

LEGEND

- SOILS CLASSIFICATION
- EXISTING CONTOURS
- PROPOSED CONTOURS
- LIMIT OF WETLANDS
- EXISTING WOODS LINE
- PROPOSED WOODS LINE
- INDICATES OPEN SPACE LESS THAN 35' IN WIDTH
- EXISTING STRUCTURE
- PROPOSED STRUCTURE
- PROPOSED EARTH DIKE
- LIMIT OF DISTURBANCE
- PROP. SUPER SILT FENCE
- STABILIZED CONSTRUCTION ENTRANCE

BENCH MARKS

HORIZONTAL: NAD 83
 HOWARD COUNTY CONC. MON. 3805
 N. 558,718.9915 E. 1,386,824.1900
 HOWARD COUNTY CONC. MON. 3806
 N. 557,155.4844 E. 1,384,992.2602

VERTICAL: NAD 27
 HOWARD COUNTY CONC. MON. 2546004
 ELEVATION 131.816

*SEE VICINITY MAP FOR LOCATIONS.

VICINITY MAP
 SCALE: 1" = 2000'

21.0 STANDARD AND SPECIFICATIONS FOR TOPSOIL

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

Purpose
 To provide a suitable 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. II. For the purpose of these Standards and Specifications, areas having slopes steeper than 2:1 require special consideration and design for adequate stabilization. Areas having slopes steeper than 2:1 shall have the appropriate stabilization shown on the plans.

Construction and Material Specifications

- Topsoil salvaged from the existing site may be used provided that it meets the standards 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 Experiment Station.
- Topsoil Specifications - Soil to be used as topsoil must meet the following:
 - Topsoil shall be a loam, sandy loam, clay loam, silt loam, sandy clay loam, loamy sand. Other soils may be used if recommended by an agronomist or soil scientist and approved by the appropriate approval authority. Regardless, topsoil shall not be a mixture of contrasting textured subsoils and shall contain less than 5% by volume of cinders, stones, sticks, 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, quack grass, Johnson grass, nutgrass, poison ivy, bitula, 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.

Notes:

- 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 diversion, 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, about 4" - 8" higher in elevation.
 - Topsoil shall be uniformly distributed in a 4" - 8" 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 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. C-21-2.
- Alternative for Permanent Seeding - Instead of applying the full amounts of lime and commercial fertilizer, composted sludge or amendments may be applied as specified below:
 - Composted Sludge Material for use as a soil conditioner for sites having disturbed areas under 5 acres shall be tested to prescribed amendments and for sites having disturbed areas under 5 acres shall conform to the following requirements:
 - Composted sludge shall be applied by, or originate from, a person or persons that are permitted (at the time of acquisition of the compost) by the Maryland Department of the Environment under COMAR 26.04.06.
 - Composted sludge shall contain at least 1 percent nitrogen, 1.5 percent phosphorus, and 0.2 percent potassium and have a pH of 6.0 or higher. 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 lbs./1,000 square feet, and 1/3 the normal lime application rate.

Construction and Material Specifications

ANCHOR POSTS SHOULD BE MIN. 2" STEEL 1/2" DIAMETER OR 2"x2" TIMBER, 8' IN LENGTH

HIGHLY VISIBLE FLAGGING USE 2"x4" LUMBER FOR CROSS BRACING

ANCHOR POSTS MUST BE INSTALLED TO A DEPTH OF NO LESS THAN 1/2 OF THE FULL HEIGHT OF THE POST.

USE #6 WIRE 1/2" TO SECURE FENCE BOTTOM

NOTES:

- FOREST PROTECTION DEVICES ONLY.
- RETENTION AREA WILL BE SET AS PART OF THE REVIEW PROCESS.
- BOUNDARIES OF RETENTION AREA SHOULD BE STAKED AND FLAGGED PRIOR TO INSTALLING DEVICES.
- AVOID ROOT DAMAGE WHEN PLACING ANCHOR POSTS.
- POSTS SHOULD BE PERMANENTLY MAINTAINED DURING CONSTRUCTION.
- PROTECTIVE SIGNAGE IS ALSO REQUIRED.

TEMPORARY TREE PROTECTION FENCE

NOT TO SCALE

SEQUENCE OF CONSTRUCTION

- NOTIFY SEDIMENT CONTROL DIVISION 48 HOURS PRIOR TO START OF CONSTRUCTION**
- DAY 1 1.) OBTAIN GRADING PERMIT.
- DAY 2-8 2.) INSTALL STABILIZED CONSTRUCTION ENTRANCES, CLEAR AND GRUB AS NEEDED TO INSTALL SEDIMENT CONTROL DEVICES AND INSTALL SEDIMENT CONTROL DEVICES AND TREE PROTECTION FENCE.
- DAY 9-30 3.) CLEAR & GRUB REMAINING AREAS, GRADE SITE, CONSTRUCT ANY UTILITIES AND STABILIZE DISTURBED AREAS ACCORDING TO PERMANENT SEEDING NOTES.
- DAY 31-34 4.) UPON APPROVAL OF THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR, REMOVE ALL SEDIMENT CONTROL DEVICES AND STABILIZE ANY DISTURBED AREAS IN ACCORDANCE WITH PERMANENT SEEDING NOTES.

BY THE DEVELOPER:

I, Jama R. Murphy, DATE 4/9/98

DEVELOPER

BY THE ENGINEER:

I, Donald Mason, DATE 4/10/98

ENGINEER

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

Carol Semmonal DATE 7/15/98

NATURAL RESOURCES CONSERVATION SERVICE

REVIEWED FOR HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

John R. Robinson DATE 4/15/98

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

APPROVED HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

William M. Dancik DATE 4-22-98

CHIEF, BUREAU OF HIGHWAYS

William M. Dancik DATE 4/20/98

CHIEF, DEVELOPMENT ENGINEERING DIVISION

William M. Dancik DATE 5/1/98

CHIEF, DIVISION OF LAND DEVELOPMENT

GENERAL NOTES

- ALL CONSTRUCTION SHALL BE IN CONFORMANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY, PLUS MSHA STANDARDS AND SPECIFICATIONS IF APPLICABLE.
- THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS - CONSTRUCTION INSPECTION DIVISION AT 410-311-1800 AT LEAST FIVE WORKING DAYS PRIOR TO THE START OF ANY WORK.
- THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO THE START OF ANY EXCAVATION.
- PROJECT BACKGROUND:
 LOCATION: TAX MAP 38, BLOCKS 7 & 8, PARCELS 90, 100 & 408
 ZONING: RSA-8 & R-12
 TOTAL TRACT AREA: 2.78 AC.
 NUMBER OF PROPOSED LOTS: 10 SFD & 1 OPEN SPACE
 DPZ REFERENCE FILE NUMBERS: S-94-40, F-92-111, P-96-11, WP-98-51
 S-97-16, S-97-149, WP-98-42
- TRAFFIC CONTROL DEVICES, MARKINGS AND SIGNING SHALL BE IN ACCORDANCE WITH THE MOST CURRENT EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), ALL STREET AND REGULATORY SIGNS SHALL BE IN PLACE PRIOR TO THE PLACEMENT OF ANY ASPHALT.
- TOPOGRAPHY IS TAKEN FROM FIELD-RUN SURVEY PERFORMED BY TSA GROUP, INC. DATED SEPTEMBER, 1997, ALONG WITH CONTRACT DRAWINGS, CONTOUR INTERVAL IS TWO(2) FEET.
- HORIZONTAL DATUMS FOR THIS PROJECT IS NAD 83 AS PROJECTED FROM HOWARD COUNTY GEODETIC CONTROL STATIONS NO.3805 & NO.3806. VERTICAL DATUM FOR THIS PROJECT IS NAD 27 PROVIDED BY CONTROL STATION NO.2546004.
- WATER AND SEWER SYSTEMS FOR THIS DEVELOPMENT SHALL BE PUBLIC. DRAINAGE AREA IS PATAPSCO. CONTRACT NOS.14-3538-D & 14-1200.
- A FEE-IN-LIEU OF STORMWATER MANAGEMENT QUANTITATIVE CONTROL WAS PAID FOR LOTS 65 THRU 67. STORMWATER MANAGEMENT QUANTITATIVE CONTROL WAS PROVIDED FOR THE REMAINING LOTS OF THE DUBIN SUBDIVISION WAS PROVIDED WITHIN THE STORMWATER MANAGEMENT FACILITY CONSTRUCTED UNDER F-97-16.
- NO FLOODPLAIN EXIST ON THIS SITE.
- FOREST STAND DELINEATION REPORT PREPARED BY ECO-SCIENCE PROFESSIONALS, INC. DATED SEPTEMBER 8, 1997. FOREST CONSERVATION PLAN PREPARED BY ECO-SCIENCE PROFESSIONALS, INC. DATED SEPTEMBER 8, 1997. 0.5 ACRES OF RETENTION PROVIDED ON-SITE (LOT 69). FOREST CONSERVATION FOR RESUBDIVIDED PORTION OF SITE PROVIDED UNDER F-97-16.
- TRAFFIC STUDY PREPARED BY LEE CUNNINGHAM & ASSOCIATES, INC. DATED NOVEMBER, 1997.
- EXISTING UTILITIES WERE LOCATED BY RECORD DRAWINGS AND FIELD SURVEY BY TSA GROUP, INC.
- THE EXISTING WATER AND SEWER LINES REFLECT INFORMATION OBTAINED FROM AS-BUILT DRAWINGS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATIONS AND ELEVATIONS OF THE EXISTING LINES.
- WETLAND DELINEATION REFLECTIVE OF ARMY CORPS OF ENGINEERS JURISDICTIONAL DETERMINATION DATED JANUARY 22, 1996.
- A NOISE STUDY IS NOT REQUIRED FOR THIS DEVELOPMENT.
- STORMWATER MANAGEMENT QUANTITATIVE CONTROL FOR LOTS 65 THRU 67 SHALL BE PROVIDED BY DRY WELLS ON THOSE RESPECTIVE LOTS. THE SIZE AND LOCATION OF THE DRY WELLS ALONG WITH NECESSARY DETAILS SHALL BE SHOWN ON THE SITE DEVELOPMENT PLAN.
- VP-48-42 APPROVED ON JANUARY 22, 1998. THE PLANNING DIRECTOR APPROVED THIS PROPOSED DEVELOPMENT PLAN WHICH REQUIRES PRELIMINARY PLANNING AND ZONING REVIEW. THE PLANNING DIRECTOR HAS REVIEWED THE PROPOSED DEVELOPMENT PLAN WITHIN THE REQUIRED 60 DAY PERIOD OF REVIEW AND HAS RECOMMENDED THAT THE PROPOSED DEVELOPMENT PLAN BE APPROVED AS SHOWN ON THESE PLANS. THE PLANNING DIRECTOR HAS REVIEWED THE PROPOSED DEVELOPMENT PLAN WITHIN THE REQUIRED 60 DAY PERIOD OF REVIEW AND HAS RECOMMENDED THAT THE PROPOSED DEVELOPMENT PLAN BE APPROVED AS SHOWN ON THESE PLANS.

SEDIMENT CONTROL NOTES

- A MINIMUM OF 48 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF INSPECTIONS AND PERMITS SEGMENT CONTROL DIVISION PRIOR TO THE START OF ANY CONSTRUCTION.
- ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, AND REVISIONS THERETO.
- FOLLOWING INITIAL SOIL DISTURBANCE OR RESTORATION, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN 7 CALENDAR DAYS FOR ALL FOREWATER 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 THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR PERMANENT SEEDINGS (SEC. 51) SDO (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 PERMITS FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
- SITE ANALYSIS:
 TOTAL AREA OF SITE: 2.77 ACRES
 TOTAL AREA DISTURBED: 1.19 ACRES
 AREA TO BE ROOFED OR PAVED: 0.00 ACRES
 AREA TO BE VEGETATIVELY STABILIZED: 2.88 ACRES
 TOTAL CUT: 2.88 CU. YDS.
 TOTAL FILL: 2.88 CU. YDS.
 OFFSITE BORROW: N/A
- ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.
- ADDITIONAL SEDIMENT CONTROLS MUST BE PROVIDED, IF DEEMED NECESSARY BY THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
- ON ALL SITES WITH DISTURBED AREAS IN EXCESS OF 2 ACRES, APPROVAL OF THE INSPECTION AGENCY SHALL BE REQUESTED UPON COMPLETION OF INSTALLATION 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 ARE LIMITED TO THREE PIPE LENGTHS OR THAT WHICH CAN BE BACK FILLED AND STABILIZED WITHIN ONE WORKING DAY, WHICHEVER IS SHORTER.

TEMPORARY SEEDBED PREPARATION

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, DISING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING, IF NOT PREVIOUSLY LOOSENED.

SOIL AMENDMENTS: APPLY 600 LBS PER ACRE 10-10-10 FERTILIZER (14 LBS/1000 SQ FT).

SEEDING: FOR PERIOD MARCH 1 THROUGH APRIL 30 AND FROM AUGUST 15 THROUGH NOVEMBER 15, SEED WITH 2-1/2 BUSHELS PER ACRE OF ANNUAL RYE (3.2 LBS/1000 SQ FT). FOR THE PERIOD MAY 1 THROUGH AUGUST 31, SEED WITH 3 LBS PER ACRE OF KEEPING LOVEGRASS (0.7 LBS/1000 SQ FT). FOR THE PERIOD NOVEMBER 16 THROUGH FEBRUARY 28, PROTECT SITE BY APPLYING 2 TONS PER ACRE OF WELLS ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING, OR USE SOIL.

MULCHING: APPLY 1-1/2 TO 2 TONS PER ACRE (70 TO 90 LBS/1000 SQ FT) OF UNROTTED SMALL GRASS 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 3 FT. OR HIGHER, USE 348 GALLONS PER ACRE (8 GAL/1000 SQ FT) FOR ANCHORING.

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

PERMANENT SEEDBED PREPARATION

SEEDBED PREPARATION: LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING, IF NOT PREVIOUSLY LOOSENED.

SOIL AMENDMENTS: IN LIEU OF SOIL TEST RECOMMENDATIONS, USE ON OF THE FOLLOWING SCHEDULES:

- PREFERRED - APPLY 2 TONS PER ACRE 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 DISC 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 DISC INTO UPPER THREE INCHES OF SOIL.

SEEDING: FOR PERIODS MARCH 1 THROUGH APRIL 30 AND AUGUST 1 THROUGH OCTOBER 15, SEED WITH 60 LBS PER ACRE (1.4 LBS/1000 SQ FT) OF KENTUCKY 31 TALL FESCUE PER ACRE AND 2 LBS PER ACRE (0.5 LBS/1000 SQ FT) OF WEEPING LOVEGRASS. DURING THE PERIOD OF OCTOBER 16 THROUGH FEBRUARY 28, PROTECT SITE BY: OPTION (1) 2 TONS PER ACRE OF WELLS ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING. OPTION (2) USE SOIL. OPTION (3) SEED WITH 60 LBS PER ACRE OF KENTUCKY 31 TALL FESCUE AND MULCH WITH 2 TONS PER ACRE OF WELLS ANCHORED STRAW.

MULCHING: APPLY 1-1/2 TO 2 TONS PER ACRE (70 TO 90 LBS/1000 SQ FT) OF UNROTTED SMALL GRASS 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 3 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.

NO.	DATE	REVISION

TSA GROUP, INC.
 planning • architecture • engineering • surveying
 8480 Baltimore National Pike • Ellicott City, Maryland 21043 • 410-465-6105

OWNER/DEVELOPER: DUBIN PROPERTY
 SECTION 2
 A SUBDIVISION OF PARCEL 90 (TAX MAP 38) & A RESUBDIVISION OF LOTS 47-52 OF DUBIN PROPERTY (PLATS 12752-12755)

LOCATION: TAX MAP 38 - BLOCKS 7 & 8
 PARCELS 90, 100 & 408
 1st ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

TITLE: GRADING/SEDIMENT & EROSION CONTROL PLAN AND NOTES
 S-94-40, F-92-111, P-96-11, WP-98-51, F-97-16, SDP-97-149, WP-98-42

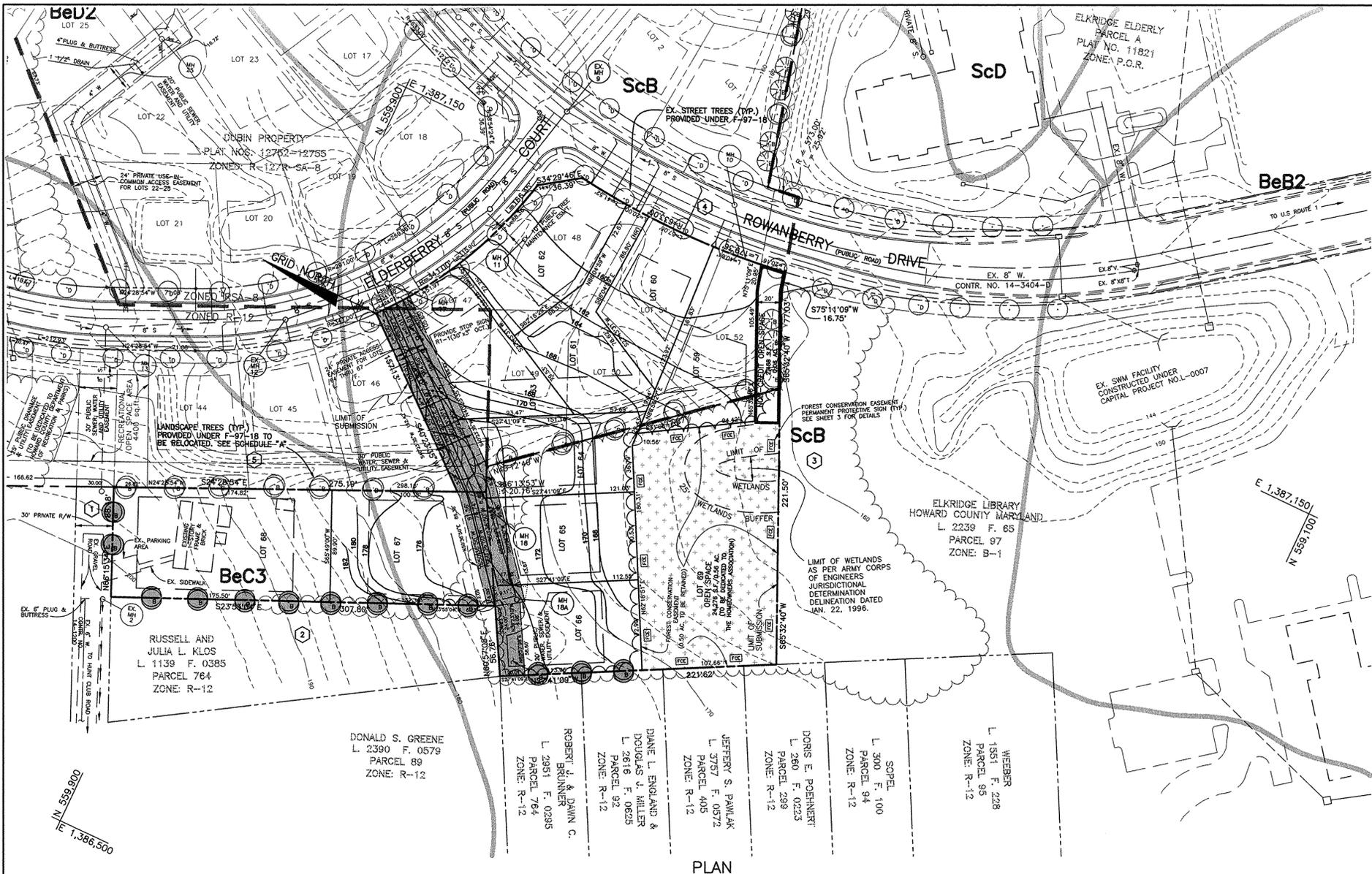
DATE: FEBRUARY, 1998
 APRIL 14, 1998

PROJECT NO: 1061

SCALE: AS SHOWN

DESIGN: GWF **DRAFT:** MCR

DRAWING: 1 OF 3



SOILS LEGEND		
MAP SYMBOL	SOIL TYPE	MAPPING UNIT
Bc3	C	BELTSVILLE SILT LOAM - 5 TO 10 PERCENT SLOPES - SEVERELY ERODED
ScB	C/D	SANDY AND CLAYEY LOAM - GENTLY SLOPING

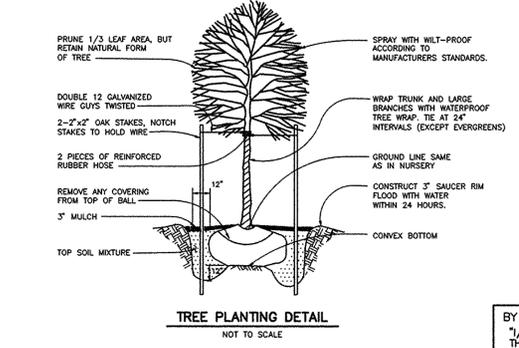
SCHEDULE A PERIMETER LANDSCAPE EDGE						
CATEGORY	ADJACENT TO ROADWAY		ADJACENT TO PERIMETER PROPERTIES		ADJACENT TO PERIMETER PROPERTIES	
	NO	YES	NO	YES	NO	YES
PERIMETER NO. / LANDSCAPE TYPE	① A	② A	③ A	④ A	⑤ A	⑥ A
LINEAR FEET OF ROADWAY (FRONTAGE/PERIMETER)	88	567	316	281	432	
CREDIT FOR EXISTING VEGETATION: (NO OR YES W/LINEAR FEET) (DESCRIBE BELOW IF NEEDED)	NO	YES 106	SEE NOTE #1	SEE NOTE #2	SEE NOTE #3	SEE NOTE #3
CREDIT FOR WALL, FENCE OR BERM: (NO OR YES W/LINEAR FEET) (DESCRIBE BELOW IF NEEDED)	NO	NO	NO	NO	NO	NO
NUMBER OF PLANTS REQUIRED: SHADE TREES EVERGREEN TREES OTHER TREES (2:1 SUBSTITUTE)	2	8	2	-	-	-
NUMBER OF PLANTS PROVIDED: SHADE TREES EVERGREEN TREES OTHER TREES (2:1 SUBSTITUTE)	2	11	3	-	-	-

GENERAL NOTES:

- TREES MUST BE A MINIMUM OF FOUR(4) FEET FROM THE CURB OR SIDEWALK AND MUST BE A MINIMUM OF FIVE(5) FEET FROM ANY STORM DRAIN.
- A MINIMUM DISTANCE OF TWENTY(20) FEET MUST BE MAINTAINED BETWEEN ANY TREES LOCATED ALONG THE CURB LINE AND ANY STREET LIGHTS.
- PERIMETER LANDSCAPING SHALL BE INSTALLED BY THE BUILDER AS INDICATED IN THE PLANTING LIST AND SHALL BE SHOWN ON A FUTURE SITE DEVELOPMENT PLAN FOR THIS PROJECT.
- THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND LANDSCAPE MANUAL.
- FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING HAS BEEN POSTED AS PART OF THE DEPT. OF PUBLIC WORKS DEVELOPERS AGREEMENT IN THE AMOUNT OF \$1,000.00.
- SEE PLANTING LIST, THIS SHEET.

- NOTES:**
- 195' CREDIT PROVIDED BY EXISTING VEGETATION LOCATED ON OPEN SPACE LOT 69.
 - PERIMETER ALONG THE ROADWAY TO BE LANDSCAPED WITH STREET TREES PROVIDED UNDER F-97-18.
 - PERIMETER LANDSCAPING PROVIDED UNDER F-97-18 TO BE RELOCATED TO PERIMETER EDGE ① & ② (13 TREES).

PLANTING LIST			
SYMBOL	QUANTITY	NAME	REMARKS
⊙	14	ACER SACCHARINUM (SUGAR MAPLE) TO BE INSTALLED BY BUILDER	2 1/2" MIN. CAL. B & B FULL HEAD
⊙	9	ACER REBRIUM (RED MAPLE) STREET TREES INSTALLED BY DEVELOPER UNDER F-97-18	2 1/2" MIN. CAL. B & B FULL HEAD
⊙	2	PRINUS STROBUS (EASTERN WHITE PINE) TO BE INSTALLED BY BUILDER	5 - 6" UNSHED



BY THE DEVELOPER:
 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.

James R. McKey Jr. 4/1/98
 DEVELOPER DATE

BY THE ENGINEER:
 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 HOWARD SOIL CONSERVATION DISTRICT.

Clough Simmons 4/15/98
 ENGINEER DATE

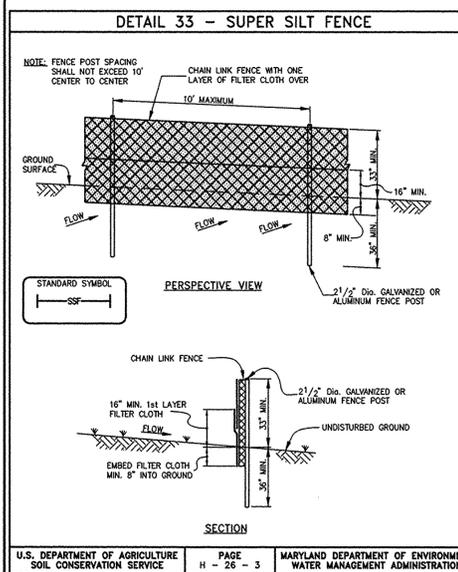
THIS DEVELOPMENT PLAN IS APPROVED FOR EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

John R. Robertson 4/15/98
 REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT MEETS TECHNICAL REQUIREMENTS DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
Arthur M. Danche 4-22-98
 CHIEF, BUREAU OF HIGHWAYS DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
Clough Simmons 4/20/98
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

C. Handley 5/1/98
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE



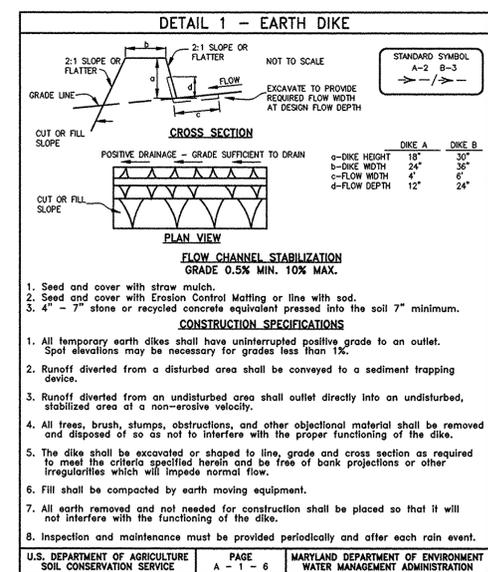
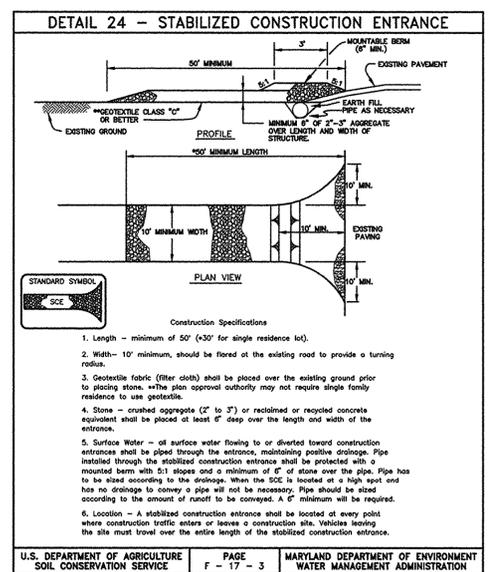
CONSTRUCTION SPECIFICATIONS

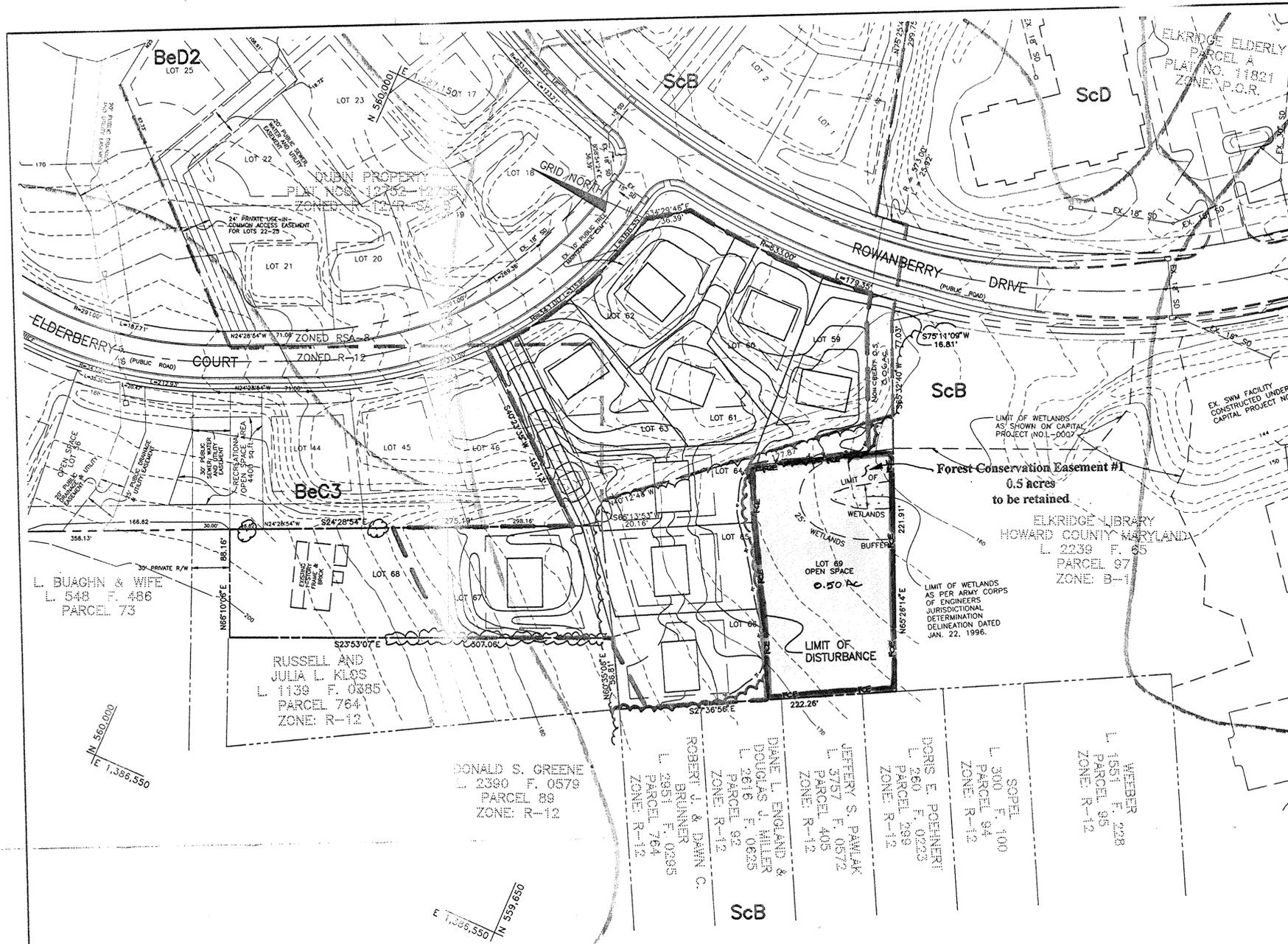
- Fencing shall be 42" in height and constructed in accordance with the latest Maryland State Highway Details for Chain Link Fencing. The specification for a 6" fence shall be used, substituting 42" fabric and 6" length posts.
- Chain link fence shall be fastened securely to the fence posts with wire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

Tensile Strength	50 lbs/in. (min.)	Test: MSMT 509
Tensile Modulus	20 lbs/in. (min.)	Test: MSMT 509
Flow Rate	0.3 gal/H / minute (max.)	Test: MSMT 322
Filtering Efficiency	75% (min.)	Test: MSMT 322

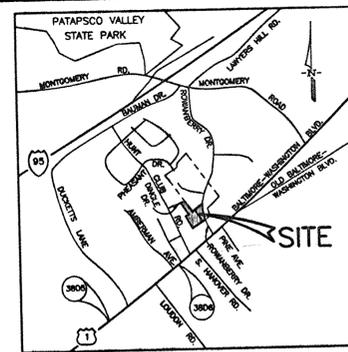
SUPER SILT FENCE DESIGN CRITERIA

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





SOILS LEGEND		
MAP SYMBOL	SOIL TYPE	MAPPING UNIT
BmC3	C	BELTSVILLE SILT LOAM - 5 TO 10 PERCENT SLOPES - SEVERELY ERODED
ScB	C/D	SANDY AND CLAYEY LAND - GENTLY SLOPING



SITE DATA TABULATION

GENERAL SITE DATA	
1.) ZONED:	R-12
2.) TOTAL AREA OF SITE:	1.65 AC.
3.) TOTAL AREA OF FLOODPLAIN:	N/A
4.) TOTAL AREA OF 25% OR GREATER SLOPES:	N/A
5.) NET AREA OF SITE:	1.65 AC.

- NOTES
- FOREST CONSERVATION FOR DUBIN PROPERTY PROVIDED UNDER F-97-18.
 - THERE IS NO 100 YEAR FLOODPLAIN OR SLOPES GREATER THAN 25% ON-SITE.

FCCP NOTES

- Any Forest Conservation Easement (FCE) area shown hereon is subject to protective covenants which may be found in the Land Records of Howard County which restrict the disturbance and use of these areas.
- Forested areas occurring outside of the FCE shall not be considered part of the FCE and shall not be subject to protective land covenants.
- Limits of disturbance shall be restricted to areas outside the limit of temporary fencing or the FCE boundary, whichever is greater.
- There shall be no clearing, grading, construction or disturbance of vegetation in the Forest Conservation Easement, except as permitted by Howard County DPZ.
- No stockpiles, parking areas, equipment cleaning areas, etc. shall occur within areas designated as Forest Conservation Easements.
- Temporary fencing shall be used to protect forest resources during construction. The fencing shall be placed along all FCE boundaries which occur within 15 feet of the proposed limits of disturbance.
- Permanent signage shall be placed 50-100' apart along the boundaries of all areas included in Forest Conservation Easements.

LEGEND

SOILS CLASSIFICATION	BeC3
EXISTING CONTOURS	--- 999 ---
PROPOSED CONTOURS	--- 999 ---
LIMIT OF WETLANDS	--- 999 ---
EXISTING WOODS LINE	~~~~~
PROPOSED WOODS LINE	~~~~~
EXISTING STRUCTURE	[]
PROPOSED STRUCTURE	[]
LIMIT OF DISTURBANCE	--- 999 ---

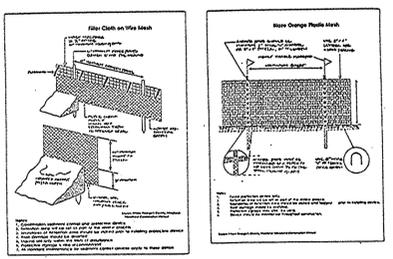
FOREST DATA	
	ACRES
Gross Area:	1.6
Lot for Existing House:	0.4
Net Tract Area (NTA):	1.2
Existing Forest (NTA):	1.0
Conservation Threshold:	0.2
Break-even Point:	0.4
Forest to be Cleared (NTA):	0.5
Forest to be Retained (NTA):	0.5
Forest to be retained in FCE:	0.5

PLAN
SCALE: 1" = 50'

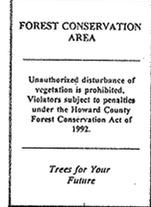
FCCP Legend

- Existing Forest
- Forest to be Retained
- Limits of Forest Conservation Easement
- Temporary Protective Fencing/LOD (see FCCP note 6)
- FCE Permanent Protective Signage

Temporary Protective Fencing



Permanent Protective Signage



APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

Carroll M. Cassel
CHIEF, BUREAU OF HIGHWAYS
DATE: 4-22-98

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

John P. Canoles
CHIEF, DEVELOPMENT ENGINEERING DIVISION
DATE: 4/28/98

John P. Canoles
CHIEF, DIVISION OF LAND DEVELOPMENT
DATE: 5/1/98

NO.	DATE	REVISION

TSA GROUP, INC.
planning • architecture • engineering • surveying
8480 Baltimore National Pike • Ellicott City, Maryland 21043 • 410-680-8108



OWNER/DEVELOPER: SDC GROUP, INC. P.O. BOX 417 ELlicOTT CITY, MD 21041 PHONE: 410-526-9428	PROJECT: DUBIN PROPERTY SECTION 2 A SUBDIVISION OF PARCELS 80 (TAX MAP 30) & A RESUBDIVISION OF LOTS 47-52 OF DUBIN PROPERTY (PLATS 12722-12750)
LOCATION: TAX MAP 38 - BLOCKS 7 & 8 PARCELS 100, 408 & 90 1st ELECTION DISTRICT HOWARD COUNTY, MARYLAND	TITLE: FOREST CONSERVATION PLAN S-94-40, F-92-111, P-98-11, WP-98-51, F-97-18, SDP-97-1
DATE: APRIL 14, 1998	PROJECT NO. 1081
DESIGN: GWF	DRAFT: MCR
SCALE: AS SHOWN	DRAWING 3 OF 3