SITE DEVELOPMENT PLAN
NORTH LAUREL
LOTS 72 AND 73

GENERAL NOTES

1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLUS MSHA STANDARDS AND SPECIFICATIONS, IF APPLICABLE.
2. THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK.
3. 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
VERIZON TELEPHONE CO.	725-9976
HOWARD COUNTY BUREAU OF UTILITIES:	313-2366
AT&T CABLE LOCATION DIVISION:	393-3553
B.G.&E. CO. CONTRACTOR SERVICES:	850-4620
B.G.&E. CO. UNDERGROUND DAMAGE CONTROL:	787-4620
STATE HIGHWAY ADMINISTRATION:	531-5533

4. THE SUBJECT PROPERTY IS ZONED R-SC AS PER 2/02/04 PER THE NEW COMPREHENSIVE ZONING PLAN. SITE ANALYSIS:
   TOTAL AREA OF LOTS AND/OR PARCELS: 0.47400 AC.
   NET TRACT AREA: 0.47400 AC.
   AREA OF PLAN SUBMISSION: 047400 AC.
   TOTAL NUMBER OF BUILDABLE LOTS: 2
5. PROJECT BACKGROUND:
   LOCATION: TAX MAP: 50 PARCEL: 425
   ZONING: R-SC
   NORTH LAUREL PARK
   DEED REFERENCE: LIBER 10080 FOLIO 494
   DPZ REFERENCE: F-06-171, WP-07-13
6. THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/BUREAU OF ENGINEERING/CONSTRUCTION INSPECTION DIVISION AT (410) 313-1880 AT LEAST FIVE (5) WORKING DAYS PRIOR TO START OF WORK.
7. ANY DAMAGE TO PUBLIC RIGHT-OF-WAY, PAVING, OR EXISTING UTILITIES WILL BE CORRECTED AT THE CONTRACTOR'S EXPENSE.
8. EXISTING UTILITIES LOCATED FROM ROAD CONSTRUCTION PLANS AND AVAILABLE RECORD DRAWINGS. APPROXIMATE LOCATION OF EXISTING UTILITIES ARE SHOWN FOR THE CONTRACTORS INFORMATION. CONTRACTOR SHALL LOCATE EXISTING UTILITIES WELL IN ADVANCE OF CONSTRUCTION ACTIVITIES AND TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND TO MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE TO THE COUNTY'S RIGHT OF WAY INCURRED DUE TO CONTRACTOR'S OPERATION SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTORS EXPENSE.
9. SOIL COMPACTION SPECIFICATIONS, REQUIREMENTS, METHODS AND MATERIALS ARE TO BE IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE PROJECT GEOTECHNICAL ENGINEER. GEOTECHNICAL ENGINEER TO CONFIRM ACCEPTABILITY OF PROPOSED PAVING SECTION, BASED ON SOILS TEST.
10. THERE ARE NO STEEP SLOPES ONSITE WITH A CONTIGUOUS AREA OF 20,000 SF OR GREATER.
11. ALL AREAS ARE SHOWN MORE OR LESS (±).
12. THE SUBDIVISION IS IN THE METROPOLITAN DISTRICT.
13. THERE ARE NO HISTORIC SITES ON THIS PROPERTY.
14. COORDINATES AND ELEVATIONS ARE BASED ON HOWARD COUNTY MONUMENT NO'S. 1741003 AND 1741002-R
15. NO BURIAL GROUNDS OR CEMETERIES ARE LOCATED ON THIS PROPERTY.
16. THERE ARE NO FLOODPLAINS ON SITE.
17. DRIVEWAYS SHALL BE PROVIDED PRIOR TO ISSUANCE OF A USE AND OCCUPANCY PERMIT OF ANY NEW DWELLINGS TO INSURE SAFE ACCESS FOR FIRE AND EMERGENCY VEHICLES PER THE FOLLOWING MINIMUM REQUIREMENTS: 16 FEET FOR DRIVEWAYS SERVING MORE THAN ONE RESIDENCE.
   1) WIDTH - 12'(14' SERVING MORE THAN ONE RESIDENCE);
   2) SURFACE - SIX (6) INCHES OF COMPACTED "CRUSHED RUN" BASE WITH A "TAR AND CHIP" COATING (1-1/2" MIN)'
   3) GEOMETRY- MAX 15% GRADE, MAX. 10% GRADE CHANGE AND MIN. 45' TURNING RADIUS;
   4) BRIDGES AND CULVERTS - DESIGNED TO SUPPORT VEHICLES WITH A GROSS VEHICLE WEIGHT OF TWENTY-FIVE (25) TONS(H25 LOADING);
   5) DRAINAGE ELEMENTS-CAPABLE OF SAFELY PASSING 100-YEAR FLOOD WITH NO MORE THAN 1 FOOT DEPTH OVER DRIVEWAY SURFACE;
   6) MAINTENANCE - DRIVEWAYS MUST BE MAINTAINED FOR ALL-WEATHER USE.
18. ALL DRIVEWAY APRONS TO BE PER HOWARD COUNTY STANDARD DETAIL NO. R-6.03. UNLESS OTHERWISE NOTED.
19. 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.
20. 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 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 CERTIFICATES.
21. THE LOTS SHOWN HEREON COMPLY WITH THE MINIMUM OWNERSHIP WIDTH AND LOT AREA AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF THE ENVIRONMENT.
22. EXISTING TOPOGRAPHY IS BASED ON A FIELD RUN SURVEY PERFORMED ON OR ABOUT OCTOBER, 2005 BY ROBERT H. VOGEL ENGINEERING INC. AND BY RECORD DRAWINGS.
23. THIS PLAN IS SUBJECT TO THE AMENDED FIFTH EDITION OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS AS AMENDED UNDER COUNCIL BILL NO 45-2003.
24. THIS SUBDIVISION IS EXEMPT FROM THE REQUIREMENTS OF SECTION 16.1200 OF THE HOWARD COUNTY CODE FOR FOREST CONSERVATION BECAUSE THE LOTS WERE CREATED PRIOR TO THE ADOPTION OF THE FOREST CONSERVATION ACT AND NO ADDITIONAL LOTS ARE BEING CREATED. RESUBDIVISIONS THAT CREATE NO ADDITIONAL LOTS, EXCEPT DIVISIONS AND PLAT CORRECTIONS.
25. STORMWATER MANAGEMENT REQUIREMENTS ARE PROVIDED BY RAINGARDEN FOR WQv AND REv. CPv IS NOT REQUIRED SINCE THE 1 YEAR STORM IS LESS THAN 2 CFS.
26. PUBLIC SEWER AND WATER SERVICE TO THIS PARCEL WILL BE GRANTED UNDER THE PROVISIONS OF SECTION 18.122B OF THE HOWARD COUNTY CODE.
27. PERIMETER LANDSCAPING IS PROVIDED IN ACCORDANCE WITH SECTION 16.124 OF THE HOWARD COUNTY CODE AND LANDSCAPE MANUAL. SURETY IN THE AMOUNT OF $1,350.00 FOR THE 3 SHADE TREES AND THREE EVERGREEN TREES SHALL BE POSTED PART OF THE DEVELOPER AGREEEMENT.
28. WAIVER PETITION WP 07-13 APPROVED AUGUST 31, 2006 TO WAIVE SECTION 16.144 (p) OF THE REGULATIONS TO EXTEND THE DEADLINE TO SUBMIT THE ORIGINAL PLAT TO MARCH 1, 2007. THE FINAL PLAT WAS SUBMITTED ON JAN. 30, 2007.
29. THE RAIN GARDENS WILL BE PRIVATELY OWNED AND MAINTAINED.
30. THE RAIN GARDENS ARE HAZARD CLASSIFICATION 'A'.
31. REFERENCE RECORDED PLAT 18927. DPZ FILE F06-171

PERMIT INFORMATION CHART

PROJECT NAME			SECTION/AREA		LOT NUMBER
NORTH LAUREL PARK/LOTS 72 &73			N/A		LOTS 72 and 73
PLAT.	BLOCK NO.	ZONE	TAX MAP	ELECT. DIST.	CENSUS TR.
18927	3	R-SC	50	6th	6063.03
WATER CODE: C05			SEWER CODE: 7104000		

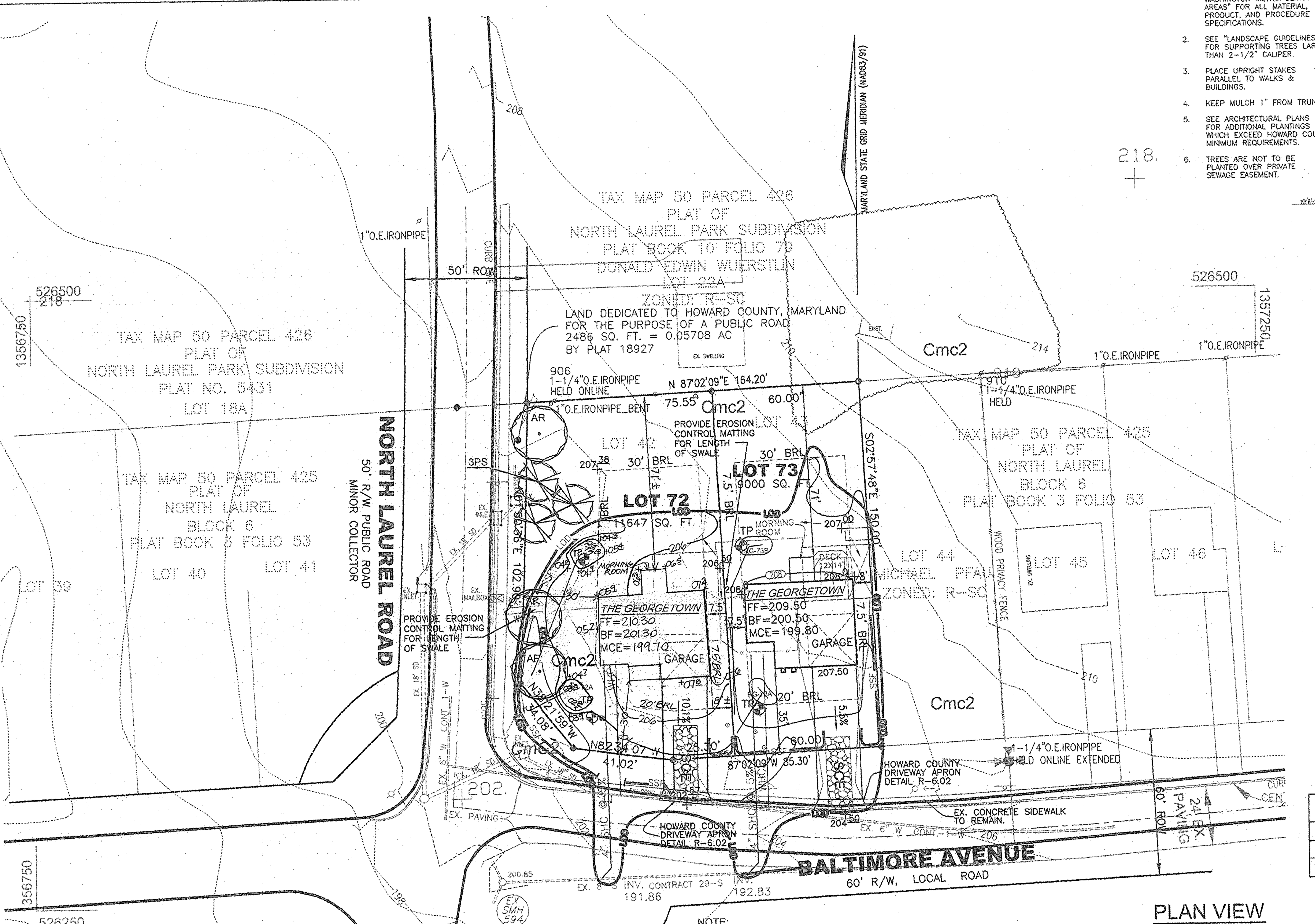
SHEET INDEX

DESCRIPTION	SHEET NO.
SITE DEVELOPMENT AND LANDSCAPE PLAN	1 OF 2
SEDIMENT AND EROSION CONTROL NOTES AND DETAILS	2 OF 2

SWM SUMMARY TABLE AREA

AREA 0.47	REQUIREMENTS	VOLUME REQMT. W/O CREDITS	CREDITS	VOLUME REQMT. AFTER CREDITS	NOTES
1	WATER QUALITY VOLUME WQV	669 CF	N/A	0.0154 AC-FT	RAINGARDENS
2	RECHARGE VOLUME REV	174 CF 2023 SF	-	174 CF 2023 SF	RAINGARDENS
3	CHANNEL PROTECTION VOLUME CPV	0	N/A	0	Q_1 = 0.54CFS
4	OVERHEAD FLOOD PROTECTION, Q10P	N/A	N/A	N/A	N/A
5	EXTREME FLOOD VOLUME, Q100P	N/A	N/A	N/A	N/A

NOTE: REV AND WQV PROVIDED BT RAINGARDEN

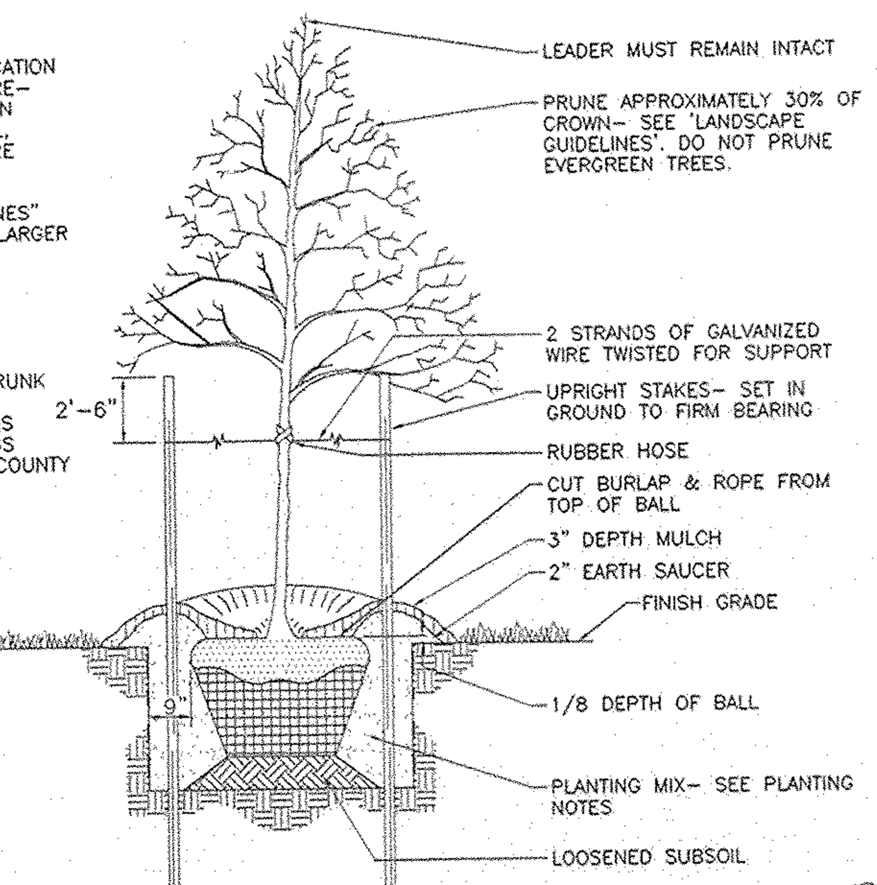


NOTE:
TOPO SHOWN IS A COMPILIZATION OF FIELD RUN SURVEY AND HOWARD COUNTY TOPO.

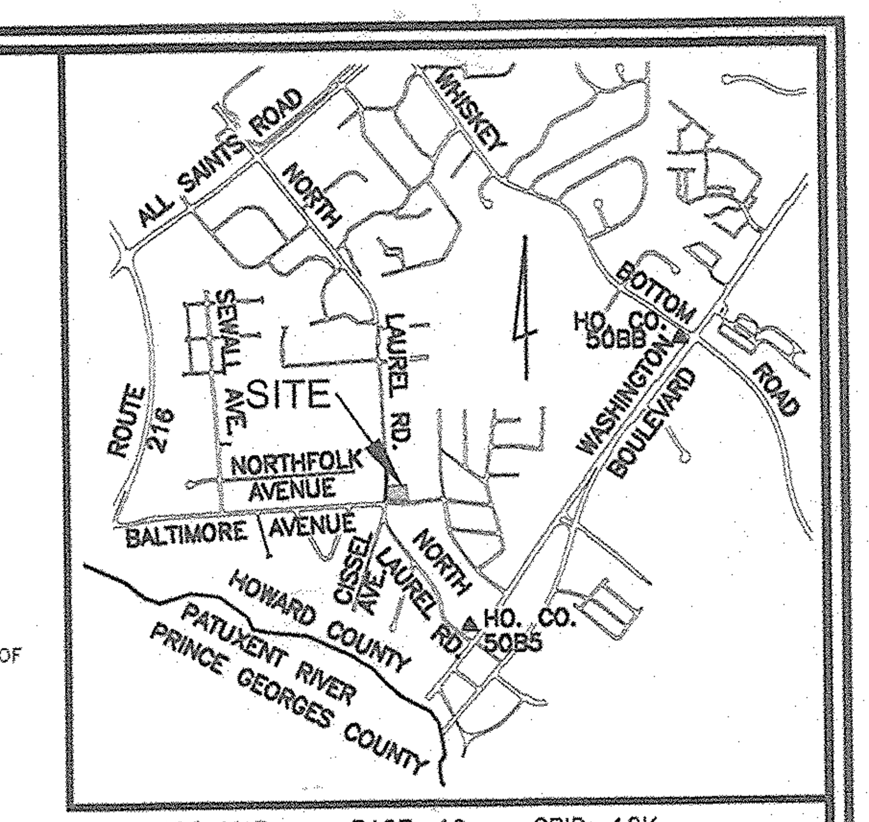
PLAN VIEW

SCALE:1"=30'

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



TREE PLANTING AND STAKING
DECIDUOUS TREES UP TO 2-1/2" CALIPER
NOT TO SCALE



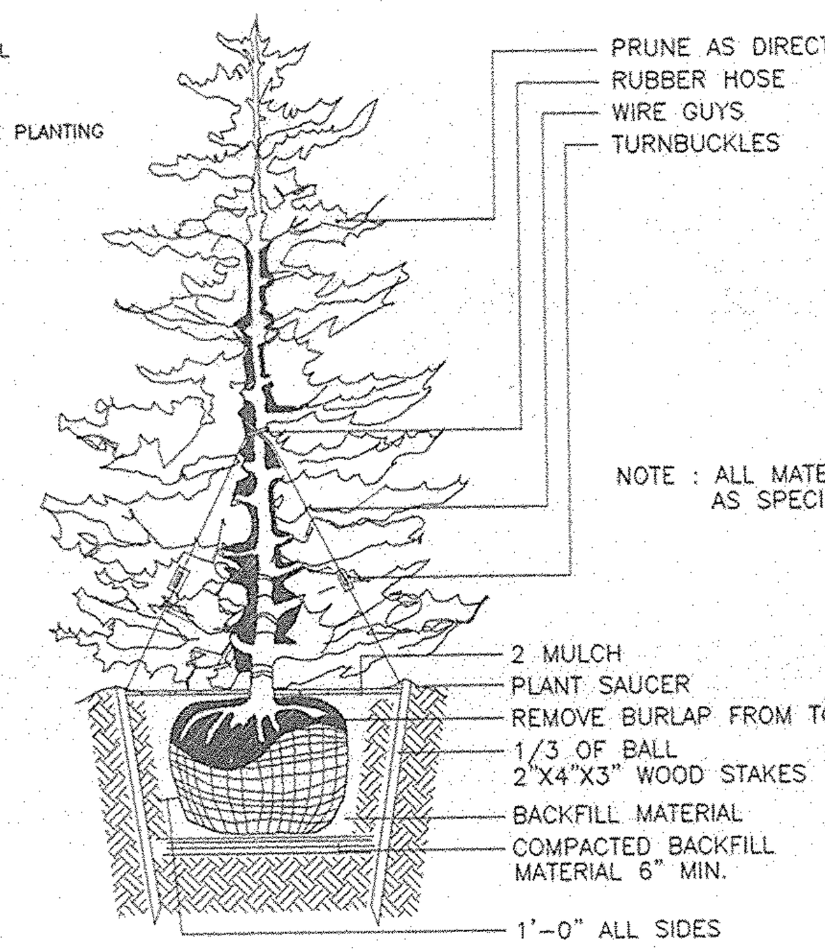
ADC MAP PAGE: 19 GRID: 12K

VICINITY MAP
SCALE: 1"=2000'

TAX MAP 50, GRID 3, PARCEL 425

BENCHMARKS

NO.	NORTHING	EASTING	ELEVATION
50BB	527565.8697	1359782.8206	245.186'
50B5	524999.3750	1357925.7480	177.424'



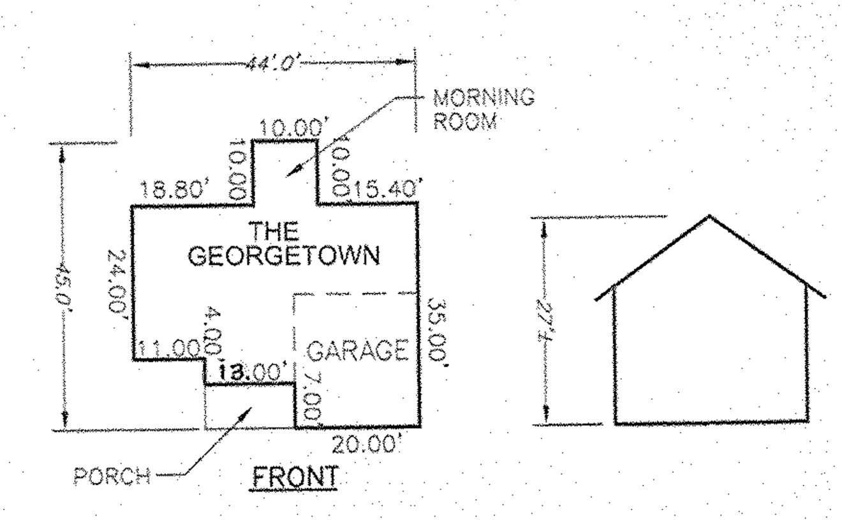
NOTE : ALL MATERIALS AS SPECIFIED

TYPICAL EVERGREEN TREE PLANTING DETAIL
NOT TO SCALE

LEGEND

EXISTING CONTOUR	440
PROPOSED CONTOUR	412
SPOT ELEVATION	+82.53
DIRECTION OF FLOW	
EXISTING TREES TO REMAIN	
SUPER SILT FENCE	SSF
LIMIT OF DISTURBANCE	
EROSION CONTROL MATTING	
EXIST. STORMWATER	EX. S.D.
TEST PIT	
RAINGARDEN	RG

NOTE:
CONTRACTOR TO DIRECT ALL ROOF LEADERS TO RAINGARDENS



THE GEORGETOWN HOUSE PLAN
SCALE: 1"=30'

ADDRESS CHART

LOT #	STREET ADDRESS
72	9532 BALTIMORE AVE.
73	9530 BALTIMORE AVE.

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 AND DESIGN FOR ADEQUATE STABILIZATION. AREAS HAVING SLOPES STEEPER THAN 2:1 SHALL HAVE THE APPROPRIATE STABILIZATION SHOWN ON THE PLANS.

CONSTRUCTION AND MATERIAL SPECIFICATIONS

I. TOPSOIL SALVAGED FROM THE EXISTING SITE MAY BE USED PROVIDED THAT IT MEETS THE STANDARDS AS SET FORTH IN THESE SPECIFICATIONS. TYPICALLY, THE DEPTH OF TOPSOIL TO BE SALVAGED FOR A GIVEN SOIL TYPE CAN BE FOUND IN THE REPRESENTATIVE SOIL PROFILE SECTION IN THE SOIL SURVEY PUBLISHED BY USDA-SCS IN COOPERATION WITH MARYLAND AGRICULTURAL EXPERIMENTAL STATION.

II. TOPSOIL SPECIFICATIONS - SOIL TO BE USED AS TOPSOIL MUST MEET THE FOLLOWING:

I. TOPSOIL SHALL BE A LOAM, SANDY LOAM, CLAY LOAM, SILT LOAM, SANDY CLAY LOAM, LOAMY SAND. OTHER SOILS MAY BE USED IF RECOMMENDED BY AN AGRONOMIST OR A SOIL SCIENTIST AND APPROVED BY THE APPROPRIATE APPROVAL AUTHORITY. REGARDLESS, TOPSOIL SHALL NOT BE A MIXTURE OF CONTRASTING TEXTURED SUBSOILS AND SHALL CONTAIN LESS THAN 5% BY VOLUME OF CINDERS, STONES, SLAG, COARSE FRAGMENTS, GRAVEL, STICKS, ROOTS, TRASH, OR OTHER MATERIALS LARGER THAT 1 AND 1/2" IN DIAMETER.

II. TOPSOIL MUST BE FREE OF PLANTS OR PLANT PARTS SUCH AS BERMUDA GRASS, QUACKGRASS, JOHNSONGRASS, NUTSEDGE, POISON IVY, THISTLE, OR OTHERS AS SPECIFIED.

III. WHERE THE SUBSOIL IS EITHER HIGHLY ACIDIC OR COMPOSED OF HEAVY CLAYS, GROUND LIMESTONE SHALL BE SPREAD AT THE RATE OF 4-8 TONS/ACRE (200-400 POUNDS PER 1,000 SQUARE FEET) PRIOR TO THE PLACEMENT OF TOPSOIL. LIME SHALL BE DISTRIBUTED UNIFORMLY OVER DESIGNATED AREAS AND WORKED INTO THE SOIL IN CONJUNCTION WITH TILLAGE OPERATIONS AS DESCRIBED IN THE FOLLOWING PROCEDURES.

II. FOR SITES HAVING DISTURBED AREAS UNDER 5 ACRES:

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

III. FOR SITES HAVING DISTURBED AREAS OVER 5 ACRES:
I. ON SOIL MEETING TOPSOIL SPECIFICATIONS, OBTAIN TEST RESULTS DICTATING FERTILIZER AND LIME AMENDMENTS REQUIRED TO BRING THE SOIL INTO COMPLIANCE WITH THE FOLLOWING:
A. PH FOR TOPSOIL 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.
B. ORGANIC CONTENT OF TOPSOIL SHALL BE NOT LESS THAN 1.5 PERCENT BY WEIGHT.
C. TOPSOIL HAVING SOLUBLE SALT CONTENT GREATER THAN 500 PARTS PER MILLION SHALL NOT BE USED.
D. NO SOD OR SEED SHALL BE PLACED ON SOIL 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 AMMENDMENTS specified in 20.0 Vegetative Stabilization-Section I-Vegetative STABILIZATION METHODS AND MATERIALS.

V. TOPSOIL APPLICATION

I. 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.

II. GRADES ON THE AREAS TO BE TOPSOILED, WHICH HAVE BEEN PREVIOUSLY ESTABLISHED, SHALL BE MAINTAINED, ALBEIT 4" - 8" HIGHER IN ELEVATION.

III. 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 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.

IV. TOPSOIL SHALL NOT BE PLACE 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.

SITE ANALYSIS DATA CHART

LOCATION: TAX MAP 50, GRID 3, P/O TM PARCELS 425
6th ELECTION DISTRICT
EXISTING ZONING: R-SC
GROSS AREA OF PROJECT: 0.474 AC
AREA OF 100-YEAR FLOODPLAIN DRAINAGE & UTILITY EASEMENT: N/A
AREA OF STEEP SLOPES OUTSIDE THE FLOODPLAIN: N/A
NET AREA OF PROJECT: 0.47400 AC
AREA OF PROPOSED BUILDABLE LOTS: 0.47400 AC
AREA OF OPEN SPACE REQUIRED: N/A
AREA OF OPEN SPACE PROVIDED: N/A
AREA OF RECREATIONAL OPEN SPACE REQUIRED: N/A
AREA OF RECREATIONAL OPEN SPACE PROVIDED: N/A
AREA OF PROPOSED RIGHT-OF-WAY: N/A
TOTAL APPROXIMATE LIMIT OF DISTURBANCE: 15,600 SF

OWNER/DEVELOPER

MICHAEL L. PFAU
3675 PARK AVENUE
ELLICOTT CITY, MARYLAND
21043-4511
443-324-9806

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION — 7/27/07 DATE
CHIEF, DIVISION OF LAND DEVELOPMENT — 8/07/07 DATE
DIRECTOR — 8/03/07 DATE

BY THE ENGINEER

"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. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

SIGNATURE OF ENGINEER
ROBERT H VOGEL, PE — 7/18/07 DATE

BY THE DEVELOPER

"I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE IN ACCORDANCE TO THESE PLANS, 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.

TRINITY QUALITY HOMES INC. — 07/18/07 DATE

THESE PLANS HAVE BEEN REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SOIL EROSION AND SEDIMENT CONTROL.

USDA - NATURAL RESOURCES CONSERVATION SERVICE — 7/24/07 DATE

THESE PLANS FOR SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT

HOWARD SCD — 7/24/07 DATE

NO.	REVISION	DATE
1	REVISE LOT 72 TO REFLECT AS-BUILT CONDITIONS	4-18-08

SITE DEVELOPMENT PLAN
LOT 72 and 73
NORTH LAUREL
DEED REFERENCE: 10080/494
REFERENCE PLAT No. 18927
TAX MAP 50 GRID 3 — PARCEL 425
6TH 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: 410.461.8961

STATE OF MARYLAND — ROBERT HARRIS VOGEL — NO. 18193 — PROFESSIONAL ENGINEER

DESIGN BY: RHV
DRAWN BY: HED
CHECKED BY: RHV
DATE: OCTOBER 2006
SCALE: AS SHOWN
W.O. NO.: 05-98

SDP-07-071

PERMANENT SEEDING NOTES

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

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

SOIL AMENDMENTS: In lieu of soil test recommendations, use one of the following schedules:

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 dolomatic 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 sod. Option (3) Seed with 60 lbs/acre Kentucky 31 Tall Fescue and mulch with 2 tons/acre well anchored straw.

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

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

TEMPORARY SEEDING NOTES

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

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

SEEDING: For periods March 1 thru April 30 and from August 15 thru November 15, seed with 2 1/2 bushel per acre of annual 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 sod.

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

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

SEDIMENT CONTROL NOTES

1. 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).
2. 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.
3. 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.
4. 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.
5. All disturbed areas must be stabilized within the time period specified above in accordance with the 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for permanent seeding, sod, temporary seeding, and mulching (Sec. 6). Temporary stabilization with mulch alone shall be done when recommended seeding dates do not allow for proper germination and establishment of grasses.
6. 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.
7. Site Analysis :

	TOTAL
Total Area	0.47400 AC
Area Disturbed	15,600 SF
Area to be roofed or paved	4,723 SF
Area to be vegetatively stabilized	10,877 SF
Total Cut	296 CY
Total Fill	296 CY
Offsite waste/borrow area location	*

8. Any sediment control practice which is disturbed by grading activity for placement of utilities must be repaired on the same day of disturbance.
9. Additional sediment controls must be provided, if deemed necessary by the Howard County Sediment Control Inspector.
10. 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.
11. 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.
12. Estimates of earthwork quantities are provided solely for the purpose of calculating fees.

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

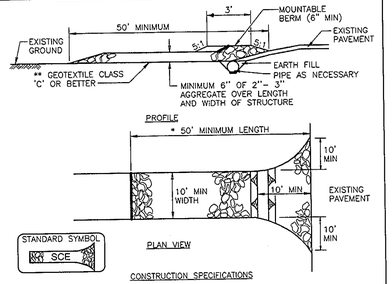
SEQUENCE OF CONSTRUCTION

1. Obtain grading permit.
2. Notify Howard County Bureau Of Inspections and Permits (410.313.1880) at least 24 hours before starting any work.
3. Construct Stabilized Construction Entrances. (1 day)
4. Install silt fence and erosion control matting. (2 days)
5. After obtaining permission from the sediment control inspector to proceed, rough grade site. (4 days)
6. Construct house. The first floor elevation cannot be more than 1' higher or 0.2' lower than the elevations shown on this plan. The foundation footprint must be within the generic block. (3 months)
7. Upon stabilization of all disturbed areas and with the approval of the sediment control inspector, remove all sediment control devices.

NOTES

1. DURING GRADING AND AFTER EACH RAINFALL, THE CONTRACTOR SHALL INSPECT AND PROVIDE THE NECESSARY MAINTENANCE ON THE SEDIMENT AND EROSION CONTROL MEASURES SHOWN HEREON.
2. FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLIED WITH.

DETAIL 24 - STABILIZED CONSTRUCTION ENTRANCE

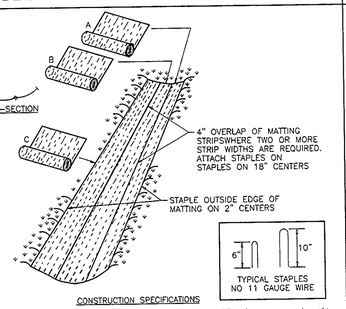


CONSTRUCTION SPECIFICATIONS

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. ** The plan approval authority may not require single family residences to use geotextile.
4. Stone – Crushed aggregate (2" to 3") or reclaimed or recycled concrete equivalent shall be placed at least 6" over the length and width of the entrance.
5. Surface Water – All surface water flowing to or diverted toward construction entrances shall be piped through the entrance, maintaining positive drainage. Pipe installed through the Stabilized Construction Entrance shall be protected with a mountable berm with 5:1 slopes and a minimum of 6" of stone over the pipe. Pipe has to be sized according to the drainage. When the SCE is located at a high spot and has no drainage to convey, a pipe will not be necessary. Pipe should be sized according to the amount of runoff to be conveyed. A 6" minimym will be required.
6. 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.

US DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE | PAGE F-17-3 | MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL 30 - EROSION CONTROL MATTING



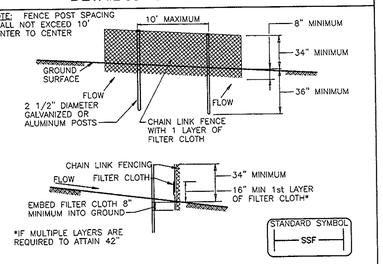
CONSTRUCTION SPECIFICATIONS

1. Key–in the matting by placing the top ends of the matting in a narrow trench, 6" in depth. Backfill the trench and tamp firmly to conform to the channel cross–section. Secure with crow of staples, about 4" down from the trench. Spacing between staples is 6".
2. Staple the 4" overlap in the channel center using an 18" spacing between staples.
3. Before stapling the outer edges of the matting, make sure the matting is smooth and in firm contact with the soil.
4. Staples shall be placed 2" apart with 4 rows for each strip, 2 outer row, and 2 alternating rows down the center.
5. Where one roll of matting ends and another begins, the end of the top strip shall overlap the upper end of the lower strip by 4", shiplap fashion. Reinforce the overlap with a double row of staples spaced 6" apart in a staggered pattern on either side.
6. The discharge end of the matting liner should be similarly secured with 2 double rows of staples.

Note: If flow will enter from the edge of the matting then the area effected by the flow must be keyed–in.

US DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE | PAGE G-22-2 | MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL 33 - SUPER SILT FENCE

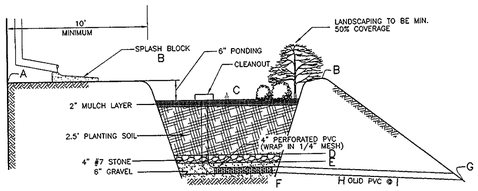


CONSTRUCTION SPECIFICATIONS

1. 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.
2. 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.
3. Filter cloth shall be fastened securely to the chain link fence with ties spaced every 24" at the top and midsection.
4. Filter cloth shall be embedded a minimum of 8" into the ground.
5. When two sections of filter cloth adjoin each other, they shall be overlapped by 8" and folded.
6. 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.
7. Filter cloth shall be fastened securely to each fence post with wire ties or staples at top and midsection 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/ft²/minute (max)	Test: MSMT 322
Filtering Efficiency	75% (min)	Test: MSMT 322

US DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE | PAGE M-26-3 | MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION



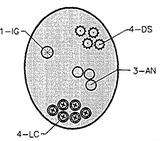
TYPICAL RAIN GARDEN CROSS SECTION
NOT TO SCALE

RAINGARDEN SCHEDULE

	72A	72B	73A	73B
A	207.5	207.5	208.0	208.0
B	207.3	207.3	207.8	207.8
C	206.8	206.8	207.3	207.3
D	204.13	204.13	204.63	204.63
E	204.13	204.13	204.63	204.63
F	203.3	203.3	203.8	203.8
G	203.3	203.3	203.8	203.8
H	15	40	85	20
I	9%	1%	0.5%	2.5%

OPERATION AND MAINTENANCE
SCHEDULE FOR BIO–RETENTION AREAS

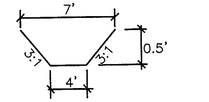
1. ANNUAL MAINTENANCE OF PLANT MATERIAL, MULCH LAYER AND SOIL LAYER IS REQUIRED. MAINTENANCE OF MULCH AND SOIL IS LIMITED TO CORRECTING AREAS OF EROSION OR WASH OUT. ANY MULCH REPLACEMENT SHALL BE DONE IN THE SPRING. PLANT MATERIAL SHALL BE CHECKED FOR DISEASE AND INSECT INFESTATION AND MAINTENANCE WILL ADDRESS DEAD MATERIAL AND PRUNING.
2. SCHEDULE OF PLANT INSPECTION WILL BE TWICE A YEAR IN SPRING AND FALL. THIS INSPECTION WILL INCLUDE REMOVAL OF DEAD AND DISEASED VEGETATION CONSIDERED BEYOND TREATMENT, TREATMENT OF ALL DEFICIENT STAKES AND WIRES.
3. MULCH SHALL BE INSPECTED EACH SPRING. REMOVE PREVIOUS MULCH LAYER BEFORE APPLYING NEW LAYER ONCE EVERY 2 TO 3 YEARS.
4. SOIL EROSION TO BE ADDRESSED ON AN AS NEEDED WITH A MINIMUM OF ONCE PER MONTH AND AFTER HEAVY STORM EVENTS.



RAIN GARDEN PLANTING DETAIL
N.T.S.

RAINGARDEN PLANT LIST(EACH)(SURFACE AREA=77SF)

QUANTITY	BOTANICAL NAME	COMMON NAME	SIZE
1	ILEX GLABRA	INK BERRY	2 '–3' HT.
4	LOBELEA CARDINALIS	CARDINAL FLOWER LOBELIA	1 GAL. CONTAINER
4	DRYOPTERIS SP.	WOOD FERN	1 GAL. CONTAINER
3	ASTER NOVAE–ANGLIAE	NEW ENGLAND ASTER	1 GAL. CONTAINER



SWM GRASS CHANNEL
WQv+REv GRASS CHANNEL SWALE
MAX. SLOPE=4.0%
NOT TO SCALE

SOILS LEGEND

SYMBOL	NAME / DESCRIPTION	GROUP
CmC2	CHILLUM SILT LOAM – 5% TO 10% SLOPES MODERATELY ERODED	B

SCHEDULE A: PERIMETER LANDSCAPE EDGE

CATEGORY	ADJACENT TO RIGHT OF WAY
PERIMETER/FRONTAGE DESIGNATION	1
LANDSCAPE TYPE	B
LINEAR FEET OF ROADWAY, PERIMETER/FRONTAGE	115'
CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR FEET DESCRIBE BELOW IF NEEDED)	NO*
CREDIT FOR WALL, FENCE OR BERM (YES, NO, LINEAR FEET DESCRIBE BELOW IF NEEDED)	– –
NUMBER OF PLANTS REQUIRED (LF REMAINING)	115'
SHADE TREES	1:50 3
EVERGREEN TREES	1:40 3
SHRUBS	–
NUMBER OF PLANTS PROVIDED	
SHADE TREES	3
EVERGREEN TREES	3
OTHER TREES (2:1 SUBSTITUTION)	–
SHRUBS (10:1 SUBSTITUTION)	–
(DESCRIBE PLANT SUBSTITUTION CREDITS BELOW IF NEEDED)	

*EXISTING WOODS TO REMAIN

PLANT LIST

KEY	QUAN.	BOTANICAL NAME	SIZE	REM.
AR	3	ACER RUBRUM 'OCTOBER GLORY' OCTOBER GLORY RED MAPLE	2 1/2"–3" Cal.	B & B
PS	3	PINUS STROBUS WHITE PINE	5'–6' HT.	B & B

3 ADDITIONAL TREES ARE PROVIDED TO SCREEN THE HOUSE.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 7/27/07
CHIEF, DIVISION OF LAND DEVELOPMENT — DATE 8/07/07
DIRECTOR — DATE 8/3/07

BY THE ENGINEER

"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. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

SIGNATURE OF ENGINEER ROBERT H VOGEL, PE — DATE 7/18/07

BY THE DEVELOPER

"I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE IN ACCORDANCE TO THESE PLANS, 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.

TRINITY QUALITY HOMES INC. — DATE 07/18/07

THESE PLANS HAVE BEEN REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SOIL EROSION AND SEDIMENT CONTROL.

USDA – NATURAL RESOURCES CONSERVATION SERVICE — DATE 7/24/07

THESE PLANS FOR SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

HOWARD SCD — DATE 7/24/07

OWNER/DEVELOPER
MICHAEL L. PFAU
3675 PARK AVENUE
ELLICOTT CITY, MARYLAND
21043–4511
443–324–9806

SEDIMENT AND EROSION CONTROL NOTES AND DETAILS
LOT 72 and 73

NORTH LAUREL

DEED REFERENCE: 10080/494
REFERENCE PLAT No. 18927
TAX MAP 50 GRID 3 PARCEL 425
6TH 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: 410.461.8961

STATE OF MARYLAND — ROBERT HARRIS VOGEL — No. 19193 — PROFESSIONAL ENGINEER — 7/18/07

DESIGN BY: RHV
DRAWN BY: HED
CHECKED BY: RHV
DATE: OCTOBER 2006
SCALE: AS SHOWN
W.O. NO.: 05-98

SHEET 2 OF 2

SDP-07-071