPMENT DATE _____

DIRECTOR DATE _____

NAME _____ DA _____

Project	date	description	no.
2005-018	JAN 2006	engineering	
JJO	JJO	scale	1"=60'
JJO	JJO	approval	CRE

Project	date	description	no.
2005-018	JAN 2006	engineering	
JJO	JJO	scale	1"=60'
JJO	JJO	approval	CRE

KEFAUVER PROPERTY
A RESUBDIVISION OF KEFAUVER PROPERTY, LOT 1
TAX MAP 18 - PARCEL 371 - GRID 7 - LOT 1
SECOND ELECTION DISTRICT - HOWARD COUNTY, MARYLAND

SITE DEVELOPMENT PLAN

MILDENBERG, BOENDER & ASSOC., INC.
Engineers Planners Surveyors
5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21042
(410) 997-0286 Fax: (410) 621-5521 Wash. (410) 997-0286 Fax

GENERAL NOTES

1. ALL FOREST RETENTION AREAS SHALL BE TEMPORARILY PROTECTED BY WELL ANCHORED BLAZE ORANGE PLASTIC FENCING AND SIGNAGE AS INDICATED ON THE PLANS. THE DEVICES SHALL BE INSTALLED ALONG THE FOREST RETENTION BOUNDARY PRIOR TO ANY LAND CLEARING, GRUBBING, OR GRADING ACTIVITIES.
2. THE FOREST PROTECTION BARRIERS SHALL BE INSTALLED SUCH THAT THE FOREST PROTECTION BARRIERS WILL BE WITHIN THE FOREST RETENTION AREA. ALL PROTECTION BARRIERS SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION. INCLUDING SILT FENCE BEING USED AS PROTECTIVE FENCING. ALL DEVICES SHALL REMAIN IN PLACE UNTIL ALL CONSTRUCTION HAS CEASED IN THE IMMEDIATE VICINITY.
3. ATTACHMENT OF SIGNS, OR ANY OTHER OBJECTS TO TREES IS PROHIBITED. NO EQUIPMENT, MACHINERY, VEHICLES, MATERIALS OR EXCESSIVE PEDESTRIAN TRAFFIC SHALL BE ALLOWED WITHIN THESE PROTECTED AREAS. INSTALLATION AND MAINTENANCE OF PROTECTIVE FENCING AND SIGNAGE SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR. THE GENERAL CONTRACTOR SHALL TAKE THE MOST CARE TO PROTECT TREE ROOT SYSTEMS DURING ALL CONSTRUCTION ACTIVITIES. TREE ROOT SYSTEMS SHALL BE PROTECTED FROM SMOTHERING, FLOODING, EXCESSIVE WETTING FROM DE-WATERING OPERATIONS, OFF-SITE RUN OFF, SPILLAGE AND DRAINING OF MATERIALS THAT MAY BE HARMFUL TO TREES.
4. THE GENERAL CONTRACTOR SHALL PREPARE PARINGS OF CONSTRUCTION OR STOCKPILING OF EARTH WITHIN FOREST CONSERVATION EASEMENTS. REMOVAL OF TOPSOIL OR ROOT MAT WITHIN THE TREE PRESERVATION AREA SHALL BE PROHIBITED.
5. THE GENERAL CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY TREES DAMAGED OR DESTROYED WITHIN THE FOREST CONSERVATION EASEMENTS. ROOT PRUNING SHALL BE USED AT THE LIMIT OF DISTURBANCE OR LIMIT OF GRADING WITHIN AND ADJACENT TO ALL PRESERVATION AREAS, AS NECESSARY.

PRE-CONSTRUCTION MEETING

1. AFTER THE BOUNDARIES OF THE FOREST RETENTION AREAS HAVE BEEN FIELD LOCATED AND MARKED, AND AFTER THE FOREST PROTECTION DEVICES HAVE BEEN INSTALLED, BUT BEFORE ANY OTHER DISTURBANCE HAS TAKEN PLACE ON SITE, A PRE-CONSTRUCTION MEETING SHALL TAKE PLACE ON SITE. THE DEVELOPER, CONTRACTOR OR PROJECT MANAGER, AND HOWARD COUNTY INSPECTORS SHALL ATTEND. THE PURPOSE OF THIS MEETING WILL BE:
 - A. TO IDENTIFY THE LOCATIONS OF THE FOREST RETENTION AREAS, SPECIFIC TREES WITHIN 50 FEET OF THE LIMIT OF DISTURBANCE, LIMITS OF CONSTRUCTION, EMPLOYEE PARKING AREAS AND RECOMMENDED STAGING AREAS.
 - B. INSPECT ALL FLAGGED BOUNDARIES AND PROTECTION DEVICES.
 - C. MAKE ALL NECESSARY ADJUSTMENTS.
 - D. ASSIGN RESPONSIBILITIES AS APPROPRIATE AND DISCUSS PENALTIES.

CONSTRUCTION MONITORING

1. THE SITE SHALL BE INSPECTED PERSONALLY DURING THE CONSTRUCTION PHASE OF THE PROJECT. A QUALIFIED PROFESSIONAL SHALL BE RESPONSIBLE FOR IDENTIFYING DAMAGE TO PROTECTED FOREST AREAS OR INDIVIDUAL TREES WHICH MAY HAVE BEEN CAUSED BY CONSTRUCTION ACTIVITIES, SUCH AS SOIL COMPACTION, ROOT INJURY, TRUNK WOUNDS, LIMB INJURY, OR STRESS CAUSED BY FLOODING OR BROUGHT CONDITIONS. ANY SUCH DAMAGE THAT MAY OCCUR SHALL BE REMEDIATED IMMEDIATELY USING APPROPRIATE MEASURES. SEVERE PROBLEMS MAY REQUIRE CONSULTATION WITH A PROFESSIONAL ARBORIST.
2. THE CONSTRUCTION PROCEDURE SHALL NOT DAMAGE AREAS OUTSIDE OF THE LIMITS OF DISTURBANCE AS DESIGNATED ON THE PLANS. ANY DAMAGE SHALL BE RESTORED BY THE CONTRACTOR AT HIS EXPENSE AND TO THE SATISFACTION OF THE DESIGN TEAM OR ENGINEER.

PLANTING SPECIFICATIONS AND NOTES

SITE PREPARATION AND SOILS

1. PROTECTION FENCING AND SILT FENCES FOR SEDIMENT AND EROSION CONTROL ARE TO BE INSTALLED AS A FIRST ORDER OF BUSINESS, IF NECESSARY.
2. DISTURBANCE OF SOILS SHOULD BE LIMITED TO THE PLANTING FIELD FOR EACH PLANT. AS SHOWN ON THE DETAIL VIEW, A PLANTING FIELD OF RADIUS = 2 X DIAMETER OF THE ROOT BALL OR CONTAINER.
3. SOIL MIX FOR ALL PLANTS EXCEPT ERICACEOUS MATERIAL: SOIL MIX SHALL CONSIST OF EXISTING NATIVE TOPSOIL MIXTURE AT EACH PLANTING FIELD LOCATION INTO WHICH THE CONTRACTOR SHALL THOROUGHLY INCORPORATE 25% BY VOLUME OF COMPOSTED SLUDGE.
4. SOIL MIX FOR ERICACEOUS MATERIAL: SOIL MIX SHALL CONSIST OF EXISTING NATIVE TOPSOIL MIXTURE AT EACH PLANTING FIELD LOCATION INTO WHICH THE CONTRACTOR SHALL THOROUGHLY INCORPORATE 25% BY VOLUME PEAT MOSS.
5. ALL MIXING IN 3 AND 4 SHALL BE LIMITED TO CONTAINER GROWN OR BALL AND BURLAP STOCK ONLY AND CONFINED TO THE PLANTING FIELD AND IMMEDIATE ADJACENT SOIL SURFACE AREA AND SHALL BE DONE TO THE SATISFACTION OF THE DESIGN TEAM OR ENGINEER.

PLANT STORAGE AND INSPECTION

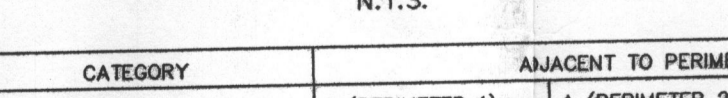
1. FOR CONTAINER GROWN NURSERY STOCK, PLANTING SHOULD OCCUR WITHIN 2 WEEKS AFTER DELIVERY TO THE SITE.
2. FOR BALL AND BURLAP NURSERY STOCK, PLANTING SHOULD OCCUR WITHIN THREE DAYS AFTER DELIVERY TO THE SITE.
3. PLANTING STOCK SHOULD BE INSPECTED PRIOR TO PLANTING. PLANTS NOT CONFORMING TO STANDARD NURSERY SPECIFICATIONS FOR SIZE, FORK VIGOR, ROOTS, TRUNK WOUNDS, INSECTS AND DISEASE SHOULD BE REPLACED.
4. UNTIL PLANTED, ALL PLANT STOCK SHALL BE KEPT IN A SHADED, COOL, AND MOISTENED ENVIRONMENT.

DEVELOPER'S/OWNER'S CERTIFICATE

I/WE CERTIFY THAT THE LANDSCAPING SHOWN ON THIS PLAN WILL BE DONE ACCORDING TO THIS PLAN, 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 OF THE PROJECT. I ALSO AUTHORIZE PERSONS ON-SITE INSPECTION BY THE NATURAL RESOURCE CONSERVATION SERVICE.

NAME	DATE
DEVELOPER'S CERTIFICATE	
I CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, 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 OF THE PROJECT. I ALSO AUTHORIZE PERSONS ON-SITE INSPECTION BY THE NATURAL RESOURCE CONSERVATION SERVICE.	
SIGNATURE OF DEVELOPER	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 AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE NATURAL RESOURCE CONSERVATION SERVICE.	
SIGNATURE OF ENGINEER	DATE
MUNICIPAL REVIEW	
THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.	
HOWARD SOIL CONSERVATION DISTRICT	DATE
APPROVED: DEPARTMENT OF PLANNING AND ZONING	
CHEF, DEVELOPMENT ENGINEERING DIVISION	DATE
CHEF, DIVISION OF LAND DEVELOPMENT	DATE
DIRECTOR	DATE

DRIVEWAY PAVING SECTION



LANDSCAPE REQUIREMENT PLANTING SCHEDULE

QUANTITY	SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE
17	(Symbol)	ACER RUBRUM 'RED SUNSET'	RED SUNSET RED MAPLE	2 1/2" - 3" CAL.
TOTAL				17 SHADE TREES

SCHEDULE A: PERIMETER LANDSCAPED EDGE

CATEGORY	ADJACENT TO PERIMETER PROPERTIES									TOTAL
	A (PERIMETER 1)	A (PERIMETER 2)	A (PERIMETER 3)	A (PERIMETER 4)	A (PERIMETER 5)	A (PERIMETER 6)	A (PERIMETER 7)	A (PERIMETER 8)	A (PERIMETER 9)	
LANDSCAPE TYPE	304.19 LF	211.07 LF	161.92 LF	529.55 LF	761.44 LF	98.92 LF	45.05 LF	100.00 LF	40.00 LF	
CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR FEET)	YES, 100 LF OF EX. TREES	YES, 155 LF OF EX. TREES	NO	YES, 178 LF OF EX. TREES	YES, 122 LF OF EX. TREES	NO	NO	NO	NO	
NUMBER OF PLANTS REQUIRED	3 SHADE TREES 0 EVERGREEN TREES 0 SHRUBS	1 SHADE TREE 0 EVERGREEN TREES 0 SHRUBS	3 SHADE TREES 0 EVERGREEN TREES 0 SHRUBS	6 SHADE TREES 0 EVERGREEN TREES 0 SHRUBS	11 SHADE TREES 0 EVERGREEN TREES 0 SHRUBS	2 SHADE TREES 0 EVERGREEN TREES 0 SHRUBS	1 SHADE TREE 0 EVERGREEN TREES 0 SHRUBS	2 SHADE TREES 0 EVERGREEN TREES 0 SHRUBS	1 SHADE TREE 0 EVERGREEN TREES 0 SHRUBS	30 SHADE TREES 0 EVERGREEN TREES 0 SHRUBS
CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR FEET)	1 SHADE TREE 0 EVERGREEN TREES	N/A	3 SHADE TREES 0 EVERGREEN TREES	N/A	8 SHADE TREES 0 EVERGREEN TREES	N/A	N/A	N/A	1 SHADE TREE 0 EVERGREEN TREES	13 SHADE TREES 0 EVERGREEN TREES
NUMBER OF PLANTS PROVIDED	2 SHADE TREES 0 EVERGREEN TREES 0 SHRUBS	1 SHADE TREE 0 EVERGREEN TREES 0 SHRUBS	0 SHADE TREES 0 EVERGREEN TREES 0 SHRUBS	6 SHADE TREES 0 EVERGREEN TREES 0 SHRUBS	3 SHADE TREES 0 EVERGREEN TREES 0 SHRUBS	2 SHADE TREES 0 EVERGREEN TREES 0 SHRUBS	1 SHADE TREE 0 EVERGREEN TREES 0 SHRUBS	2 SHADE TREES 0 EVERGREEN TREES 0 SHRUBS	0 SHADE TREES 0 EVERGREEN TREES 0 SHRUBS	17 SHADE TREES 0 EVERGREEN TREES 0 SHRUBS

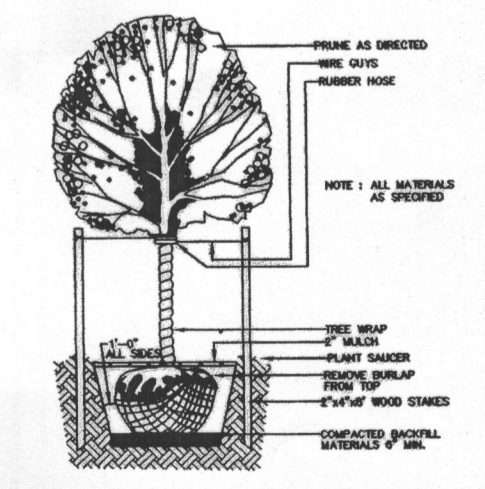
* PERIMETER 1: CREDIT FOR ONE (1) EX. 6" PEAR; PERIMETER 2: CREDIT FOR ONE (1) EX. 7" LOCUST, ONE (1) EX. 11" CHERRY, AND ONE (1) EX. 6" LOCUST; PERIMETER 3: CREDIT FOR ONE (1) EX. 13" POPLAR; PERIMETER 4: CREDIT FOR ONE (1) EX. 8" MAPLE, TWO (2) EX. 13" LOCUST, ONE (1) EX. 10" HICKORY, ONE (1) EX. 15" CHERRY, ONE (1) EX. 15" MAPLE, AND ONE (1) EX. 12" CHERRY; PERIMETER 5: CREDIT FOR ONE (1) EX. 4" RED MAPLE.

FOREST STAND

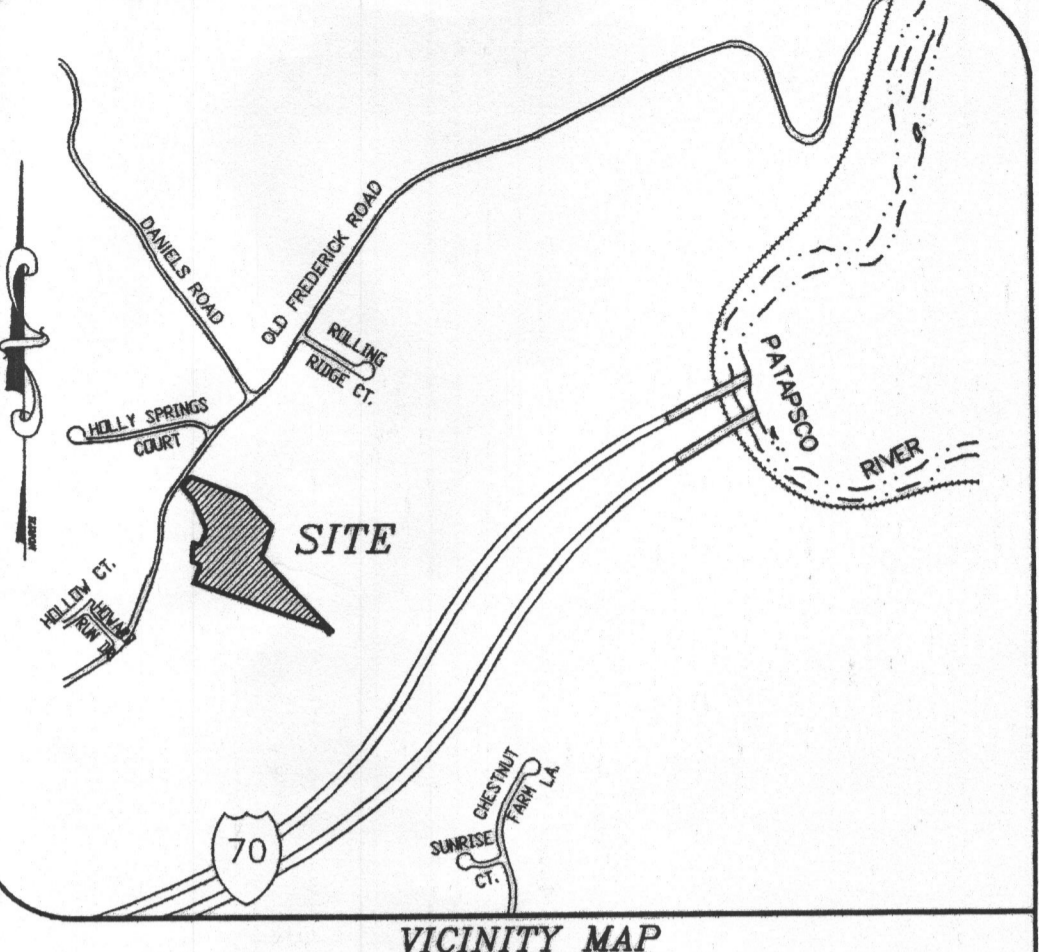
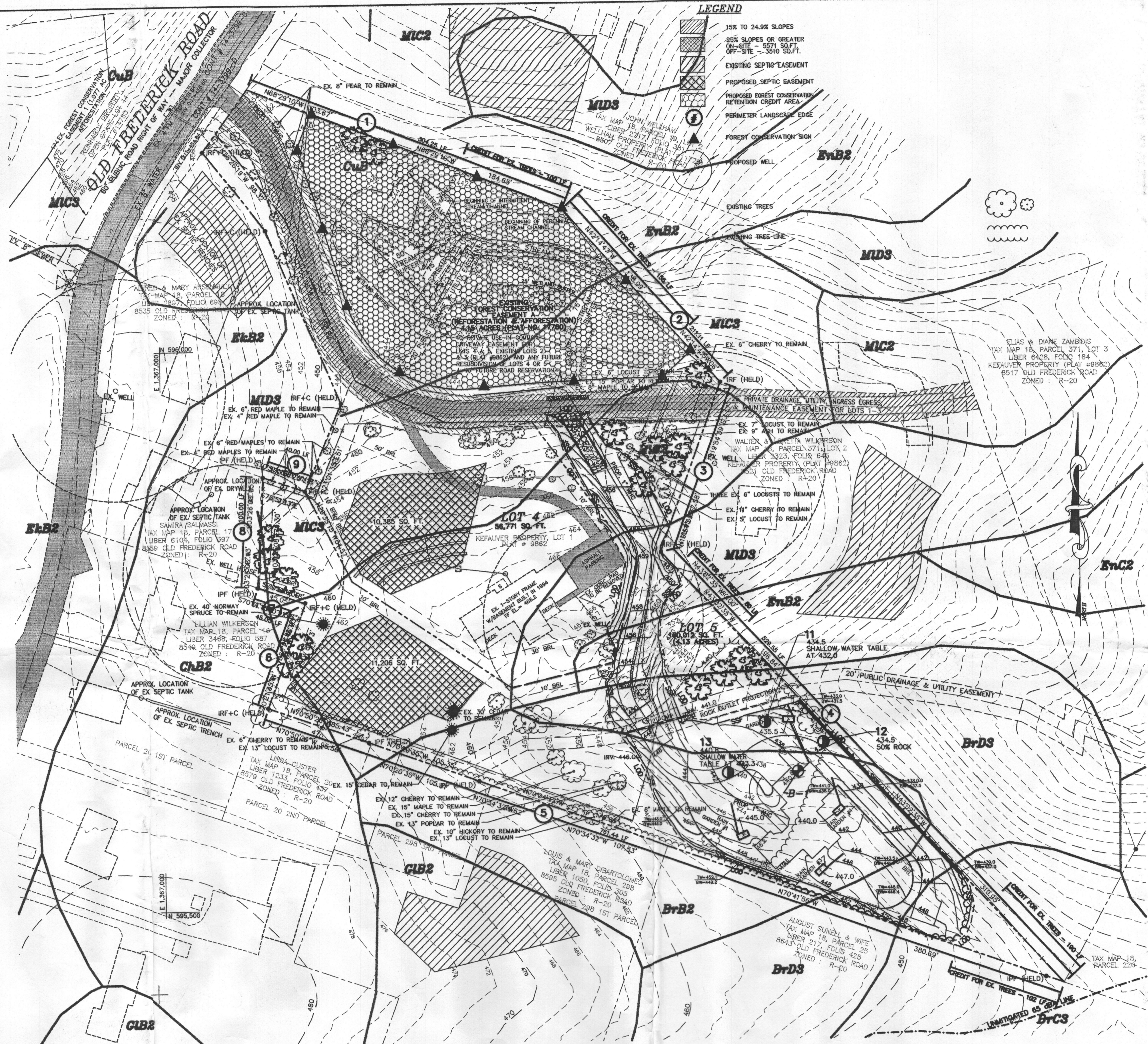
FS1 - SUCCESSIONAL STAND

SOILS DESCRIPTION

SYMBOL DESCRIPTION
BRANDYWINE LOAM, 3% TO 8% SLOPES, MODERATELY ERODED -- TYPE C
BRANDYWINE LOAM, 8% TO 15% SLOPES, SEVERELY ERODED -- TYPE C
BRANDYWINE LOAM, 15% TO 25% SLOPES, SEVERELY ERODED -- TYPE C
CHESTER SILT LOAM, 3% TO 8% SLOPES, MODERATELY ERODED -- TYPE B
COMUS SILT LOAM, LOCAL ALLUVIAL, 3% TO 8% SLOPES -- TYPE B
ELLSBORO LOAM, 3% TO 8% SLOPES, MODERATELY ERODED -- TYPE B
MANOR LOAM, 3% TO 8% SLOPES, MODERATELY ERODED -- TYPE B
MANOR LOAM, 8% TO 15% SLOPES, SEVERELY ERODED -- TYPE B
MANOR LOAM, 15% TO 25% SLOPES, SEVERELY ERODED -- TYPE B



TYPICAL DECIDUOUS TREE PLANTING DETAIL



PLANTING SPECIFICATIONS AND NOTES (CON'T)

1. THE PLANTING FIELD SHOULD BE PREPARED AS SPECIFIED (SEE DETAIL). NATIVE TOPSOILED SOILS SHOULD BE USED FOR SOIL MIX AND BACKFILL FOR PLANTING FIELD. AFTER PLANT INSTALLATION, MAKE SOILS EVENLY OVER THE PLANTING FIELD AND COVER WITH AT LEAST 4 INCHES OF MULCH. WATER, GENEROUSLY, TO SETTLE SOIL BACKFILLED AROUND TREES.
2. PLANTING FIELD DIAMETERS SHOULD BE REDUCED OR PLANTING FIELD MOVED IF IT APPEARS THAT EXCESSIVE ROOT DAMAGE MAY OCCUR DURING DIGGING OPERATION NEAR EXISTING FOREST.
3. CARE SHALL BE TAKEN WHEN DIGGING PLANTING FIELDS NOT TO CHOP THRU LARGER EXISTING ROOTS FROM EXISTING MATURE TREES. IF ROOTS GREATER THAN 1/2 INCH ARE ENCOUNTERED PLEASE TRY TO DIG AROUND THEM AS MUCH AS POSSIBLE TO MINIMIZE IMPACT TO EXISTING TREES. THEY WERE HERE FIRST.
4. CONTAINER GROWN STOCK SHOULD BE REMOVED FROM THE CONTAINER AND ROOTS GENTLY LOOSENED FROM THE SOIL. IF THE ROOTS ENIRCLE OR KINKED ROOT SYSTEMS SHOULD ALSO BE NOTED. ROOTS MAY NOT BE TRIMMED ON SITE, DUE TO THE INCREASED CHANCES OF SOIL BURNING DISEASES.
5. FOR BALL AND BURLAP STOCK, PLACE TREE IN PREPARED PLANTING FIELD AND REMOVE WIRE AND/OR STRING FROM ROOT BALL. THEN PEEL BACK BURLAP TO BASE OF ROOT BALL AND COVER ENTIRE ROOT BALL WITH TOPSOIL MIXTURE INDICATED ABOVE AND WATER GENEROUSLY.
6. FOR TREES PLANTED IN THE MITIGATION AREA, CONTRACTOR SHALL EVENLY DISPERSE SPECIES IN GROUPS OF TWO (2) TO FOUR (4), PER SPECIES, OVER THE ENTIRE DESIGNATED AREA TO BE PLANTED WHILE MAINTAINING AN AVERAGE SPACING OF INDIVIDUAL TREES AT PROPER SPACING INDICATED ON PLANT LIST.
7. AVOID PLANTING IN A STRAIGHT GRID PATTERN. TREES SHALL BE PLANTED ON AN AVERAGE SPACING AS INDICATED ON PLANT LISTS TO OBTAIN A MORE NATURAL APPEARANCE.
8. NEWLY PLANTED TREES MAY NEED WATERING AS MUCH AS ONCE A WEEK FOR THE ENTIRE GROWING SEASON, DUE TO THE WELL DRAINED NATIVE SOILS FOUND ON THIS SITE. COMBINED WITH THE LOOSENESS OF THE BACKFILLED AREA WITHIN THE PLANTING FIELD, THE NEXT TWO YEARS MAY REQUIRE WATERING ONLY A FEW TIMES A YEAR DURING SUMMER AND DRY MONTHS. AFTER THAT PERIOD, TREES SHOULD ONLY NEED WATER IN SEVERE DROUGHTS. ANY WATERING PLAN SHOULD COMPENSATE FOR RECENT RAINFALL PATTERNS.

FERTILIZING

1. DO NOT FERTILIZE NEWLY PLANTED TREES WITHIN THE FIRST GROWING SEASON AFTER PLANTING. FERTILIZER MAY GAUZE ROOTS AND STIMULATE GROWTH WHICH THE ROOTS CANNOT SUPPORT AND ADD ADDITIONAL SHOCK TO THE ALREADY DISTURBED PLANT.
2. NOTHING SHOULD BE ADDED TO THE SOIL WITHOUT TESTING IT FIRST TO DETERMINE ITS NEEDS.
3. IF AND WHEN IT IS TIME TO FERTILIZE, ORGANIC FERTILIZERS ARE PREFERRED TO SYNTHETIC FERTILIZERS. BONE MEAL OR SEAWEED BASED PRODUCTS ARE AVAILABLE COMMERCIALY AND ARE RECOMMENDED. THEY HAVE THE ABILITY TO SUPPLY NUTRIENTS TO THE PLANT AS NEEDED WHILE MINIMIZING THE RISK OF EXCESS NUTRIENTS ENTERING THE FOREST SYSTEM AND WATER SUPPLY.

MAINTENANCE SCHEDULE

1. ANNUAL MAINTENANCE DURING THE GROWING SEASON, FOR A THREE YEAR PERIOD.
2. ASSESS TREE MORTALITY OF PLANTING STOCK, REMOVE AND REPLACE ANY DEAD OR DISEASED PLANTINGS.
3. VOLUNTEER SEEDING OF NATIVE, LOCAL AND ENDEMIC VEGETATION IS TO BE EXPECTED. DO NOT DISCOURAGE THIS EFFORT UNLESS IT IS NEGATIVELY EFFECTING THE PLANTED STOCK.
4. REMOVE THROUGH MANUAL MEANS (GRUBBING, PULLING, CUTTING) AGGRESSIVE, NOXIOUS, INVASIVE SPECIES AND ALL HERCACEOUS VEGETATION WITHIN A 3-FOOT RADIUS SURROUNDING THE PLANTED WOODY NURSERY STOCK.
5. REMOVE AND DISPOSE OF MAN-MADE TRASH, INCLUDING ITEMS CONTAINED WITHIN ENTIRE PLANTING AREA. DO NOT REMOVE DOWN AND DEAD MATERIAL NATURALLY OCCURRING OR ACCUMULATING, UNLESS IT IS SMOTHERING PLANTING STOCK.
6. 75 PERCENT SURVIVAL OF PLANTED STOCK MUST BE ACHIEVED AT THE END OF THE 24 MONTH MANAGEMENT PERIOD. IF NOT, ADDITIONAL PLANTINGS MAY BE REQUIRED TO ACHIEVE THIS GOAL.

SUPERVISION

ALL FOREST CONSERVATION ACTIVITIES SHALL BE DONE UNDER THE DIRECT SUPERVISION OF SOMEONE FROM THE DESIGN TEAM OR OTHER QUALIFIED PROFESSIONAL, AS DETERMINED BY THE REQUIREMENTS OF COMAR 08.18.06.01 AND THE MARYLAND DEPARTMENT OF NATURAL RESOURCES, PUBLIC LANDS AND FORESTRY DIVISION.
STANDARD NON-DISTURBANCE NOTE:
THERE SHALL BE NO CLEARING, GRADING, CONSTRUCTION OR DISTURBANCE OF VEGETATION IN THE FOREST CONSERVATION EASEMENTS EXCEPT AS PERMITTED BY HOWARD COUNTY.

Project	2005-018	Date	JUNE 2005
Illustration	JJO	Scale	1" = 60'
Approval	JJO	Revision	
Approval	CRE	Revision	

KEFAUVER PROPERTY
A RESUBDIVISION OF KEFAUVER PROPERTY, LOT 1
TAX MAP 18 - PARCEL 371 - LOT 1
SECOND ELECTION DISTRICT - HOWARD COUNTY, MARYLAND
SITE DEVELOPMENT PLAN

MILDENBERG & ASSOC., INC.
Engineers - Planners - Surveyors
5072 Dorsey Hall Drive, Suite 202, Elkoot City, Maryland 21042
(410) 997-0286 Fax: (301) 621-5521 Wash.

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 ACRES DOLOMITIC LIMESTONE (92 LBS./1000 SQ.FT.) AND 600 LBS. PER ACRE 10-10-10 FERTILIZER (14 LBS./1000 SQ.FT.) BEFORE SEEDING. HARROW OR DISK INTO UPPER THREE INCHES OF SOIL. AT 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 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 PERIODS MARCH 1 THRU APRIL 30, AND AUGUST 1 THRU OCTOBER 15, SEED WITH 80 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. PER ACRE 1.4 LBS./1000 SQ.FT.) OF KENTUCKY 31 TALL FESCUE. FOR THE PERIOD OCTOBER 15 THRU APRIL 30, SEED WITH 60 LBS. PER ACRE 1.4 LBS./1000 SQ.FT.) OF KENTUCKY 31 TALL FESCUE. DURING THE PERIOD OF OCTOBER 15 THRU APRIL 30, PROJECT SITE (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./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 UNROTATED SMALL GRASS STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 218 GAL 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 SEEDING AREAS AND MAKE NEEDED REPAIRS, REPLACEMENTS AND RESEEDINGS.

TEMPORARY SEEDING NOTES

APPLY TO GRADED OR CLEARED AREAS LIKELY TO BE REDISTURBED 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, FOR 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 OCTOBER 15, SEED WITH 2-1/2 BUSHEL PER ACRE OF ANNUAL RYE (3.2 LBS./1000 SQ.FT.) FOR THE PERIOD MAY 1 THRU AUGUST 14, SEED WITH 3 LBS. PER ACRE OF WHEEPING LOWGRASS (0.7 LBS./1000 SQ.FT.). FOR THE PERIOD NOVEMBER 15 THRU NOVEMBER 28, PROJECT 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 UNROTATED WEED FREE SMALL GRASS STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 218 GAL PER ACRE (5 GAL/1000 SQ.FT.) OF EMULSIFIED ASPHALT ON FLAT AREAS. ON SLOPES 8 FEET OR HIGHER, USE 348 GAL PER ACRE (8 GAL/1000 SQ.FT.) FOR ANCHORING.

REFER TO THE 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR ADDITIONAL RATES AND METHODS NOT COVERED.

STANDARD SEDIMENT CONTROL NOTES

- A MINIMUM OF 48 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS, SEDIMENT CONTROL DIVISION PRIOR TO THE START OF ANY CONSTRUCTION, (313-1855).
- ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE MOST CURRENT MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, AND REVISIONS THERETO.
- FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN: A) 7 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, PERMETER 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 12, OF THE HOWARD COUNTY DESIGN MANUAL, STORM DRAINAGE.
- ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIODS SPECIFIED ABOVE IN ACCORDANCE WITH THE 1991 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR PERMANENT SEEDING (SEC.51), SOD (SEC. 54), TEMPORARY SEEDING (SEC. 50) AND MULCHING (SEC.52). TEMPORARY STABILIZATION WITH MULCH ALONE CAN ONLY BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER GERMINATION AND ESTABLISHMENT OF GRASSES.
- ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE AND ARE TO BE MAINTAINED IN OPERATIVE CONDITION UNTIL PERMISSION FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
- SITE ANALYSIS:

TOTAL AREA OF SITE:	4.13	ACRES
AREA DISTURBED:	1.15	ACRES
AREA TO BE ROOFED OR PAVED:	0.29	ACRES
AREA TO BE NEGATIVELY STABILIZED:	0.88	ACRES
TOTAL CUT:	2500	CU. YDS.
TOTAL FILL:	2500	CU. YDS.
TOTAL WASTE/BORROW AREA LOCATION:	N/A	

THESE QUANTITIES ARE FOR PERMIT PURPOSES ONLY. CONTRACTOR IS REQUIRED TO PROVIDE HIS OWN QUANTITIES MEASUREMENTS.
- ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.
- ADDITIONAL SEDIMENT CONTROL MUST BE PROVIDED, IF DEEMED NECESSARY BY THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
- ON ALL SITES WITH DISTURBED AREAS IN EXCESS OF 2 ACRES, APPROVAL OF THE INSPECTION AGENCY SHALL BE REQUESTED UPON COMPLETION OF INSTALLATION OF PERMETER EROSION AND SEDIMENT CONTROLS, BUT BEFORE PROCEEDING WITH ANY OTHER EARTH DISTURBANCE OR GRADING. OTHER BUILDING OR GRADING INSPECTION APPROVALS MAY NOT BE AUTHORIZED UNTIL THIS INITIAL APPROVAL BY THE INSPECTION AGENCY IS MADE.
- TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE PIPE LENGTHS OR THAT WHICH CAN BE BACK FILLED AND STABILIZED WITHIN ONE WORKING DAY, WHICHEVER IS SHORTER.

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 PLANS.

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 CON-TRASTING 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 1/2" IN DIAMETER.
 - TOPSOIL MUST BE FREE OF PLANTS OR PLANT PARTS SUCH AS BERMUDA GRASS, QUACKGRASS, JOHNSON-SON GRASS, NUTSEDGE, 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 20.0 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 TOPSOILS 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.
 - ORGANIC CONTENT OF TOPSOIL SHALL BE NOT LESS THAN 1.5 PERCENT BY WEIGHT.
 - TOPSOIL HAVING SOLUBLE SALT CONTENT GREATER THAN 500 PARTS 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 PHYTO-TOXIC 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.

ii. PLACE TOPSOIL (IF REQUIRED) AND APPLY SOIL AMENDMENTS AS SPECIFIED IN 20.0 VEGETATIVE STABILIZATION - SECTION 1 - VEGETATIVE STABILIZATION METHODS AND MATERIALS.

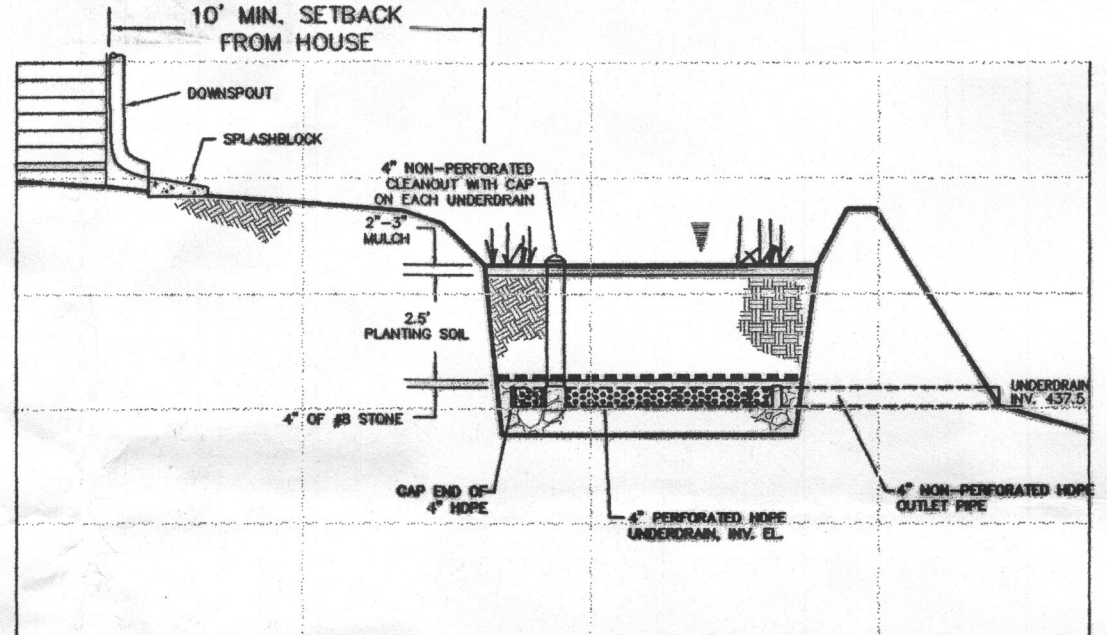
TOPSOIL APPLICATION

- 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 UNLESS OTHERWISE NOTED ON THE PLANS.
- TOPSOIL SHALL BE UNIFORMLY DISTRIBUTED IN A 4" TO 6" LAYER AND LIGHTLY COMPACTED 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.

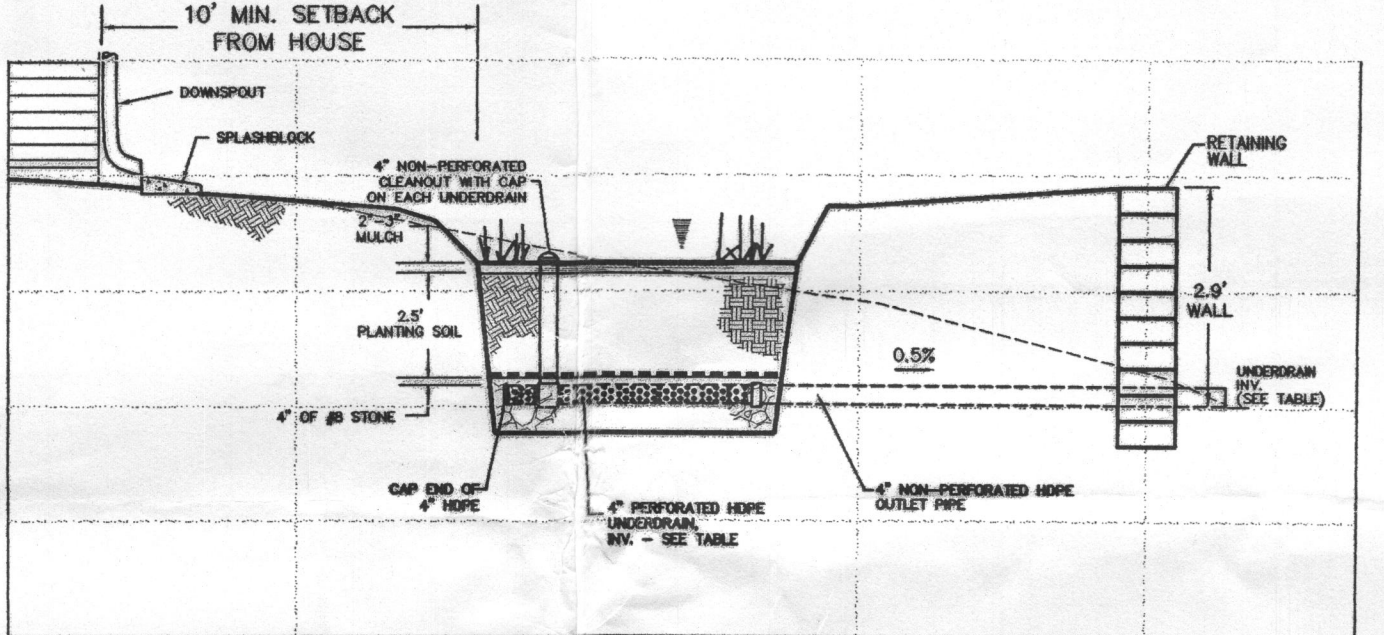
vi. ALTERNATIVE FOR PERMANENT SEEDING - INSTEAD OF APPLYING THE FULL AMOUNTS OF LIME AND COMMERCIAL FERTILIZER, COMPOSTED SLUDGE AND AMENDMENTS MAY BE APPLIED AS SPECIFIED BELOW:

- 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 AREAS UNDER 5 ACRES SHALL CONFORM TO THE FOLLOWING REQUIREMENTS:
 - COMPOSTED SLUDGE SHALL BE SUPPLIED BY, OR ORIGINATE FROM, A PERSON OR PERSONS WHO 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 PHOSPHOROUS, 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 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-VI, PUB. #1, COOPERATIVE EXTENSION SERVICE, UNIVERSITY OF MARYLAND AND VIRGINIA POLYTECHNIC INSTITUTES, REVISED 1973.



TYPICAL RAIN GARDEN PROFILE

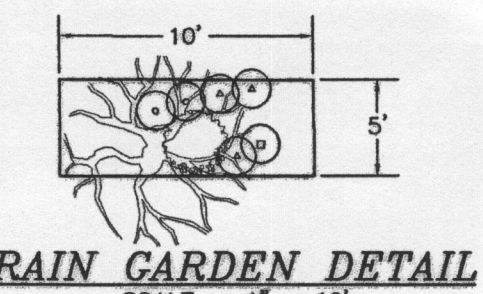


TYPICAL RAIN GARDEN PROFILE WITH RETAINING WALL

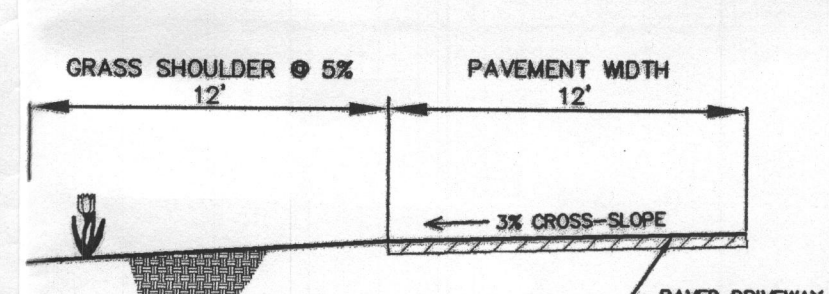
RAIN GARDEN PLANT LIST SCHEDULE

QUANTITY	SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE
1	⊙	PLATANUS OCCIDENTALIS	AMERICAN SYCAMORE	2-1/2" - 3" GAL.
1	⊙	ILEX GLABRA	INK BERRY	2" - 3" HI.
3	⊙	LOBELIA SP. (SIPHILITICA)	GREAT BLUE LOBELIA	1 GAL. CONTAINER
2	⊙	ONOCLEA SENSIBILIS	SENSITIVE FERN	1 GAL. CONTAINER
1	⊙	ASTER NOVAE-ANGLIAE	NEW ENGLAND ASTER	1 GAL. CONTAINER

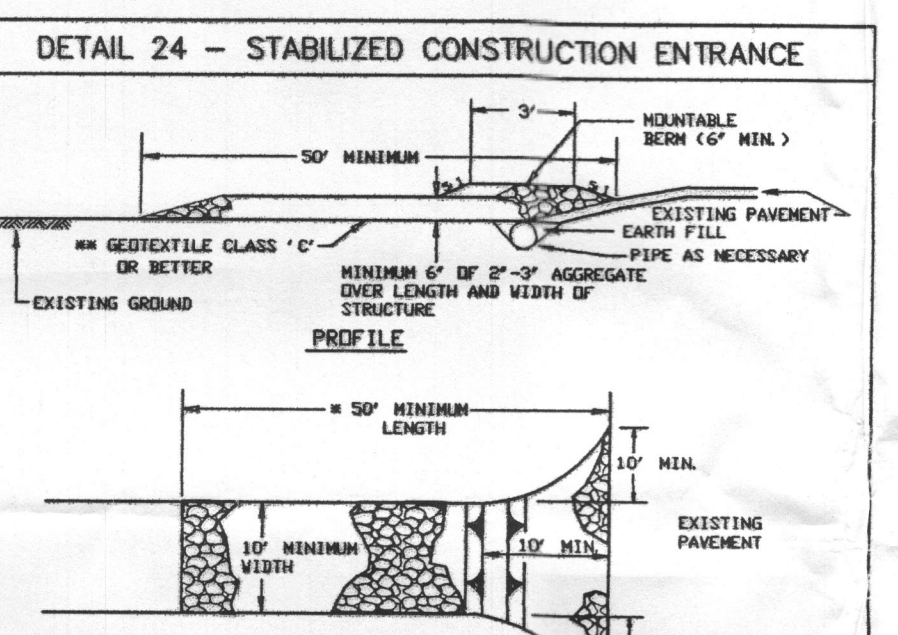
TOTAL: 13 PERENNIALS, 1 SHRUB, 1 TREE (PER EACH RAIN GARDEN)



RAIN GARDEN DETAIL



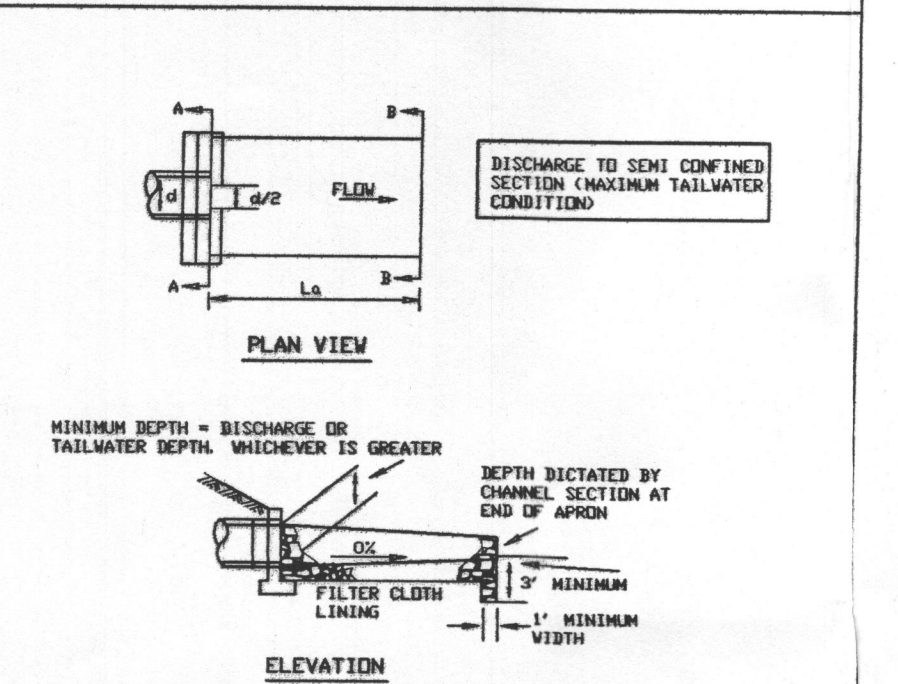
DT 5 DRIVEWAY CROSS SECTION TREATED BY NON ROOFTOP DISCONNECTION



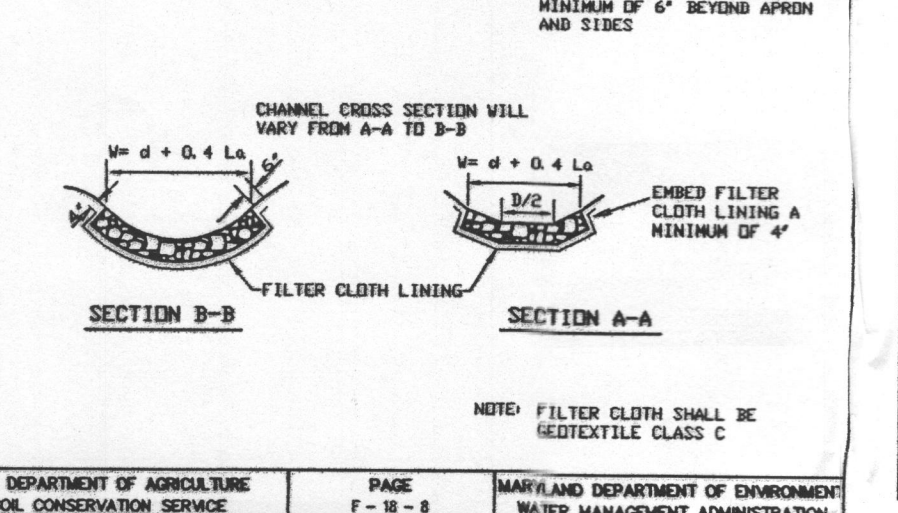
DETAIL 24 - STABILIZED CONSTRUCTION ENTRANCE

- Construction Specifications**
- Length - minimum of 50' x 100' for single residence lots.
 - 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. Write plan approval authority may 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 non-erodible 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, PAGE 1-17-3, MARYLAND DEPARTMENT OF ENVIRONMENT, SOIL CONSERVATION SERVICE, WATER MANAGEMENT ADMINISTRATION.

DETAIL 25 - ROCK OUTLET PROTECTION I



DETAIL 25 - ROCK OUTLET PROTECTION I



DETAIL 25 - ROCK OUTLET PROTECTION I

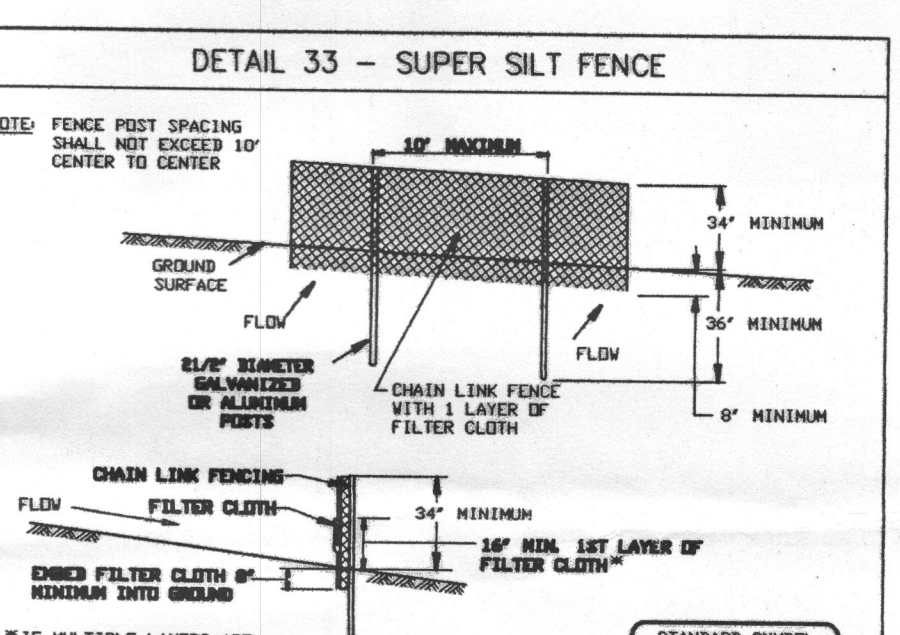
EROSION AND SEDIMENT CONTROL NOTES

- ALL SEDIMENT CONTROL OPERATIONS ARE TO BE DONE IN ACCORDANCE WITH SECTION 219 OF THE HOWARD COUNTY VOLUME IV DESIGN MANUAL AND THE STANDARDS AND SPECIFICATIONS FOR SEDIMENT CONTROL IN DEVELOPING AREAS.
- ALL EROSION AND SEDIMENT CONTROL DEVICES SHALL BE INSTALLED AS THE FIRST ORDER OF BUSINESS.
- ALL EXCAVATED MATERIALS SHALL BE STOCKPILED ON THE NORTHERN MOST AREA WITHIN THE LIMIT OF DISTURBANCE.
- EXCAVATION AND BACKFILL SHALL BE LIMITED TO THAT WHICH CAN BE STABILIZED WITHIN ONE WORKING DAY.
- IMMEDIATELY FOLLOWING BACKFILL OF THE WATER AND SEWER HOUSE CONNECTION TRENCH, ALL DISTURBED AREAS ARE TO BE STABILIZED IN ACCORDANCE WITH THE PERMANENT STABILIZATION AND SEEDING NOTES SHOWN ON THIS SHEET.
- THROUGHOUT THE PROJECT, THE CONTRACTOR SHALL REGULARLY INSPECT ALL SEDIMENT CONTROL DEVICES AND PROVIDE ALL NECESSARY MAINTENANCE TO INSURE THAT ALL DEVICES ARE IN OPERATIVE CONDITION.
- ALL SEDIMENT CONTROL FACILITIES SHALL REMAIN IN PLACE UNTIL PERMISSION FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.

SEQUENCE OF CONSTRUCTION

- OBTAIN THE REQUIRED GRADING PERMIT.
- INSTALL STABILIZED CONSTRUCTION ENTRANCE SEE DETAIL 24 THIS SHEET. (1 DAY)
- INSTALL SUPER SILT FENCE AS INDICATED SEE DETAIL 33. (1 DAY) (INSPECT, REPAIR, AND/OR REPLACE SILT FENCE AT THE END OF EACH WORKING DAY)
- WITH PERMISSION OF SEDIMENT CONTROL INSPECTOR BRING SITE TO GRADE INDICATED.
- CONSTRUCT PROPOSED STRUCTURES PER SITE DEVELOPMENT PLAN. (90 DAYS)
- CONSTRUCT PROPOSED DRIVEWAY, SEE DETAIL THIS SHEET. (3 DAYS)
- STABILIZE, SEED & MULCH ALL DISTURBED AREAS IN ACCORDANCE WITH THE PERMANENT SEEDING NOTES SHOWN ON THIS SHEET.
- WHEN ALL CONTRIBUTING AREAS TO SEDIMENT CONTROL DEVICES HAVE BEEN PERMANENTLY STABILIZED AND AFTER PERMISSION HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR, REMOVE ALL EROSION AND SEDIMENT CONTROL DEVICES.

NOTES: FOLLOWING INITIAL SOILS DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN:
 A) 7 CALENDAR DAYS FOR ALL PERIMETER SLOPES GREATER THAN 3:1
 B) 14 CALENDAR DAYS FOR ALL OTHER DISTURBED GRADED AREAS ON THE PROJECT SITE.



DETAIL 33 - SUPER SILT FENCE

- Construction Specifications**
- Fencing shall be 42" in height and constructed in accordance with the latest Maryland State Highway Detail for Chain Link Fencing. The specification for 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 6" into the ground.
 - When the sections of filter cloth adjoin each other, they shall be overlapped by 6" and folded.
 - Maintenance shall be performed as needed and silt bulges 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: HMT 509
Tensile Modulus	20 lbs/in (min.)	Test: HMT 509
Flow Rate	0.3 gal/ft ² /minute (max.)	Test: HMT 382
Filtering Efficiency	75% (min.)	Test: HMT 382
- U.S. DEPARTMENT OF AGRICULTURE, PAGE 1-17-3, MARYLAND DEPARTMENT OF ENVIRONMENT, SOIL CONSERVATION SERVICE, WATER MANAGEMENT ADMINISTRATION.

DETAIL 33 - SUPER SILT FENCE

Design Criteria

Slope	Slope Steepness	Slope Length (Maximum)	Silt Fence Length (Maximum)
0 - 10%	0 - 10:1	Unlimited	Unlimited
10 - 20%	10:1 - 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, PAGE 1-17-3, MARYLAND DEPARTMENT OF ENVIRONMENT, SOIL CONSERVATION SERVICE, WATER MANAGEMENT ADMINISTRATION.

I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, 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 INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT.

DEVELOPER'S SIGNATURE _____ DATE _____

DEVELOPER'S NAME _____

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

ENGINEER'S SIGNATURE _____ DATE _____

ENGINEER'S NAME _____

REVIEWED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS.

USDA-NATURAL RESOURCES CONSERVATION SERVICE _____ DATE _____

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

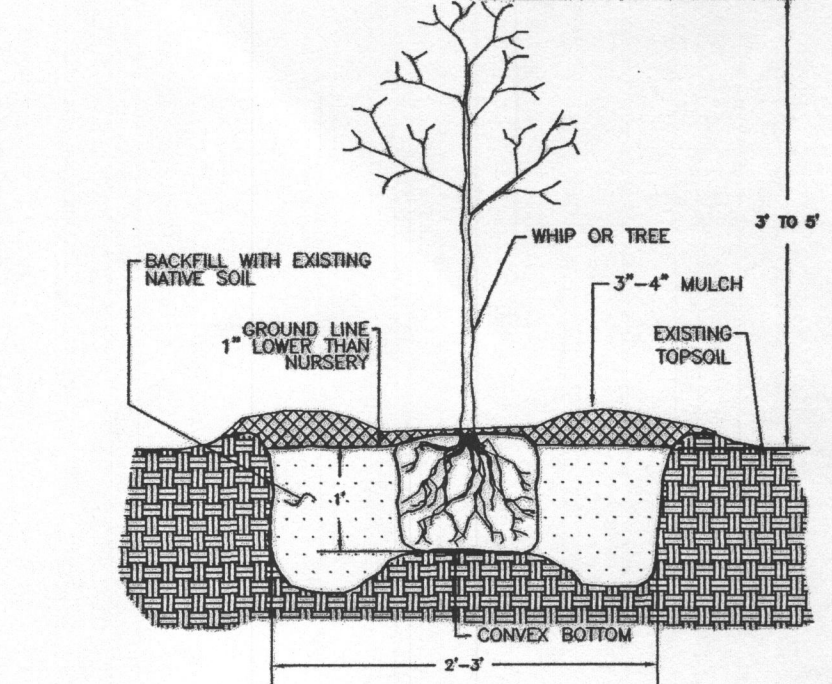
HOWARD SCD _____ DATE _____

RAIN GARDEN DESIGN DATA

RAIN GARDEN	LOCATION	DIMENSIONS	BOTTOM OF RAIN GARDEN ELEVATION	PONDING DEPTH	DEPTH OF UNDERDRAIN	WEIR ELEVATION
1	FRONT NORTHWEST	5'x10'	445.00	0.5'	2.5'	442.50
2	FRONT NORTH	5'x10'	435.50	0.5'	2.5'	433.00
3	REAR SOUTH	5'x10'	447.00	0.5'	2.5'	444.50
4	SIDE NORTHEAST	5'x10'	440.00	0.5'	2.5'	437.50

REFORESTATION/AFFORESTATION PLANT LIST

QTY.	SPECIES	SHADE TOL.	MOIST. REGIME	WET. STATUS	MIN.O.C.	SIZE & SPACING	REMARKS
25	Acer rubrum Red Maple	D-W	FAC	20'	2"	CONT/B & B 2" CALIPER	
3	Arsenochier arborea Serviceberry	VT	D-M	FACU-	20'	CONT/B & B 2" CALIPER	
3	Cercus canadensis Eastern Redbud	VT	D-M	FACU-	20'	CONT/B & B 2" CALIPER	
3	Cornus florida Flowering Dogwood	VT	D-M	FACU-	20'	CONT/B & B 2" CALIPER	
3	Ilex opaca American Holly	T	M	FAC-	20'	CONT/B & B 2" CALIPER	
10	Nyssa sylvatica Black Gum	T	M-W	FACU	20'	CONT/B & B 2" CALIPER	
3	Prunus serotina Wild Black Cherry	I	M	FACU	20'	CONT/B & B 2" CALIPER	
3	Quercus alba White Oak	I	M-W	FAC+	20'	CONT/B & B 2" CALIPER	
8	Quercus palustris Pin Oak	I	M-W	FACW	20'	CONT/B & B 2" CALIPER	
8	Quercus phellos Willow Oak	I	M-W	FACW	20'	CONT/B & B 2" CALIPER	



TREE PLANTING DETAIL

BASED ON THE FOLLOWING ASSESSMENT, THE EXISTING GROUND PLANE CONDITIONS CAN REMAIN IN THE REFORESTATION AREA WITHOUT FURTHER TREATMENT:

- > THE "LAWN