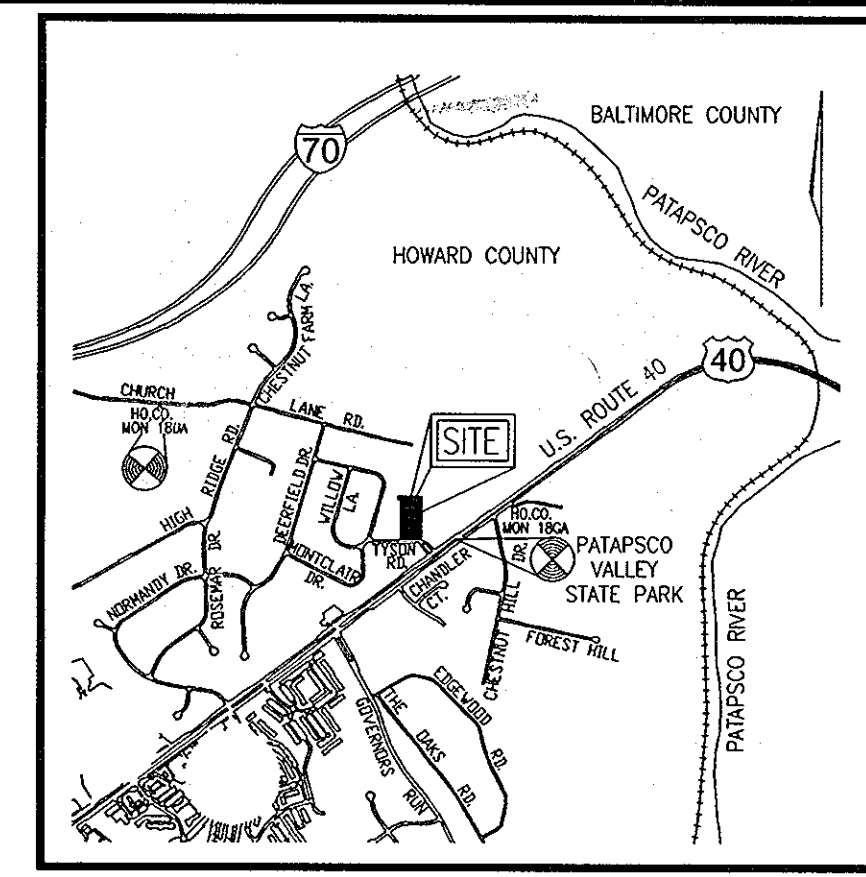


GENERAL NOTES

- THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK.
- THE CONTRACTOR IS TO NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST FIVE DAYS BEFORE STARTING WORK ON THESE DRAWINGS:
 - MISS UTILITY 1-800-257-7777
 - BELL ATLANTIC TELEPHONE CO. 725-9976
 - HOWARD COUNTY BUREAU OF UTILITIES 313-2366
 - VERIZON CABLE LOCATION DIVISION 393-3553
 - B.G.&E. CO. CONTRACTOR SERVICES 650-4620
 - B.G.&E. CO. UNDERGROUND DAMAGE CONTROL 787-4620
 - STATE HIGHWAY ADMINISTRATION 531-5533
- THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/BUREAU OF ENGINEERING/CONSTRUCTION INSPECTION DIVISION AT (410) 513-1880 AT LEAST FIVE (5) WORKING DAYS PRIOR TO START OF WORK.
- ANY DAMAGE TO PUBLIC RIGHTS-OF-WAY, PAVING, OR EXISTING UTILITIES WILL BE CORRECTED AT THE CONTRACTOR'S EXPENSE.
- EXISTING UTILITIES LOCATED FROM ROAD CONSTRUCTION PLANS AND AVAILABLE RECORD DRAWINGS, APPROXIMATE LOCATION OF EXISTING UTILITIES ARE SHOWN FOR THE CONTRACTOR'S INFORMATION. CONTRACTOR SHALL LOCATE EXISTING UTILITIES WELL IN ADVANCE OF CONSTRUCTION ACTIVITIES AND TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND TO MAINTAIN UNINTERRUPTED SERVICE.
- TRAFFIC CONTROL DEVICES, MARKINGS AND SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). ALL STREET AND REGULATORY SIGNS SHALL BE IN PLACE PRIOR TO THE PLACEMENT OF ANY ASPHALT.
- IN ACCORDANCE WITH SECTION 128 OF THE HOWARD COUNTY ZONING REGULATIONS, BAY WINDOWS, CHIMNEYS, OR EXTERIOR STAIRWAYS NOT MORE THAN 16 FEET IN WIDTH MAY PROJECT NOT MORE THAN 4 FEET INTO ANY SETBACKS. PORCHES OR DECKS, OPEN OR ENCLOSED MAY PROJECT NOT MORE THAN 10 FEET INTO THE FRONT OR REAR YARD SETBACK.
- DRIVEWAYS SHALL BE PROVIDED PRIOR TO RESIDENTIAL OCCUPANCY TO INSURE SAFE ACCESS FOR FIRE AND EMERGENCY VEHICLES PER THE FOLLOWING MINIMUM REQUIREMENTS:
 - A) WIDTH - 12 FEET (16 FEET IF SERVING MORE THAN ONE RESIDENCE).
 - B) SURFACE - 6 INCHES OF COMPACTED CRUSHER RUN BASE WITH TAR AND CHIP COATING
 - C) GEOMETRY - MAXIMUM 14% GRADE, MAXIMUM 10% GRADE CHANGE, AND MINIMUM 45 FOOT TURNING RADIUS
 - D) STRUCTURES (CULVERTS/BRIDGES) - MUST SUPPORT 25 GROSS TON LOADING (H25 LOADING)
 - E) DRAINAGE ELEMENTS - CAPABLE OF SAFELY PASSING 100 YEAR FLOOD EVENTS WITH NO MORE THAN 1 FOOT DEPTH OVER DRIVEWAY SURFACE
 - F) STRUCTURE CLEARANCES - MINIMUM 12 FEET
 - G) MAINTENANCE - SUFFICIENT TO INSURE ALL WEATHER USE
- SUBJECT PROPERTY ZONED R-20 PER 07/28/06 COMPREHENSIVE ZONING PLAN.
- COORDINATES BASED ON NAD 83, MARYLAND COORDINATE SYSTEM AS PROJECTED BY HOWARD COUNTY GEODETIC CONTROL STATIONS NO. 1801 AND 24C2.
- THIS PLAN IS BASED ON A RUN BOUNDARY SURVEY PERFORMED BY FREDERICK WARD ASSOCIATES, INC. IN APRIL 2003.
- DECLARATION OF MAINTENANCE OBLIGATION FOR PRIVATE USE-IN-COMMON ACCESS EASEMENT SERVING LOTS 2, 3, AND 4 TO BE RECORDED AMONG THE LAND RECORDS OF HOWARD COUNTY, MARYLAND SIMULTANEOUSLY WITH THIS PLAN.
- FOR FLAG OR PIPELINE REFUSE COLLECTION, SNOW REMOVAL, AND ROAD MAINTENANCE ARE PROVIDED TO THE JUNCTION OF THE FLAG OR PIPELINE AND ROAD RIGHT-OF-WAY LINE AND NOT TO THE PIPELINE LOT DRIVEWAY.
- LANDSCAPING FOR LOTS 1, 2, AND 4 IS PROVIDED IN ACCORDANCE WITH A CERTIFIED LANDSCAPE PLAN FILE WITH THE PLAT IN ACCORDANCE WITH SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL. FINANCIAL SURETY FOR THE REQUIRED 9 SHADE TREES IN THE AMOUNT OF \$2700 WILL BE PAID WITH THE DEVELOPER'S AGREEMENT.
- LOT 3 IS EXEMPT FROM THE LANDSCAPE REQUIREMENTS PER SECTION 16.124 OF THE HOWARD COUNTY CODE AND LANDSCAPE MANUAL BECAUSE THE LOT CONTAINS AN EXISTING DWELLING.
- THE FOREST CONSERVATION OBLIGATION FOR THIS RESUBDIVISION HAS BEEN ADDRESSED BY (1) RETENTION OF 0.35 AC OF EXISTING FOREST WITHIN A FOREST CONSERVATION EASEMENT (15246 SF X .20 = \$ 3049.20), (2) ON-SITE REFORESTATION OF 0.03 AC WITHIN THE FOREST CONSERVATION EASEMENT (1306.80 SF X .50 = \$ 653.40), AND (3) PAYMENT OF A FEE-IN-LIEU FOR THE REMAINING 0.04 AC OF OBLIGATION (1,742.40 SF X 0.50 = \$ 871.20). FEE-IN-LIEU SHALL BE PAID IN THE TOTAL AMOUNT OF \$4,573.40 TO THE FOREST CONSERVATION FUND UNDER F-03-197.
- THE FOREST CONSERVATION EASEMENT SHOWN HEREON HAS BEEN ESTABLISHED TO FULFILL THE REQUIREMENTS OF SECTION 16.120 OF THE HOWARD COUNTY CODE AND FOREST CONSERVATION ACT. NO CLEARING, GRADING, OR CONSTRUCTION IS PERMITTED WITHIN THE FOREST CONSERVATION EASEMENT UNLESS THE FOREST MANAGEMENT PRACTICES AS DEFINED IN THE DEED OF FOREST CONSERVATION EASEMENT ARE ALLOWED.
- DEVELOPER RESERVES UNTO ITSELF, ITS SUCCESSORS AND ASSIGNS, ALL EASEMENTS SHOWN ON THIS PLAN FOR WATER, SEWER, STORM DRAINAGE, OTHER PUBLIC UTILITIES AND FOREST CONSERVATION (DESIGNATED AS "FOREST CONSERVATION EASEMENT"), LOCATED IN, ON, OVER AND THROUGH LOTS/PARCELS, ANY CONVEYANCES OF OR INTERFERENCES WITH LOTS/PARCELS SHALL BE SUBJECT TO THE EASEMENTS HERIN RESERVED, WHETHER OR NOT EXPRESSLY STATED IN THE DEED(S) CONVEYING SAID LOTS/PARCELS. DEVELOPER SHALL EXECUTE AND DELIVER DEEDS FOR THE EASEMENTS HERIN RESERVED TO HOWARD COUNTY WITHIN 4 METES AND BOUNDS DESCRIPTION OF THE FOREST CONSERVATION EASEMENT. UPON COMPLETION OF THE PUBLIC UTILITIES AND THEIR ACCEPTANCE BY HOWARD COUNTY, AND IN THE CASE OF THE FOREST CONSERVATION EASEMENT, UPON COMPLETION OF THE DEVELOPER'S OBLIGATIONS UNDER THE FOREST CONSERVATION INSTALLATION AND MAINTENANCE AGREEMENT EXECUTED BY THE DEVELOPER AND THE COUNTY, AND THE RELEASE OF DEVELOPER'S SURETY POSTED WITH SAID AGREEMENT, THE COUNTY SHALL ACCEPT THE EASEMENTS AND RECORD THE DEED(S) OF EASEMENT IN THE LAND RECORDS OF HOWARD COUNTY.
- STORMWATER MANAGEMENT FACILITIES WILL BE REQUIRED ON LOTS 1 AND 2 IN ACCORDANCE WITH THE DESIGN MANUALS. EXEMPT, THE Q1 IS LESS THAN 2 CFS. REV AND WQ FOR EACH LOT PROVIDED BY DRY SWALE ON THE LOT. FINANCIAL SURETY FOR THE REQUIRED STORMWATER MANAGEMENT OBLIGATION OF DRY SWALES FOR LOT 1 & 2 WILL BE PAID WITH THE DEVELOPER'S AGREEMENT IN THE AMOUNT OF \$13,000. (6,500 PER LOT).
- THE EXISTING DWELLING ON LOT 3 TO REMAIN. NO NEW BUILDINGS, EXTENSIONS, OR ADDITIONS TO THE EXISTING DWELLING ARE TO BE CONSTRUCTED AT A DISTANCE LESS THAN THE ZONING REGULATIONS REQUIRE.
- WATER AND SEWER SERVICE TO LOTS 1 AND 2 WILL BE GRANTED UNDER THE PROVISIONS OF SECTION 18.122B OF THE HOWARD COUNTY CODE. PUBLIC WATER AND SEWER ALLOCATION WILL BE GRANTED AT THE TIME OF ISSUANCE OF BUILDING PERMIT. CAPACITY IS AVAILABLE AT THAT TIME. ACCESS TO WATER HAS BEEN PROVIDED UNDER CONTRACT 9-W. ACCESS TO SEWER HAS BEEN PROVIDED UNDER CONTRACT 20-W&S.
- THE AREAS SHOWN HEREON ARE MORE OR LESS.
- THE WETLANDS SHOWN HEREON ARE BASED ON DELINEATION BY ECO-SCIENCE PROFESSIONALS, INC. IN MAY 2003.
- NO 100 YEAR FLOODPLAINS EXIST ON SITE.
- OPEN SPACE CALCULATIONS:
 - OPEN SPACE PROVIDED: 1.9177 AC X 0.20 = 0.38 AC OR 16,553 SqFt
 - OPEN SPACE REQUIRED: 0.38 AC OR 16,759.42 SF CREDITED, 0.06 AC OR 2,687.57 NON-CREDITED.
- THE OPEN SPACE SHOWN HEREON IS DEDICATED TO A PROPERTY OWNERS ASSOCIATION FOR THE RESIDENTS OF THIS SUBDIVISION. ARTICLES OF INCORPORATION AND RESTRICTIONS HAVE BEEN ACCEPTED BY THE MARYLAND STATE DEPARTMENT OF ASSESSMENT AND TAXATION ON DECEMBER 12, 2006 AS FILING NO. 1000361994030686.
- NO GRADING, REMOVAL OF VEGETATIVE COVER OR TREES, OR PLACEMENT OF NEW STRUCTURES IS PERMITTED WITHIN THE LIMITS OF WETLANDS, STREAM(S), OR THEIR BUFFERS AND FOREST CONSERVATION EASEMENT AREAS.
- LOT 2 MUST USE THE PROVIDED PRIVATE ACCESS EASEMENT AS ITS SOLE MEANS OF VEHICULAR ACCESS.
- THIS PLAN IS SUBJECT TO THE AMENDED 5TH EDITION OF THE SUBDIVISION REGULATIONS.
- WP-04-25 APPROVED SEPTEMBER 26, 2003 TO WAIVE SECTION 16.121(C)(1) TO PERMIT THE MINIMUM REQUIRED OPEN SPACE LOT FRONTAGE OF 40 FEET ON AN ACCESSIBLE PUBLIC ROAD TO BE REDUCED TO 8 FEET FOR OPEN SPACE LOT 4. SUBJECT TO (1) THE SHARED ACCESS AND MAINTENANCE EASEMENT SHOWN ON THE WAIVER PETITION EXHIBIT/PLAN SHALL BE PROVIDED FOR PEDESTRIAN AND MAINTENANCE VEHICLE ACCESS TO OPEN SPACE LOT 4 AND SHALL BE INDICATED ON FINAL PLAT, F-03-197.
- ANY DAMAGE TO THE COUNTY'S RIGHT-OF-WAY SHALL BE CORRECTED AT THE DEVELOPER'S EXPENSE.
- FOR DRIVEWAY ENTRANCE DETAIL, REFER TO THE HOWARD COUNTY DESIGN MANUAL VOLUME IV, STANDARD DETAIL.

SITE DEVELOPMENT PLAN
TYSON HILLS
LOTS 1,2,3, AND OPEN SPACE LOT 4
A RESUBDIVISION OF LOT 2



SITE DATA

TOTAL PROJECT AREA: 1.9177 AC.
AREA OF PLAN SUBMISSION: 1.9177 AC.
LIMIT OF DISTURBED AREA: 0.77 AC.
PRESENT ZONING DESIGNATION: R-20 AS PER THE 07/28/06, COMPREHENSIVE ZONING PLAN.
PROPOSED USES FOR SITE AND STRUCTURE: RESIDENTIAL - SFD UNITS
OPEN SPACE ON SITE: 0.4484 AC.
OPEN SPACE % OF GROSS AREA: 23.28%
BUILDING COVERAGE OF SITE: 0.11 AC
BUILDING COVERAGE % OF GROSS AREA: 5.73%
DPZ REF: PLAT #15096, PLAT #19219
LOCATION: TAX MAP 18, GRID 14, PARCEL 148
2ND ELECTION DISTRICT
AREA OF 100-YEAR FLOODPLAIN DRAINAGE & UTILITY EASEMENT: 0.00 AC
AREA OF STEEP SLOPES OUTSIDE THE FLOODPLAIN: 0.00 AC
NET AREA OF PROJECT: 1.9177 AC
AREA OF PROPOSED BUILDABLE LOTS: 1.4713 AC
LOT 1: 16,161 SF (0.37 AC)
LOT 2: 16,107 SF (0.369 AC)
LOT 3: 31,823 SF (0.73 AC)
TOTAL: 64,091 SF (1.47 AC)
AREA OF OPEN SPACE PROVIDED: 1.9177 AC X 0.20 = 0.38 AC OR 16,553 SF.
AREA OF OPEN SPACE REQUIRED: 0.39 AC. OR 16,759.42 SF CREDITED, 0.06 AC. OR 2,648 SF NON-CREDITED.
AREA OF RECREATIONAL OPEN SPACE PROVIDED: N/A
AREA OF RECREATIONAL OPEN SPACE REQUIRED: N/A
AREA OF PROPOSED RIGHT-OF-WAY DEDICATION: 0.00 AC
NUMBER OF LOTS/PARCELS PROPOSED: 3 BUILDABLE LOTS & 1 OPEN SPACE LOT

COORDINATE TABLE

POINT	NORTH	EAST
501	N 591916.9869	E 1370094.8946
503	N 592277.8068	E 1369909.3712
504	N 592280.0711	E 1369861.9452
506	N 591928.5347	E 1369892.6952
507	N 591919.9504	E 1370072.4904
512	N 592330.2721	E 1369863.3293
513	N 592319.3419	E 1370114.1012

MINIMUM LOT SIZE CHART

LOT NO.	GROSS AREA	PIPE STEM	MINIMUM LOT SIZE
3	31,823	2,740	29,083
4	19,446	2,648	16,798

LANDSCAPE NOTES

THE OWNER, TENANT 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 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 HEREFITH LISTED AND APPROVED FOR THIS SITE SHALL BE OF THE PROPER HEIGHT REQUIREMENTS IN ACCORDANCE WITH THE HOWARD COUNTY LANDSCAPE MANUAL. IN ADDITION, NO SUBSTITUTION OR RELOCATION OF 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 CERTIFICATES.

DEVELOPER'S CERTIFICATE

I/WE CERTIFY THAT THE LANDSCAPING SHOWN ON THIS PLAN WILL BE DONE ACCORDING TO THE PLAN, SECTION 16.124 OF THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS AND THE LANDSCAPE MANUAL. I/WE FURTHER CERTIFY THAT UPON COMPLETION, A LETTER OF NOTICE, ACCOMPANIED BY AN EXECUTED ONE YEAR GUARANTEE OF PLANT MATERIALS, WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.

Stephen J. Tomoy 5/12/08
DEVELOPER DATE

ENGINEERS CERTIFICATE

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

Robert H. Vogel 5/12/08
SIGNATURE OF ENGINEER DATE
ROBERT H. VOGEL, PE 16193

DEVELOPER'S CERTIFICATE

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

Stephen J. Tomoy 5/12/08
SIGNATURE OF DEVELOPER DATE

OWNER
KEVIN & ELIZABETH GEIER
8204 TYSON ROAD
ELLCOTT CITY, MD 21043-3432

DEVELOPER
HAMILTON REED
8000 MAIN STREET
ELLCOTT CITY, MD 21043
410-461-8666

ADC MAP PAGE 12
ADC MAP PAGE 12
GRID G-5

VICINITY MAP
SCALE: 1"=200'

BENCHMARKS

NO.	NORTHING	EASTING	ELEVATION	DESCRIPTION
18DA	593334.356	1367562.293	483.221	CHURCH LANE (NEAR ROGERS AVE & TR-70)
18GA	591871.9340	1370380.4310	445.827	MEDIAN RT-40 BY #1875

CURVE DATA TABLE

CURVE NO.	△	RADIUS	LENGTH	TANGENT	CHORD BEARING	CHORD LENGTH
①	09°36'10"	135.00'	22.63'	11.34'	S82°27'55"E	22.60'

LEGEND

- 585 EXISTING 2 FT CONTOUR
- 580 EXISTING 10 FT CONTOUR
- 582 PROPOSED 2 FT CONTOUR
- 580 PROPOSED 10 FT CONTOUR
- SF-SF SILT FENCE
- LOD LIMIT OF DISTURBANCE
- SCE STABILIZED CONSTRUCTION ENTRANCE
- EROSION CONTROL MATTING
- EXISTING TREELINE
- EX. TREE TO REMAIN
- EX. TREE TO BE REMOVED
- PRIVATE ACCESS & UTILITY EASEMENT
- FOREST CONSERVATION EASEMENT REFORESTATION AREA = 0.03 ACRES
- FOREST CONSERVATION EASEMENT RETENTION AREA = 0.35 ACRES
- 25% OR GREATER SLOPES
- 15-24.9% SLOPES
- UTILITY OR ACCESS EASEMENT
- PROPOSED TREE (SHADE)

ADDRESS CHART

LOT #	STREET ADDRESS
1	8206 TYSONS ROAD
2	8204 TYSONS ROAD
3	8202 TYSONS ROAD

PERMIT INFORMATION CHART

PROJECT NAME	SECTION/AREA	LOT/PARCEL #
TYSON HILLS	-	1-4

PLAT REF.	BLOCK NO.	ZONE	TAX MAP	ELECT. DIST.	CENSUS TR.
19219	14	R-20	18	2ND	602600

WATER CODE: F02 SEWER CODE: 1451500

SHEET INDEX

DESCRIPTION	SHEET NO.
SITE DEVELOPMENT AND LANDSCAPE PLAN	1 OF 2
HOUSE TYPES AND DETAILS	2 OF 2

NO.	REVISION	DATE
2	REVISE HOUSE LOCATION LOT 2	3/20/11
1	REVISE HOUSE TYPE, GRADING AND ELIMINATE RETAINING WALL	11/20/10

SITE DEVELOPMENT PLAN
TYSON HILLS
SINGLE FAMILY DETACHED
LOTS 1,2,3, AND OPEN SPACE LOT 4
REF: PLAT#19219

TAX MAP 18 GRID 14
2ND ELECTION DISTRICT

PARCEL 148
HOWARD COUNTY, MARYLAND

ROBERT H. VOGEL ENGINEERING, INC.
ENGINEERS • SURVEYORS • PLANNERS
8407 MAIN STREET
ELLCOTT CITY, MD 21043
TEL: 410.461.7666
FAX: 410.461.8961

DESIGN BY: RHW/RJ
DRAWN BY: RJV
CHECKED BY: RHW
DATE: 10-11-2007
SCALE: 1"=30'
W.O. NO.: 2034025.00

1 SHEET OF 2

21.0 STANDARDS AND SPECIFICATIONS FOR TOPSOIL

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

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

CONDITIONS WHERE PRACTICE APPLIES
I. THIS PRACTICE IS LIMITED TO AREAS HAVING 2:1 OR FLATTER SLOPES WHERE:
A. THE TEXTURE OF THE EXPOSED SUBSOIL/PARENT MATERIAL IS NOT ADEQUATE TO PRODUCE VEGETATIVE GROWTH.
B. 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.
C. THE ORIGINAL SOIL TO BE VEGETATED CONTAINS MATERIAL TOXIC TO PLANT GROWTH.
D. 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 FOR ADEQUATE STABILIZATION. AREAS HAVING SLOPES STEEPER THAN 2:1 SHALL HAVE THE APPROPRIATE STABILIZATION SHOWN ON THE PLANS.

CONSTRUCTION AND MATERIAL SPECIFICATIONS
I. TOPSOIL SALVAGED FROM THE EXISTING SITE MAY BE USED PROVIDED THAT IT MEETS THE STANDARDS AS SET FORTH IN THESE SPECIFICATIONS. TYPICALLY, THE DEPTH OF TOPSOIL TO BE SALVAGED FOR A GIVEN SOIL TYPE CAN BE FOUND IN THE REPRESENTATIVE SOIL PROFILE SECTION IN THE SOIL SURVEY PUBLISHED BY USDA-SCS IN COOPERATION WITH MARYLAND AGRICULTURAL EXPERIMENTAL STATION.
II. TOPSOIL SPECIFICATIONS - SOIL TO BE USED AS TOPSOIL MUST MEET THE FOLLOWING:
I. TOPSOIL SHALL BE A LOAM, SANDY LOAM, CLAY LOAM, SILT LOAM, SANDY CLAY LOAM, LOAMY SAND. OTHER SOILS MAY BE USED IF RECOMMENDED BY AN AGRONOMIST OR A SOIL SCIENTIST AND APPROVED BY THE APPROPRIATE AUTHORITY. REGARDLESS, TOPSOIL SHALL NOT BE A MIXTURE OF CONTRASTING TEXTURED SUBSOILS AND SHALL CONTAIN LESS THAN 5% BY VOLUME OF CHINDERS, STONES, SLAG, COARSE FRAGMENTS, GRAVEL, STICKS, ROOTS, TRASH, OR OTHER MATERIALS LARGER THAN 1" AND 1/2" IN DIAMETER.

II. TOPSOIL MUST BE FREE OF PLANTS OR PLANT PARTS SUCH AS BERBERIS GRASS, QUACKGRASS, JOHNSONGRASS, NUTSEDGE, POISON IVY, THISTLE, OR OTHERS AS SPECIFIED.
III. WHERE THE SUBSOIL IS EITHER HIGHLY ACIDIC OR COMPOSED OF HEAVY CLAYS, GROUND LIMESTONE SHALL BE SPREAD AT THE RATE OF 4-8 TONS/ACRE (200-400 POUNDS PER 1,000 SQUARE FEET) PRIOR TO THE PLACEMENT OF TOPSOIL. LIME SHALL BE DISTRIBUTED UNIFORMLY OVER DESIGNATED AREAS AND WORKED INTO THE SOIL IN CONJUNCTION WITH TILLAGE OPERATIONS AS DESCRIBED IN THE FOLLOWING PROCEDURES.

IV. FOR SITES HAVING DISTURBED AREAS UNDER 5 ACRES:
I. PLACE TOPSOIL (IF REQUIRED) AND APPLY SOIL AMENDMENTS AS SPECIFIED IN 20.0 VEGETATIVE STABILIZATION - SECTION 1 - VEGETATIVE STABILIZATION METHODS AND MATERIALS.

PERMANENT SEEDING NOTES

APPLY TO GRADED OR CLEARED AREAS NOT SUBJECT TO IMMEDIATE FURTHER DISTURBANCE WHERE A PERMANENT LONG-LIVED VEGETATIVE COVER IS NEEDED.

SEEDING 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 ONE OF THE FOLLOWING SCHEDULES:
1) PREFERRED-APPLY 2 TONS PER ACRE DOLOMITIC LIMESTONE (92 LBS./100 SQ.FT.) AND 600 LBS PER ACRE 10-10-10 FERTILIZER (14 LBS./1000 SQ.FT.) BEFORE SEEDING. HARROW OR DISC INTO UPPER THREE INCHES OF SOIL AT THE TIME OF SEEDING. APPLY 400 LBS. PER ACRE 30-0-0 UREAFORM FERTILIZER (9 LBS./1000 SQ.FT.)
2) ACCEPTABLE-APPLY 2 TONS PER ACRE DOLOMITIC LIMESTONE (92 LBS./1000 SQ.FT.) AND APPLY 1000 LBS. PER ACRE 10-10-10 FERTILIZER (23 LBS./1000 SQ.FT.) BEFORE SEEDING. HARROW OR DISC INTO UPPER THREE INCHES OF SOIL.

SEEDING: FOR THE PERIODS MARCH 1 THRU APRIL 30, AND AUGUST 1 THRU OCTOBER 15, SEED WITH 60 LBS. PER ACRE (1.4 LBS./1000 SQ.FT.) OF KENTUCKY 31 TALL FESCUE. FOR THE PERIOD MAY 1 THRU JULY 31, SEED WITH 60 LBS. KENTUCKY 31 TALL FESCUE PER ACRE AND 2 LBS. PER ACRE (.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 WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING. OPTION (2) USE SOO. 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

SEEDING 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 PERIODS MARCH 1 THRU APRIL 30 AND FROM AUGUST 15 THRU NOVEMBER 15, SEED WITH 1 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 1 THRU FEBRUARY 28, PROTECT SITE BY APPLYING 2 TONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING, OR USE SOO.

MULCHING: APPLY 1 1/2 TO 2 TONS PER ACRE (70 TO 90 LBS./1000 SQ.FT.) OF UNROTTED SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 218 GALLONS PER ACRE (5 GAL./1000 SQ.FT.) OF EMULSIFIED ASPHALT ON FLAT AREAS. ON SLOPES 8 FEET OR HIGHER, USE 348 GALLONS PER ACRE (8 GAL./1000 SQ.FT.) FOR ANCHORING.

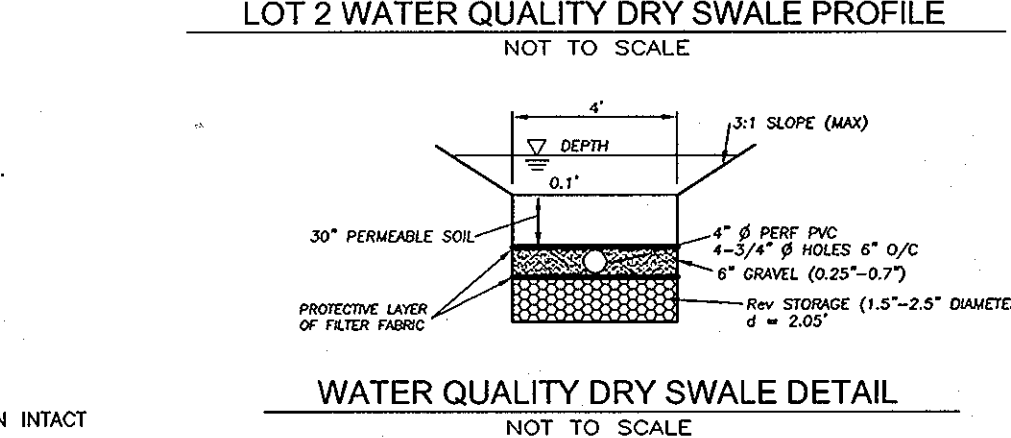
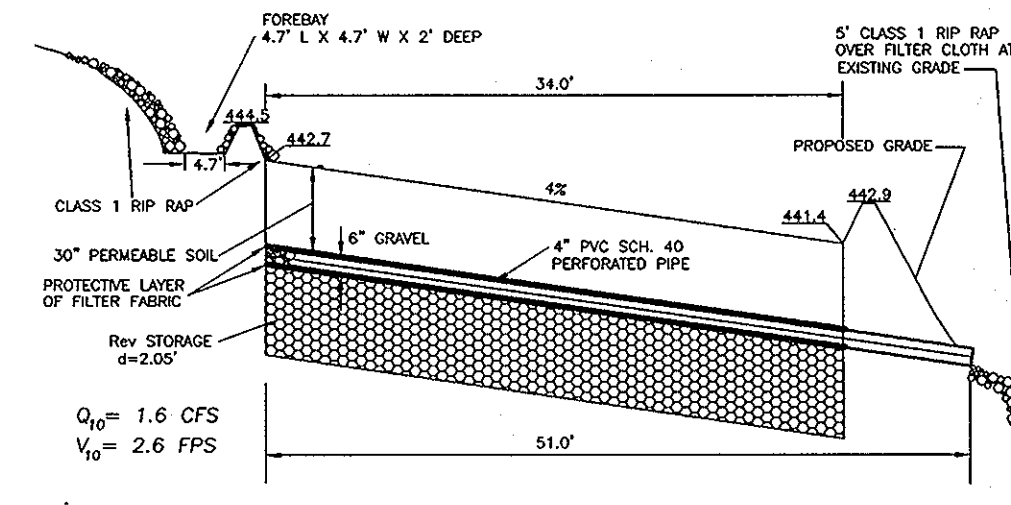
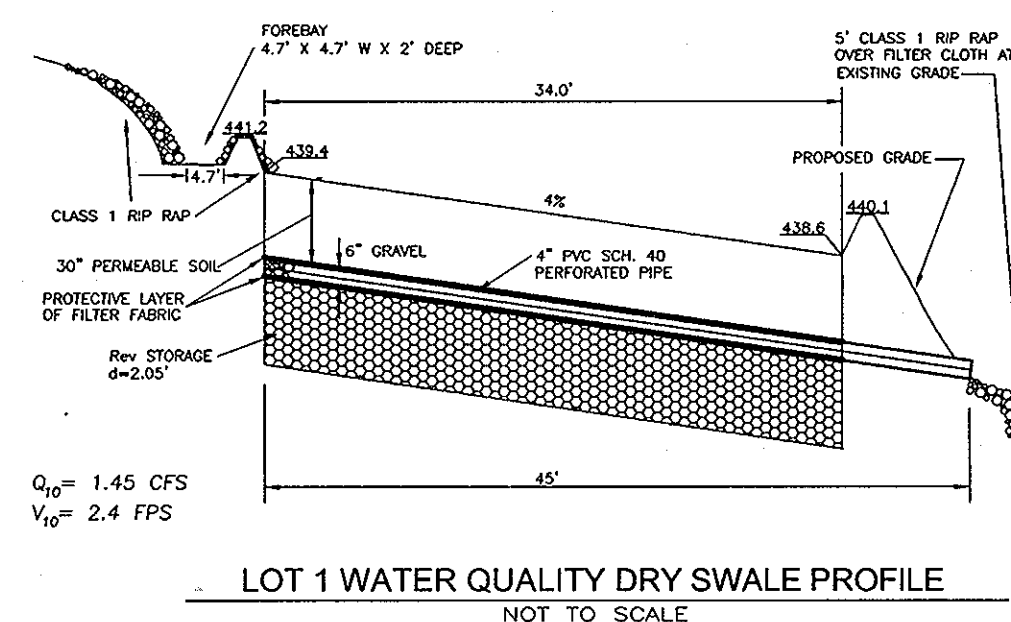
REFER TO THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR RATE AND METHODS NOT COVERED.

SEQUENCE OF CONSTRUCTION

- OBTAIN GRADING PERMIT.
- INSTALL SEDIMENT CONTROL AS SHOWN ON PLAN IN ACCORDANCE WITH DETAILS (1 DAY)
- CLEAR AND ROUGH GRADE SITE (1 WEEK)
- CONSTRUCT HOUSE (4 MONTHS)
- FINE GRADE AND STABILIZE THE SITE WITH TOPSOIL AND SEEDING (SEE NOTES THIS PLAN) (3 DAYS)
- AFTER THE SITE IS PERMANENTLY STABILIZED AND PERMISSED IS GRANTED FROM HOWARD COUNTY AND PERMISSED IS GRANTED FROM HOWARD COUNTY SEDIMENT CONTROL INSPECTOR, REMOVE SEDIMENT CONTROLS AND STABILIZE ANY REMAINING DISTURBED AREAS.

SEDIMENT CONTROL NOTES

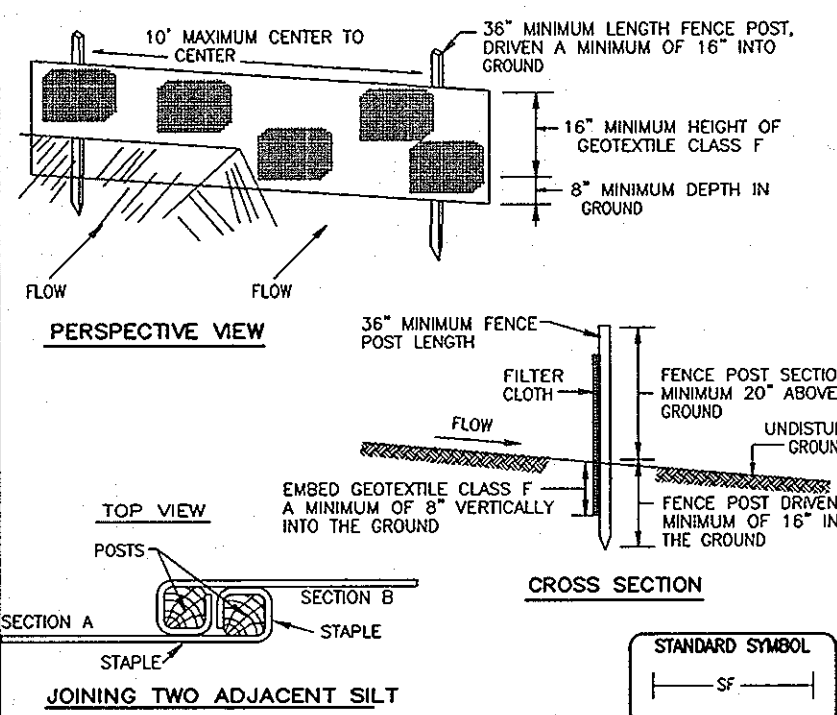
- A MINIMUM OF 48 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF INSPECTION, LICENSE AND PERMITS SEDIMENT CONTROL DIVISION PRIOR TO THE START OF ANY CONSTRUCTION (313-1855).
- ALL VEGETATION AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, AND REVISIONS THERETO.
- FOLLOWING INITIAL SOIL DISTURBANCE OR 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 7, HOWARD COUNTY DESIGN MANUAL, STORM DRAINAGE.
- ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR PERMANENT SEEDING, SOO, TEMPORARY SEEDING, AND MULCHING (SEC. G). TEMPORARY STABILIZATION WITH MULCH ALONE SHALL BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER GERMINATION AND ESTABLISHMENT OF GRASSES.
- ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE AND ARE TO BE MAINTAINED IN OPERATIVE CONDITION UNTIL PERMITS FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
- SITE ANALYSIS:
TOTAL AREA: 83,535.0 SF
AREA DISTURBED: 33,541.00 SF
AREA TO BE ROOFED OR PAVED: 12,500 SF
AREA TO BE VEGETATIVELY STABILIZED: 21,041.20 SF
TOTAL CUT: 450 CY
TOTAL FILL: 450 CY
OFFSITE WASTE/DORROW AREA LOCATION: *
- ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.
- ADDITIONAL SEDIMENT CONTROLS MUST BE PROVIDED, IF DEEMED NECESSARY BY THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
- ON ALL SITES WITH DISTURBED AREAS IN EXCESS OF 2 ACRES, APPROVAL OF THE INSPECTION AGENCY SHALL BE REQUESTED UPON COMPLETION OF INSTALLATION OF PERIMETER EROSION AND SEDIMENT CONTROL STRUCTURES, BUT BEFORE PROCEEDING WITH ANY OTHER EARTH DISTURBANCE OR GRADING. OTHER BUILDING OR GRADING INSPECTION APPROVALS MAY NOT BE AUTHORIZED UNTIL THIS INITIAL APPROVAL BY THE INSPECTION AGENCY IS MADE.
- TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE PIPE LENGTHS OR THAT WHICH SHALL BE BACK-FILLED AND STABILIZED WITHIN ONE WORKING DAY, WHICHEVER IS SHORTER.
- TO BE DETERMINED BY CONTRACTOR, WITH PRE-APPROVAL OF THE SEDIMENT CONTROL INSPECTOR WITH AN APPROVED AND ACTIVE GRADING PERMIT



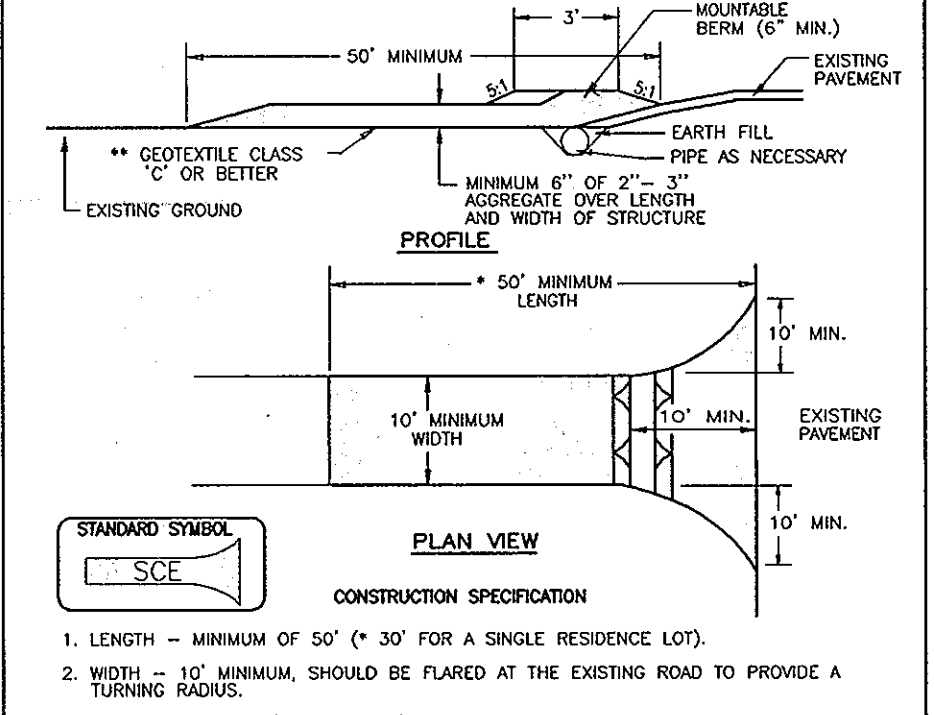
OPERATION AND MAINTENANCE SCHEDULE FOR PRIVATELY OWNED AND MAINTAINED OPEN CHANNEL SYSTEMS (0-1 AND 0-2)

- THE OPEN CHANNEL SYSTEM SHALL BE INSPECTED ANNUALLY AND AFTER MAJOR STORMS. INSPECTIONS SHALL BE PERFORMED DURING WEATHER TO DETERMINE IF THE FACILITY IS FUNCTIONING PROPERLY.
- THE OPEN CHANNEL SHALL BE MOVED A MINIMUM OF AS NEEDED DURING THE GROWING SEASON TO MAINTAIN A MAXIMUM GRASS HEIGHT OF LESS THAN 6 INCHES.
- DEBRIS AND LITTER SHALL BE REMOVED DURING REGULAR MOWING OPERATIONS AS NEEDED.
- VISIBLE SIGNS OF EROSION IN THE OPEN CHANNEL SYSTEMS SHALL BE REPAIRED AS SOON AS IT IS NOTICED.
- REMOVE SILT IN THE OPEN CHANNEL SYSTEM WHEN IT EXCEEDS 25% OF THE ORIGINAL W/O.

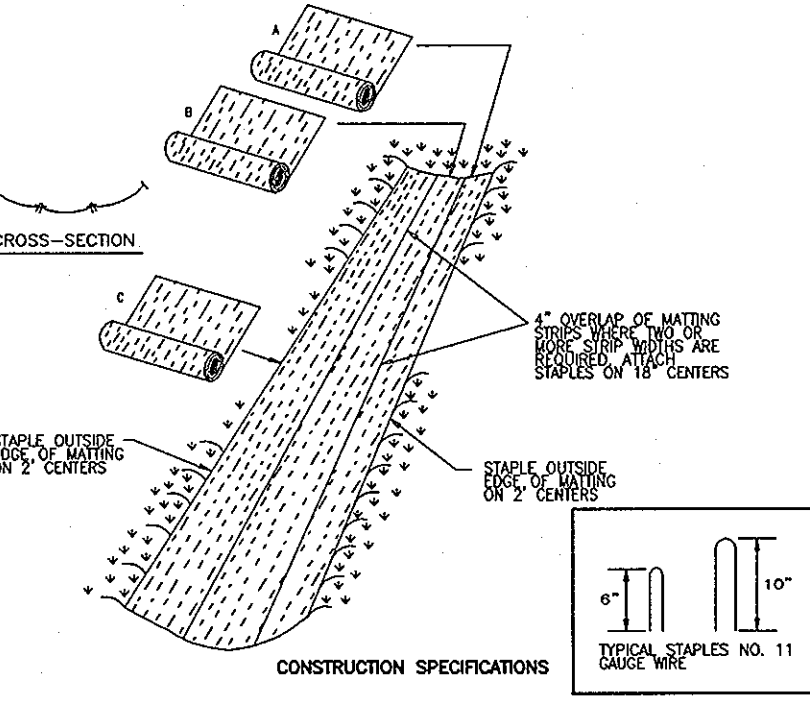
DETAIL 22 - SILT FENCE



DETAIL 24 - STABILIZED CONSTRUCTION ENTRANCE



DETAIL 30 - EROSION CONTROL MATTING



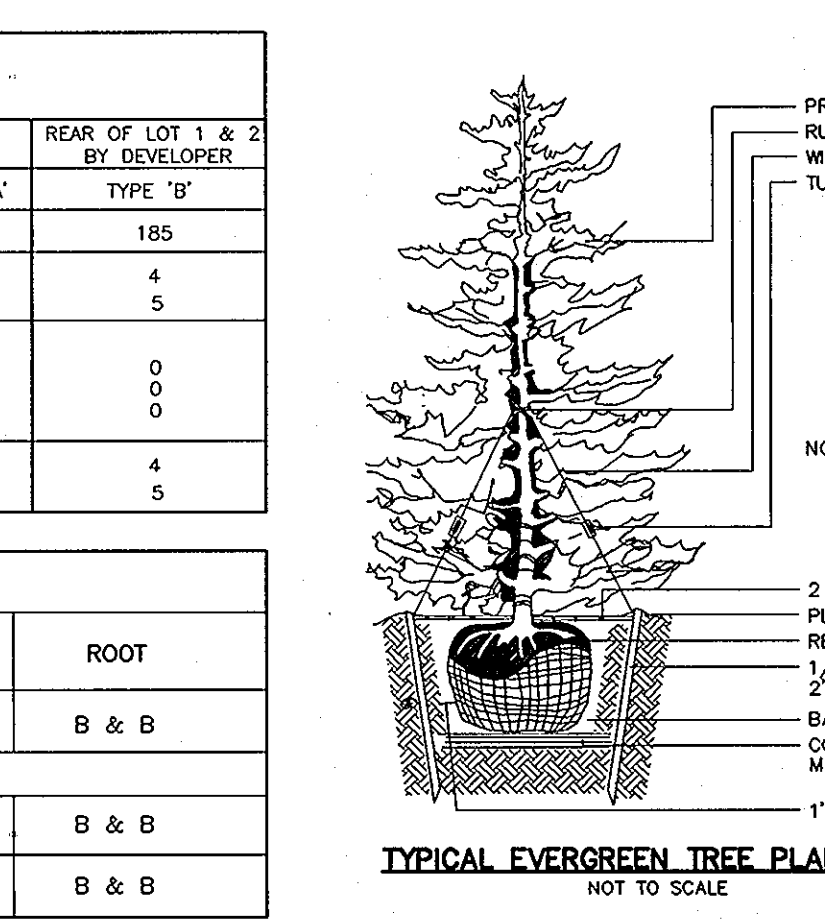
SOILS LEGEND			TYPE
GRZ	GLENELG LOAM, 8 TO 15 PERCENT SLOPES, MODERATELY ERODED		B
MID2	MANOR LOAM, 15 TO 25 PERCENT SLOPES, MODERATELY ERODED		B

NOTE: HOWARD SOIL SURVEY, MAP NUMBER 16

SCHEDULE A PERIMETER LANDSCAPE EDGE

CATEGORY	ADJACENT TO ROADS	ADJACENT TO PERIMETER PROPERTIES					REAR OF LOT 1 & 2 BY DEVELOPER
		"A"	"B"	"C"	"D"	"E"	
PERIMETER	NA	"A"	"B"	"C"	"D"	"E"	185
LANDSCAPE TYPE	NONE REQUIRED	TYPE 'A'	TYPE 'A'	TYPE 'A'	TYPE 'A'	TYPE 'B'	
LINEAR FEET OF PERIMETER	NA	191	117	251	403	185	
NUMBER OF PLANTS PROVIDED	NA	3	2	4	7	4	
SHADE TREES	NA	0	0	0	0	5	
EVERGREEN TREES (2:1 SUBSTITUTION)	NA	0	0	0	0	0	
CREDIT FOR EXISTING VEGETATION	NA	0	117	251	71	0	
20' LANDSCAPE EDGE	NA	0	0	0	0	0	
SHADE TREES	NA	0	0	0	0	0	
EVERGREEN TREES	NA	0	0	0	0	0	
NUMBER OF PLANTS PROVIDED	NA	6	0	0	12	4	
SHADE TREES	NA	0	0	0	0	5	
EVERGREEN TREES	NA	0	0	0	0	0	

PLANT LIST		
QTY	BOTANICAL NAME / COMMON NAME	SIZE
10	OPYPARIS LEYLANDI / LEYLAND CYPRESS	5' - 6' Ht.
5	CORNELIAN CHERRY / CORNUS MAS	2-1/2" - 3" CAL
5	PINUS STROBUS / EASTERN WHITE PINE	6'-8' Ht.



CONSTRUCTION SPECIFICATIONS
1. FENCE POSTS SHALL BE A MINIMUM OF 16\"/>

CONSTRUCTION SPECIFICATIONS
1. LENGTH - MINIMUM OF 50' (± 30' FOR A SINGLE RESIDENCE LOT).
2. WIDTH - 10' MINIMUM. SHOULD BE FLARED AT THE EXISTING ROAD TO PROVIDE A TURNING RADIUS.
3. GEOTEXTILE FABRIC (FILTER CLOTH) SHALL BE PLACED OVER THE EXISTING GROUND PRIOR TO PLACING STONE. ** GEOTEXTILE SHALL BE PLACED AT LEAST 6\"/>

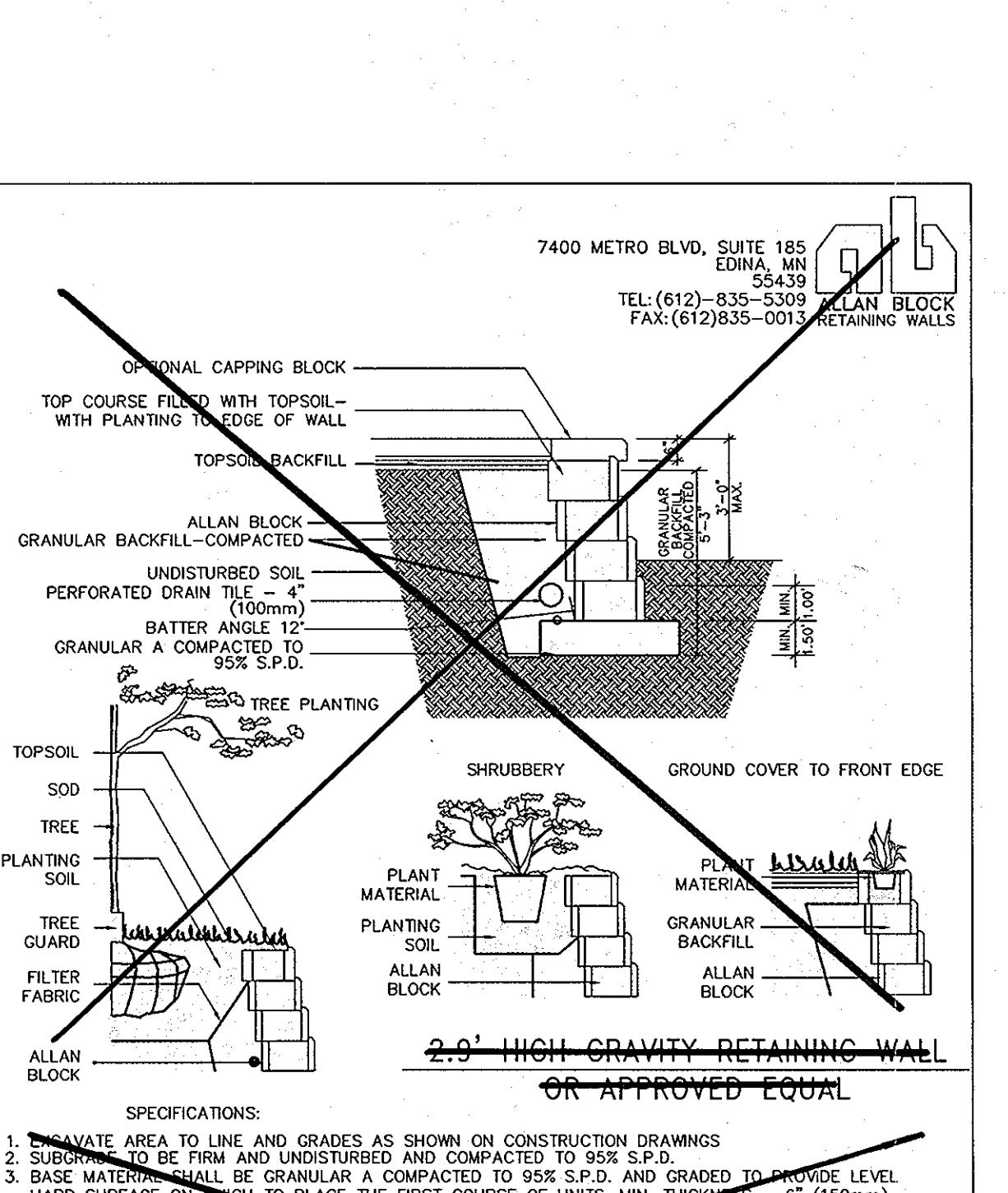
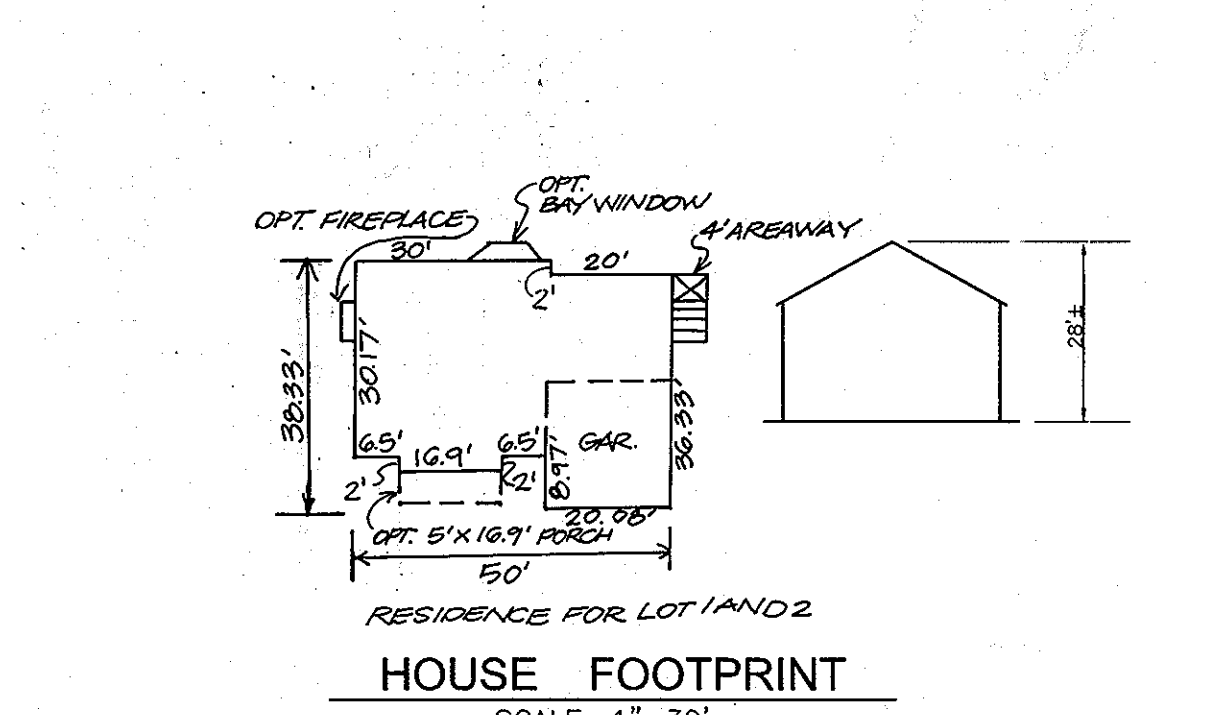
CONSTRUCTION SPECIFICATIONS
1. KEY-IN THE MATTING BY PLACING THE TOP ENDS OF THE MATTING IN A NARROW TRENCH 6\"/>

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
 [Signature] 6/2/08
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 [Signature] 6/2/08
 CHIEF, DIVISION OF LAND DEVELOPMENT
 [Signature] 6/2/08
 DIRECTOR

FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS
 [Signature] 6/2/08
 USDA-NATURAL RESOURCES CONSERVATION SERVICE
 [Signature] 6/2/08
 HOWARD SCD

ENGINEERS CERTIFICATE
 I CERTIFY THAT THIS PLAN FOR SEDIMENT AND EROSION CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL OBSERVATION OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.
 [Signature] 6/2/08
 SIGNATURE OF ENGINEER
 ROBERT H. VOGEL, PE 16193
 DATE

DEVELOPER'S CERTIFICATE
 I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN FOR SEDIMENT AND EROSION CONTROL, AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT.
 [Signature] 6-12-08
 SIGNATURE OF DEVELOPER
 DATE



2.9' HIGH GRAVITY RETAINING WALL OR APPROVED EQUAL

- SUBGRADE AREA TO LINE AND GRADES AS SHOWN ON CONSTRUCTION DRAWINGS
- BASE MATERIAL SHALL BE GRANULAR BACKFILL COMPACTED TO 95% S.P.D. AND GRADED TO PROVIDE LEVEL HARD SURFACE ON WHICH TO PLACE THE FIRST COURSE OF UNITS. MIN. THICKNESS 6" (150mm)
- BASE COURSE SHALL BE 12" (305mm) STANDARD BLOCKS WITH THE RAISED LIP FACING OUT AND THE FRONT EDGES TIGHT TOGETHER. FILL CAVITIES WITH SAND OR CLEAR CRUSHED STONE AND COMPACT. SWEEP CLEAN AND CHECK THE WALL FOR LEVEL AND ALIGNMENT. BACKFILL FRONT AND BACK OF ENTIRE BASE ROW TO FIRMLY LOCK IN PLACE.
- INSTALL SUBSEQUENT COURSES IN SIMILAR FASHION PROVIDING A MIN. 3/8" (9.5mm) OVERLAP OF SEAMS AND A MIN. OF 12" (305mm) STANDARD BLOCKS.
- ALLAN BLOCKS COME IN 5 STANDARD COLORS: STANDARD BLOCK, ANGLE BLOCK AND CORNER BLOCK AS WELL AS A STANDARD CAPPING STONE. THE BLOCKS HAVE A COMPRESSIVE STRENGTH OF OVER 4000 PSI (28MPa)
- A WIDE VARIETY OF DESIGNS CAN BE ACHIEVED INCLUDING INSIDE AND OUTSIDE CORNER BLOCKS AND STEPS. BLOCKS COME IN 5 STANDARD COLORS: NATURAL, BUFF, BROWN, EARTH RANGE, SMOKE AND END.
- BLOCKS HIGHER THAN 6" REQUIRE GEORIGIDS OR REBAR AND MASONRY CONSTRUCTION-CONSULT MANUFACTURER.

NO.	REVISION	DATE
1	REVISE HOUSE MODELS LOT 1 AND 2; REVISE LANDSCAPING	12/21/2007
	REPLACE SHADE TREES WITH EVERGREENS PERIMETERS AND	

SITE DEVELOPMENT PLAN
TYSON HILLS
 SINGLE FAMILY DETACHED
 LOTS 1,2,3, AND OPEN SPACE LOT 4
 REF: PLAT#19219

TAX MAP 18 GRID 14 PARCEL 148
 2ND ELECTION DISTRICT HOWARD COUNTY, MARYLAND

ROBERT H. VOGEL ENGINEERING, INC.
 ENGINEERS • SURVEYORS • PLANNERS
 8407 MAIN STREET, ELLICOTT CITY, MD 21043 TEL: 410.461.7666 FAX: 410.461.8951

OWNER
 KEVIN & ELIZABETH GEER
 8204 TYSON ROAD
 ELLICOTT CITY, MD 21043-3432

DEVELOPER
 HAMILTON REED
 8000 MAIN STREET
 ELLICOTT CITY, MD 21043
 410-461-6666

DESIGN BY: RHV/RJ
 DRAWN BY: RJ
 CHECKED BY: RHV
 DATE: 10-11-2007
 SCALE: 1"=30'
 W.O. NO.: 2034025.00

2 SHEET OF 2