RESIDENTIAL SITE DEVELOPMENT PLAN
THE WALTER DAVIS PROPERTY
LOT 1

GENERAL NOTES

1.) THIS PROJECT IS IN CONFORMANCE WITH THE LATEST HOWARD COUNTY STANDARDS UNLESS WAIVERS HAVE BEEN APPROVED.

2.) THE SUBJECT PROPERTY IS ZONED R–20 PER THE 2–2–2004 COMPREHENSIZE ZONING PLAN AND THE "COMP LITE" ZONING AMENDMENTS EFFECTIVE 7–28–2006.

3.) COORDINATES BASED ON NAD '83, MARYLAND COORDINATE SYSTEM AS PROJECTED BY HOWARD COUNTY GEODETIC CONTROL STATIONS 24FB AND 2413.

4.) TRACT BOUNDARY IS BASED ON A FIELD RUN MONUMENTED BOUNDARY SURVEY PERFORMED BY DEMARIO DESIGN CONSULTANTS IN JUNE, 2009.

5.) THE EXISTING TOPOGRAPHY SHOWN WAS FIELD RUN BY DEMARIO DESIGN CONSULTANTS, INC. IN JULY, 2009.

6.) THE EXISTING UTILITIES SHOWN HEREON ARE BASED ON FIELD SURVEYS BY DEMARIO DESIGN CONSULTANTS, INC AND BY RECORD DRAWINGS. IT IS THE CONTRACTORS RESPONSIBILITY FOR VERIFYING THESE UTILITIES IN THE FIELD AT TIME OF CONSTRUCTION.

7.) THE TRAFFIC STUDY WAS PREPARED BY TRAFFIC CONCEPTS, INC. DATED JANUARY 22, 2010 AND WAS APPROVED UNDER SP–10–003 ON NOVEMBER 10, 2010.

8.) THIS PROPERTY IS LOCATED WITHIN THE METROPOLITAN DISTRICT.

9.) WATER IS PUBLIC. THE CONTRACT NUMBER IS 11–W.

10.) SEWER IS PUBLIC. THE CONTRACT NUMBER IS 37–S.

11.) WATER AND SEWER SERVICE TO THESE LOTS WILL BE GRANTED UNDER THE PROVISIONS OF SECTION 18.122.B OF THE HOWARD COUNTY CODE.

12.) PUBLIC WATER AND SEWAGE ALLOCATIONS WILL BE GRANTED AT THE TIME OF ISSUANCE THE BUILDING PERMIT IF CAPACITY IS AVAILABLE AT THAT TIME.

13.) THERE ARE NO WETLANDS, STREAMS, THEIR BUFFERS, 100–YEAR FLOODPLAIN OR STEEP SLOPES LOCATED ON THIS LOT.

14.) TO THE BEST OF OUR KNOWLEDGE, THERE ARE NO CEMETERY LOCATIONS ON THESE LOTS.

15.) THERE ARE NO HISTORIC SITES/FEATURES LOCATED ON THESE LOTS.

16.) STORMWATER MANAGEMENT FOR THIS LOT WAS APPROVED UNDER SP–10–003 AND ECP–10–011. THE PROPOSED HOUSE SHALL BE TREATED BY THE MICRO–BIORETENTION PRACTICE IN THE BACK OF THE LOT. THE DRIVEWAY SHALL BE TREATED VIA MICRO-BIORETENTION #1. SEE SHEET 3 FOR SWM DETAILS.

17.) THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE HOWARD COUNTY LANDSCAPE MANUAL.

FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING SHALL BE POSTED AS PART OF THE BUILDERS GRADING PERMIT APPLICATION IN THE AMOUNT OF $2,100.00 ($1,500.00 FOR 5 SHADE TREES AND $600.00 FOR 2 STREET TREES).

18.) A DESIGN MANUAL WAIVER FOR RELEASE FROM THE PROVISION OF PUBLIC SIDEWALKS AND A SPEED STUDY FOR THE SITE ACCESS ON HUNT AVENUE WAS APPROVED ON JUNE 21, 2010 BY A LETTER RECEIVED FROM CHARLES D. DAMMERS, CHIEF, DEVELOPMENT ENGINEERING DIVISION.

19.) 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' (16' SERVING MORE THAN ONE RESIDENCE).
b) SURFACE – 6" OF COMPACT CRUSHER RUN BASE WITH TAR AND CHIP COATING (1–1/2" MIN.)
c) GEOMETRY – MAXIMUM 15% GRADE, MAXIMUM 10% GRADE CHANGE AND MINIMUM 45' TURNING RADIUS.
d) STRUCTURES (CULVERTS/BRIDGES) – CAPABLE OF SUPPORTING 25 GROSS TONS (H25 LOADING).
e) DRAINAGE ELEMENTS – CAPABLE OF SAFELY PASSING 100 YEAR FLOODPLAIN WITH NO MORE THAN 1 FOOT DEPTH OVER DRIVEWAY.
f) STRUCTURE CLEARANCES – MINIMUM 12 FEET.
g) MAINTENANCE – SUFFICIENT TO INSURE ALL WEATHER USE.

20.) WAIVER PETITION (WP–11–155) WAS APPROVED ON APRIL 26, 2011 GRANTING A REQUEST TO DEFER THE OPEN SPACE REQUIREMENTS FOR LOT 1 AND FOREST CONSERVATION OBLIGATION REQUIREMENTS FOR NON–BUILDABLE BULK PARCEL 'B' UNTIL THE RESUBDIVISION OF NON–BUILDABLE BULK PARCEL 'B'.

21.) THE FOREST CONSERVATION OBLIGATION FOR LOT 1 HAS BEEN MET BY A FEE–IN–LIEU PAYMENT OF $2,351.81 [LOT 1 (20,365 sf) AND NON–BUILDABLE BULK PARCEL A (540 sf) x 15% AFFORESTATION OBLIGATION x $0.75] PAID PRIOR TO THE RECORDATION OF PLAT 21672.

22.) 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 THE START OF ANY WORK.

23.) THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1–800–257–7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.

24.) ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLUS MSHA STANDARDS AND SPECIFICATIONS IF APPLICABLE.

25.) IN ACCORDANCE OF 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.

26.) 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 THE START OF ANY WORK.

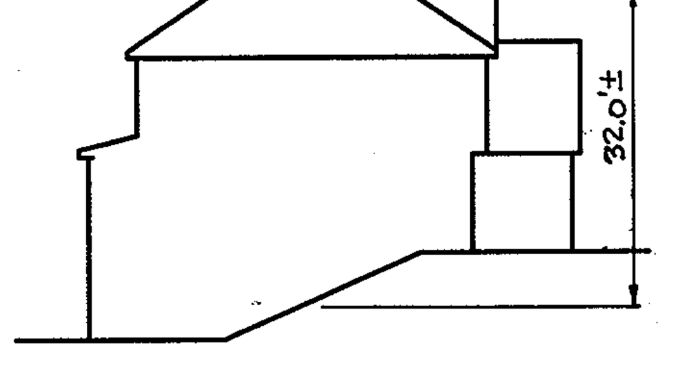
27.) THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1–800–257–7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.

28.) ANY DAMAGE TO THE COUNTY'S RIGHT–OF–WAY SHALL BE CORRECTED AT THE DEVELOPER'S EXPENSE.

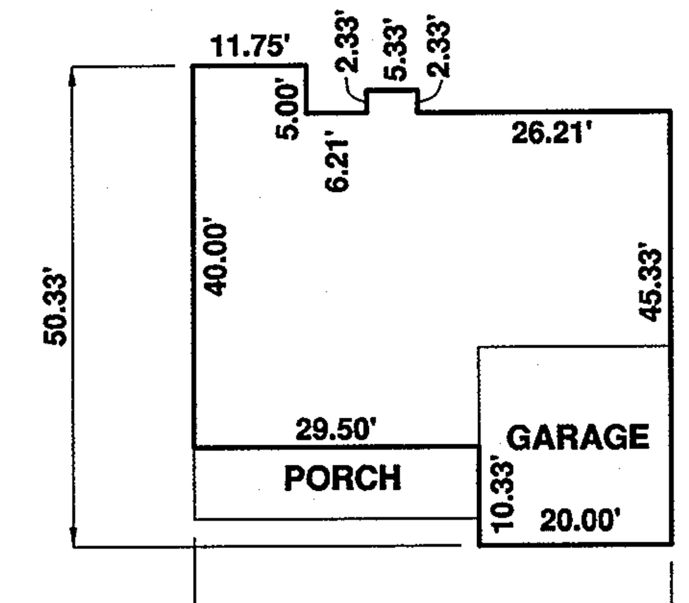
29.) IN ACCORDANCE WITH SECTION 128 OF THE HOWARD COUNTY ZONING REGULATIONS, BAY WINDOWS, CHIMNEYS OR EXTERIOR STAIRWAYS NOT MORE THAN 16 FEET IN WIDTH MAY PROJECT NOT MORE THAN 4 FEET INTO ANY SETBACKS, PORCHES OR DECKS, OPEN OR ENCLOSED, MAY PROJECT NOT MORE THAN 10 FEET INTO THE FRONT OR REAR YARD SETBACK.

30.) THE STAKING OF FOUNDATIONS PRIOR TO CONSTRUCTION TO ENSURE COMPLIANCE WITH REGULATORY BUILDING RESTRICTION LINES IS RECOMMENDED.

31.) THIS DEVELOPMENT IS DESIGNED TO BE IN ACCORDANCE WITH SECTION 16.127 RESIDENTIAL INFILL DEVELOPMENT, OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS. THE DEVELOPER OF THIS PROJECT SHALL CREATE COMPATIBILITY WITH THE EXISTING NEIGHBORHOOD THROUGH THE USE OF ENHANCED PERIMETER LANDSCAPING, BERMS, FENCES, SIMILAR HOUSING UNIT TYPES AND THE DIRECTIONAL ORIENTATION OF THE PROPOSED HOUSES.



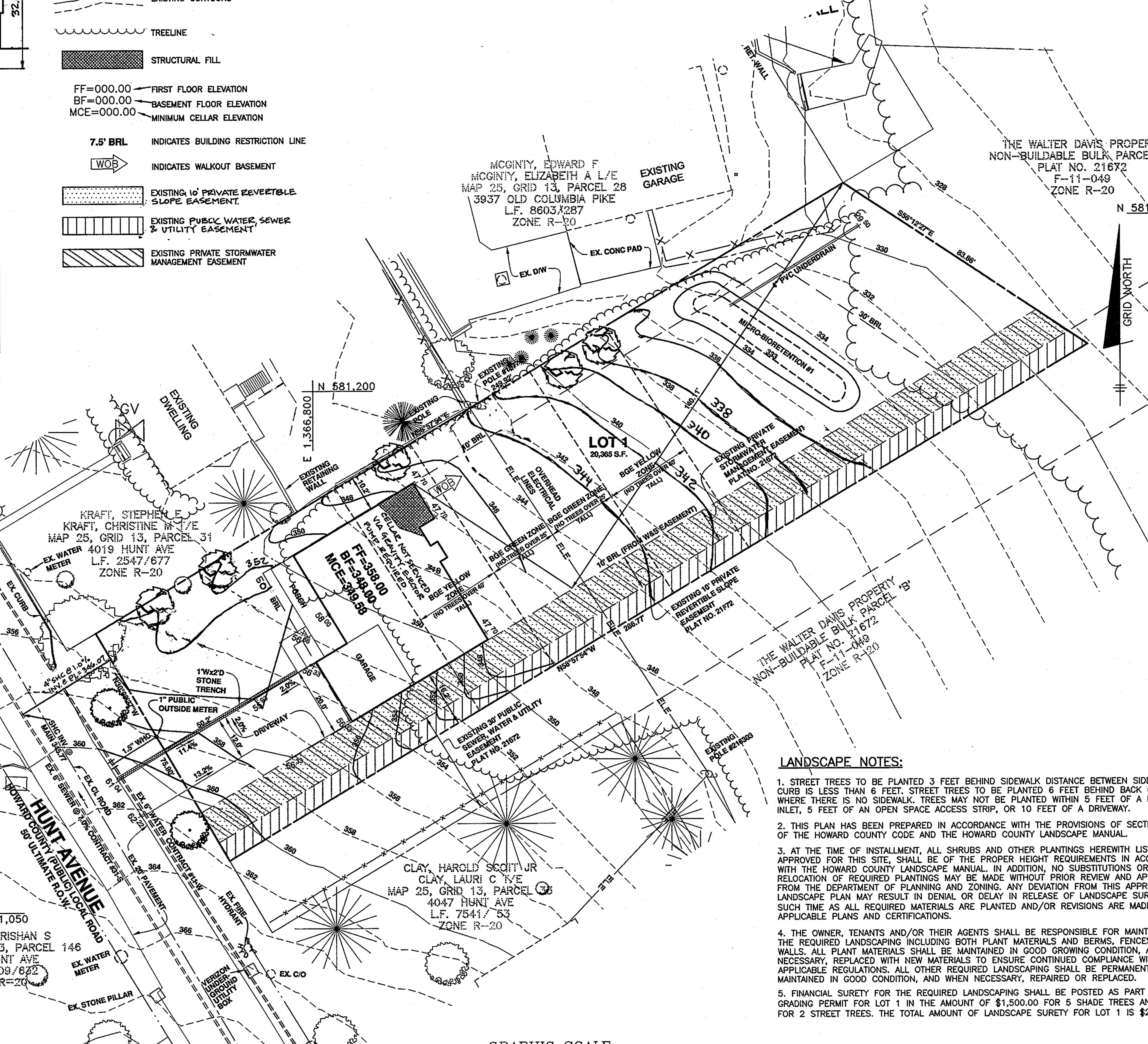
LEFT SIDE ELEVATION
SCALE: 1" = 20'



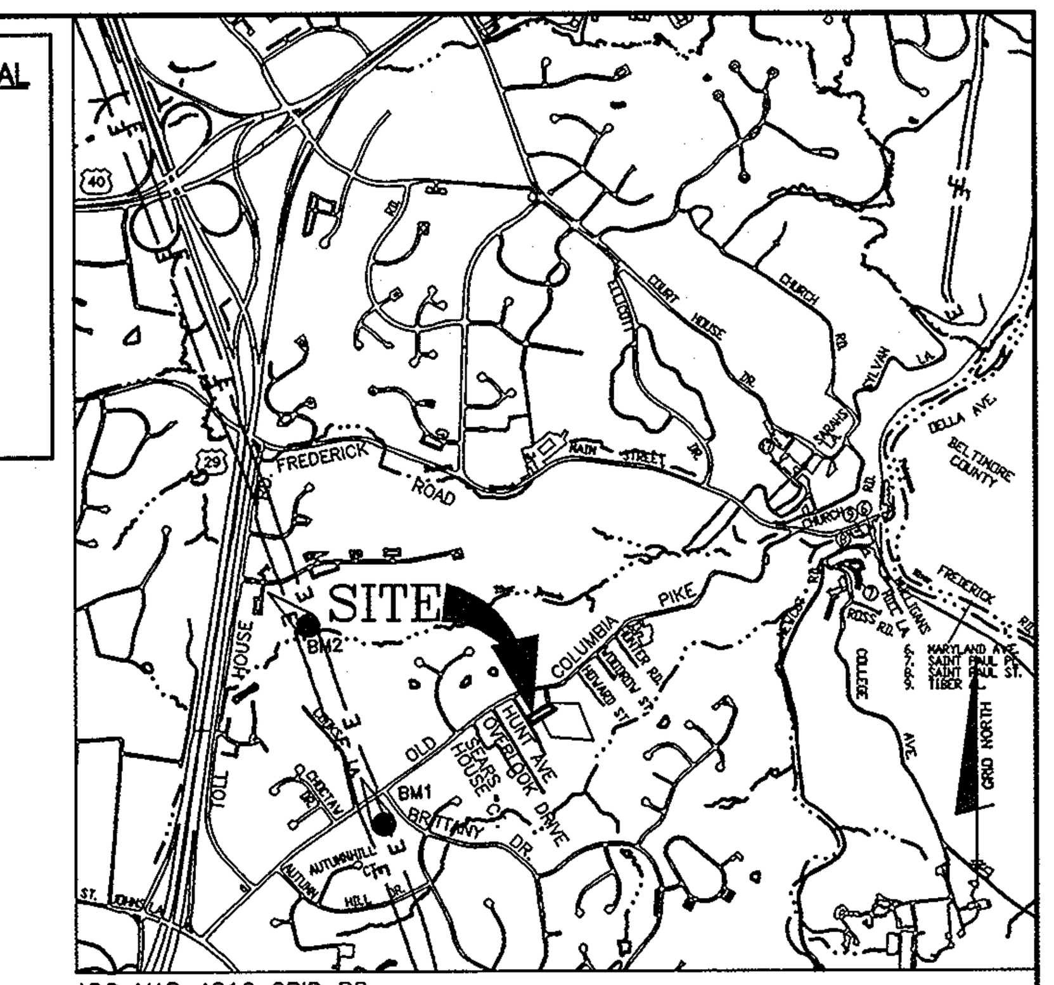
HOUSE FOOTPRINT
SCALE: 1" = 20'

LEGEND

(line)	EXISTING CONTOURS
(line)	TREELINE
(hatch)	STRUCTURAL FILL
FF=000.00	FIRST FLOOR ELEVATION
BF=000.00	BASEMENT FLOOR ELEVATION
MCE=000.00	MINIMUM CELLAR ELEVATION
7.5' BRL	INDICATES BUILDING RESTRICTION LINE
WOB	INDICATES WALKOUT BASEMENT
(hatch)	EXISTING 10' PRIVATE REVERTBLE SLOPE EASEMENT.
(hatch)	EXISTING PUBLIC WATER, SEWER & UTILITY EASEMENT
(hatch)	EXISTING PRIVATE STORMWATER MANAGEMENT EASEMENT



BENCHMARKS NAD'83 HORIZONTAL	
HO. CO. #24FB	
N 582652.1506'	E 1364255.9193'
ELEVATION: 422.498'	
HO. CO. #2413	
N 580648.9394'	E 1364974.4661'
ELEVATION: 403.699'	



ADC MAP 4816 GRID B8

VICINITY MAP
SCALE : 1'=2000'

SITE ANALYSIS DATA CHART

1.) TOTAL PROJECT AREA ____ 0.47 AC.
2.) AREA OF PLAN SUBMISSION ____ 0.47 AC.
3.) LIMIT OF DISTURBED AREA ____ 0.30 AC.
4.) PRESENT ZONING: ____ R–20
5.) PROPOSED USE OF SITE: ____ RESIDENTIAL SFD HOME
6.) TOTAL NUMBER OF UNITS ALLOWED AS SHOWN ON FINAL PLAT(S) ____ 1
7.) TOTAL NUMBER OF UNITS PROPOSED ____ 1
8.) NUMBER OF PARKING SPACES REQUIRED BY HO. CO. ZONING REGS AND/OR FDP CRITERIA ____ 2
9.) NUMBER OF PARKING SPACES PROVIDED ONSITE (INCLUDES 2 IN GARAGE AND 2 IN D/W) ____ 4
10.) OPEN SPACE ON–SITE ____ N/A (SEE GENERAL NOTE 20)
PERCENTAGE OF GROSS ____ N/A
11.) AREA OF RECREATIONAL OPEN SPACE REQUIRED ____ N/A
AREA OF RECREATIONAL OPEN SPACE PROVIDED ____ N/A
12.) APPLICABLE DPZ FILE REFERENCES: ____ SP–10–003 F–11–049 ECP–10–011 WP–11–155

LANDSCAPE NOTES:

1. STREET TREES TO BE PLANTED 3 FEET BEHIND SIDEWALK DISTANCE BETWEEN SIDEWALK AND CURB IS LESS THAN 6 FEET. STREET TREES TO BE PLANTED 6 FEET BEHIND BACK OF CURB WHERE THERE IS NO SIDEWALK. TREES MAY NOT BE PLANTED WITHIN 5 FEET OF A DRAIN INLET, 5 FEET OF AN OPEN SPACE ACCESS STRIP, OR 10 FEET OF A DRIVEWAY.

2. THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE HOWARD COUNTY LANDSCAPE MANUAL.

3. 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 RELEASE OF LANDSCAPE SURETY UNTIL SUCH TIME AS ALL REQUIRED MATERIALS ARE PLANTED AND/OR REVISIONS ARE MADE TO APPLICABLE PLANS AND CERTIFICATIONS.

4. THE OWNER, TENANTS AND/OR THEIR AGENTS SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE REQUIRED LANDSCAPING INCLUDING BOTH PLANT MATERIALS AND BERMS, FENCES AND WALLS. ALL PLANT MATERIALS SHALL BE MAINTAINED IN GOOD GROWING CONDITION, AND WHEN NECESSARY, REPLACED WITH NEW MATERIALS TO ENSURE CONTINUED COMPLIANCE WITH APPLICABLE REGULATIONS. ALL OTHER REQUIRED LANDSCAPING SHALL BE PERMANENTLY MAINTAINED IN GOOD CONDITION, AND WHEN NECESSARY, REPAIRED OR REPLACED.

5. FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING SHALL BE POSTED AS PART OF THE GRADING PERMIT FOR LOT 1 IN THE AMOUNT OF $1,500.00 FOR 5 SHADE TREES AND $600.00 FOR 2 STREET TREES. THE TOTAL AMOUNT OF LANDSCAPE SURETY FOR LOT 1 IS $2,100.00.

SHEET INDEX

SHEET	TITLE
1	SITE DEVELOPMENT PLAN
2	SEDIMENT & EROSION CONTROL PLAN, NOTES AND DETAILS
3	MICRO–BIORETENTION DETAILS

ADDRESS CHART

LOT	STREET ADDRESS
1	4023 HUNT AVENUE

DEVELOPER'S/BUILDER'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 LANDSCAPE MANUAL. I/WE FURTHER CERTIFY THAT UPON COMPLETION OF A LETTER OF LANDSCAPE INSTALLATION, ACCOMPANIED BY AN EXECUTED ONE–YEAR GUARANTEE OF PLANT MATERIALS, WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.

DEVELOPER [signature] DATE 12-20-2011

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

[signature] CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 1/9/12
[signature] CHIEF, DIVISION OF LAND DEVELOPMENT — DATE 1/11/12
[signature] DIRECTOR — DATE 1/11/12

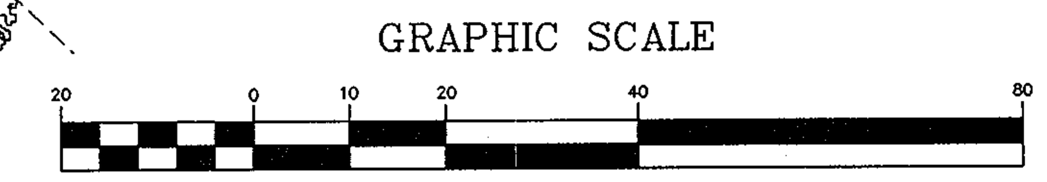
SCHEDULE A PERIMETER LANDSCAPE EDGE

CATEGORY	ADJACENT TO PERIM. PROPERTY ①
LANDSCAPE TYPE	A 1:60 shade
LINEAR FEET OF ROADWAY FRONTAGE/PERIMETER	250 LF
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)	NO
NUMBER OF PLANTS REQUIRED	250 LF
SHADE TREES	5
EVERGREEN TREES	0
OTHER TREES (2:1 SUBSTITUTE)	0
SHRUBS	0
NUMBER OF PLANTS PROVIDED	
SHADE TREES	5
EVERGREEN TREES	0
OTHER TREES (2:1 SUBSTITUTE)	0
SHRUBS (10:1 SUBSTITUTE)	0

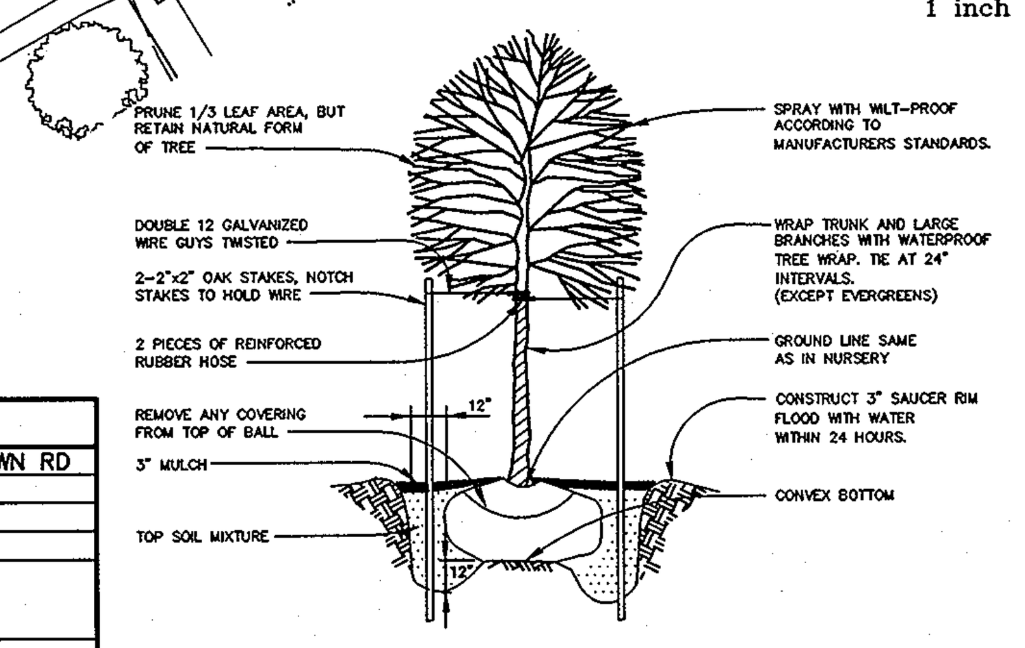
STREET TREE SCHEDULE

	MARCH BROWN RD
LINEAR FEET OF RIGHT–OF–WAY	76'
LINEAR FEET OF CREDIT	0'
LINEAR FEET OF REQUIRED PLANTING	76'
TREE SIZE	LARGE 1:40 LF
TREES REQUIRED	2

GRAPHIC SCALE



(IN FEET)
1 inch = 20 ft.



TREE PLANTING DETAIL
NOT TO SCALE

PUBLIC STREET TREE PLANTING LIST

SYMBOL	QUANTITY	NAME	REMARKS	DESCRIPTION
(symbol)	2	TILIA CORDATA 'GREENSPIRE' (Greenspire Littleleaf Linden)	2.5" –3" cal.	TO BE PLANTED ALONG HUNT AVENUE AND PROVIDED BY THE BUILDER

PERIMETER LANDSCAPE PLANTING LIST

SYMBOL	QUANTITY	NAME	REMARKS	DESCRIPTION
(symbol)	5	ACER RUBRUM 'RED SUNSET' (Red Sunset Red Maple)	2.5" – 3" cal.	SHADE TREES ALONG PERIMETER TO BE PROVIDED BY THE BUILDER

PERMIT INFORMATION CHART

SUBDIVISION NAME:		SECTION/AREA:			LOT/PARCEL #
THE WALTER DAVIS PROPERTY		NA			LOT 1/148
PLAT No. OR L/F	GRID No.	ZONE	TAX MAP NO	ELECTION DISTRICT	CENSUS TRACT
21672	13	R–20	25	2	6028.00

NO.	DATE	REVISION
1 (△)	8-14-12	DELETE INFILTRATION BERM AND REVISE LOT GRADES PER AS-BUILT CONDITIONS

BENCHMARK ENGINEERING, INC.
ENGINEERS ▲ LAND SURVEYORS ▲ PLANNERS
8480 BALTIMORE NATIONAL PIKE ▲ SUITE 418 ▲ ELLICOTT CITY, MARYLAND 21043
(P) 410–465–6105 (F) 410–465–6644
60 THOMAS JOHNSON DRIVE ▲ FREDERICK, MARYLAND 21702
(P) 301–371–3505 (F) 301–371–3506
WWW.BEI–CIVILENGINEERING.COM

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland, License No. 28559, Expiration Date: 7-22-2013.
[signature] 12/12/2011

OWNER:
SUBRAHMANYAN AND LEENASHRI PEDDIBHOTLA
6261 GREENFIELD ROAD, APT 404
ELKRIDGE, MARYLAND 21075

BUILDER:
STIRLING HOMES
20901 NEW HAMPSHIRE AVENUE
BROOKEVILLE, MARYLAND 20833
301–974–4899

THE WALTER DAVIS PROPERTY
LOT 1

TAX MAP: 25 GRID: 13 PARCEL: 148 ZONED: R–20
HUNT AVENUE
ELECTION DISTRICT NO. 2
HOWARD COUNTY, MARYLAND

SITE DEVELOPMENT PLAN
SP–10–003, ECP–10–011, F–11–049, WP–11–155

DATE: DECEMBER, 2011 — BEI PROJECT NO: 2445
DESIGN: DBT — DRAWN: DBT — SCALE: AS SHOWN — SHEET 1 OF 3

SDP-12-021

P:\2445 Walter Davis Property\dwg\8000.dwg, 12/5/2011 1:24:35 PM

SEDIMENT CONTROL NOTES

1. A MINIMUM OF 24 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF INSPECTION, LICENSES AND PERMITS, SEDIMENT CONTROL DIVISION PRIOR TO THE START OF ANY CONSTRUCTION. (313-1850).
2. ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE MOST CURRENT "MARYLAND STANDARDS AND SPECIFICATION FOR SOIL EROSION AND SEDIMENT CONTROL", 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 12, OF THE 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 SEEDINGS (SEC. 51) SOD (SEC. 54), TEMPORARY SEEDING (SEC. 50) AND MULCHING (SEC. 52). TEMPORARY STABILIZATION WITH MULCH ALONE CAN ONLY BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER GERMINATION AND ESTABLISHMENT OF GRASSES.
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 AREA OF SITE	0.47	ACRES
AREA DISTURBED	0.30	ACRES
AREA TO BE ROOFED OR PAVED	0.07	ACRES
AREA TO BE VEGETATIVELY STABILIZED	0.23	ACRES
TOTAL CUT	212	CY
TOTAL FILL	281	CY
OFFSITE WASTE AREA LOCATION	N/A	

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 CONTROL 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 CAN BE BACK FILLED AND STABILIZED WITHIN ONE WORKING DAY, WHICHEVER IS SHORTER.

TEMPORARY SEEDBED PREPARATIONS

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, 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 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 14, SEED WITH 3 LBS PER ACRE OF WEEPING LOVEGRASS (.07 LBS/1000 SQ FT). FOR THE PERIOD NOVEMBER 16 THROUGH 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.

PERMANENT SEEDBED PREPARATIONS

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 ON OF THE FOLLOWING SCHEDULES:

1. 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).
2. 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 THE 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 (.05 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 WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING. OPTION (2) USE SOD. OPTION (3) SEED WITH 60 LBS PER ACRE OF KENTUCKY 31 TALL FESCUE AND MULCH WITH 2 TONS PER ACRE OF 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.

TOPSOIL SPECIFICATIONS

I. Topsoil salvaged from the existing site may be used provided that it meets that 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 soil scientist and approved by the appropriate approval authority. Regardless, topsoil shall not be a mixture of contrasting texture subsoils and shall contain less than 5% by volume of cinders, stones, slag, coarse fragments, gravel, sticks, roots, trash, or other materials larger than 1-1/2" in diameter.

ii. Topsoil must be free of plants or plant parts such as Bermuda grass, quack grass, Johnson grass, 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.

III. 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.

IV. 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 or 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 which has been treated with soil sterilants or chemicals used for weed control until sufficient time has elapsed (14 days min.) to permit dissipation of phyto-toxic materials.

Note: Topsoil substitutes or amendments, as recommended by a qualified agronomist or soil scientist and approved by the appropriate approval authority, may be used in lieu of natural topsoil.

ii. Place topsoil (if required) and apply soil amendments as specified in 20.0 Vegetative Stabilization — Section 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 placed while the topsoil or subsoil is in a frozen or muddy condition, when the subsoil is excessively wet or in a condition that may otherwise be detrimental to proper grading and seedbed preparation.

VI. Alternative for Permanent Seeding — Instead of applying the full amounts of lime and commercial fertilizer, composted sludge and amendments may be applied as specified below:

i. Composted Sludge Material for use as a soil conditioner for sites having distributed areas over 5 acres shall be tested to prescribe amendments and for sites having disturbed areas under 5 acres shall conform to the following requirements:

a. Composted sludge shall be supplied 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.

b. Composted sludge shall contain at least 1 percent nitrogen, 1.5 percent phosphorus, and 0.2 percent potassium and have a pH of 7.0 to 8.0. If compost does not meet these requirements, the appropriate constituents must be added to meet the requirements prior to use.

c. Composted sludge shall be applied at a rate of 1 ton/1,000 square feet.

ii. Composted sludge shall be amended with a potassium fertilizer applied at the rate of 4 lb/1,000 square feet, and 1/3 the normal lime application rate.

References: Guidelines Specifications, Soil Preparation and Sodding, MD-VA, Pub. #1, Cooperative Extension Service, University of Maryland and Virginia Polytechnic Institutes, Revised 1973.

30.0 DUST CONTROL

Definition

Controlling dust blowing and movement on construction sites and roads.

Purpose

To prevent blowing and movement of dust from exposed soil surfaces, reduce on and off-site damage, health hazards, and improve traffic safety.

Conditions Where Practice Applies

This practice is applicable to areas subject to dust blowing and movement where on and off-site damage is likely without treatment.

Specifications

Temporary Methods

1. Mulches — See standards for vegetative stabilization with mulches only. Mulch should be crimped or tracked to prevent blowing.
2. Vegetative Cover — See standards for temporary vegetative cover.
3. Tillage — To roughen surface and bring clods to the surface. This is an emergency measure which should be used before soil blowing starts. Begin plowing on windward side of site. Chisel-type plows spaced about 12" apart, spring-loaded harrows, and similiar plows are examples of equipment which may produce the desired effect.
4. Irrigation — This is generally done as an emergency treatment. Site is sprinkled with water until the surface is moist. Repeat as needed. At no time should the site be irrigated to the point that runoff begins to flow.
5. Barriers — Solid board fences, silt fences, snow fences, burlap fences, straw bales, and similiar material can be used to control air currents and soil blowing. Barriers placed at right angles to prevailing currents at intervals of about 10 times their height are effective in controlling soil blowing.
6. Calcium Chloride — Apply at rates that will keep surface moist. May need retreatment.

Permanent Methods

1. Permanent Vegetation — See standards for permanent vegetative cover, and permanent stabilization with sod. Existing trees or large shrubs may afford valuable protection if left in place.
2. Topsoiling — Covering with less erosive soil materials. See standards for topsoiling.
3. Stone — Cover surface with crushed stone or coarse gravel.

References

1. Agriculture Handbook 346. Wind Erosion Forces in the United States and Their Use in Predicting Soil Loss.
2. Agriculture Information Bulletin 354. How to Control Wind Erosion, USDA-ARS.

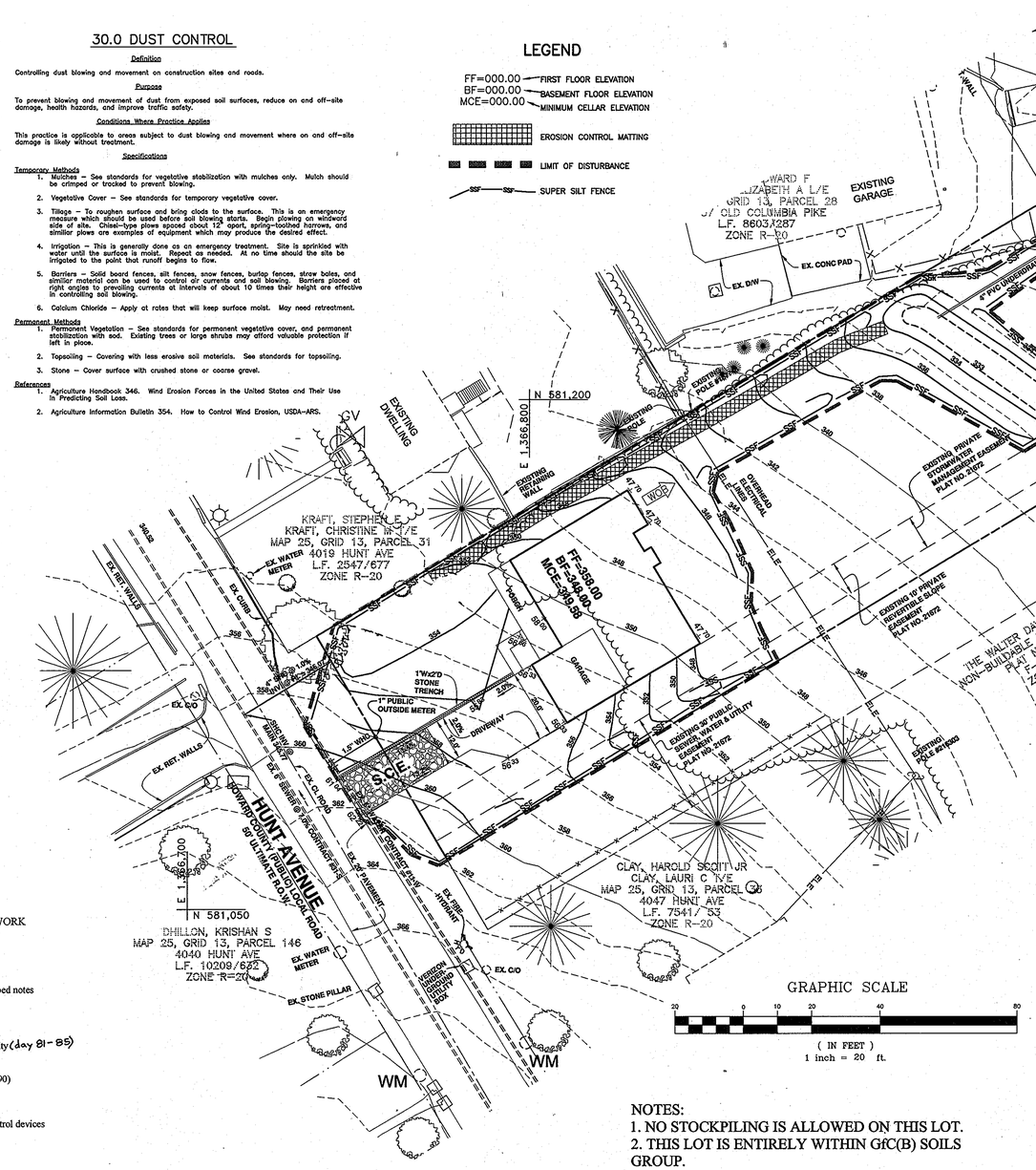
SEQUENCE OF CONSTRUCTION

NOTIFY SEDIMENT CONTROL DIVISION 48 HOURS PRIOR TO START OF WORK

1. Obtain grading permit. (day 1)
2. Install stabilized construction entrance, silt fences and super silt fences . (day 2-6)
4. Excavate for foundation, rough grade and stabilize in accordance with the temporary seedbed notes (day 7-10)
5. Construct house, backfill and construct driveway. (day 11-80)
6. Once the contributing drainage area has been stabilized, construct micro-bioretention facility (day 81-85)
7. Final grade the lot and stabilize in accordance with the permanent seedbed notes. (day 85-90)
8. Install perimeter and street trees. (day 91)
9. Upon approval from the Howard County sediment control inspector, remove sediment control devices and stabilize any remaining disturbed areas. (day 92-95)

LEGEND

FF=000.00 — FIRST FLOOR ELEVATION
BF=000.00 — BASEMENT FLOOR ELEVATION
MCE=000.00 — MINIMUM CELLAR ELEVATION
EROSION CONTROL MATTING
LIMIT OF DISTURBANCE
SSF SSF SUPER SILT FENCE



GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

NOTES:
1. NO STOCKPILING IS ALLOWED ON THIS LOT.
2. THIS LOT IS ENTIRELY WITHIN GfC(B) SOILS GROUP.

ENGINEER'S 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.

ENGINEER — DATE 12/12/2011

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."

DEVELOPER — DATE 12-20-2011

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

HOWARD SOIL CONSERVATION DISTRICT — DATE 1/9/12

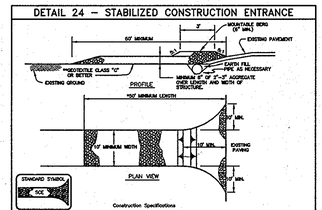
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 1/9/12

CHIEF, DIVISION OF LAND DEVELOPMENT — DATE 1/11/12

DIRECTOR — DATE 1/11/12

DETAIL 24 — STABILIZED CONSTRUCTION ENTRANCE

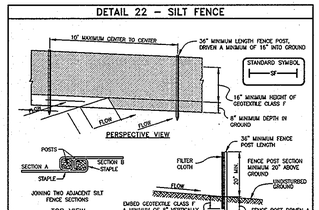


Construction Specifications

1. Length — minimum of 50' (*50' for 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 residence to use geotextile.
4. Stone — crushed aggregate (2" to 3") or reclaimed or recycled concrete equivalent shall be placed at least 6" deep over the length and width of the entrance.
5. Surface Water — all surface water flowing to or diverted toward construction entrance shall be piped through the construction 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" minimum 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.

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

DETAIL 22 — SILT FENCE



CONSTRUCTION NOTES FOR FABRICATED SILT FENCE

1. Fence posts shall be a minimum of 36" long driven 16" minimum into the ground. Wood posts shall be 1"/2" x 1"/2" square (minimum) cut, or 1 3/4" diameter (minimum) round and shall be of sound quality hardwood. Steel posts will be standard T or U section weighting not less than 1.00 pond per linear foot.
2. Geotextile 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/ft /minute (max.)	Test: MSMT 322
Filtering Efficiency	75% (min.)	Test: MSMT 322

3. Where ends of geotextile fabric come together, they shall be overlapped, folded and stapled to prevent sediment bypass.
4. Silt Fence shall be inspected after each rainfall event and maintained when bulges occur or when sediment accumulation reached 50% of the fabric height.

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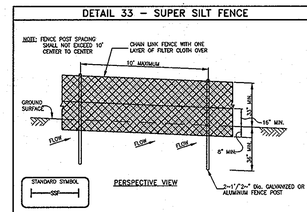
DETAIL 33 — SUPER SILT FENCE



U.S. DEPARTMENT OF AGRICULTURE — SOIL CONSERVATION SERVICE — PAGE H — 26 — 3 — MARYLAND DEPARTMENT OF ENVIRONMENT — WATER MANAGEMENT ADMINISTRATION

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 mid section.
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 6" 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 mid section and shall meet the following requirements for Geotextile Class F:

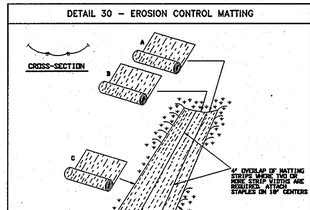
Tensile Strength	50 lbs/in (min.)	Test: MSMT 509
Tensile Modulus	20 lbs/in (min.)	Test: MSMT 509
Flow Rate	0.3 gal/ft /minute (max.)	Test: MSMT 322
Filtering Efficiency	75% (min.)	Test: MSMT 322

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

U.S. DEPARTMENT OF AGRICULTURE — SOIL CONSERVATION SERVICE — PAGE E — 26 — 3A — MARYLAND DEPARTMENT OF ENVIRONMENT — WATER MANAGEMENT ADMINISTRATION

DETAIL 30 — EROSION CONTROL MATTING



U.S. DEPARTMENT OF AGRICULTURE — SOIL CONSERVATION SERVICE — PAGE G — 22 — 2 — 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 a row of staples about 4" down slope 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 rows, 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.

U.S. DEPARTMENT OF AGRICULTURE — SOIL CONSERVATION SERVICE — PAGE G — 22 — 2A — MARYLAND DEPARTMENT OF ENVIRONMENT — WATER MANAGEMENT ADMINISTRATION

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1	8-14-12	DELETE INFILTRATION BERM

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60 THOMAS JOHNSON DRIVE ▲ FREDERICK, MARYLAND 21702
(P) 301-371-3505 (F) 301-371-3506
WWW.BEI-CIVILENGINEERING.COM

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland, License No. 22508, Expiration Date: 7-22-2013.

STATE OF MARYLAND — BRIAN F. CLEARY — No. 22508 — REGISTERED PROFESSIONAL ENGINEER — 12/12/2011

OWNER:
SUBRAHMANYAN AND LEENASHRI PEDDIBHOTLA
6261 GREENFIELD ROAD, APT 404
ELKRIDGE, MARYLAND 21075

BUILDER:
STIRLING HOMES
20901 NEW HAMPSHIRE AVENUE
BROOKEVILLE, MARYLAND 20833
301-974-4899

THE WALTER DAVIS PROPERTY
LOT 1

TAX MAP: 25 GRID: 13 PARCEL: 148 ZONED: R-20
HUNT AVENUE
ELECTION DISTRICT NO. 2
HOWARD COUNTY, MARYLAND

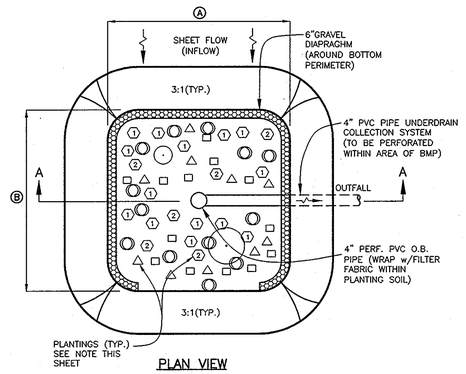
SEDIMENT AND EROSION CONTROL PLAN, NOTES AND DETAILS

SP-10-003, ECP-10-011, F-11-049, WP-11-155

DESIGN: DBT DRAWN: DBT
DATE: DECEMBER, 2011 BEI PROJECT NO: 2445
SCALE: AS SHOWN SHEET 2 OF 3

SDP-12-021

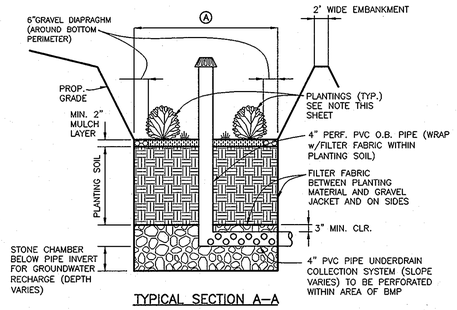
P:\2445 Walter Davis Property\dwg\8000.dwg, 12/5/2011 1:24:51 PM



PLAN VIEW

MICRO–BIORETENTION PLANTING LEGEND	
SYMBOL	NAME
①	AJUGA REPTANS (CREEPING BUGLEWEED)
②	IRIS VERSICOLOR (IRIS)
□	CLETHRA (COMMON PERIWINKLE)
△	ELYMUS VIRGINICUS (VIRGINIA WILD RYE)
◎	VACCINUM ATROCOCCUM (HIGHBUSH BLUEBERRY)
·	BETULA NIGRA (RIVER BIRCH)

MICRO BIO-RETENTION FACILITY INTERNAL LANSCAPING CHART		
		MB #1
Facility square footage	→	300
PLANT NAME	COMMON NAME	QUANTITY
Betula nigra	RIVER BIRCH	1
Clethra	COMMON PERIWNKLE	3
Ajuga reptans	CREEPING BUGLEWEED	9
Iris versicolor	IRIS	9
Elymus virginicus	VIRGINIA WILD RYE	3
Vaccinium atrococcum	HIGHBUSH BLUEBERRY	3

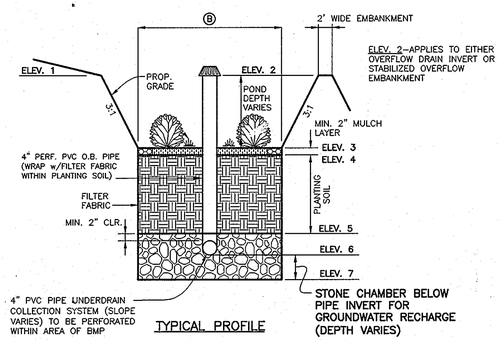


TYPICAL SECTION A–A

MICRO–BIORETENTION DESIGN TABLE

	#1
ELEV. 1	334.00
ELEV. 2	334.00
ELEV. 3	333.00
ELEV. 4	332.83
ELEV. 5	330.83
ELEV. 6	330.33
ELEV. 7	330.33
DIMENSIONS	
'A'	6 FT
'B'	50 FT
TOTAL SF	300

MATERIALS AND SPECIFICATIONS FOR (M–6) MICRO–BIORETENTION			
MATERIAL	SPECIFICATION	SIZE	NOTES:
PLANTINGS (IF REQUIRED)	SEE APPENDIX A; TABLE A.4	N/A	PLANTINGS ARE SITE SPECIFIC
PLANTING SOIL (2.0' TO 4.0' DEEP)	LOAMY SAND (60–65%) & COMPOST (35–40%) OR LOAMY SAND (30%) COARSE SAND (30%) & COMPOST (35–40%)	N/A	USDA SOIL TYPES: LOAMY SAND, SANDY LOAM; CLAY CONTENT <5%
ORGANIC CONTENT	MIN. 10% BY DRY WEIGHT (ASTM D2974)	N/A	-
MULCH	SHREDDED HARDWOOD	N/A	AGED 6 MONTHS, MINIMUM
PEA GRAVEL DIAPHRAGM	PEA GRAVEL; ASTM D-448	#6 OR #8 (1/8" TO 3/8")	
CURTAIN DRAIN	ORNAMENTAL STONE: WASHED COBBLES	STONE: 2" TO 5"	
GEOTEXTILE	N/A	N/A	PE TYPE 1 – NONWOVEN
GRAVEL (UNDERDRAINS & BERMS)	AASHTO M-43	#57 OR #6 AGGREGATE (3/8" TO 3/4")	#8 STONE
UNDERDRAIN PIPING	F758, TYPE PS28 OR AASHTO M-278	4" TO 6" RIGID SCH.40 PVC OR SDR35	SLOTTED OR PERFORATED: 3/8" PERFS. @ 6" O/C, 4 HOLES PER ROW; MINIMUM OF 3" OF GRAVEL OVER PIPES, NOT NECESSARY UNDERNEATH PIPES. PERFORATED PIPE SHALL BE WRAPPED WITH 1/4" GALVANIZED HARDWIRE CLOTH
POURED–IN–PLACE CONC. (IF REQUIRED)	MSHA MIX NO.3; f'c=3500psi @ 28 DAYS, NORMAL WEIGHT, AIR ENTRAINED; REINFORCING TO MEET ASTM 615–60	N/A	ON–SITE TESTING OF POURED–IN–PLACE CONC. REQUIRED; 28 DAY STRENGTH TEST AND SLUMP TEST; ALL CONC. DESIGN (CAST –IN–PLACE or PRE–CAST) NOT USING PREVIOUSLY APPROVED STATE OR LOCAL STANDARDS REQUIRES DESIGN DRAWINGS SEALED AND APPROVED BY A PROFESSIONAL STRUCTURAL ENGINEER LICENSED IN THE STATE OF MARYLAND. – DESIGN TO INCLUDE MEETING ACI CODE 350.6/98: VERTICAL LOADING (H–10 or H–20) ALLOWABLE HORIZONTAL LOADING (BASED ON SOIL PRESSURES); AND ANALYSIS OF POTENTIAL CRACKING
SAND (1.0' DEEP)	AASHTO M–6 OR ASTM C–33	0.02" TO 0.04"	SAND SUBSTITUTIONS SUCH AS DIABASE AND GRAYSTONE (AASHTO) #10 ARE NOT ACCEPTABLE. NO CALCIUM CARBONATED OR DOLOMITIC SAND SUBSTITUTIONS ARE ACCEPTABLE. NO "ROCK DUST" CAN BE USED FOR SAND



TYPICAL PROFILE

TYPICAL MICRO–BIORETENTION DETAILS
NOT TO SCALE

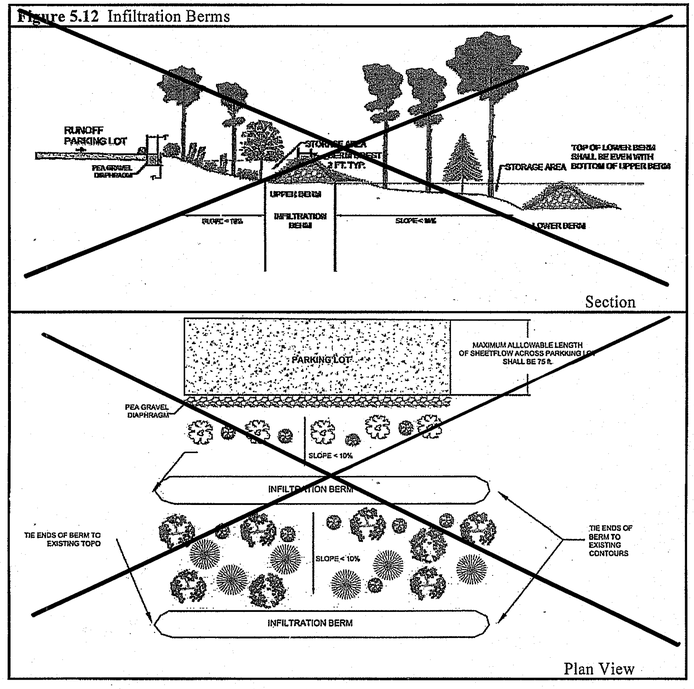
UNDERDRAIN, OVERFLOW AND OUTFALL NOTES

1. THE LAST CLEAN–OUT LOCATION WITHIN EACH MICRO–BIORETENTION FACILITY SHALL BE FITTED WITH A NON–CLOGGING SURFACE DRAIN (EXAMPLE: 4" ABS ROOF DRAIN W/CAST ALUMINUM DOME) AT THE POND SURFACE ELEVATION INDICATED IN THE CORRESPONDING TABLE ELEV. 2.

2. THE PVC WITHIN THE FACILITY SHALL BE PERFORATED.

3. THE UNDER–DRAIN AND PIPE TO OUTFALL SHALL BE INSTALLED TO A MINIMUM DEPTH OF 2' BELOW FINISHED GRADE AND SHALL MAINTAIN A MINIMUM 1% SLOPE AND MAINTAIN A MINIMUM OF 1' OF SEPARATION AT ALL CROSSINGS.

Figure 5.12 Infiltration Berms



SWM SUMMARY TABLE			
FEATURE	Pe TREATS	OBJECT TREATED	D.A. LOCATION
MICRO–BIORETENTION #1	1.0"	LOT 1 HOUSE	D.A. 1

DRAINAGE AREA 1	
DRAINAGE AREA	0.64
IMPERVIOUS AREA	0.098
% IMPERVIOUS	15.3
SOIL TYPE	B
TARGET (EXISTING) RCN	55
Pe VALUE (TABLE 5.3) (in)	1.0
Rv=0.05+0.009(%I)	0.188
ESDv=(Pe*Rv*DA)/12 (sq-ft)	436

SWM DESIGN – DRAINAGE AREA-1

1 Driveway – drain to microbioretention via side yard swale.

2 House – drain to microbioretention feature on lot via a combination of roof leaders and a drainage depression, runoff from rooftop is conveyed to the feature. Use Equation 5.2 and the ESDv eq'n from the MDE Regs:

Af = Pe*DA/a5"

Af = (1.0")(0.098ac)(43560sf/ac)/15" = 285 sq-ft

ESDv = Pe*DA*Rv/12

ESDv = (1.0")(0.098)(43560)(0.95)/12 = 338 cu-ft

75% of the ESDv is required for micro-bioretention:

0.75(ESDv) = 254 cu-ft

USE: 6'X50' surface with 1.0' ponding depth, which provides 300 sq-ft of surface and 300 cu-ft of volume.

ENGINEER'S 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.

ENGINEER — DATE 12/12/2011

DEVELOPER'S CERTIFICATE

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DEVELOPER — DATE 12-20-2011

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

HOWARD SOIL CONSERVATION DISTRICT — DATE 1/5/12

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 1/3/12

CHIEF, DIVISION OF LAND DEVELOPMENT — DATE 1/4/12

DIRECTOR — DATE 1/11/12

NO.	DATE	REVISION
1	8-14-12	DELETE INFILTRATION BERM

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Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland, License No. 22858, Expiration Date: 7-22-2013.

STATE OF MARYLAND — BRIAN F. CLEARY — No. 22858 — REGISTERED PROFESSIONAL ENGINEER — 12/12/2011

OWNER:
SUBRAHMANYAN AND LEENASHRI PEDDIBHOTLA
6261 GREENFIELD ROAD, APT 404
ELKRIDGE, MARYLAND 21075

BUILDER:
STIRLING HOMES
20901 NEW HAMPSHIRE AVENUE
BROOKEVILLE, MARYLAND 20833
301-974-4699

THE WALTER DAVIS PROPERTY
LOT 1

TAX MAP: 25 GRID: 13 PARCEL: 148 ZONED: R–20
HUNT AVENUE
ELECTION DISTRICT NO. 2
HOWARD COUNTY, MARYLAND

MICRO–BIORETENTION DETAILS

SP–10–003, ECP–10–011, F–11–049, WP–11–155

DESIGN: DBT	DRAWN: DBT	SCALE: AS SHOWN	DATE: DECEMBER, 2011	BEI PROJECT NO: 2445

SHEET 3 OF 3

SDP-12-021

P:\2445 Walter Davis Property\dwg\8000.dwg, 12/5/2011 1:25:08 PM