

**GENERAL NOTES**

- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLUS MINOR STANDARD SPECIFICATIONS IF APPLICABLE.
- 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  
 VERIZON TELEPHONE COMPANY: 1-800-743-0033  
 BUREAU OF UTILITIES: 410-313-4900  
 AT&T CABLE LOCATION DIVISION: 1-800-252-1133  
 B.G.&E. CO. CONSTRUCTION SERVICES: 410-637-8713  
 B.G.&E. CO. EMERGENCY: 410-688-0123  
 STATE HIGHWAY ADMINISTRATION: 410-531-5533  
 COLONIAL PIPELINE CO.: 410-795-1390
- LOCATION: ELK RIDGE, MD.; TAX MAP 38, BLOCK 3, PARCEL 437  
 SUBDIVISION: SOUTH POINT PHASE 1 & 2  
 DEED REFERENCE: L. 9010/F. 628  
 SECTION/AREA: 3  
 ELECTION DISTRICT: 1ST  
 AREA OF PARCEL: 3.09 AC.  
 AREA OF PLAN SUBMISSION: 3.09 AC.  
 PRESENT ZONING: R-12  
 AREA OF PROPOSED RESIDENTIAL LOTS (SFD): 2.07 AC.  
 LIMIT OF DISTURBED AREA: 1.54 AC.  
 DPZ REFERENCES: S-05-09, WP-05-131, P-10-01, F-10-054
- 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.
- ANY DAMAGE TO PUBLIC RIGHT-OF-WAYS, PAVING, OR EXISTING UTILITIES WILL BE CORRECTED AT THE CONTRACTOR'S EXPENSE.
- EXISTING UTILITIES LOCATED FROM ROAD CONSTRUCTION PLANS, FIELD SURVEYS, PUBLIC WATER AND SEWER EXTENSION 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 INCURRED DUE TO CONTRACTOR'S OPERATION SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE.
- ESTIMATES OF EARTHWORK QUANTITIES ARE PROVIDED SOLELY FOR THE PURPOSE OF CALCULATING FEES.
- 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 SOIL TEST PRIOR TO CONSTRUCTION.
- THE TOPOGRAPHY SHOWN HEREON IS BASED ON A TOPOGRAPHICAL SURVEY PREPARED BY ROBERT H. VOGEL ENGINEERING, INC., DATED DECEMBER 2004.
- PUBLIC WATER AND SEWER ARE AVAILABLE THROUGH CONTRACT NO. 14-4638-D
- STORMWATER MANAGEMENT HAS BEEN PROVIDED UNDER F-10-054. WOV AND REV ARE PROVIDED BY 2 BIORETENTION FACILITIES AND 2 RAINGARDENS. THE BIORETENTION FACILITIES ARE LOCATED ON HOA OPEN SPACE LOT 8 AND ARE TO BE PRIVATELY OWNED.
- A PRIVATE RANGE OF ADDRESS SIGN ASSEMBLY SHALL BE FABRICATED AND INSTALLED BY HOWARD COUNTY BUREAU OF HIGHWAYS AT THE DEVELOPER'S EXPENSE. CONTACT HOWARD COUNTY TRAFFIC DIVISION AT 410-313-5752 FOR DETAILS AND COST ESTIMATES.
- ANY EXISTING STREET TREES DAMAGED OR DESTROYED DURING CONSTRUCTION WILL BE REPLACED BY THE CONTRACTOR.
- SIMPLE FOREST STAND DELINEATION PLAN PREPARED BY ECO-SCIENCE PROFESSIONALS, INC., DATED JANUARY 2005. FOREST CONSERVATION REQUIREMENTS ARE COMPLIED WITH PER SECTION 16.1202 OF THE HOWARD COUNTY CODE UNDER F-10-054. THE FOREST CONSERVATION OBLIGATIONS FOR THE REQUIRED 0.47 AC. HAVE BEEN PROVIDED BY ON-SITE AFFORESTATION OF 0.47 AC. FINANCIAL SURETY IN THE AMOUNT OF \$10,237.00 (20,473.20 SF x 0.50) HAS BEEN POSTED WITH THE DEVELOPER'S AGREEMENT UNDER F-10-054.
- THIS PLAN IS SUBJECT TO THE AMENDED FIFTH EDITION OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS. DEVELOPMENT OR CONSTRUCTION OF THESE LOTS MUST COMPLY WITH SETBACK AND BUFFER REGULATIONS IN EFFECT AT THE TIME OF SUBMISSION OF THE SITE DEVELOPMENT PLAN, WAIVER PETITION APPLICATION OR BUILDING/GRADING PERMIT APPLICATIONS.
- BASED ON A FIELD INVESTIGATION BY ECO-SCIENCE PROFESSIONALS, INC. DATED JANUARY, 2005 THERE ARE NO WETLANDS OR STREAMS LOCATED ON-SITE.
- NO 100-YR FLOODPLAIN IS LOCATED ON-SITE.
- THE SUBJECT PROPERTY IS ZONED R-12 PER THE 02/02/04 COMPREHENSIVE ZONING PLAN AND THE COMP LITE ZONING REGULATION AMENDMENTS EFFECTIVE ON 07/28/06.
- TWO GRADE SITES ON NON-BUILDABLE PARCEL A CEMETERY PRESERVATION AREA. THE ACCOMMODATION OF THE ACCESS TO THE CEMETERY ON PARCEL A WAS APPROVED BY THE PLANNING BOARD ON SEPTEMBER 2, 2010 ASSOCIATED WITH F-10-054 & SDP-10-092.
- FOR DRIVEWAY ENTRANCE DETAILS REFER TO THE HOWARD COUNTY DESIGN MANUAL, VOLUME IV, STANDARD DETAIL R-6.06.
- THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL WHICH ARE BASED UPON THE MARYLAND STATE PLANE COORDINATE SYSTEM. HOWARD COUNTY MONUMENT 3884 AND 388A WERE USED FOR THIS PROJECT.
- DRIVEWAYS SHALL BE PROVIDED PRIOR TO ISSUANCE OF A USE AND OCCUPANCY PERMIT FOR ANY NEW DWELLINGS TO INSURE SAFE ACCESS FOR FIRE EMERGENCY VEHICLES PER THE FOLLOWING MINIMUM REQUIREMENTS:  
 A. WIDTH - 12' (16' FOR SERVING MORE THAN ONE RESIDENCE)  
 B. SURFACE - 6" OF COMPACTED CRUSHER RUN BASE WITH TAR AND CHIP COATING (1-1/2" MIN)  
 C. GEOMETRY - MAX 15% GRADE, MAX 10% GRADE CHANGE, AND MIN 45' TURNING RADIUS  
 D. STRUCTURES (CULVERTS/BRIDGES) - CAPABLE OF SUPPORTING 25 GROSS TONS (H25 LOADING)  
 E. DRAINAGE ELEMENTS - CAPABLE OF SAFELY PASSING 100-YEAR FLOOD WITH NO MORE THAN 1 FOOT OF DEPTH OVER DRIVEWAY SURFACE  
 F. MAINTENANCE - SUFFICIENT TO ENSURE ALL WEATHER USE
- 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 REAR YARD SETBACK.
- NO GRADING, REMOVAL OF VEGETATIVE COVER OR TREES, OR PLACEMENT AND PAVING OF NEW STRUCTURES IS PERMITTED WITHIN THE LIMITS OF WETLANDS, WETLAND BUFFERS, STREAM, STREAM BUFFERS OR FOREST CONSERVATION EASEMENT AREAS.
- A NOISE STUDY IS NOT REQUIRED FOR THIS SITE.
- ALL LANDSCAPING REQUIREMENTS AS SET FORTH IN SECTION 16.124 OF THE HOWARD COUNTY SUBDIVISION REGULATIONS AND THE LANDSCAPE MANUAL ARE BY COMPLIED WITH UNDER F-10-054. THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL. LANDSCAPE SURETY IN THE AMOUNT OF \$17,250.00 FOR THE REQUIRED 30 SHADE TREES, 53 EVERGREEN TREES AND 10 SHRUBS HAS BEEN PROVIDED WITH THE DEVELOPER'S AGREEMENT UNDER F-10-054.
- A USE-IN-COMMON DRIVEWAY MAINTENANCE AGREEMENT FOR LOTS 1-7, LOT 9, NON-BUILDABLE PARCEL A CEMETERY PRESERVATION AREA, TM 38/PARCEL 889, AND STORMWATER MANAGEMENT ACCESS EASEMENT HAS BEEN RECORDED IN THE LAND RECORDS OF HOWARD COUNTY AND RECORDED CONCURRENTLY WITH THE PLAT.
- SHC ELEVATIONS SHOWN ON SHEET 4.
- ALL NECESSARY WATER METERS SHALL BE LOCATED WITHIN THE HOUSE.
- THIS SITE IS LOCATED WITHIN THE BVI FOUR MILE HEIGHT RESTRICTION ZONE REQUIRING APPROVAL FROM THE MARYLAND AVIATION ADMINISTRATION FOR NEW HOUSE CONSTRUCTION AND FOR STORMWATER MANAGEMENT DESIGN. AN APPROVAL FROM THE MVA HAS BEEN GIVEN ON MARCH, 2010.
- THIS PROJECT IS PHASED BASED ON HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING LETTER DATED JULY 6, 2009. PHASE 1 ALLOCATIONS ARE AVAILABLE FOR 6 UNITS FOR YEAR 2012, ONE ALLOCATION FOR PHASE II YEAR 2013.
- THIS PROPERTY IS LOCATED WITHIN THE OLD WASHINGTON ROAD HISTORIC SURVEY DISTRICT, HO-803.
- THIS SUBDIVISION PLAN WAS PRESENTED TO THE HISTORIC DISTRICT COMMISSION ON APRIL 7, 2005.
- THIS PROPERTY IS WITHIN THE METROPOLITAN DISTRICT.
- THIS PROPERTY IS SUBJECT TO WP-05-131 FOR A WAIVER FROM SECTION 16.120(b)(4)(v) WHICH REQUIRES THAT RESIDENTIAL LOTS NOT BE ENCUMBERED BY ACCESS EASEMENTS STORMWATER MANAGEMENT FACILITIES OR OPEN SPACE, EXCEPT PER SECTION 16.121(e) OF THE SUBDIVISION REGULATIONS TO ALLOW SWM ACCESS FOR OPEN SPACE LOT 8 BY WAY OF THE PROPOSED USE-IN-COMMON DRIVEWAY EASEMENTS FOR LOTS 1-7, AND LOT 9.
- THE 6/27/05 APPROVAL IS SUBJECT TO THE FOLLOWING CONDITIONS:  
 1. THE DEVELOPER SHALL INSTALL BOLLARD MARKERS OR SOME OTHER FORM OF SIGNS ALONG THE USE-IN-COMMON DRIVEWAY ACCESS EASEMENT FOR LOTS 1 THRU 7, 9, AND NON-BUILDABLE PARCEL A CEMETERY PRESERVATION AREA, AND PARCEL 889. ANY PROPERTY DAMAGE INCURRED BY THE INSPECTION OR MAINTENANCE OF THE OPEN SPACE LOT OR SWM IS TO BE REPAIRED BY THE HOA.  
 2. COMPLIANCE WITH COMMENTS DATED JUNE 23, 2005 FROM THE DEVELOPMENT ENGINEERING DIVISION.
- NO GRADING OR CONSTRUCTION SHALL BE PERMITTED WITHIN 30 FEET OF A CEMETERY BOUNDARY OR WITHIN 10 FEET OF INDIVIDUAL GRAVE SITES.
- TRASH AND RECYCLING WILL BE PROVIDED AT OLD WASHINGTON ROAD WITHIN 5' OF THE COUNTY ROADWAY.
- A SITE INSPECTION ON THE PROPERTY WAS COMPLETED ON APRIL 12, 2005 BY THE OWNER OF THE PROPERTY AND TO THE BEST OF THEIR KNOWLEDGE THERE IS NO EVIDENCE THAT THE WELL AND SEPTIC EXISTS. IT IS LIKELY THAT THEY WERE PROPERLY ABANDONED AND SEALED AND IF ENCOUNTERED DURING THE DEMOLITION PROCESS, THEY WILL BE PROPERLY ABANDONED/SEALED AND THE HOWARD COUNTY HEALTH DEPARTMENT WILL BE NOTIFIED.

# SITE DEVELOPMENT PLAN

## SOUTH POINT PHASE I & 2

### LOTS 1-7, AND LOT 9

### HOWARD COUNTY, MARYLAND

**MINIMUM LOT SIZE CHART**

LOT NO.	GROSS AREA	PIPE STEM AREA	MINIMUM LOT SIZE
1	10,394 #	1,508 #	8,886 #
2	11,155 #	1,863 #	9,292 #
3	11,864 #	2,200 #	9,664 #
4	12,138 #	2,530 #	9,608 #
5	11,741 #	3,119 #	8,622 #
6	12,245 #	3,640 #	8,605 #
7	10,785 #	2,246 #	8,539 #
9	9,959 #	1,270 #	8,689 #

**COORDINATE CHART**

NO.	NORTH	EAST
1	562456.63	1391791.11
2	562171.85	1392027.19
3	562111.07	1391947.61
4	561926.36	1392100.83
5	5618875.13	1392018.34
6	562096.54	1391836.75
7	562047.39	1391754.87
8	562050.75	1391752.13
9	562012.62	1391687.47
10	562193.07	1391540.27

**SITE DATA**  
 LOCATION: TAX MAP 38, BLOCK 3, PARCEL 437  
 EXISTING ZONING: R-12  
 GROSS AREA OF PARCEL: 3.09 AC.  
 AREA OF PROPOSED RIGHT-OF-WAY: N/A  
 AREA OF 100-YR FLOODPLAIN: N/A  
 AREA OF STEEP SLOPES: N/A  
 NET AREA OF PROJECT: 3.09 AC.  
 PROPOSED USE: SINGLE FAMILY DETACHED  
 NUMBER OF PROPOSED RESIDENTIAL LOTS: 8 (W/ 1 NON-BUILDABLE PARCEL)  
 AREA OF PROPOSED RESIDENTIAL LOTS: 2.07 AC.  
 AREA OF NON-BUILDABLE PARCEL: 0.01 AC.  
 AREA OF SMALLEST BUILDABLE LOT PROPOSED (WITHOUT AREA OF PIPESTEM): 8,438 SQUARE FEET - LOT 7  
 NUMBER OF PROPOSED OPEN SPACE LOTS: 1 (LOT 8)  
 AREA OF OPEN SPACE REQUIRED: 0.93 AC. (3,092 x 30%)  
 AREA OF CREDITED OPEN SPACE PROVIDED: 0.945 AC.  
 AREA OF NON-CREDITED OPEN SPACE: 0.07 AC.  
 TOTAL AREA OF OPEN SPACE PROVIDED: 1.0125 AC.  
 AREA DISTURBED: 1.54 AC.

**SHEET INDEX**

SHEET NO.	TITLE
1	COVER SHEET
2	LAYOUT PLAN
3	GRADING, SEDIMENT AND EROSION CONTROL PLAN
4	SEDIMENT AND EROSION CONTROL DETAILS

**APFO PHASING SCHEDULE**

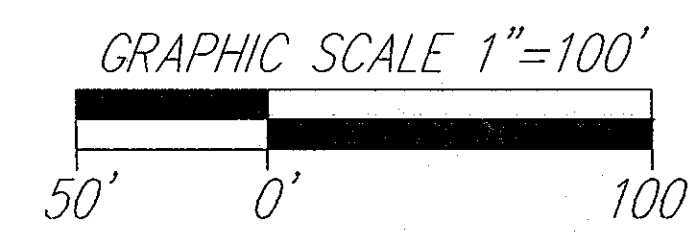
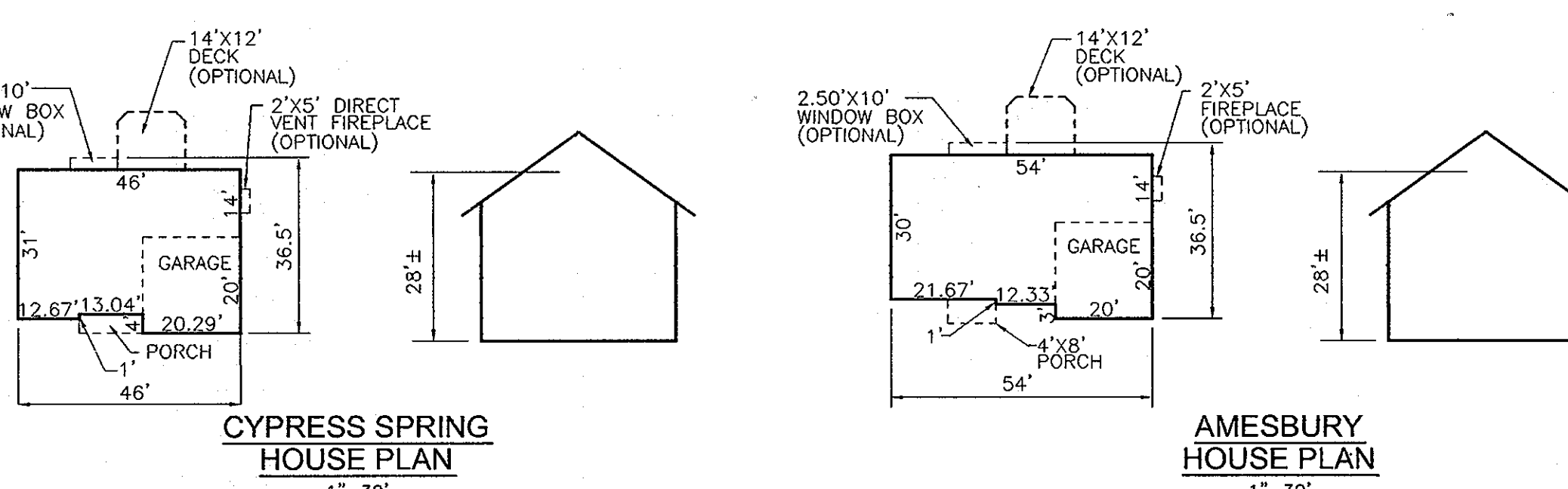
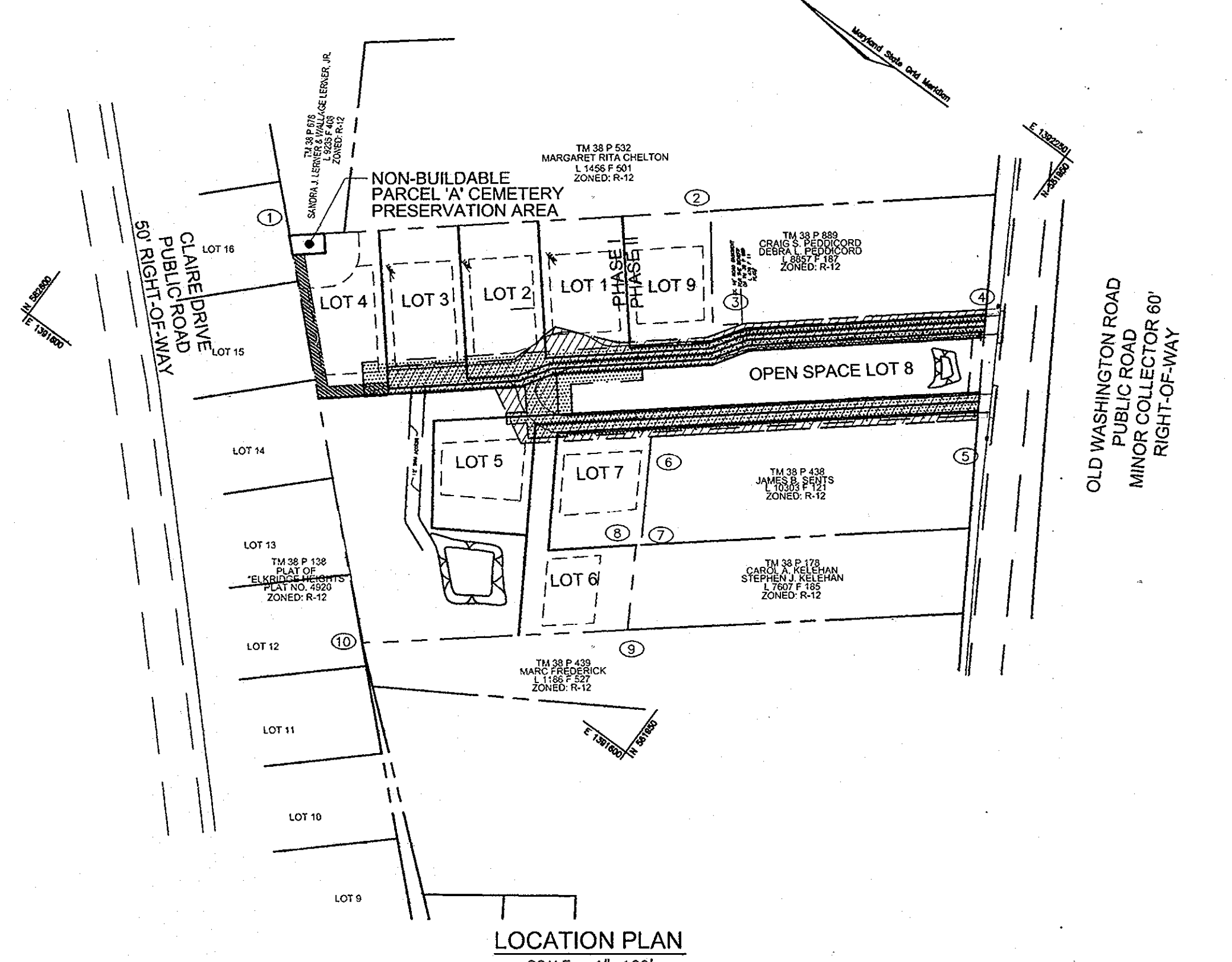
SUBDIVISION PHASE	NUMBER OF HOUSING UNITS/LOTS	ALLOCATION YEAR
PHASE 1	7 LOTS (6 GRANTED ALLOCATIONS + 1 CREDIT FOR EXISTING HOUSE)	2012
PHASE 2	1 LOT	2013
TOTAL	8 LOTS	

**PERMIT INFORMATION CHART**

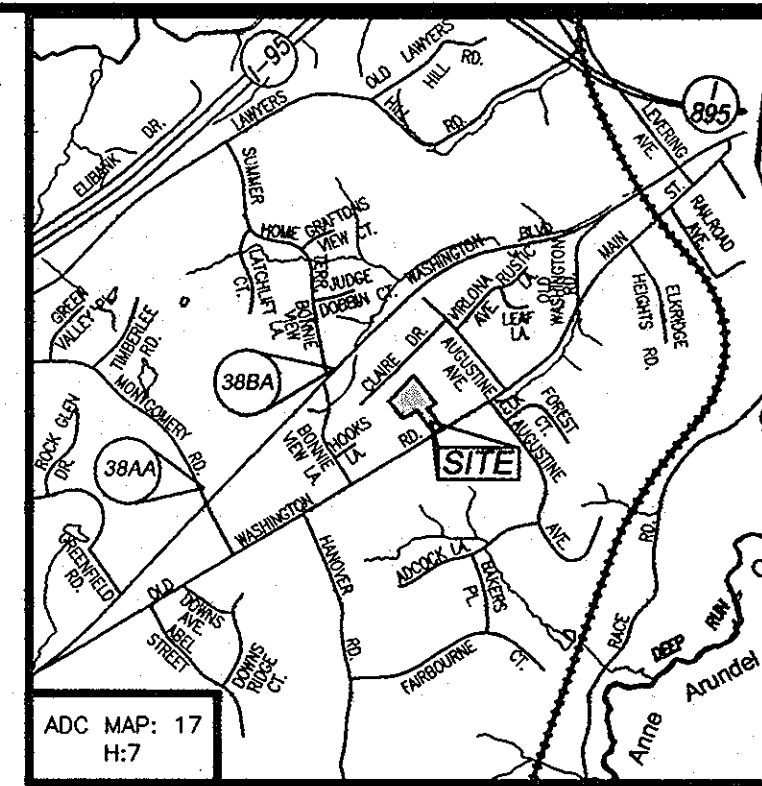
SUBDIVISION NAME	PHASE/ AREA
SOUTH POINT	PHASES I & 2
LOT/ PARCEL	LOT 1-7, AND LOT 9 / PARCEL 437
FLAT REF	2190-2192
BLOCK NO	3
ZONE	R-12
TAX MAP	38
ELECT DIST	1ST
CENSUS TR	6012.01

**ADDRESS CHART**

LOT NO	STREET ADDRESS
1	6078 OLD WASHINGTON ROAD
2	6080 OLD WASHINGTON ROAD
3	6082 OLD WASHINGTON ROAD
4	6084 OLD WASHINGTON ROAD
5	6086 OLD WASHINGTON ROAD
6	6088 OLD WASHINGTON ROAD
7	6090 OLD WASHINGTON ROAD
9	6076 OLD WASHINGTON ROAD



- LEGEND**
- PROPERTY LINE
  - EXISTING CONTOUR
  - PROPOSED CONTOUR
  - EXISTING TREELINE
  - PROPOSED TREELINE
  - EX. FENCE
  - EX. UTILITY POLE
  - PUBLIC WATER, SEWER AND UTILITY EASEMENT & DRAINAGE EASEMENT
  - VARIABLE WIDTH PRIVATE USE-IN-COMMON ACCESS
  - FOREST CONSERVATION AREA (AFFORESTATION)
  - 10' PRIVATE CEMETERY ACCESS EASEMENT
  - BORING
  - EX. RAIN GARDEN PER (F-10-054)
  - STABILIZED CONSTRUCTION ENTRANCE
  - EROSION CONTROL MATTING
  - SUPER SILT FENCE
  - LIMIT OF DISTURBANCE
  - SOILS
  - EX. EROSION CONTROL MATTING PER (F-10-054)
  - SUPER SILT FENCE PER (F-10-054)
  - LIMIT OF DISTURBANCE PER (F-10-054)
  - EX. EARTHDIKE PER (F-10-054)
  - EX. TREES PER (F-10-054)
- NOTE: ALL EXISTING SEDIMENT AND EROSION CONTROL MEASURES, APPROVED UNDER F-10-054 ARE TO REMAIN.



**BENCHMARKS**  
 38AA-- N. 561158.817, E. 1389728.33  
 ELEV. = 220.084  
 CONC. MON. W/ STAMPED DISC SET  
 38BA-- N. 562553.314, E. 1390967.86  
 ELEV. = 166.184  
 CONC. MON. W/ STAMPED DISC SET

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

*[Signature]* 11/30/10  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

*[Signature]* 12/13/10  
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

*[Signature]* 12/13/10  
 DIRECTOR DATE

**SITE DEVELOPMENT PLAN**  
**COVER SHEET**  
**SOUTH POINT PHASE I & 2**  
**LOTS 1 - 7, AND LOT 9**

COUNTY REF.: S-05-09, WP-05-131, P-10-01, F-10-054  
 TAX MAP 38 BLOCK 3 PARCEL 437  
 1ST ELECTION DISTRICT HOWARD COUNTY, MARYLAND

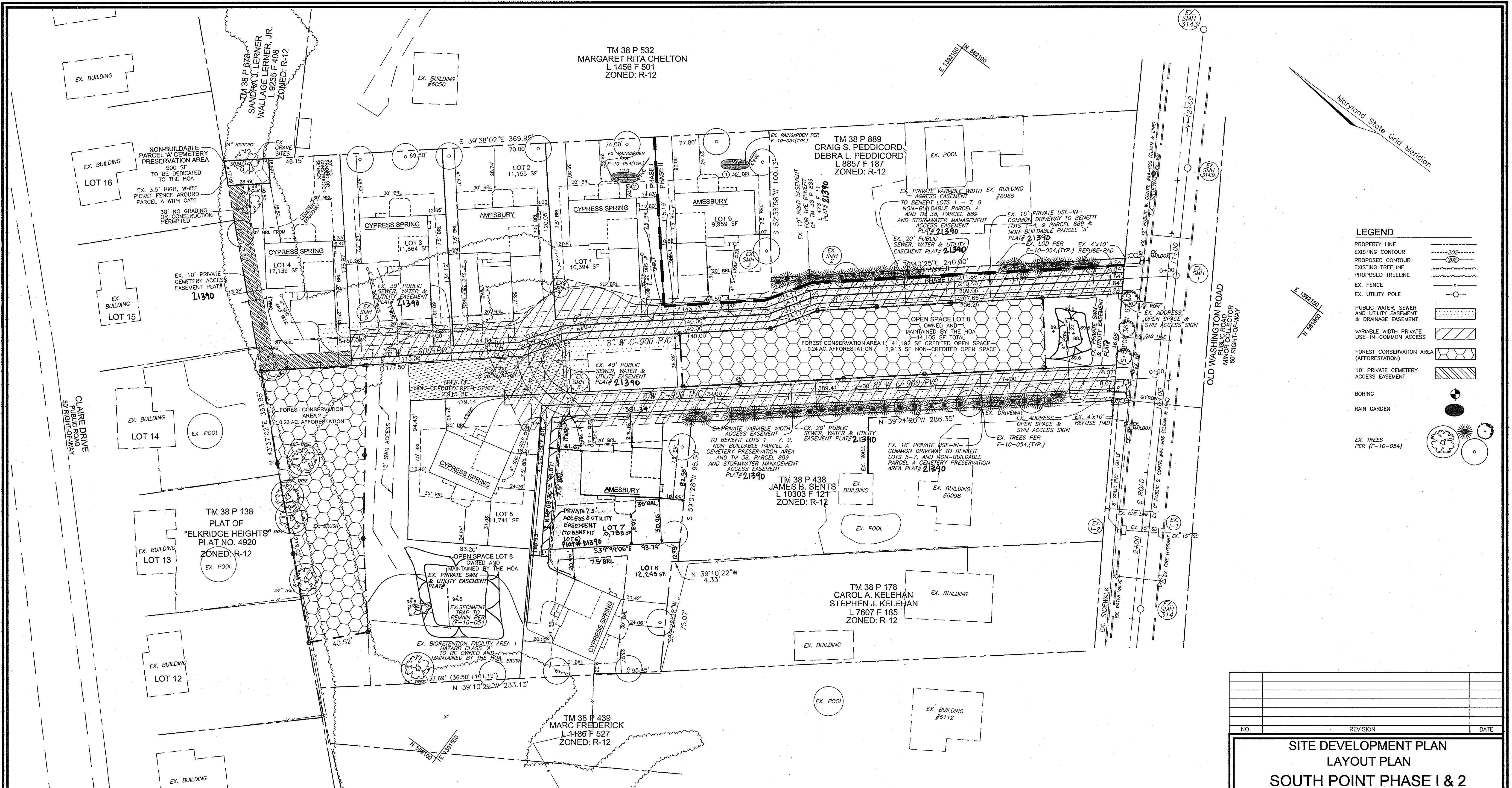
**ROBERT H. VOGEL ENGINEERING, INC.**  
 ENGINEERS • SURVEYORS • PLANNERS  
 8407 MAIN STREET TEL: 410.461.7666  
 ELLICOTT CITY, MD 21043 FAX: 410.461.8961

DESIGN BY: JCO  
 DRAWN BY: JCO&HS  
 CHECKED BY: RHY  
 DATE: NOVEMBER, 2010  
 SCALE: AS SHOWN  
 W.O. NO.: 04-149

PROFESSIONAL CERTIFICATE  
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DAILY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 18193 EXPIRATION DATE: 09-27-2012

1 SHEET OF 4

SDP-10-092



**LEGEND**

PROPERTY LINE	---
EXISTING CONTOUR	---202---
PROPOSED CONTOUR	---(202)---
EXISTING TREELINE	-----
PROPOSED TREELINE	-----
EX. FENCE	-----
EX. UTILITY POLE	○
PUBLIC UTILITY, SEWER AND DRAINAGE EASEMENT	-----
VARIABLE WIDTH PRIVATE USE-IN-COMMON ACCESS	-----
FOREST CONSERVATION AREA (AFFORESTATION)	-----
10' PRIVATE CEMETERY ACCESS EASEMENT	-----
BORING	⊕
RAIN GARDEN	⊙
EX. TREES PER (F-10-054)	⊙

**PLAN**  
SCALE: 1"=30'

NOTE: FOR SHC ELEVATIONS SEE CHART ON SHEET 4.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

*W. J. ...* 11/30/10  
CHIEF, DEVELOPMENT ENGINEERING DIVISION J.R. DATE

*W. J. ...* 12/13/10  
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

*W. J. ...* 12/13/10  
DIRECTOR DATE



**OWNER/BUILDER**  
TRINITY QUALITY HOMES  
3675 PARK AVE., STE. 301  
ELLCOTT CITY, MARYLAND 21043  
(410) 480-0023

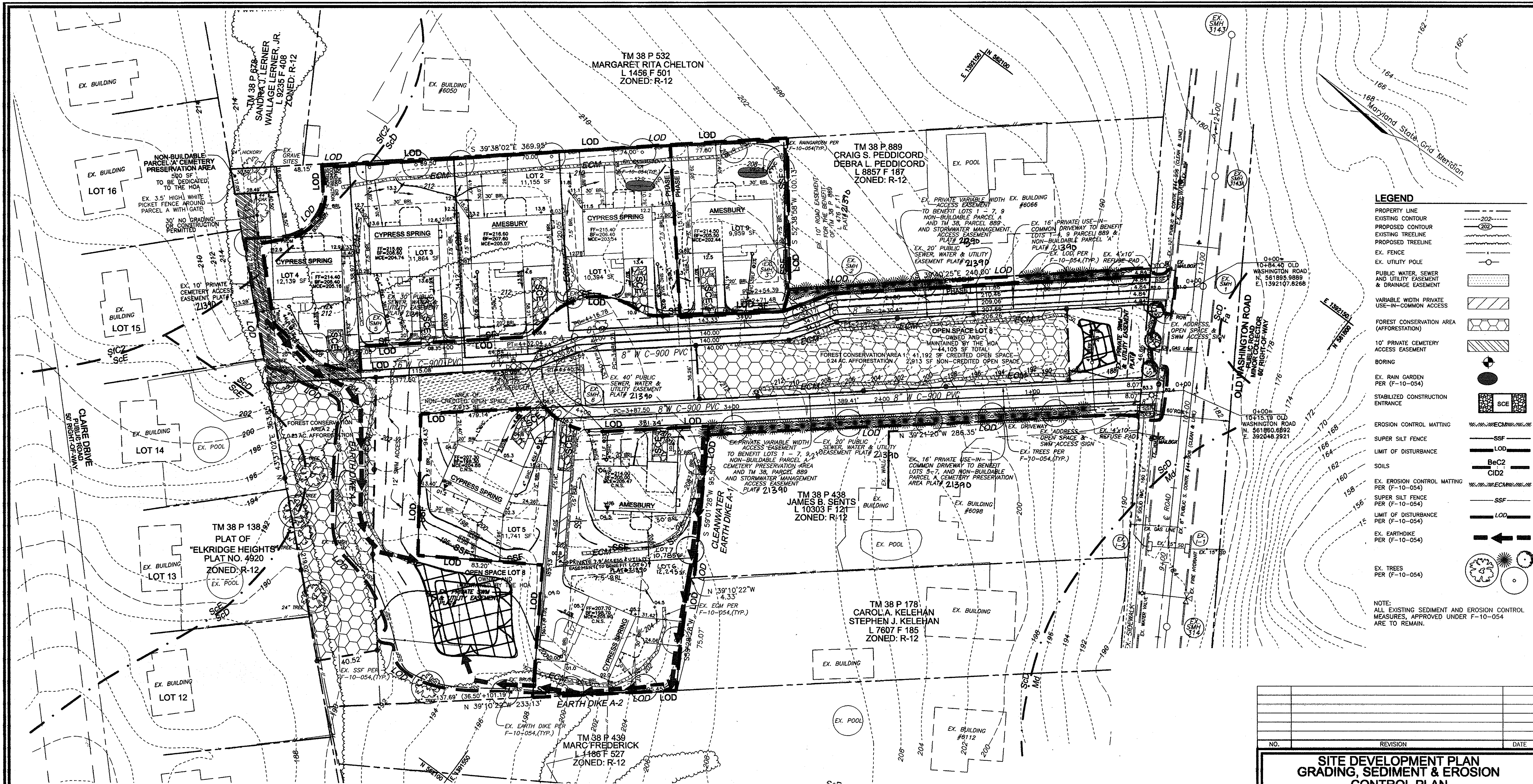
NO.	REVISION	DATE

**SITE DEVELOPMENT PLAN  
LAYOUT PLAN  
SOUTH POINT PHASE I & 2  
LOTS 1 - 7, AND LOT 9**

COUNTY REF.: S-05-09, WP-05-131, P-10-01, F-10-054  
TAX MAP 38 BLOCK 3 PARCEL 437  
1ST ELECTION DISTRICT HOWARD COUNTY, MARYLAND

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

DESIGN BY: JCO		<b>PROFESSIONAL CERTIFICATE</b> 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. 18193, EXPIRATION DATE: 09-27-2012.
DRAWN BY: JCO&HS		
CHECKED BY: RHV		
DATE: NOVEMBER, 2010		
SCALE: AS SHOWN	W.O. NO.: 04-149	2 SHEET OF 4



**LEGEND**

PROPERTY LINE	---
EXISTING CONTOUR	- - - -
PROPOSED CONTOUR	- . - . - .
EXISTING TREELINE	~~~~~
PROPOSED TREELINE	~~~~~
EX. FENCE	—●—●—●—
EX. UTILITY POLE	○
PUBLIC WATER, SEWER AND UTILITY EASEMENT & DRAINAGE EASEMENT	
VARIABLE WIDTH PRIVATE USE-IN-COMMON ACCESS	
FOREST CONSERVATION AREA (AFFORESTATION)	
10' PRIVATE CEMETERY ACCESS EASEMENT	
BORING	⊕
EX. RAIN GARDEN PER (F-10-054)	⊕
STABILIZED CONSTRUCTION ENTRANCE	⊕
EROSION CONTROL MATTING	
SUPER SILT FENCE	—●—●—●—
LIMIT OF DISTURBANCE	---
SOILS	BeC2 CID2
EX. EROSION CONTROL MATTING PER (F-10-054)	
SUPER SILT FENCE PER (F-10-054)	—●—●—●—
LIMIT OF DISTURBANCE PER (F-10-054)	---
EX. EARTHDIKE PER (F-10-054)	—▲—▲—▲—
EX. TREES PER (F-10-054)	⊕

**PLAN**  
SCALE: 1"=30'

**SOILS LEGEND**

SYMBOL	NAME / DESCRIPTION	GROUP
Fo	FALLSINGTON LOAM	B/D
ScB	SANDY AND CLAYEY LAND, GENTLY SLOPING	B
ScD	SANDY AND CLAYEY LAND, MODERATELY SLOPING	B
ScE	SANDY AND CLAYEY LAND, MODERATELY STEEP	B
SfC2	SASSAFRAS GRAVELLY SANDY LOAM, 5 TO 10 PERCENT SLOPES, MODERATELY ERODED	B
Md	MADE LAND	-

PAGE 26 OF THE HOWARD COUNTY SOIL SURVEY

NO.	REVISION	DATE

**SITE DEVELOPMENT PLAN  
GRADING, SEDIMENT & EROSION  
CONTROL PLAN  
SOUTH POINT PHASE I & 2  
LOTS 1 - 7, AND LOT 9**

COUNTY REF.: S-05-09, WP-05-131, P-10-01, F-10-054  
TAX MAP 38 BLOCK 3 PARCEL 437  
1ST ELECTION DISTRICT HOWARD COUNTY, MARYLAND

**ROBERT H. VOGEL  
ENGINEERS • SURVEYORS • PLANNERS**

8407 MAIN STREET TEL: 410.461.7666  
ELLCOTT CITY, MD 21043 FAX: 410.461.8961

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION J.P. DATE 11/30/10  
CHIEF, DIVISION OF LAND DEVELOPMENT DATE 12/13/10  
DIRECTOR DATE 12/13/10

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

HOWARD S.C.D. DATE

BY THE DEVELOPER:

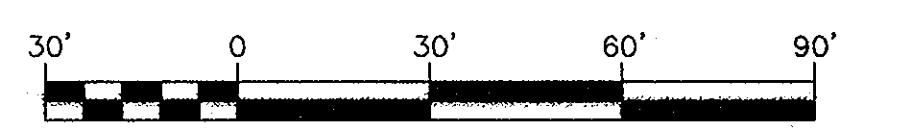
I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN FOR SEDIMENT AND EROSION CONTROL, AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL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

MICHAEL RAY DATE 11.16.10  
SIGNATURE OF DEVELOPER

BY THE ENGINEER:

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

DATE 11/12/10  
SIGNATURE OF ENGINEER



**OWNER/BUILDER**  
TRINITY QUALITY HOMES  
3675 PARK AVE., STE. 301  
ELLCOTT CITY, MARYLAND 21043  
(410) 480-0023

**PROFESSIONAL CERTIFICATE**

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A FULLY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 15193 EXPIRATION DATE: 09-27-2012

DESIGN BY: JCO  
DRAWN BY: JCO&HS  
CHECKED BY: RHY  
DATE: NOVEMBER, 2010  
SCALE: AS SHOWN  
W.O. NO.: 04-149

3 SHEET OF 4

ROBERT H. VOGEL, P.E. No. 16193

**SEDIMENT CONTROL NOTES**

- 1. A MINIMUM OF 48 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPT. OF INSPECTION, LICENSE AND PERMITS SEDIMENT CONTROL DIVISION PRIOR TO THE START OF ANY CONSTRUCTION (13-185S).
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 THEREOF.
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 2:1, (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, SOIL 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 AREA 3.09 AC.
AREA DISTURBED 1.54 AC.
AREA TO BE ROOPED OR PAVED 0.48 AC.
AREA TO BE VEGETATIVELY STABILIZED 1.03 AC.
TOTAL CUT 1.815 CY
TOTAL FILL 1.815 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 MUST BE REQUESTED UPON COMPLETION OF INSTALLATION OF PERIMETER 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.
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. TO BE DETERMINED BY CONTRACTOR, WITH PRE-APPROVAL OF THE SEDIMENT CONTROL INSPECTOR WITH AN APPROVED AND ACTIVE GRADING PERMIT

**21.0 STANDARDS AND SPECIFICATIONS FOR TOPSOIL**

- 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 AND 7.2 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 THEREOF.
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 SUCH TREATMENT 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 SPECIFIED IN 20.0 VEGETATIVE STABILIZATION-SECTION 1-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, ALBERT 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 SOODING OR SEEDING CAN PROCEED WITH A MINIMUM OF ADDITIONAL SOIL PREPARATION AND TILLAGE. ANY IRREGULARITIES IN THE SURFACE RESULTING FROM TOPSOILING OR OTHER OPERATIONS SHALL BE CORRECTED IN ORDER TO PREVENT THE FORMATION OF DEPRESSIONS OR WATER POCKETS.
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 SEEDING PREPARATION.

**SOIL PROTECTION ZONE NOTES**

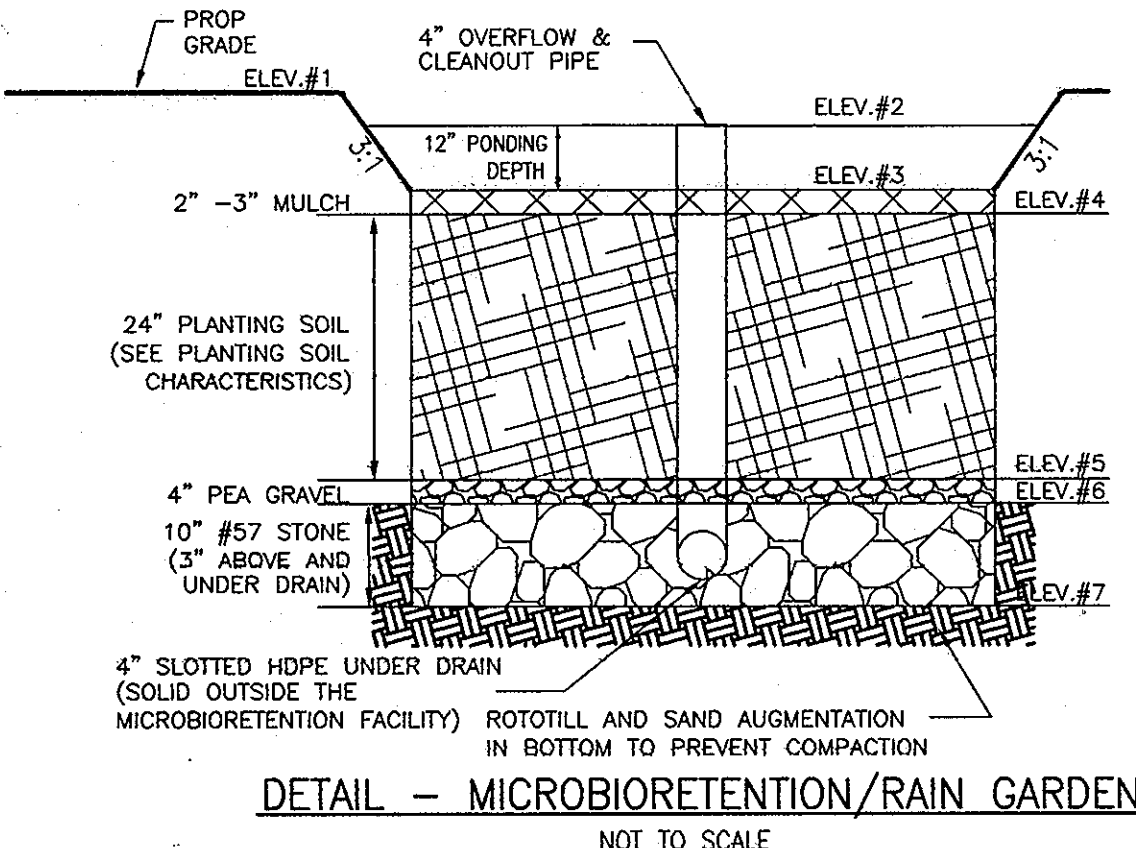
- I. THE SOIL PROTECTION ZONE INCLUDE ALL AREAS CONTAINED INSIDE THE LIMIT OF DISTURBANCE.
II. WHERE POSSIBLE, THE SOIL PROTECTION ZONE SHALL EXTEND TO THE DRIP LINE OF SPECIMEN TREES. FOR OTHER GROUPS OF TREES, THE ZONE SHALL BE THE DRIP LINE OF 40% OF THE HEIGHT OF THE TREE, WHICHEVER IS GREATER.
III. NO CONSTRUCTION ACTIVITY IS PERMITTED WITHIN THE SOIL PROTECTION ZONE.
IV. IF SOIL HAS BEEN COMPACTED OR GRADING HAS TAKEN PLACE IN THE VICINITY OF THE SOIL PROTECTION ZONE, ROOT PRUNING SHALL BE IMPLEMENTED PER ROOT PRUNING DETAIL SHOWN ON THIS PLAN.
V. ROOT PRUNING SHALL OCCUR PRIOR TO THE BEGINNING OF CONSTRUCTION.
VI. WHERE THE SOIL PROTECTION ZONE MUST ENDOACH INSIDE THE CRITICAL ROOT ZONE OF A TREE, SOIL DISTURBANCE SHALL BE MITIGATED WITH VERTICAL MULCHING, OR RADIAL TRENCHING.
VII. PRIOR TO CONSTRUCTION, THE LIMITS OF DISTURBANCE SHALL BE MARKED AND THE DETERMINE WHICH TREES WILL NEED PREVENTATIVE TREATMENT OF REMOVAL.
VIII. TREE MAINTENANCE AND REMOVAL SHALL BE UNDERTAKEN BY A QUALIFIED TREE EXPERT TO ENSURE DAMAGE TO SURROUNDING TREES IS MINIMIZED.
IX. BRUSH AND LIMBS REMOVED FOR CONSTRUCTION SHALL BE CHIPPED AND SPREAD AT THE EDGE OF THE SOIL PROTECTION ZONE TO A DEPTH OF 6 INCHES. THE SOIL PROTECTION ZONE WHERE COMPACTED SHOULD IMPACT OTHER UNPROTECTED AREAS.
X. MICROBIORETENTION (SOLID OUTSIDE THE MICROBIORETENTION FACILITY) ROTOTILL AND SAND AUGMENTATION IN BOTTOM TO PREVENT COMPACTION

**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, 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 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 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 GRASS STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL, OR 218 GALLONS PER ACRE (5 GAL/1000 SQ.FT.) OF EMULSIFIED ASPHALT ON FLAT AREAS, ON SLOPES 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, RESEEDMENTS AND RESEEDINGS.

**TEMPORARY SEEDING NOTES**

- SEEDING 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 GRASS STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL, OR 218 GALLONS PER ACRE (5 GAL/1000 SQ.FT.) OF EMULSIFIED ASPHALT ON FLAT AREAS, ON SLOPES 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



**DETAIL - MICROBIORETENTION/RAIN GARDEN**  
NOT TO SCALE

**RAIN GARDEN PLANT LIST (F-10-054)**

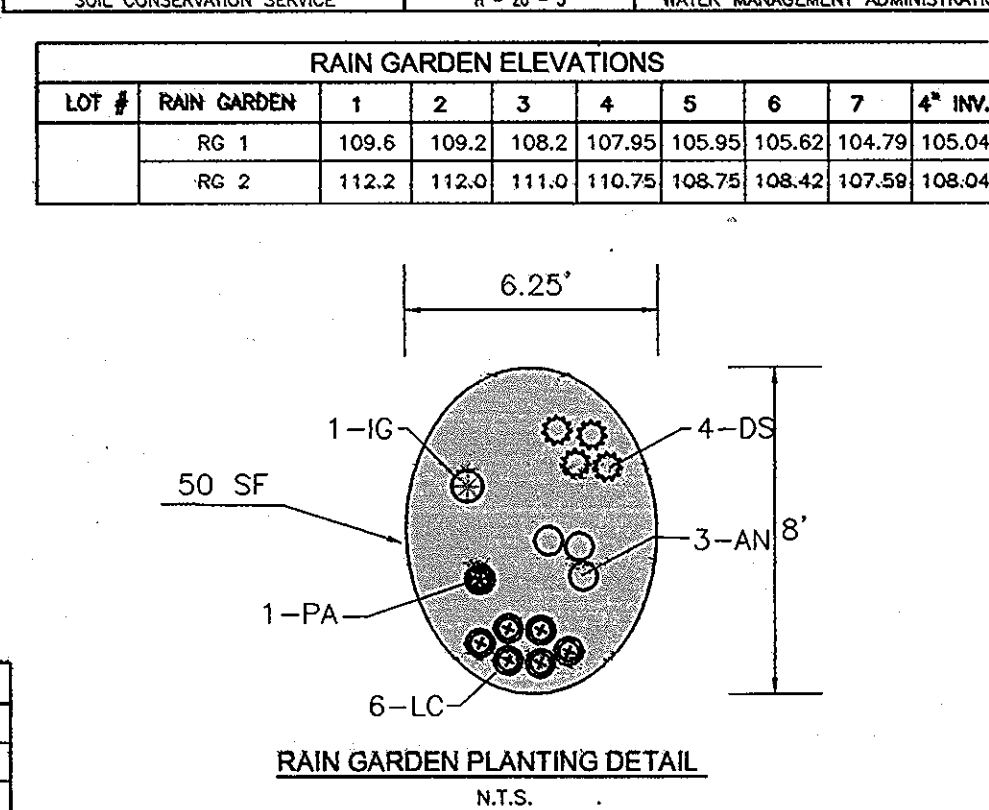
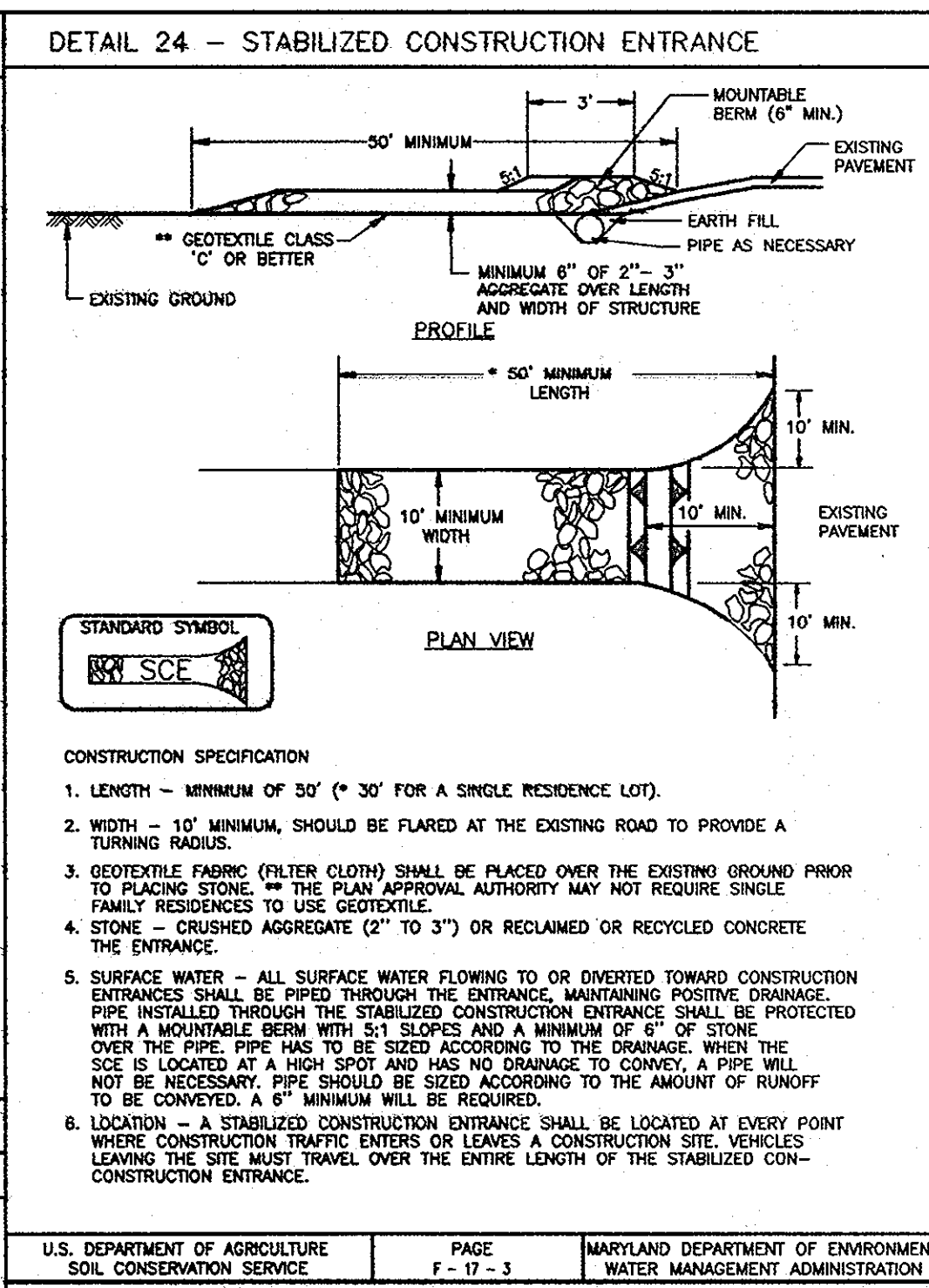
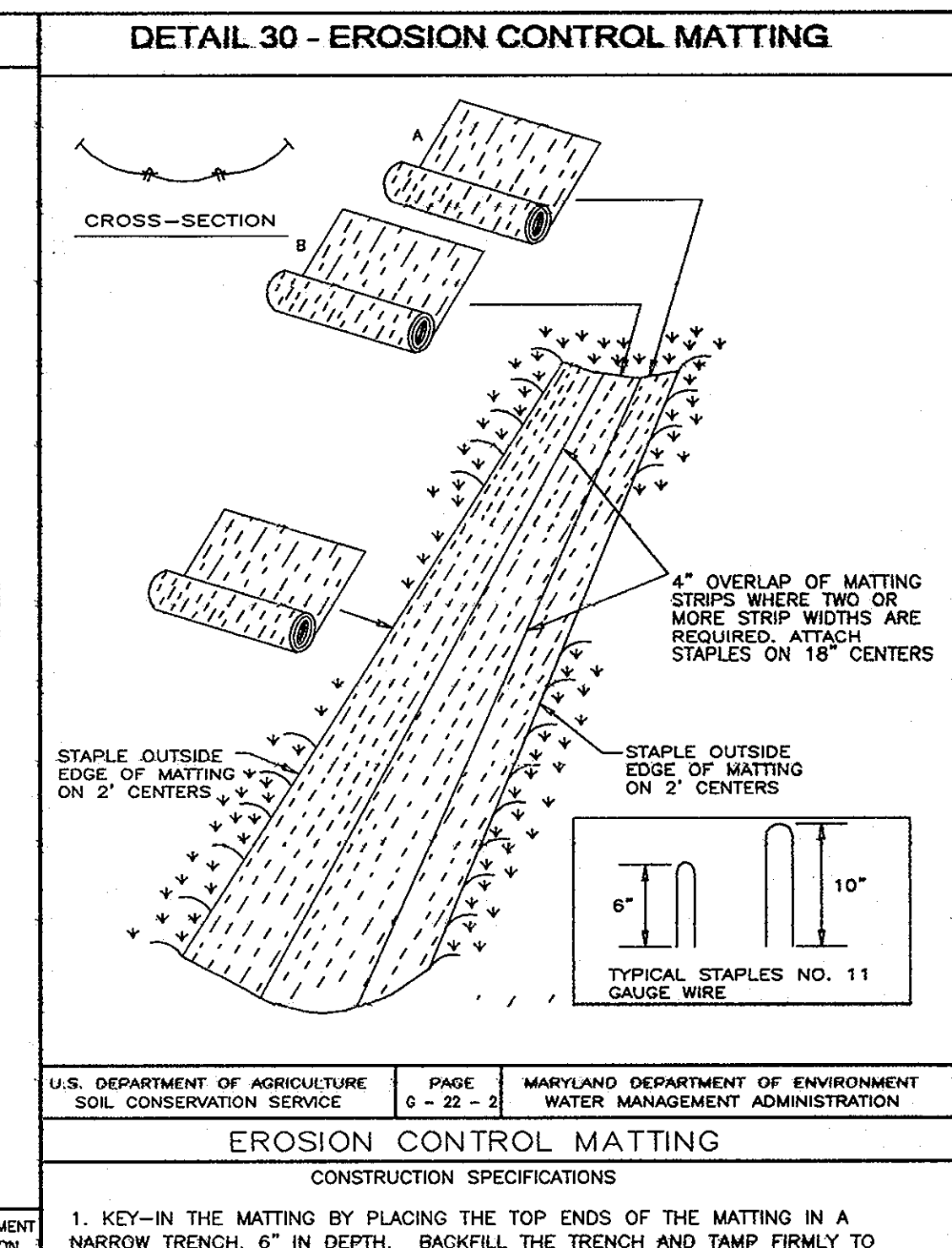
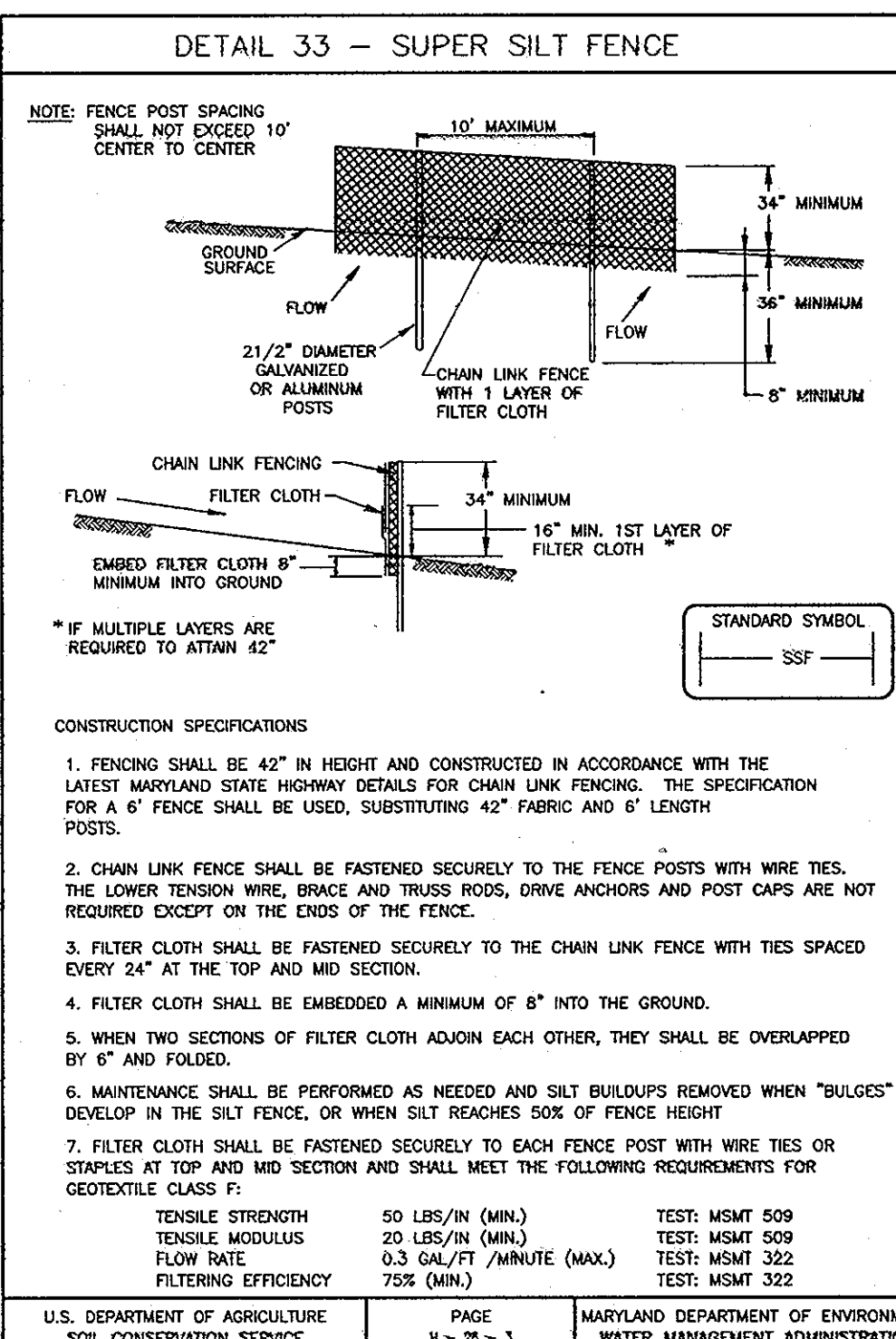
QUANTITY	BOTANICAL NAME	COMMON NAME	SIZE
1	PLATANUS X ACERIFOLIA(PA)	LONDON PLANE TREE	2 1/2\"-3\" Cal.
1	ILEX GLABRACIN(C)	INK BERRY	2\"-3\" HT.
6	LOBELIA CARDINALIS(LC)	CARDINAL FLOWER LOBELIA	1 GAL. CONTAINER
4	DRYOPTERIS SP.(OS)	WOOD FERN	1 GAL. CONTAINER
3	ASTER NOVAE-ANGLIAE(AH)	NEW ENGLAND ASTER	1 GAL. CONTAINER

**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. INSTALL SEDIMENT CONTROL MEASURES AS SHOWN ON PLAN AND IN ACCORDANCE WITH DETAILS. (5 DAYS)
4. INSPECT SEDIMENT CONTROL MEASURES FROM F-10-054 TO REMAIN PER SDP. REPAIR AS NEEDED. (1 DAY)
5. AFTER OBTAINING PERMISSION FROM THE SEDIMENT CONTROL INSPECTOR TO PROCEED, ROUGH GRADE SITE. (2 WEEKS)
6. CONSTRUCT HOUSES. THE FIRST FLOOR ELEVATIONS CANNOT BE MORE THAN 1\" HIGHER OR 0.2\" LOWER THAN THE ELEVATIONS SHOWN ON THIS PLAN. (6 MONTHS)
7. UPON STABILIZATION OF ALL DISTURBED AREAS AND WITH THE APPROVAL OF THE SEDIMENT CONTROL INSPECTOR, REMOVE ALL SEDIMENT CONTROL DEVICES. (2 DAYS)

**NOTES**

- DURING GRADING AND AFTER EACH RAINFALL, THE CONTRACTOR SHALL INSPECT AND PROVIDE THE NECESSARY MAINTENANCE ON THE SEDIMENT AND EROSION CONTROL MEASURES SHOWN HEREON.
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, SWALES, DITCH PERMETER SLOPES AND ALL SLOPES GREATER THAN 3:1.
B. 14 CALENDAR DAYS FOR ALL OTHER DISTURBED AREAS.



**OPERATION AND MAINTENANCE SCHEDULE FOR RAIN GARDEN 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 MATERIALS 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 THE 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 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.

**MATERIALS SPECIFICATIONS FOR BIO-RETENTION**

MATERIAL	SPECIFICATION	SIZE	NOTES
PLANTING	SPECIFICATION	N/A	PLANTINGS ARE SITE-SPECIFIC
PLANTING SOIL (2.5\" TO 4\" DEEP)	SAND 35-60% SILT 30-50% CLAY 0-5%	N/A	USDA SOIL TYPES LOAMY SAND, SANDY LOAM OR LOAM
MULCH	SHREDED HARDWOOD		AGED 6 MONTHS, MINIMUM
PEA GRAVEL DRAIN AND CURB DRAIN	PEA GRAVEL: ASTM-G-448 ORNAMENTAL STONE: WASHED CORNELL	PEA GRAVEL NO. 6 STONE: 2\" TO 5\"	
GEOTEXTILE	CLASS 100 APPARENT GRADING SIZE (ASTM-D-4751), GRASS TENSILE STRENGTH (ASTM-D-4632), PUNCTURE RESISTANCE (ASTM-D-4633)	N/A	FOR USE AS NECESSARY BENEATH UNDERDRAINS ONLY
UNDERDRAIN GRAVEL	MSH70 M-43	0.375\" TO 0.75\"	
UNDERDRAIN PIPING	1\" DIA. TYPE P3 28 ORR MSH70 M-278	4\" TO 6\" GRID SCHEDULE 40 PVC OR SDR33	3/8\" PEGS @ 8\" O.C. 4 HOLES PER ROW MIN. OF 3\" OF GRAVEL OVER PIPES; NOT NECESSARY UNDERNEATH PIPES
POURED IN PLACE CONCRETE (IF REQUIRED)	MSHA MIX NO. 3; f <sub>c</sub> =3500 PSI @ 28 DAYS, NORMAL WEIGHT, AIR-ENTRAINED; REINFORCING TO MEET ASTM-A615-40	N/A	ON-SITE TESTING OF POURED-IN-PLACE CONCRETE REQUIRED: 28 DAY STRENGTH AND SLUMP TEST. ALL CONCRETE 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 WETTING AND DRYING CURE, 28-DAY VERTICAL LOADING (H-10 OR H-20); ALLOWABLE HORIZONTAL LOADING (BASED ON SOIL PRESSURES); AND ANALYSIS OF POTENTIAL CRACKING
SAND (1\" DEEP)	MSH70 M-6 OR ASTM-C-33	0.075\" TO 0.04\"	SAND SUBSTITUTIONS SUCH AS DAMAGE AND GRANITONE #10 ARE NOT ACCEPTABLE. NO CALCIUM OXIDATED OR PLASTIC SAND SUBSTITUTIONS ARE ACCEPTABLE. NO \"ROCK DUST\" CAN BE USED FOR SAND

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING  
[Signature] 4/30/10  
[Signature] 4/23/10  
[Signature] 4/23/10  
[Signature] 4/23/10

BY THE DEVELOPER:  
[Signature] 4/24/10  
HOWARD S.C.D.  
BY THE ENGINEER:  
[Signature] 4/16/10  
[Signature] 4/16/10

I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE IN ACCORDANCE WITH THE PLAN FOR SEDIMENT AND EROSION CONTROL AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I/WE CERTIFY THAT AN AUTOMATIC ON-SITE INSPECTION BY THE HOWARD COUNTY SEDIMENT CONTROL DISTRICT.

I CERTIFY THAT THIS PLAN FOR SEDIMENT AND EROSION CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON PERSONAL KNOWLEDGE OF THE SITE CONDITIONS, AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD COUNTY SEDIMENT CONTROL DISTRICT.  
[Signature] 4/16/10  
[Signature] 4/16/10  
OWNER/BUILDER  
TRINITY QUALITY HOMES  
3675 PARK AVE., STE. 301  
ELLCOTT CITY, MARYLAND 21043  
(410) 480-0023

**SITE DEVELOPMENT PLAN  
SEDIMENT AND EROSION CONTROL DETAILS  
SOUTH POINT PHASE I & 2  
LOTS 1 - 7, AND LOT 9**  
COUNTY REF.: S-05-08, WP-05-131, P-10-01, F-10-054  
BLOCK 3  
1ST ELECTION DISTRICT  
TAX MAP 38  
F-10-054  
PARCEL 437  
HOWARD COUNTY, MARYLAND  
**ROBERT H. VOGEL ENGINEERS, INC.**  
ENGINEERS • SURVEYORS • PLANNERS  
3407 MAIN STREET  
ELLCOTT CITY, MD 21043  
TEL: 410-461-7866  
FAX: 410-461-8951  
DESIGN BY: JCO  
DRAWN BY: JCO&HS  
CHECKED BY: RHV  
DATE: NOVEMBER, 2010  
SCALE: AS SHOWN  
W.O. NO.: 04-149  
PROFESSIONAL CERTIFICATE  
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. 16193 EXPIRATION DATE: 09-27-2012.  
4 SHEET OF 4  
SOP-10-072