SITE DEVELOPMENT PLAN
WORTHINGTON FIELDS
PHASE 6
LOT 90 THRU 148
SINGLE FAMILY DETACHED UNITS
HOWARD COUNTY, MARYLAND

GENERAL NOTES

1. THE CONTRACTOR IS TO NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST FIVE DAYS BEFORE STARTING WORK ON THESE DRAWINGS:

MISS UTILITY	
VERIZON TELEPHONE	1-800-257-7777
HOWARD COUNTY BUREAU OF UTILITIES:	725-9976
AT&T CABLE LOCATION DIVISION:	313-2366
B.G.&E. CO. CONTRACTOR SERVICES:	393-3553
B.G.&E. CO. UNDERGROUND DAMAGE CONTROL:	850-4620
STATE HIGHWAY ADMINISTRATION:	787-4620
	531-5533

2. SITE ANALYSIS:

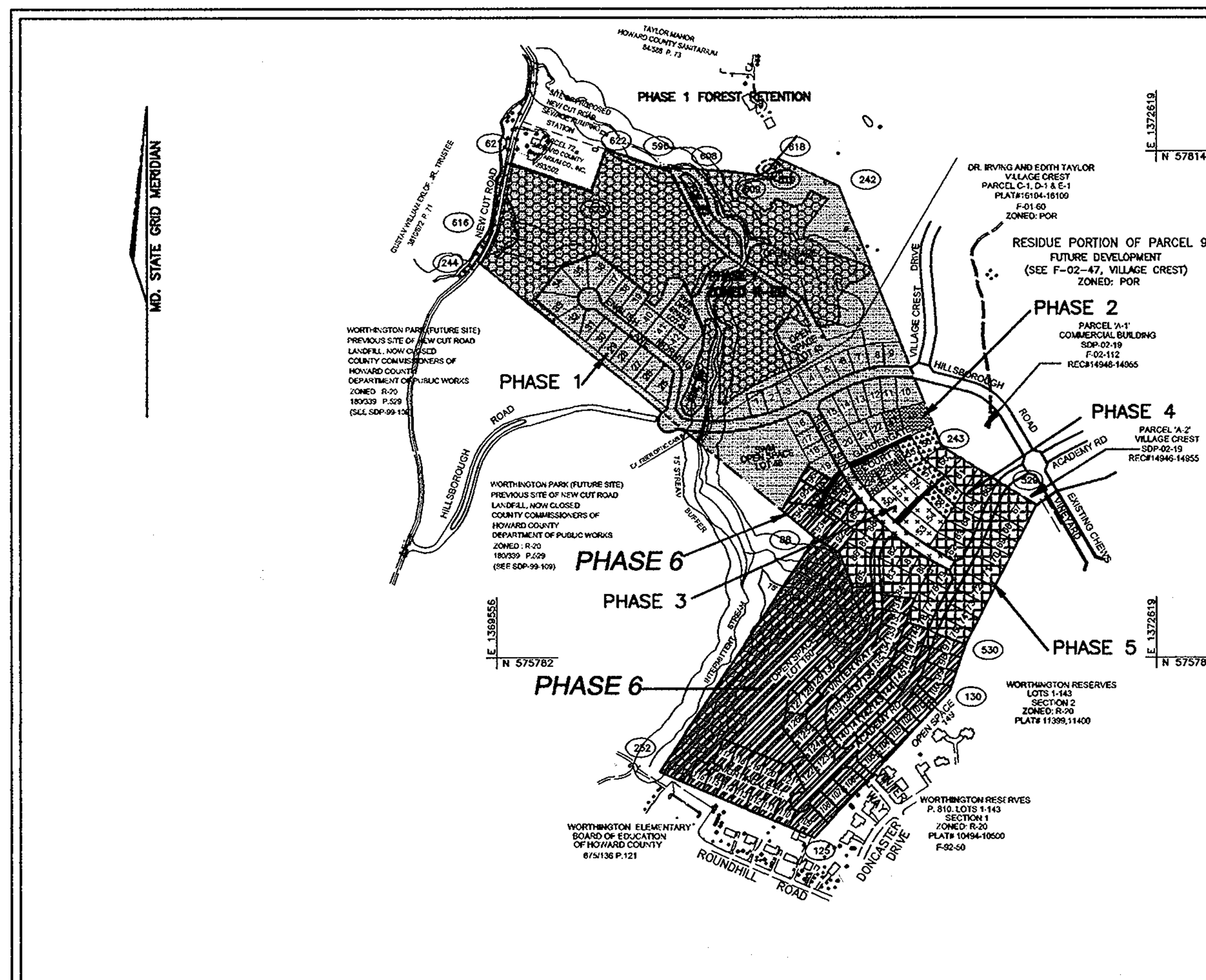
TOTAL AREA OF SITE (WORTHINGTON FIELD PH#6 PLAT# 19741-19746):	24.40184 AC
AREA OF SUBMISSION:	12.92406 AC
WORTHINGTON FIELDS PH#6 (PLAT# 19741-19746)	
LIMIT OF DISTURBANCE:	15.16 AC
PRESENT ZONING:	R-ED
PROPOSED USE OF SITE:	SINGLE FAMILY DETACHED DWELLINGS
TOTAL NUMBER OF UNITS ALLOWED:	59 BUILDABLE LOTS
TOTAL NUMBER OF UNITS PROPOSED ON THIS SUBMISSION	59 BUILDABLE LOTS
OPEN SPACE ON WORTHINGTON FILED PH#6 (PLAT# 19741-19746)	9.67811 AC

APPLICABLE DPZ FILE REFERENCES: S-98-18, PB-336 (APPROVED 6/16/99), P-00-07, F-01-60, (PHASE 1), F-01-206 (PHASE 2), F-02-170, (PHASE 3), P-03-07 (PHASE 4), P-04-14(PHASE 5), F-05-019 (PHASE 5), SDP-06-33 (PHASE 5), P-06-006, F-06-077, F-06-172, GP-06-59,F-07-002
PROJECT BACKGROUND: TAX MAPS 25&31, P/O PARCEL 98, BLOCKS 20&2
AREA OF FLOOD PLAIN ON SITE: 0 AC.

4. ALL ASPECTS OF THE PROJECT ARE IN CONFORMANCE WITH THE LATEST HOWARD COUNTY STANDARDS UNLESS WAIVERS HAVE BEEN APPROVED.
5. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLUS MSHA STANDARDS AND SPECIFICATIONS IF APPLICABLE.
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 THE START OF WORK.
7. THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK
8. THE SUBJECT PROPERTY IS ZONED R-ED PER THE FEBRUARY 2, 2004 COMPREHENSIVE ZONING PLAN, AND THE COMPREHENSIVE LITE ZONING AMENDMENTS 07/28/06.
9. TRAFFIC CONTROL DEVICES, MARKINGS AND SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). ALL STREET AND REGULATORY SIGNS SHALL BE IN PLACE PRIOR TO THE PLACEMENT OF ANY ASPHALT.
10. STORMWATER MANAGEMENT PROVIDED BY MICRO POOL EXTENDED DETENTION POND (P-1) AND UNDERGROUND GRAVEL TRENCH. FACILITIES ARE LOCATED IN OPEN SPACE LOT 150 AND WILL BE PRIVATELY OWNED BY HOA AND JOINTLY MAINTAINED BY HOA & HOWARD COUNTY PUBLIC WORKS, AS APPROVED UNDER F-07-002.
11. THERE ARE NO WETLANDS WITHIN THIS PHASE BASED ON A WETLAND REPORT PREPARED BY ECO-SCIENCE PROFESSIONALS, INC. DATED SEPTEMBER 18, 2006.
12. A TRAFFIC STUDY FOR THIS SITE WAS PREPARED BY THE TRAFFIC GROUP, INC., DATED JUNE 8,1998, APPROVED UNDER S-98-18.
13. A FINANCIAL SURETY FOR THE REQUIRED STREET TREES WAS POSTED AS A PART OF THE DEVELOPER'S AGREEMENT PLANS IN THE AMOUNT OF $33,000 UNDER F-07-002.
14. THERE IS NO FLOODPLAIN LOCATED WITHIN THIS PHASE.
15. TREE PROTECTION FENCING WILL BE PROVIDED AT THE LIMITS OF DISTURBANCE WHERE GRADING IS ADJACENT TO FOREST CONSERVATION RETENTION AREAS AND SENSITIVE ENVIRONMENTAL AREAS, SUCH AS STREAM BUFFERS AND STEEP SLOPES.
16. TO THE BEST OF THE OWNERS KNOWLEDGE, THERE ARE NO BURIAL/CEMETARY LOCATIONS ON SITE.
17. A NOISE STUDY IS NOT REQUIRED FOR THIS SITE.
18. FOR DRIVEWAY ENTRANCE DETAILS REFER TO THE HOWARD COUNTY DESIGN MANUAL, VOLUME IV, STANDARD DETAIL R-6.03 AND R-6.06 FOR USE-IN-COMMON DRIVE.
19. FOR FLAG OR PIPE STEM LOTS, REFUSE COLLECTION, SNOW REMOVAL AND ROAD MAINTENANCE ARE PROVIDED TO THE JUNCTION OF THE FLAG OR PIPE STEM AND ROAD RIGHT-OF-WAY LINE AND NOT TO THE PIPE STEM LOT DRIVEWAY.
20. LOTS 110-120 WILL UTILIZE USE-IN-COMMON DRIVEWAYS. HOWARD COUNTY STANDARD DETAIL NO. R-6.06 WILL BE UTILIZED FOR THE ENTRANCE AT THE INTERSECTION OF THE PUBLIC ROAD AND EACH USE-IN-COMMON DRIVEWAY.
21. DRIVEWAYS SHALL BE PROVIDED PRIOR TO ISSUANCE OF A USE AND OCCUPANCY PERMIT FOR ANY NEW DWELLINGS TO ENSURE 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
22. 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.
23. NO GRADING, REMOVAL OF VEGETATIVE COVER OR TREES, PAVING AND NEW STRUCTURES SHALL BE PERMITTED WITHIN THE REQUIRED WETLANDS, STREAM(S) OR THEIR BUFFERS, FOREST CONSERVATION EASEMENT AREAS AND 100 YEAR FLOODPLAIN.
24. STREET TREES ARE PROVIDED FOR THIS PROJECT UNDER F-07-002 IN ACCORDANCE WITH SECTION 16.124(e)(1) OF THE SUBDIVISION REGULATIONS AND THE LANDSCAPE MANUAL. A FINANCIAL SURETY IN THE AMOUNT OF $33,000.00 WAS POSTED AS PART OF THE DEVELOPER'S AGREEMENT FOR THE REQUIRED 110 PUBLIC STREET TREES. FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING PROVIDED PER THE LANDSCAPE MANUAL WAS POSTED WITH THE DEVELOPER'S AGREEMENT IN THE AMOUNT OF $14,100.00 FOR THE REQUIRED 41 SHADE TREES AND THE REQUIRED 12 EVERGREEN TREES PER F-07-002.
25. THIS PLAN AND PROJECT ARE GRANDFATHERED TO THE FIFTH EDITION OF THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS BECAUSE S-98-18 RECEIVED SIGNATURE APPROVAL PRIOR TO 11/15/01.
26. THIS SITE SHALL BE CLEARED IN ACCORDANCE WITH THE HOWARD COUNTY FOREST HARVESTING PERMIT PROCESS. THE DEVELOPER IS SUBJECT TO THE CONDITIONS OF THE EXECUTED DECLARATION OF INTENT PER (GP-06-59).
27. THIS PROJECT IS LOCATED IN THE WORTHINGTON ELEMENTARY SCHOOL DISTRICT AND THE ELLICOTT MILLS MIDDLE SCHOOL DISTRICT. AS A CONSEQUENCE OF THE COUNCIL'S APPROVAL OF RESOLUTION 96-2003". THE 30 UNITS COMPRISING PHASE V HAVE NOW PASSED THE APFO TEST FOR OPEN SCHOOL REGION PROPOSAL HAS BEEN ENDORSED BY DEPARTMENT OF PLANNING & ZONING BY LETTER DATED JUNE 26, 2003 AND HAD GRANTED 30 TENTATIVE HOUSING UNIT ALLOCATIONS FOR THE YEAR 2006 (PHASE V) AND 59 FOR THE YEAR 2007 (PHASE VI). UNDER F-07-002.
28. PRIVATE EASEMENTS SHOWN ON THIS PLAN ARE TO MAINTAINED BY THE HOA.
29. EXISTING WATER AND SEWER ARE BASED ON CONTRACT # 14-4344-D. WATER METERS ARE INSIDE.
30. STREET LIGHT PLACEMENT AND THE TYPE OF FIXTURE AND POLE SHALL BE IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL, VOLUME III (1993)AND AS MODIFIED BY "GUIDELINES FOR STREET LIGHTS IN RESIDENTIAL DEVELOPMENTS (JUNE 1993)." A MINIMUM SPACING OF 20' SHALL BE MAINTAINED BETWEEN ANY STREETLIGHT AND ANY TREE UNDER F-07-002.
31. ALL SIGN POSTS USED FOR TRAFFIC CONTROL SIGNS INSTALLED IN THE COUNTY RIGHT-OF-WAY SHALL BE MOUNTED ON A 2" GALVANIZED STEEL, PERFORATED, SQUARE TUBE POST (14 GAUGE) INSERTED INTO A 2-1/2" GALVANIZED STEEL, PERFORATED, SQUARE TUBE SLEEVE (12 GAUGE)- 3' LONG. A GALVANIZED STEEL POLE CAP SHALL BE MOUNTED ON TOP OF EACH POST UNDER F-07-002.
32. THE HOME OWNERS ASSOCIATION SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF THE SIDEWALK IN FRONT OF OPEN SPACE LOTS 150 AND 151.
33. FOREST CONSERVATION PLAN PREPARED BY EXPLORATION RESEARCH, INC. DATED OCTOBER, 1999 FOR THE ENTIRE SITE. FOREST STAND DELINEATION PLAN PREPARED BY CHESAPEAKE ENVIRONMENTAL, DATED MARCH 1995 AND APPROVED S-98-18. THE THE FOREST CONSERVATION OBLIGATIONS FOR THE ENTIRE SUBMISSION OF WORTHINGTON FIELDS, PHASE 1-6, HAS BEEN MET BY PROVIDING 20.32 ACRES OF RETENTION IN PHASE 1/F-01-060, A FEE IN LIEU PAYMENT OF $8,799.12 FOR THE ABANDONMENT OF 8,799.12 SQ.F./0.202 ACRE OF PARTS OF FCE'S 1 AND 5 IN PHASE 1 PER F-06-077, 6.19 ACRES OF RETENTION IN PHASE 6/F-07-002, FOR A TOTAL OF 26.308 ACRES OF RETENTION PROVIDED. FOREST CONSERVATION SURETY IN THE AMOUNT OF $53,927.28 HAS BEEN POSTED FOR THE 6.19 ACRES OF RETENTION PROVIDED IN PHASE 6 AS A PART OF THE DEVELOPER'S AGREEMENT FOR F-07-002/PHASE 6 UNDER F-07-002.
34. FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING PROVIDED PER THE LANDSCAPE MANUAL SHALL BE POSTED WITH THE GRADING PERMIT IN THE AMOUNT OF $5,550.00 FOR THE REQUIRED TOTAL 7 SHADE TREES 13 EVERGREEN TREES AND 50 SHRUBS PER THIS PLAN.
35. THE EXISTING TOPOGRAPHY IS TAKEN FROM AERIAL PHOTOGRAMETRIC SURVEY WITH TWO FOOT CONTOUR INTERVALS PREPARED BY WINGS AERIAL MAPPING COMPANY, INC., DATED MARCH, 1995.
36. THE PROJECT BOUNDARY IS BASED ON A BOUNDARY SURVEY PERFORMED BY VOGEL & ASSOCIATES, INC., DATED NOVEMBER, 1998.
37. THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL, WHICH IS BASED UPON THE MARYLAND STATE PLANE COORDINATE SYSTEM. HOWARD COUNTY MONUMENT NOS. BM1-3044005R AND BM2-3044004R WERE USED FOR THIS PROJECT.
38. ANY DAMAGE TO THE COUNTY'S RIGHT-OF-WAY SHALL BE CORRECTED AT THE DEVELOPER'S EXPENSE.
39. SHC ELEVATIONS SHOWN ARE LOCATED AT THE PROPERTY LINE.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION	DATE 9/23/09
CHIEF, DIVISION OF LAND DEVELOPMENT	DATE 9/24/09
DIRECTOR, DEP.	DATE 9/24/09



LEGEND

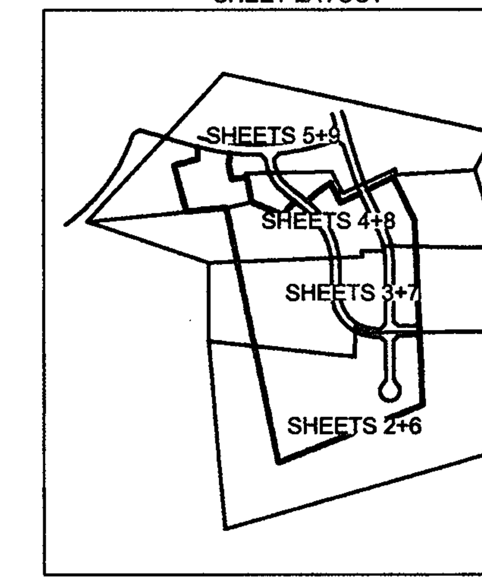
- PHASE 1 (LOTS 1-46)
- PHASE 2 (LOTS 47-49)
- PHASE 3 (LOTS 50-54)
- PHASE 4 (LOTS 55-59)
- PHASE 5 (LOTS 60-89)
- PHASE 6 (LOTS 90-148)
- FOREST CONSERVATION EASEMENT (RETENTION)

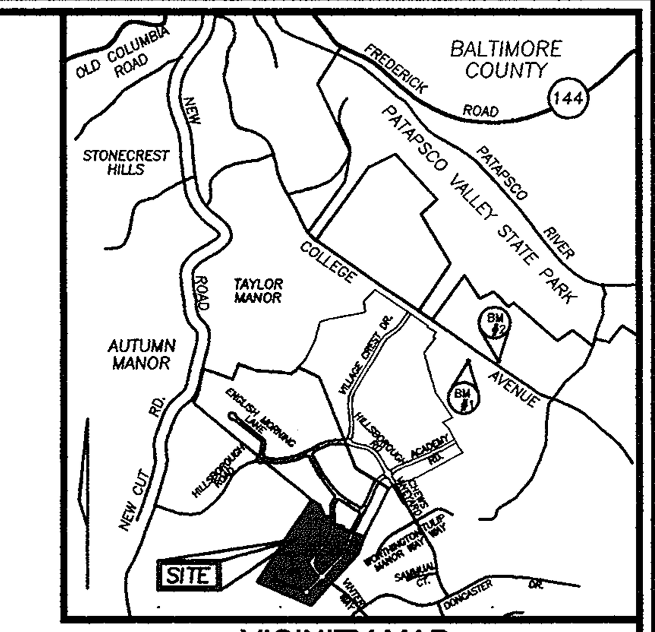
COORDINATE CHART

NO.	NORTHING	EASTING
244	577,606.1340	1,369,487.53
616	577,736.5191	1,369,549.543
621	578,062.2368	1,369,621.369
622	578,124.7592	1,370,077.658
623	577,927.7562	1,370,009.379
596	578,042.0039	1,370,316.428
608	578,023.6744	1,370,634.400
609	578,002.6822	1,370,830.207
610	578,032.1616	1,370,870.344
618	578,081.1422	1,371,148.920
242	577,955.5100	1,371,620.520
243	576,754.7600	1,372,055.889
529	576,482.7908	1,371,730.762
530	575,844.1251	1,371,730.762
130	575,623.8142	1,371,654.758
125	574,948.0467	1,371,033.450
252	575,251.6521	1,370,324.308
88	576,332.2271	1,371,039.300

LOCATION MAP
SCALE: 1"=600'

WORTHINGTON FIELDS
PHASE SIX
SHEET LAYOUT





VICINITY MAP
SCALE: 1" = 2000'
ADC MAP COORDINATE: 12 H13

BENCHMARK INFORMATION

BENCHMARK NO. 1: COUNTY CONTROL #3044005R
3/4" REBAR 0.8' BELOW SURFACE
N. 578233.92, E. 1373142.33
ELEV. =362.575
ELEV. = 374.389
BENCHMARK NO. 2: COUNTY CONTROL #3044004R
3/4" REBAR 0.6' BELOW SURFACE
N. 578128.03, E. 1373460.71

SHEET INDEX

DESCRIPTION	SHEET NO
COVER SHEET	1 OF 13
LAYOUT PLAN	2 OF 13
LAYOUT PLAN	3 OF 13
LAYOUT PLAN	4 OF 13
LAYOUT PLAN	5 OF 13
GRADING, SEDIMENT AND EROSION CONTROL PLAN	6 OF 13
GRADING, SEDIMENT AND EROSION CONTROL PLAN	7 OF 13
GRADING, SEDIMENT AND EROSION CONTROL PLAN	8 OF 13
GRADING, SEDIMENT AND EROSION CONTROL PLAN	9 OF 13
SEDIMENT AND EROSION CONTROL NOTES AND DETAILS	10 OF 13
LANDSCAPE PLAN AND DETAILS	11 OF 13
LANDSCAPE PLAN AND DETAILS	12 OF 13
HOUSE FOOTPRINT PLAN	13 OF 13

ADDRESS CHART

LOT NO	STREET ADDRESS	LOT NO	STREET ADDRESS
90	8103 ALLOWAY COURT	120	4506 NIGHTINGALE COURT
91	8107 ALLOWAY COURT	121	8590 ACADEMY ROAD
92	8111 ALLOWAY COURT	122	8586 ACADEMY ROAD
93	8115 ALLOWAY COURT	123	8582 ACADEMY ROAD
94	8112 ALLOWAY COURT	124	4513 VINTER WAY
95	8108 ALLOWAY COURT	125	4517 VINTER WAY
96	8104 ALLOWAY COURT	126	4521 VINTER WAY
97	8343 ACADEMY ROAD	127	4525 VINTER WAY
98	8347 ACADEMY ROAD	128	4529 VINTER WAY
99	8351 ACADEMY ROAD	129	4533 VINTER WAY
100	8355 ACADEMY ROAD	130	4537 VINTER WAY
101	8363 ACADEMY ROAD	131	4546 VINTER WAY
102	8367 ACADEMY ROAD	132	4542 VINTER WAY
103	8371 ACADEMY ROAD	133	4538 VINTER WAY
104	8375 ACADEMY ROAD	134	4534 VINTER WAY
105	8379 ACADEMY ROAD	135	4530 VINTER WAY
106	8383 ACADEMY ROAD	136	4526 VINTER WAY
107	8387 ACADEMY ROAD	137	4522 VINTER WAY
108	8391 ACADEMY ROAD	138	4518 VINTER WAY
109	8395 ACADEMY ROAD	139	4514 VINTER WAY
110	8399 ACADEMY ROAD	140	8378 ACADEMY ROAD
111	4503 NIGHTINGALE COURT	141	8374 ACADEMY ROAD
112	4507 NIGHTINGALE COURT	142	8370 ACADEMY ROAD
113	4511 NIGHTINGALE COURT	143	8366 ACADEMY ROAD
114	4515 NIGHTINGALE COURT	144	8362 ACADEMY ROAD
115	4519 NIGHTINGALE COURT	145	8358 ACADEMY ROAD
116	4523 NIGHTINGALE COURT	146	8554 ACADEMY ROAD
117	4518 NIGHTINGALE COURT	147	8550 ACADEMY ROAD
118	4514 NIGHTINGALE COURT	148	8546 ACADEMY ROAD
119	4510 NIGHTINGALE COURT		

PERMIT INFORMATION CHART

PROJECT NAME			SECTION/AREA		LOT/PARCEL
WORTHINGTON FIELDS			PHASE 6		90-148
PLAT REF 19741-19746 (F-07-002)	BLOCK NO 20	ZONE R-ED	TAX MAP 25	ELECT DIST 2ND	CENSUS TR 6028.00
WATER CODE: G-01			SEWER CODE: 1253100		

OWNER
TAYLOR FAMILY LIMITED PARTNERSHIP
4100 COLLEGE AVENUE
ELLICOTT CITY, MD 21043
(410)465-3500

DEVELOPER
RYAN HOMES
6031 UNIVERSITY BLVD.
SUITE 250
ELLICOTT CITY, MARYLAND 21043
(410) 796-0980

NO.	REVISION	DATE

SITE DEVELOPMENT PLAN
COVER SHEET
WORTHINGTON FIELDS, PHASE 6
LOTS 90-148
SINGLE FAMILY DETACHED UNITS

TAX MAP 25 BLOCK 20 — PARCEL P/O '98'
2ND ELECTION DISTRICT — HOWARD COUNTY, MARYLAND
REF.: S-98-18, PB-366 (APP. 6/16/99), P-00-07, F-01-60 (PHASE 1), P-01-01, F-01-206 (PHASE 2), P-02-08, F-02-270 (PHASE 3), P-03-07,F-03-207 (PHASE 4),P-04-12,F-05-019 (PHASE 5),F-07-002

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 H. VOGEL — No. 16193 — PROFESSIONAL ENGINEER
ROBERT H. VOGEL, PE No.16193

DESIGN BY:	RJ
DRAWN BY:	JMR/KG
CHECKED BY:	RHV
DATE:	AUGUST 2009
SCALE:	AS SHOWN
W.O. NO.:	99-11

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: 09-27-2010

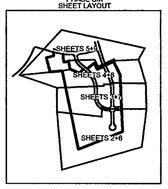
SDP-09-056

LAYOUT PLAN
SCALE: 1" = 30'

LEGEND:

- EXISTING CONTOUR
- EXISTING CURB AND GUTTER
- EXISTING UTILITY POLE
- EXISTING LIGHT POLE
- EXISTING MAILBOX
- EXISTING SIGN
- EXISTING SANITARY MANHOLE
- EXISTING SANITARY LINE
- EXISTING CLEANOUT
- EXISTING FIRE HYDRANT
- EXISTING WATER LINE
- EXISTING SEWER LINE
- EXISTING STORM DRAIN LINE
- EXISTING FENCE
- PROPERTY LINE
- RIGHT-OF-WAY LINE
- EXISTING STREET TREES (F-07-002)
- EXISTING VEGETATION (APPROXIMATE LOCATION)
- PROPOSED TREELINE
- EXISTING TREELINE (FIELD LOCATED)
- 15' NO WOODY VEGETATION BUFFER
- EXISTING FOREST CONSERVATION EASEMENT (PLAT# 19741-19746)
- EXISTING PRIVATE USE-IN-COMMON ACCESS EASEMENT (PLAT# 19741-19746, AND 17480)
- EXISTING PRIVATE DRAINAGE, AND UTILITY EASEMENT (PLAT# 19741-19746)
- EXISTING PUBLIC SWM, STORMDRAIN AND UTILITY EASEMENT (PLAT# 19741-19746)
- EXISTING PUBLIC WATER, SEWER, AND UTILITY EASEMENT (PLAT# 19741-19746)

WORTHINGTON FIELDS PHASE SIX SHEET LAYOUT



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NO.	REVISION	DATE

SITE DEVELOPMENT PLAN
LAYOUT PLAN
WORTHINGTON FIELDS, PHASE 6
LOTS 90-148
SINGLE FAMILY DETACHED UNITS

TAX MAP 25 BLOCK 20 — PARCEL P/O '98'
2ND ELECTION DISTRICT — HOWARD COUNTY, MARYLAND
REF.: S-98-18, PB-366 (APP. 6/16/99), P-00-07, F-01-60 (PHASE 1), P-01-01, F-01-206 (PHASE 2), P-02-08, F-02-270 (PHASE 3), P-03-07,F-03-207 (PHASE 4),P-04-12,F-05-019 (PHASE 5),F-07-002

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FAX: 410.461.8961

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION	DATE 9/21/09
CHIEF, DIVISION OF LAND DEVELOPMENT	DATE 9/21/09
DIRECTOR, DEP.	DATE 9/21/09

STATE OF MARYLAND — ROBERT HARRIS VOGEL — No. 16193 — PROFESSIONAL ENGINEER — 9/21/09
ROBERT H. VOGEL, PE No.16193

DESIGN BY:	RJ
DRAWN BY:	JMR/KG
CHECKED BY:	RHV
DATE:	AUGUST 2009
SCALE:	AS SHOWN
W.O. NO.:	99-11

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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: 09-27-2010

SHEET 2 OF 13

SDP-09-056

LEGEND:

- EXISTING CONTOUR
- EXISTING CURB AND GUTTER
- EXISTING UTILITY POLE
- EXISTING LIGHT POLE
- EXISTING MAILBOX
- EXISTING SIGN
- EXISTING SANITARY MANHOLE
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- EXISTING PRIVATE DRAINAGE, AND UTILITY EASEMENT (PLAT# 19741-19746)
- EXISTING PUBLIC SWM, STORMDRAIN AND UTILITY EASEMENT (PLAT# 19741-19746)
- EXISTING PUBLIC WATER, SEWER, AND UTILITY EASEMENT (PLAT# 19741-19746)
- EXISTING VARIABLE WIDTH PUBLIC SIGHT DISTANCE EASEMENT (PLAT# 19741-19746)

LAYOUT PLAN
SCALE: 1" = 30'

WORTHINGTON FIELDS
PHASE SIX
SHEET LAYOUT

NO.	REVISION	DATE

SITE DEVELOPMENT PLAN
LAYOUT PLAN
WORTHINGTON FIELDS, PHASE 6
LOTS 90-148
SINGLE FAMILY DETACHED UNITS

TAX MAP 25 BLOCK 20 — PARCEL P/O '98'
2ND ELECTION DISTRICT — HOWARD COUNTY, MARYLAND
REF.: S-98-18, PB-366 (APP. 6/16/99), P-00-07, F-01-60 (PHASE 1), P-01-01, F-01-206 (PHASE 2), P-02-08, F-02-270 (PHASE 3), P-03-07, F-03-207 (PHASE 4), P-04-12, F-05-019 (PHASE 5), F-07-002

OWNER
LAND DESIGN & DEVELOPMENT
5300 DORSEY HALL DRIVE
SUITE 102
ELLICOTT CITY, MD 21042
ATTN: MR DONALD R REUWER
(410) 480-9105

DEVELOPER
RYAN HOMES
6085 MARSHALEE DRIVE
ELKRIDGE, MARYLAND 21075
ATTN: JOHN LEWIS
(410) 796-0980

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STATE OF MARYLAND — ROBERT HARRIS VOGEL — No. 16193 — PROFESSIONAL ENGINEER
ROBERT H. VOGEL, PE No.16193

DESIGN BY:	RJ
DRAWN BY:	JMR/KG
CHECKED BY:	RHV
DATE:	AUGUST 2009
SCALE:	AS SHOWN
W.O. NO.:	99-11

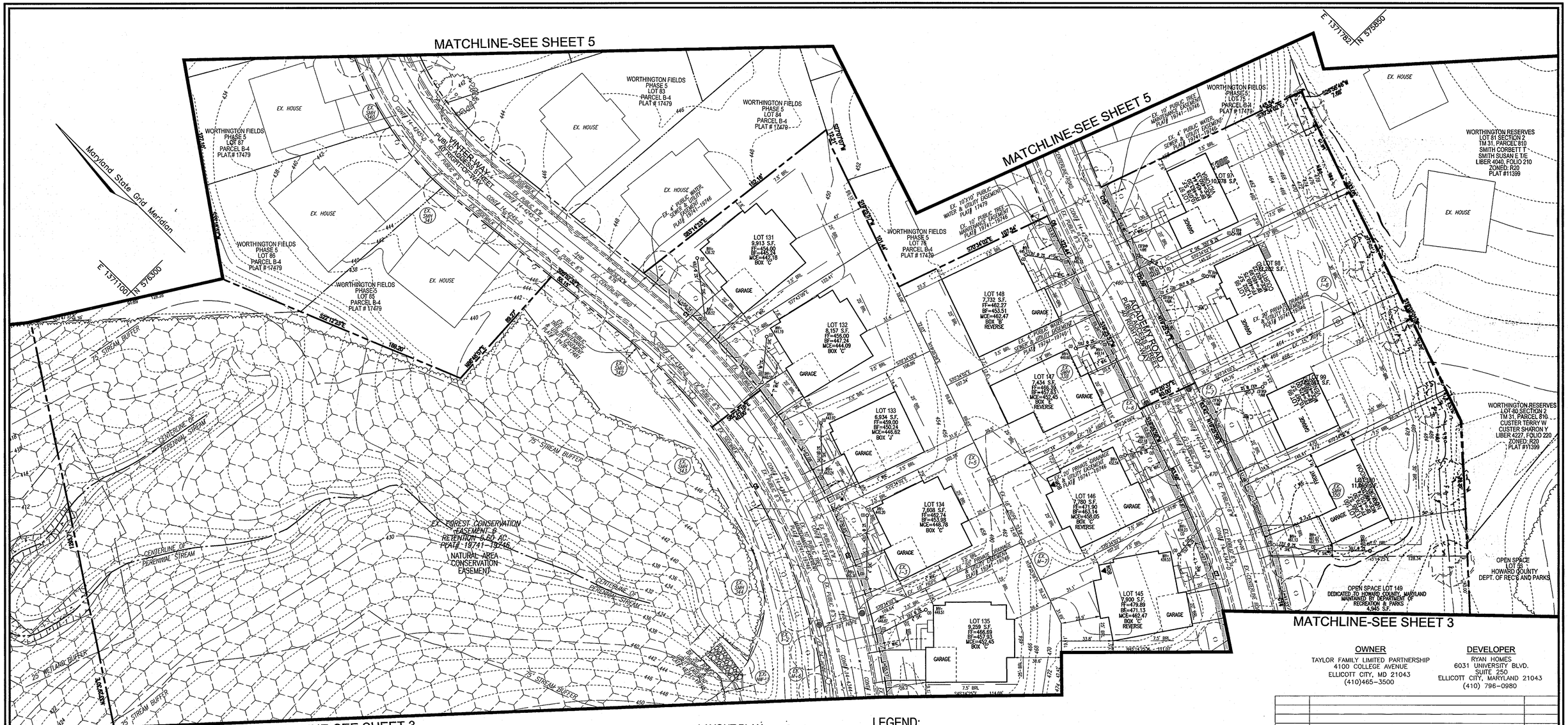
PROFESSIONAL CERTIFICATE
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 16193
EXPIRATION DATE: 09-27-2010

SHEET 3 OF 13

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

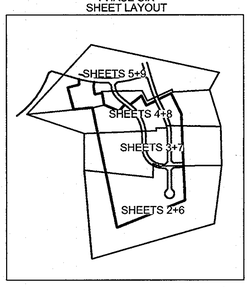
CHIEF, DEVELOPMENT ENGINEERING DIVISION	DATE 9/22/09
CHIEF, DIVISION OF LAND DEVELOPMENT	DATE 9/24/09
DIRECTOR, DEP.	DATE 9/24/09

SDP-09-056



LAYOUT PLAN
SCALE: 1" = 30'

WORTHINGTON FIELDS
PHASE SIX
SHEET LAYOUT



LEGEND:

- EXISTING CONTOUR
- EXISTING CURB AND GUTTER
- EXISTING UTILITY POLE
- EXISTING LIGHT POLE
- EXISTING MAILBOX
- EXISTING SIGN
- EXISTING SANITARY MANHOLE
- EXISTING SANITARY LINE
- EXISTING CLEANOUT
- EXISTING FIRE HYDRANT
- EXISTING WATER LINE
- EXISTING SEWER LINE
- EXISTING STORM DRAIN LINE
- EXISTING FENCE
- PROPERTY LINE
- RIGHT-OF-WAY LINE
- EXISTING STREET TREES (F-07-002)
- EXISTING VEGETATION (APPROXIMATE LOCATION)
- PROPOSED TREELINE
- EXISTING TREELINE (FIELD LOCATED)
- 15' NO WOODY VEGETATION BUFFER
- EXISTING FOREST CONSERVATION EASEMENT (PLAT# 19741-19746)
- EXISTING PRIVATE USE-IN-COMMON ACCESS EASEMENT (PLAT# 19741-19746, AND 17480)
- EXISTING PRIVATE DRAINAGE, AND UTILITY EASEMENT (PLAT# 19741-19746)
- EXISTING PUBLIC SWM, STORMDRAIN AND UTILITY EASEMENT (PLAT# 19741-19746)
- EXISTING PUBLIC WATER, SEWER, AND UTILITY EASEMENT (PLAT# 19741-19746)

OWNER
TAYLOR FAMILY LIMITED PARTNERSHIP
4100 COLLEGE AVENUE
ELLICOTT CITY, MD 21043
(410)465-3500

DEVELOPER
RYAN HOMES
6031 UNIVERSITY BLVD.
SUITE 250
ELLICOTT CITY, MARYLAND 21043
(410) 796-0980

NO.	REVISION	DATE

SITE DEVELOPMENT PLAN
LAYOUT PLAN
WORTHINGTON FIELDS, PHASE 6
LOTS 90-148
SINGLE FAMILY DETACHED UNITS

TAX MAP 25 BLOCK 20 PARCEL P/O '98'
2ND ELECTION DISTRICT HOWARD COUNTY, MARYLAND
REF.: S-98-18, PB-366 (APP. 6/16/99), P-00-07, F-01-60 (PHASE 1), P-01-01, F-01-206 (PHASE 2), P-02-08, F-02-270 (PHASE 3), P-03-07,F-03-207 (PHASE 4),P-04-12,F-05-019 (PHASE 5),F-07-002

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. 16193 PROFESSIONAL ENGINEER
9/24/09
ROBERT H. VOGEL, PE No.16193

DESIGN BY: RJ
DRAWN BY: JMR/KG
CHECKED BY: RHV
DATE: AUGUST 2009
SCALE: AS SHOWN
W.O. NO.: 99-11

PROFESSIONAL CERTIFICATE
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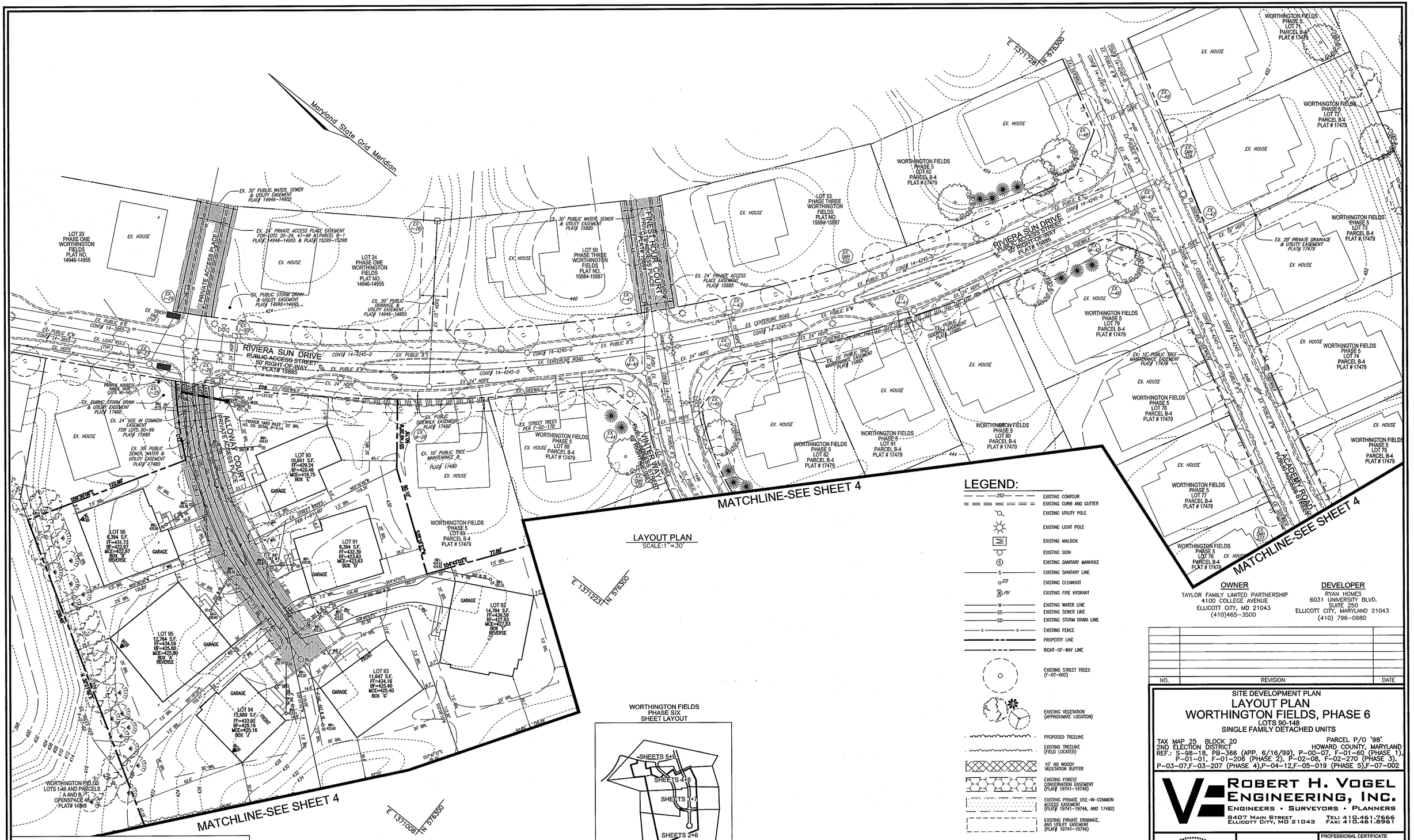
EXPIRATION DATE: 09-27-2010

SHEET 4 OF 13

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION	DATE 9/23/09
CHIEF, DIVISION OF LAND DEVELOPMENT	DATE 9/24/09
DIRECTOR, DEP.	DATE 9/24/09

SDP-09-056



APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION	DATE 9/23/09
CHIEF, DIVISION OF LAND DEVELOPMENT	DATE 9/24/09
DIRECTOR, DEP.	DATE 9/24/09

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NO.	REVISION	DATE

SITE DEVELOPMENT PLAN
LAYOUT PLAN
WORTHINGTON FIELDS, PHASE 6
LOTS 90-148
SINGLE FAMILY DETACHED UNITS

TAX MAP 25 BLOCK 20 — PARCEL P/O '98'
2ND ELECTION DISTRICT — HOWARD COUNTY, MARYLAND
REF.: S-98-18, PB-366 (APP. 6/16/99), P-00-07, F-01-60 (PHASE 1), P-01-01, F-01-206 (PHASE 2), P-02-08, F-02-270 (PHASE 3), P-03-07, F-03-207 (PHASE 4), P-04-12, F-05-019 (PHASE 5), F-07-002

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STATE OF MARYLAND — ROBERT HARRIS VOGEL — No. 16193 — PROFESSIONAL ENGINEER — 8/21/09
ROBERT H. VOGEL, PE No.16193

DESIGN BY:	RJ
DRAWN BY:	JMR/KG
CHECKED BY:	RHV
DATE:	AUGUST 2009
SCALE:	AS SHOWN
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SHEET 5 OF 13

SDP-09-056

LEGEND:

- EXISTING CONTOUR
- PROPOSED CONTOUR
- PROPOSED SPOT ELEVATION
- EXISTING SPOT ELEVATION
- EXISTING CURB AND GUTTER
- EXISTING UTILITY POLE
- EXISTING LIGHT POLE
- EXISTING MAILBOX
- EXISTING SIGN
- EXISTING SANITARY MANHOLE
- EXISTING SANITARY LINE
- EXISTING CLEANOUT
- EXISTING FIRE HYDRANT
- EXISTING WATER LINE
- EXISTING SEWER LINE
- EXISTING STORM DRAIN LINE
- EXISTING FENCE
- PROPERTY LINE
- RIGHT-OF-WAY LINE
- EXISTING STREET TREES (F-07-002)
- EXISTING VEGETATION (APPROXIMATE LOCATION)
- PROPOSED TREELINE
- EXISTING TREELINE (FIELD LOCATED)
- 15' NO WOODY VEGETATION BUFFER
- EXISTING FOREST CONSERVATION EASEMENT (PLAT# 19741-19746)
- EXISTING PRIVATE USE-IN-COMMON ACCESS EASEMENT (PLAT# 19741-19746, AND 17480)
- EXISTING PRIVATE DRAINAGE, AND UTILITY EASEMENT (PLAT# 19741-19746)
- EXISTING PUBLIC SWM, STORMDRAIN AND UTILITY EASEMENT (PLAT# 19741-19746)
- EXISTING PUBLIC WATER, SEWER, AND UTILITY EASEMENT (PLAT# 19741-19746)
- EROSION CONTROL MATTING
- STABILIZED CONSTRUCTION ENTRANCE
- SILT FENCE
- SUPER SILT FENCE
- LIMIT OF DISTURBANCE
- INLET PROTECTION
- AS SHOWN ON F-07-002 TO REMAIN
- EARTHDIKE AS SHOWN ON F-07-002 TO REMAIN
- SOIL

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NO.	REVISION	DATE

SITE DEVELOPMENT PLAN

GRADING, SEDIMENT & EROSION CONTROL PLAN
WORTHINGTON FIELDS, PHASE 6

LOTS 90-148
SINGLE FAMILY DETACHED UNITS

TAX MAP 25 BLOCK 20 — PARCEL P/O '98'
2ND ELECTION DISTRICT — HOWARD COUNTY, MARYLAND
REF.: S-98-18, PB-366 (APP. 6/16/99), P-00-07, F-01-60 (PHASE 1), P-01-01, F-01-206 (PHASE 2), P-02-08, F-02-270 (PHASE 3), P-03-07,F-03-207 (PHASE 4),P-04-12,F-05-019 (PHASE 5),F-07-002

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ELLICOTT CITY, MD 21043
TEL: 410.461.7666
FAX: 410.461.8961

SOILS LEGEND

SYMBOL	NAME / DESCRIPTION	GROUP
AdC2	ALDINO SILT LOAM, 8 TO 15 PERCENT SLOPES, MODERATELY ERODED	D
BrC3	BRANDYWINE LOAM, 8 TO 15 PERCENT SLOPES, SEVERLEY ERODED	C
BrD2	BRANDYWINE LOAM, 15 TO 25 PERCENT SLOPES, MODERATELY ERODED	C
BrD3	BRANDYWINE LOAM, 15 TO 25 PERCENT SLOPES, SEVERLEY ERODED	C
BrF	BRANDYWINE LOAM, 25 TO 60 PERCENT SLOPES	C
CnB2	CHILLUM-FAIRFAX LOAMS, 1 TO 5 PERCENT SLOPES, MODERATELY ERODED	C
CnD3	CHILLUM-FAIRFAX LOAMS, 5 TO 15 PERCENT SLOPES, SEVERLEY ERODED	C
GnB2	GLENVILLE SILT LOAM, 3 TO 8 PERCENT SLOPES, MODERATELY ERODED	C
LgC3	LEGORE SILTY CLAY LOAM, 8 TO 15 PERCENT SLOPES, SEVERLEY ERODED	C
MgB2	MANOR GRAVELLY LOAM, 3 TO 8 PERCENT SLOPES, MODERATELY ERODED	B
MgC3	MANOR GRAVELLY LOAM, 8 TO 15 PERCENT SLOPES, SEVERLEY ERODED	B
MlC3	MANOR LOAM, 8 TO 15 PERCENT SLOPES, SEVERLEY ERODED	B
MlD3	MANOR LOAM, 15 TO 25 PERCENT SLOPES, SEVERLEY ERODED	B
MpB2	MONTALTO SILT LOAM, 3 TO 8 PERCENT SLOPES, MODERATELY ERODED	C
MrE	MONTALTO AND RELAY SOILS, 15 TO 45 PERCENT SLOPES	C
MsD	MONTALTO AND RELAY VERY STONY SILT LOAMS, 3 TO 25 PERCENT SLOPES	C
ReC2	RELAY SILT LOAM, 3 TO 15 PERCENT SLOPES, MODERATELY ERODED	B
WoB	WACTHUNG SILT LOAM, 3 TO 8 PERCENT SLOPES	D

LAYOUT PLAN
SCALE: 1" = 30'

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION	DATE 9/23/09
CHIEF, DIVISION OF LAND DEVELOPMENT	DATE 9/24/09
DIRECTOR, DEP.	DATE 9/24/09

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

HOWARD S.C.D. — DATE 9/9/09

BY THE DEVELOPER:

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

SIGNATURE OF DEVELOPER — DATE 8-28-09

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."

SIGNATURE OF ENGINEER — DATE 8/27/09

STATE OF MARYLAND — ROBERT HARRIS VOGEL — No. 16193 — PROFESSIONAL ENGINEER
ROBERT H. VOGEL, PE No.16193

DESIGN BY:	RJ
DRAWN BY:	JMR/KG
CHECKED BY:	RHV
DATE:	AUGUST 2009
SCALE:	AS SHOWN
W.O. NO.:	99-11

PROFESSIONAL CERTIFICATE

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SHEET 6 OF 13

SDP-09-056

LEGEND:

- EXISTING CONTOUR
- PROPOSED CONTOUR
- PROPOSED SPOT ELEVATION
- EXISTING SPOT ELEVATION
- EXISTING CURB AND GUTTER
- EXISTING UTILITY POLE
- EXISTING LIGHT POLE
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- EXISTING SANITARY LINE
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- EXISTING SEWER LINE
- EXISTING STORM DRAIN LINE
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- EXISTING TREELINE (FIELD LOCATED)
- EXISTING STREET TREES (F-07-002)
- EXISTING VEGETATION (APPROXIMATE LOCATION)
- EXISTING PUBLIC WATER, SEWER, AND UTILITY EASEMENT (PLAT# 19741-19746)
- 15' NO WOODY VEGETATION BUFFER
- EXISTING FOREST CONSERVATION EASEMENT (PLAT# 19741-19746)
- EXISTING PRIVATE USE-IN-COMMON ACCESS EASEMENT (PLAT# 19741-19746, AND 17480)
- EXISTING PRIVATE DRAINAGE, AND UTILITY EASEMENT (PLAT# 19741-19746)
- BrC3 MgB2 — SOIL
- EXISTING PUBLIC SWM, STORMDRAIN AND UTILITY EASEMENT (PLAT# 19741-19746)
- EXISTING VARIABLE WIDTH PUBLIC SIGHT DISTANCE EASEMENT (PLAT# 19741-19746)
- EROSION CONTROL MATTING
- SOE SOE — STABILIZED CONSTRUCTION ENTRANCE
- SILT FENCE
- SSF — SUPER SILT FENCE
- LOD — LIMIT OF DISTURBANCE
- AGIP — INLET PROTECTION
- AS SHOWN ON F-07-002 TO REMAIN
- EARTHDIKE AS SHOWN ON F-07-002 TO REMAIN

SOILS LEGEND

SYMBOL	NAME / DESCRIPTION	GROUP
AaC2	ALDINO SILT LOAM, 8 TO 15 PERCENT SLOPES, MODERATELY ERODED	D
BrC3	BRANDYWINE LOAM, 8 TO 15 PERCENT SLOPES, SEVERLEY ERODED	C
BrD2	BRANDYWINE LOAM, 15 TO 25 PERCENT SLOPES, MODERATELY ERODED	C
BrD3	BRANDYWINE LOAM, 15 TO 25 PERCENT SLOPES, SEVERLEY ERODED	C
BrF	BRANDYWINE LOAM, 25 TO 60 PERCENT SLOPES	C
CnB2	CHILLUM-FAIRFAX LOAMS, 1 TO 5 PERCENT SLOPES, MODERATELY ERODED	C
CnD3	CHILLUM-FAIRFAX LOAMS, 5 TO 15 PERCENT SLOPES, SEVERLEY ERODED	C
GnB2	GLENVILLE SILT LOAM, 3 TO 8 PERCENT SLOPES, MODERATELY ERODED	C
LgC3	LEGORE SILTY CLAY LOAM, 8 TO 15 PERCENT SLOPES, SEVERLEY ERODED	C
MgB2	MANOR GRAVELLY LOAM, 3 TO 8 PERCENT SLOPES, MODERATELY ERODED	B
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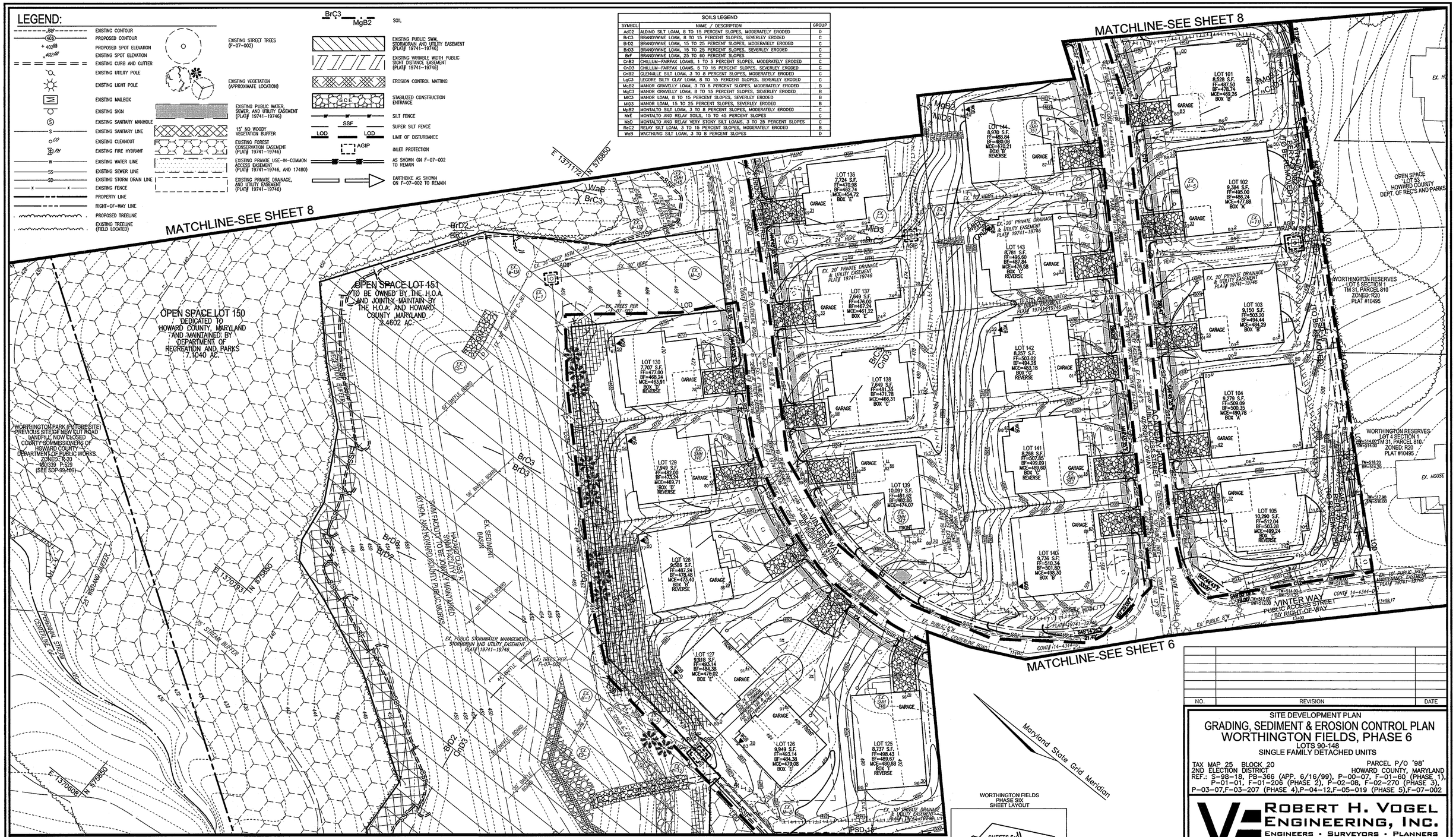
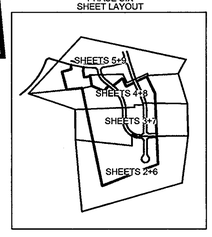
MpB2	MONTALTO SILT LOAM, 3 TO 8 PERCENT SLOPES, MODERATELY ERODED	C
MrE	MONTALTO AND RELAY SOILS, 15 TO 45 PERCENT SLOPES	C
MsD	MONTALTO AND RELAY VERY STONY SILT LOAMS, 3 TO 25 PERCENT SLOPES	C
ReC2	RELAY SILT LOAM, 3 TO 15 PERCENT SLOPES, MODERATELY ERODED	B
WaB	WACTHUNG SILT LOAM, 3 TO 8 PERCENT SLOPES	D



LAYOUT PLAN
SCALE: 1"=30'

WORTHINGTON FIELDS
PHASE SIX
SHEET LAYOUT



OWNER
LAND DESIGN & DEVELOPMENT
5300 DORSEY HALL DRIVE
SUITE 102
ELLICOTT CITY, MD 21042
ATTN: MR DONALD R REUWER
(410) 480-9105

DEVELOPER
RYAN HOMES
6085 MARSHALEE DRIVE
ELKRIDGE, MARYLAND 21075
ATTN: JOHN LEWIS
(410) 796-0980

NO.	REVISION	DATE

SITE DEVELOPMENT PLAN

GRADING, SEDIMENT & EROSION CONTROL PLAN
WORTHINGTON FIELDS, PHASE 6

LOTS 90-148
SINGLE FAMILY DETACHED UNITS

TAX MAP 25 BLOCK 20 — PARCEL P/O '98'
2ND ELECTION DISTRICT — HOWARD COUNTY, MARYLAND
REF.: S-98-18, PB-366 (APP. 6/16/99), P-00-07, F-01-60 (PHASE 1), P-01-01, F-01-206 (PHASE 2), P-02-08, F-02-270 (PHASE 3), P-03-07, F-03-207 (PHASE 4), P-04-12, F-05-019 (PHASE 5), F-07-002

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APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION	DATE 9/22/09
CHIEF, DIVISION OF LAND DEVELOPMENT	DATE 9/21/09
DIRECTOR, DEP.	DATE 9/24/09

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HOWARD S.C.D. — DATE 9/9/09

BY THE DEVELOPER:

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SIGNATURE OF ENGINEER — DATE 8/27/09

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ROBERT H. VOGEL, PE No.16193

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CHECKED BY:	RHV
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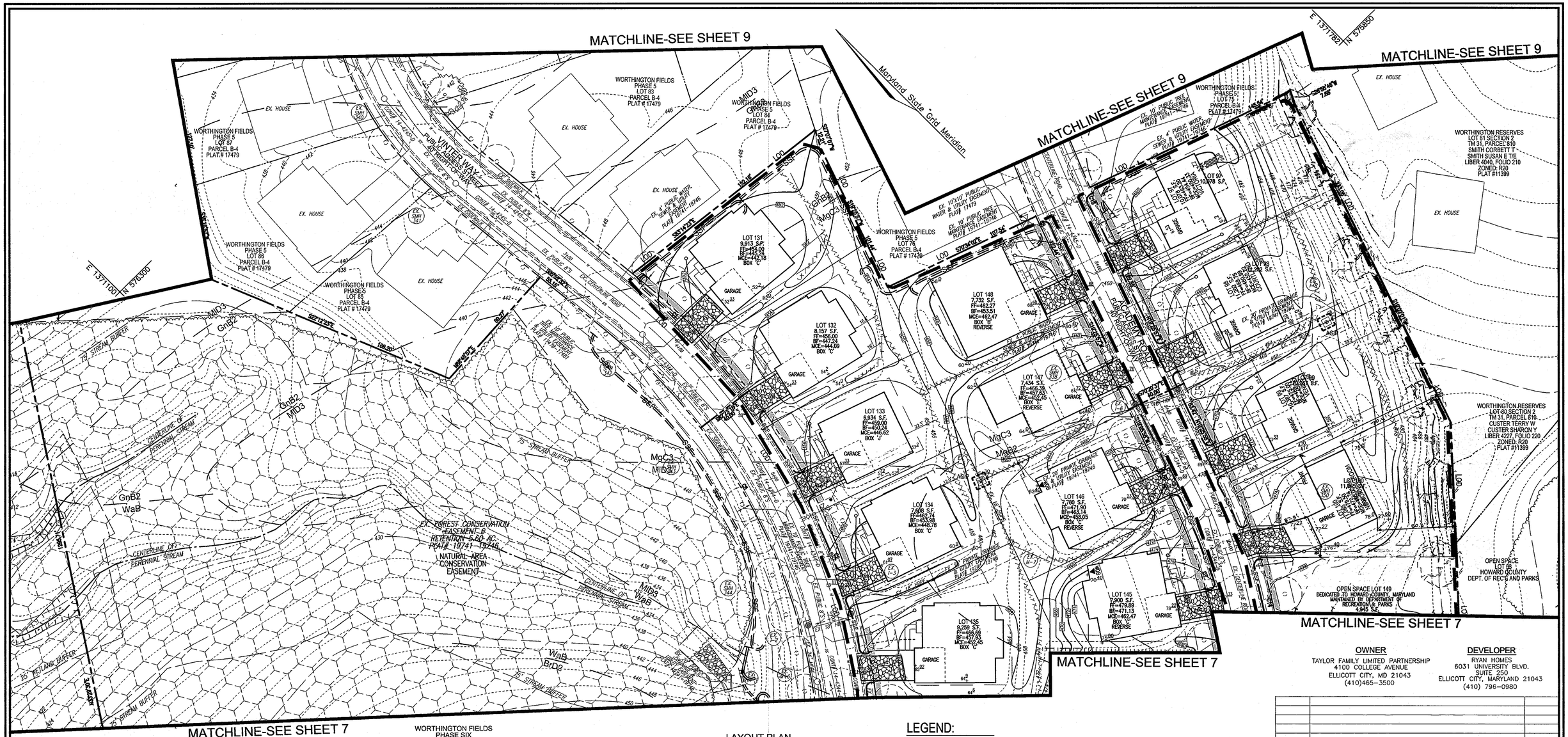
SHEET 7 OF 13

SDP-09-056



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DEVELOPER

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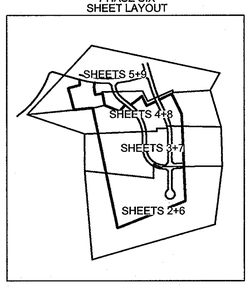
PHASE SIX
SHEET LAYOUT



E 1371100 N 575850

LAYOUT PLAN
SCALE: 1" = 30'

SOILS LEGEND

SYMBOL	NAME / DESCRIPTION	GROUP
AdC2	ALDINO SILT LOAM, 8 TO 15 PERCENT SLOPES, MODERATELY ERODED	D
BrC3	BRANDYWINE LOAM, 8 TO 15 PERCENT SLOPES, SEVERLEY ERODED	C
BrD2	BRANDYWINE LOAM, 15 TO 25 PERCENT SLOPES, MODERATELY ERODED	C
BrD3	BRANDYWINE LOAM, 15 TO 25 PERCENT SLOPES, SEVERLEY ERODED	C
BrF	BRANDYWINE LOAM, 25 TO 60 PERCENT SLOPES	C
CnB2	CHILLUM-FAIRFAX LOAMS, 1 TO 5 PERCENT SLOPES, MODERATELY ERODED	C
CnD3	CHILLUM-FAIRFAX LOAMS, 5 TO 15 PERCENT SLOPES, SEVERLEY ERODED	C
GnB2	GLENVILLE SILT LOAM, 3 TO 8 PERCENT SLOPES, MODERATELY ERODED	C
LgC3	LEGORE SILTY CLAY LOAM, 8 TO 15 PERCENT SLOPES, SEVERLEY ERODED	C
MgB2	MANOR GRAVELLY LOAM, 3 TO 8 PERCENT SLOPES, MODERATELY ERODED	B
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MIC3	MANOR LOAM, 8 TO 15 PERCENT SLOPES, SEVERLEY ERODED	B
MID3	MANOR LOAM, 15 TO 25 PERCENT SLOPES, SEVERLEY ERODED	B
MpB2	MONTALTO SILT LOAM, 3 TO 8 PERCENT SLOPES, MODERATELY ERODED	C
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MsD	MONTALTO AND RELAY VERY STONY SILT LOAMS, 3 TO 25 PERCENT SLOPES	C
ReC2	RELAY SILT LOAM, 3 TO 15 PERCENT SLOPES, MODERATELY ERODED	B
WoB	WACTHUNG SILT LOAM, 3 TO 8 PERCENT SLOPES	D

LEGEND:

- 388 — EXISTING CONTOUR
- 406 — PROPOSED CONTOUR
- + 402.68 — PROPOSED SPOT ELEVATION
- x402.68 — EXISTING SPOT ELEVATION
- EXISTING CURB AND GUTTER
- EXISTING UTILITY POLE
- EXISTING LIGHT POLE
- EXISTING MAILBOX
- EXISTING SIGN
- S — EXISTING SANITARY MANHOLE
- S — EXISTING SANITARY LINE
- CO — EXISTING CLEANOUT
- FH — EXISTING FIRE HYDRANT
- W — EXISTING WATER LINE
- SS — EXISTING SEWER LINE
- SD — EXISTING STORM DRAIN LINE
- x — x — EXISTING FENCE
- PROPERTY LINE
- RIGHT-OF-WAY LINE
- AGIP — INLET PROTECTION
- AS SHOWN ON F-07-002 TO REMAIN
- EARTHDIKE AS SHOWN ON F-07-002 TO REMAIN
- EXISTING STREET TREES (F-07-002)
- EXISTING VEGETATION (APPROXIMATE LOCATION)
- PROPOSED TREELINE
- EXISTING TREELINE (FIELD LOCATED)
- EXISTING FOREST CONSERVATION EASEMENT (PLAT# 19741-19746)
- EXISTING PRIVATE DRAINAGE, AND UTILITY EASEMENT (PLAT# 19741-19746)
- EXISTING PUBLIC WATER, SEWER, AND UTILITY EASEMENT (PLAT# 19741-19746)
- BrC3 MgB2 — SOIL
- EROSION CONTROL MATTING
- SCE — STABILIZED CONSTRUCTION ENTRANCE
- SSF — SILT FENCE
- SUPER SILT FENCE
- LOD — LOD — LIMIT OF DISTURBANCE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION	DATE 9/22/09
CHIEF, DIVISION OF LAND DEVELOPMENT	DATE 9/24/09
DIRECTOR, DEP.	DATE 9/24/09

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

HOWARD S.C.D. — DATE 9/9/09

BY THE DEVELOPER:

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

SIGNATURE OF DEVELOPER — DATE 8/28/09

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."

SIGNATURE OF ENGINEER — DATE 8/27/09

SITE DEVELOPMENT PLAN

GRADING, SEDIMENT & EROSION CONTROL PLAN
WORTHINGTON FIELDS, PHASE 6

LOTS 90-148
SINGLE FAMILY DETACHED UNITS

TAX MAP 25 BLOCK 20 — PARCEL P/O '98'
2ND ELECTION DISTRICT — HOWARD COUNTY, MARYLAND
REF.: S-98-18, PB-366 (APP. 6/16/99), P-00-07, F-01-60 (PHASE 1), P-01-01, F-01-206 (PHASE 2), P-02-08, F-02-270 (PHASE 3), P-03-07, F-03-207 (PHASE 4), P-04-12, F-05-019 (PHASE 5), F-07-002

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. 16193 — PROFESSIONAL ENGINEER — 8/28/09

ROBERT H. VOGEL, PE No.16193

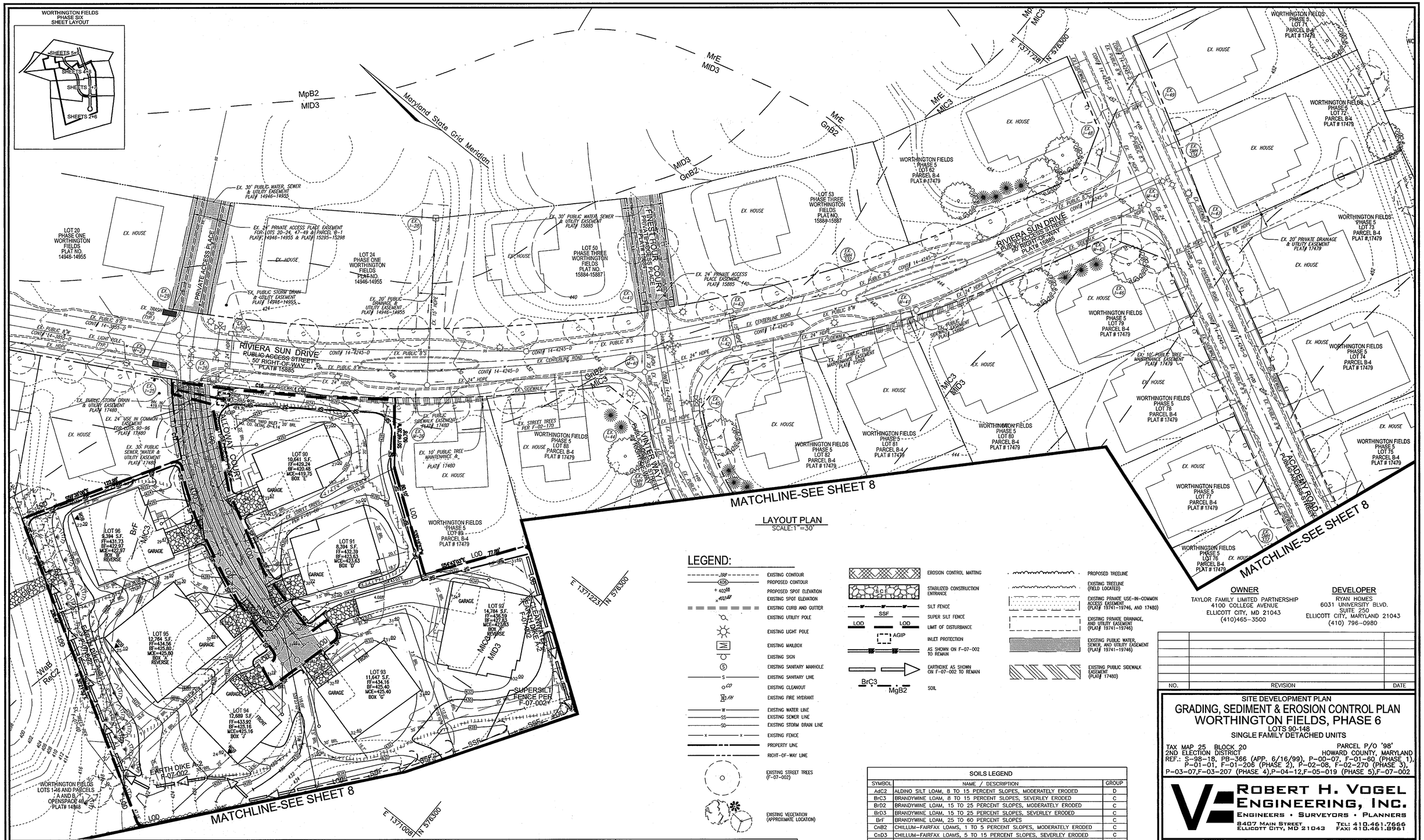
DESIGN BY:	RJ
DRAWN BY:	JMR/KG
CHECKED BY:	RHV
DATE:	AUGUST 2009
SCALE:	AS SHOWN
W.O. NO.:	99-11

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: 09-27-2010

SHEET 8 OF 13

SDP-09-056



LEGEND:

- EXISTING CONTOUR
- PROPOSED CONTOUR
- PROPOSED SPOT ELEVATION
- EXISTING SPOT ELEVATION
- EXISTING CURB AND GUTTER
- EXISTING UTILITY POLE
- EXISTING LIGHT POLE
- EXISTING MAILBOX
- EXISTING SIGN
- EXISTING SANITARY MANHOLE
- EXISTING SANITARY LINE
- EXISTING CLEANOUT
- EXISTING FIRE HYDRANT
- EXISTING WATER LINE
- EXISTING SEWER LINE
- EXISTING STORM DRAIN LINE
- EXISTING FENCE
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- AS SHOWN ON F-07-002 TO REMAIN
- EARTHDIKE AS SHOWN ON F-07-002 TO REMAIN
- SOIL
- PROPOSED TREELINE
- EXISTING TREELINE (FIELD LOCATED)
- EXISTING PRIVATE USE-IN-COMMON ACCESS EASEMENT (PLAT# 19741-19746, AND 17480)
- EXISTING PRIVATE DRAINAGE, AND UTILITY EASEMENT (PLAT# 19741-19746)
- EXISTING PUBLIC WATER, SEWER, AND UTILITY EASEMENT (PLAT# 19741-19746)
- EXISTING PUBLIC SIDEWALK EASEMENT (PLAT# 17480)

SOILS LEGEND		
SYMBOL	NAME / DESCRIPTION	GROUP
AdC2	ALDINO SILT LOAM, 8 TO 15 PERCENT SLOPES, MODERATELY ERODED	D
BrC3	BRANDYWINE LOAM, 8 TO 15 PERCENT SLOPES, SEVERLEY ERODED	C
BrD2	BRANDYWINE LOAM, 15 TO 25 PERCENT SLOPES, MODERATELY ERODED	C
BrD3	BRANDYWINE LOAM, 15 TO 25 PERCENT SLOPES, SEVERLEY ERODED	C
BrF	BRANDYWINE LOAM, 25 TO 60 PERCENT SLOPES	C
CnB2	CHILLUM-FAIRFAX LOAMS, 1 TO 5 PERCENT SLOPES, MODERATELY ERODED	C
CnD3	CHILLUM-FAIRFAX LOAMS, 5 TO 15 PERCENT SLOPES, SEVERLEY ERODED	C
GnB2	GLENVILLE SILT LOAM, 3 TO 8 PERCENT SLOPES, MODERATELY ERODED	C
LgC3	LEGORE SILTY CLAY LOAM, 8 TO 15 PERCENT SLOPES, SEVERLEY ERODED	C
MgB2	MANOR GRAVELLY LOAM, 3 TO 8 PERCENT SLOPES, MODERATELY ERODED	B
MgC3	MANOR GRAVELLY LOAM, 8 TO 15 PERCENT SLOPES, SEVERLEY ERODED	B
MlC3	MANOR LOAM, 8 TO 15 PERCENT SLOPES. SEVERLEY ERODED	B
MlD3	MANOR LOAM, 15 TO 25 PERCENT SLOPES, SEVERLEY ERODED	B
MpB2	MONTALTO SILT LOAM, 3 TO 8 PERCENT SLOPES, MODERATELY ERODED	C
MrE	MONTALTO AND RELAY SOILS, 15 TO 45 PERCENT SLOPES	C
MsD	MONTALTO AND RELAY VERY STONY SILT LOAMS, 3 TO 25 PERCENT SLOPES	C
ReC2	RELAY SILT LOAM, 3 TO 15 PERCENT SLOPES, MODERATELY ERODED	B
WoB	WACTHUNG SILT LOAM, 3 TO 8 PERCENT SLOPES	D

OWNER
TAYLOR FAMILY LIMITED PARTNERSHIP
4100 COLLEGE AVENUE
ELLICOTT CITY, MD 21043
(410)465-3500

DEVELOPER
RYAN HOMES
6031 UNIVERSITY BLVD.
SUITE 250
ELLICOTT CITY, MARYLAND 21043
(410) 796-0980

NO.	REVISION	DATE

SITE DEVELOPMENT PLAN

GRADING, SEDIMENT & EROSION CONTROL PLAN
WORTHINGTON FIELDS, PHASE 6

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STATE OF MARYLAND — ROBERT HARRIS VOGEL — No. 16193 — PROFESSIONAL ENGINEER
ROBERT H. VOGEL, PE No.16193

DESIGN BY: RJ
DRAWN BY: JMR/KG
CHECKED BY: RHV
DATE: AUGUST 2009
SCALE: AS SHOWN
W.O. NO.: 99-11

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: 09-27-2010

SHEET 9 OF 13

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION	DATE 9/23/09
CHIEF, DIVISION OF LAND DEVELOPMENT	DATE 9/24/09
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HOWARD S.C.D. — DATE 9/9/09

BY THE DEVELOPER:
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SIGNATURE OF DEVELOPER — DATE 8-18-09

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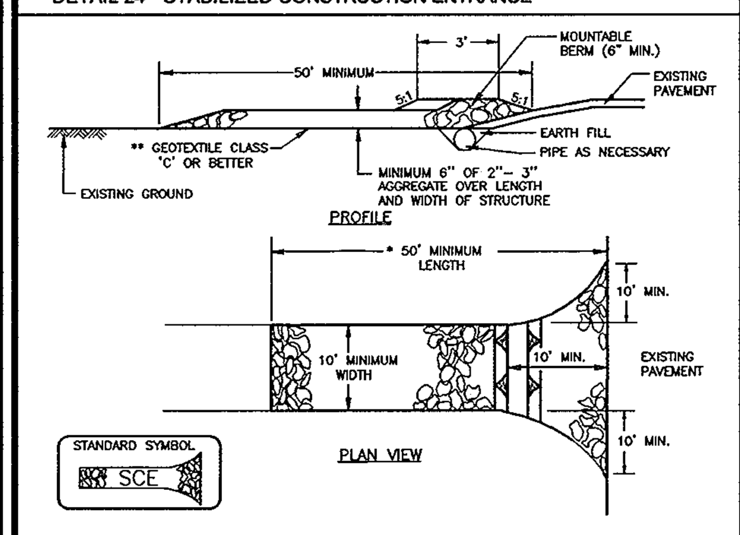
"I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS, AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT."

SIGNATURE OF ENGINEER — DATE 8/10/09

SDP-09-056

DETAIL 24 - STABILIZED CONSTRUCTION ENTRANCE

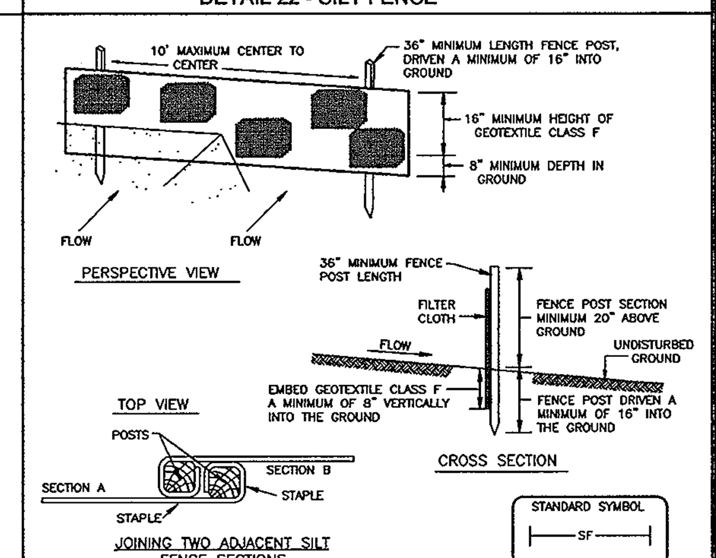


CONSTRUCTION SPECIFICATION

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 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" 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 SPECIFICATIONS

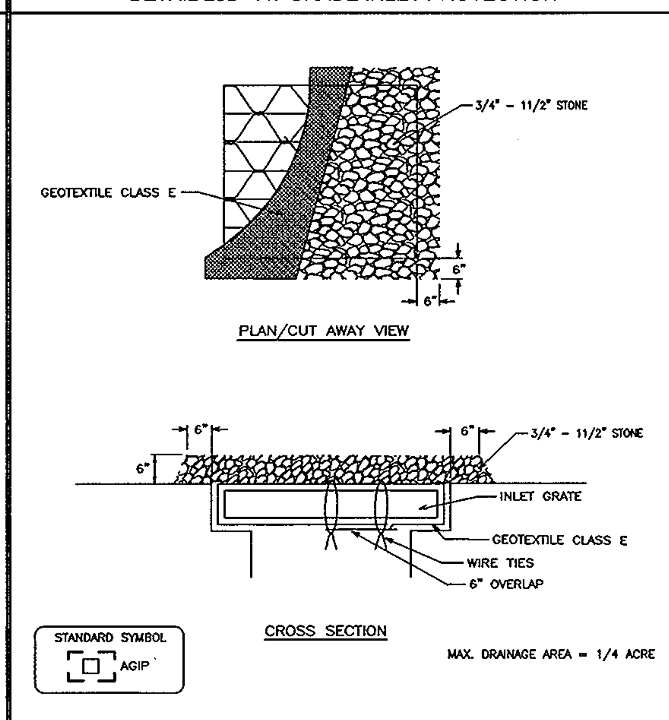
1. FENCE POSTS SHALL BE A MINIMUM OF 36" LONG, DRIVEN 16" MINIMUM INTO THE GROUND. WOOD POSTS SHALL BE 1 1/2" X 1 1/2" SQUARE (MINIMUM) CUT, OR 1 3/4" DIAMETER (MINIMUM) ROUND AND SHALL BE OF SOUND QUALITY HARDWOOD. STEEL POSTS WILL BE STANDARD T OR U SECTION WEIGHING NOT LESS THAN 1.00 POUND PER LINEAR 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 EGGECIENCY	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 REACHES 50% OF THE FABRIC HEIGHT.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE E - 15 - 3	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL 23B - AT GRADE INLET PROTECTION

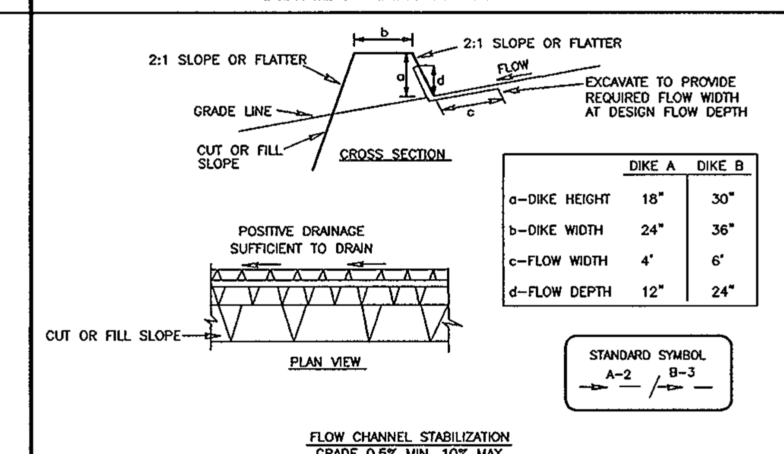


Construction Specifications

1. Lift grate and wrap with Geotextile Class E to completely cover all openings, then set grate back in place.
2. Place 3/4" to 11/2" stone, 4"–6" thick on the grate to secure the fabric and provide additional filtration.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE E - 16 - 5A	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL 1 - EARTH DIKE



	DIKE A	DIKE B
a–DIKE HEIGHT	18"	30"
b–DIKE WIDTH	24"	36"
c–FLOW WIDTH	4'	6'
d–FLOW DEPTH	12"	24"

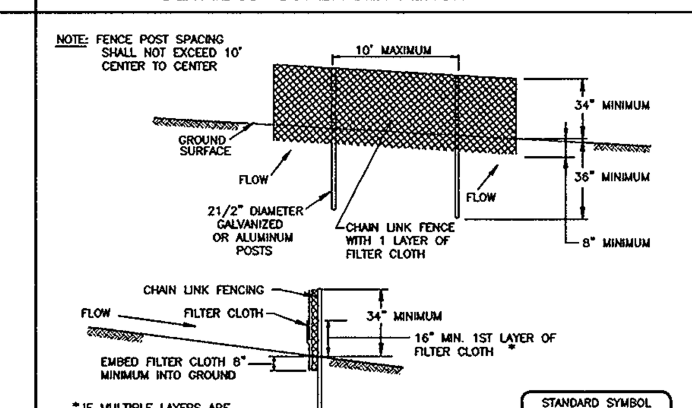
1. SEED AND COVER WITH STRAW MULCH.
2. SEED AND COVER WITH EROSION CONTROL MATTING OR LINE WITH SOD.
3. 4" – 7" STONE OR RECYCLED CONCRETE EQUIVALENT PRESSED INTO THE SOIL 7" MINIMUM

CONSTRUCTION SPECIFICATIONS

1. ALL TEMPORARY EARTH DIKES SHALL HAVE UNINTERRUPTED POSITIVE GRADE TO AN OUTLET. SPOT ELEVATIONS MAY BE NECESSARY FOR GRADES LESS THAN 1%.
2. RUNOFF DIVERTED FROM A DISTURBED AREA SHALL BE CONVEYED TO A SEDIMENT TRAPPING DEVICE.
3. RUNOFF DIVERTED FROM AN UNDISTURBED AREA SHALL OUTLET DIRECTLY INTO AN UNDISTURBED, STABILIZED AREA AT A NON-EROSIVE VELOCITY.
4. ALL TREES, BRUSH, STUMPS, OBSTRUCTIONS, AND OTHER OBJECTIONAL MATERIAL SHALL BE REMOVED AND DISPOSED OF SO AS NOT TO INTERFERE WITH THE PROPER FUNCTIONING OF THE DIKE.
5. THE DIKE SHALL BE EXCAVATED OR SHAPED TO LINE, GRADE AND CROSS SECTION AS REQUIRED TO MEET THE CRITERIA SPECIFIED HEREIN AND BE FREE OF BANK PROJECTIONS OR OTHER IRREGULARITIES WHICH WILL IMPEDE NORMAL FLOW.
6. FILL SHALL BE COMPACTED BY EARTH MOVING EQUIPMENT.
7. ALL EARTH REMOVED AND NOT NEEDED FOR CONSTRUCTION SHALL BE PLACED SO THAT IT WILL NOT INTERFERE WITH THE FUNCTIONING OF THE DIKE.
8. INSPECTION AND MAINTENANCE MUST BE PROVIDED PERIODICALLY AND AFTER EACH RAIN EVENT.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE A - 1 - 6	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL 33 - SUPER SILT FENCE



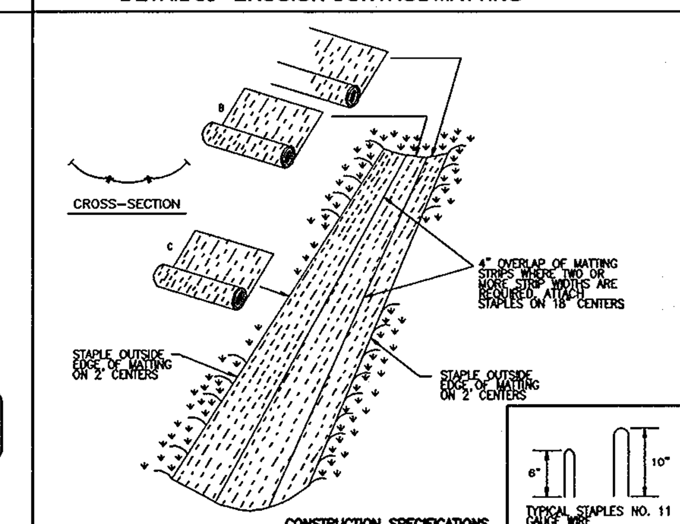
CONSTRUCTION SPECIFICATIONS

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 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

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

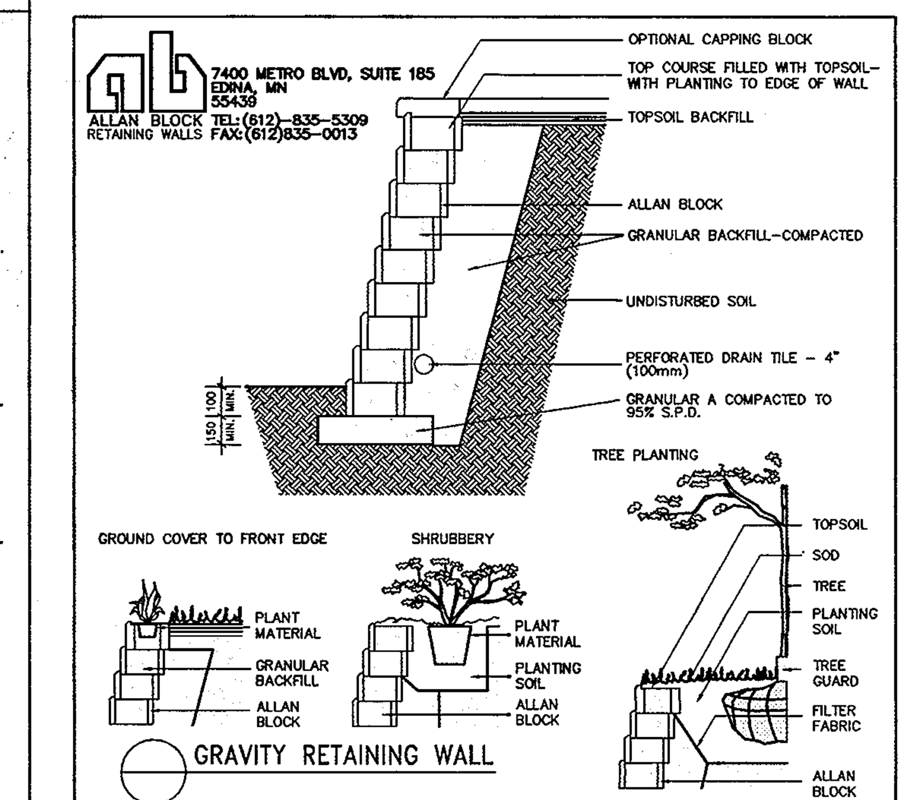
DETAIL 30 - EROSION CONTROL MATTING



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 C - 22 - 2	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION



SPECIFICATIONS:

1. EXCAVATE AREA TO LINE AND GRADES AS SHOWN ON CONSTRUCTION DRAWINGS
2. SUBGRADE TO BE FIRM AND UNDISTURBED AND COMPACTED TO 95% S.P.D.
3. BASE MATERIAL SHALL BE GRANULAR A COMPACTED TO 95% S.P.D. AND GRADED TO PROVIDE LEVEL HARD SURFACE ON WHICH TO PLACE THE FIRST COURSE OF UNITS, MIN. THICKNESS – 6" (150mm)
4. PLACE FIRST COURSE A MINIMUM OF 4" (100mm) BELOW FINISHED GRADE, WITH THE RAISED LIP FACING OUT AND THE FRONT EDGES TIGHT TOGETHER. FILL CAVITYS WITH SAND OR CLEAR CRUSHED STONE AND COMPACT. SWEEP CLEAN AND CHECK THE UNITS FOR LEVEL AND ALIGNMENT. BACKFILL FRONT AND BACK OF ENTIRE BASE ROW TO FIRMLY LOCK IN PLACE.
5. INSTALL SUBSEQUENT COURSES IN SIMILAR FASHION PROVIDING A MIN. 3" (76mm) OVERLAP OF SEAMS AND A MIN. OF 12" (305mm) GRANULAR BACKFILL.
6. ALLAN BLOCKS COME IN 3 STYLES : STANDARD BLOCK, ANGLE BLOCK, AND CORNER BLOCK AS WELL AS A STANDARD CAPPING STONE. THE BLOCKS HAVE A COMPRESSIVE STRENGTH OF OVER 4000 psi (28MPa)
7. A WIDE VARIETY OF DESIGNS CAN BE ACHIEVED INCLUDING INSIDE AND OUTSIDE CORNERS, CURVES AND STEPS. BLOCKS COME IN 5 STANDARD COLOURS :NATURAL, BUFF, BROWN, EARTH RANGE, SMOKE BLEND.
8. WALLS HIGHER THAN 6' REQUIRE GEOGRIDS OR REBAR AND MASONRY CONSTRUCTION–CONSULT MANUF.

BLOCK WALL
OR APPROVED EQUAL

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. INLETS I–11, I–12 & I–15 TO BE WRAPPED WITH SSF FOR ADDITIONAL INLET PROTECTION .... (5 DAYS)
4. INSPECT SEDIMENT CONTROL MEASURES FROM F–07–002 TO REMAIN AS NOTED ON 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. INSTALL LANDSCAPE RETAINING WALLS (LESS THAN 3' HIGH)................ (1 WEEK)
8. INSTALL PERIMETER LANDSCAPING FOR LOTS 90, 105, 106, 123, 140................ (1 DAY)
9. UPON STABILIZATION OF ALL DISTURBED AREAS AND WITH THE APPROVAL OF THE SEDIMENT CONTROL INSPECTOR, REMOVE ALL SEDIMENT CONTROL DEVICES................ (2 DAYS)

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, DISKING 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/ACRE DOLOMITIC LIMESTONE (92 IBS/1000 SQ. FT.) AND 600 IBS/ACRE 10–10–10 FERTILIZER (14 IBS/1000 SQ. FT.) BEFORE SEEDING. HARROW OR DISK INTO UPPER THREE INCHES OF SOIL. AT TIME OF SEEDING, APPLY 400 IBS/ACRE 30–0–0 UREAFORM FERTILIZER (9 IBS/1000 SQ. FT.)
2. ACCEPTABLE: APPLY 2 TONS/ACRE DOLOMITIC LIMESTONE (92 IBS/1000 SQ. FT.) AND 1000 IBS/ACRE 10–10–10 FERTILIZER (23 IBS/1000 SQ. FT.) BEFORE SEEDING. HARROW OR DISK INTO UPPER THREE INCHES OF SOIL.

SEEDING: FOR THE PERIODS MARCH 1 THUR APRIL 30, AND AUGUST 1 THRU OCTOBER 15, SEED WITH 60 IBS/ACRE (1.4 IBS/1000 SQ.FT.) OF KENTUCKY 31 TALL FESCUE. FOR THE PERIOD MAY 1 THRU JULY 31, SEED WITH 60 IBS KENTUCKY 31 TALL FESCUE PER ACRE AND 2 IBS/ACRE (.05 IBS/1000 SQ. FT.) OF WEEPING LOVEGRASS. DURING THE PERIOD OF OCTOBER 16 THRU FEBRUARY 28, PROTECT SITE BY:
OPTION 1: TWO TONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING.
OPTION 2: USE SOD.
OPTION 3: SEER: WITH 60 IBS/ACRE KENTUCKY 30 TALL FESCUE AND MULCH WITH 2 TONS/ACRE WELL ANCHORED STRAW.

MULCHING: APPLY 1–1/2 TO 2 TONS PER ACRE (70 TO 90 IBS/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 SLOPE 8 FEET OR HIGHER, USE 348 GALLONS PER ACRE (8 GAL/1000 SQ. FT.) FOR ANCHORING.

MAINTENANCE: INSPECT ALL SEEDING AREAS AND MAKE NEEDED REPAIRS, REPLACEMENTS AND RESEEDINGS.

TEMPORARY SEEDING NOTES

APPLY TO GRADED OR CLEARED AREAS LIKELY TO BE RE-DISTURBED WHERE A SHORT-TERM VEGETATIVE COVER IS NEEDED.

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

SOIL AMENDMENTS: APPLY 600 IBS/ACRE 10–10–10 FERTILIZER (14 IBS/1000 SQ. FT.).

SEEDING: FOR PERIODS MARCH 1 THRU APRIL 30 AND FROM AUGUST 15 THRU OCTOBER 15, SEED WITH 2–1/2 BUSHEL PER ACRE OF ANNUAL RYE (3.2 IBS/1000 SQ. FT.). FOR THE PERIOD MAY 1 –– AUGUST 14, SEED WITH 3 IBS/ACRE OF WEEPING LOVEGRASS (.07 IBS/1000 SQ. FT.). FOR THE PERIOD NOVEMBER 16 –– FEBRUARY 28, PROTECT SITE BY APPLYING 2 TONS/ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING, OR USE SOD.

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

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

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 VEGETATIVE GROWTH. SOILS OF CONCERN HAVE LOW MOISTURE CONTENT, LOW NUTRIENT LEVELS, LOW pH, MATERIALS TOXIC TO PLANTS, AND/OR UNACCEPTABLE SOIL GRADATION.

CONDITIONS WHERE PRACTICE APPLIES

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.
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.

   NOTE: TOPSOIL SUBSTITUTES OR AMENDMENTS, AS RECOMMENDED BY A QUALIFIED AGRONOMIST OR SOIL SCIENTIST AND 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 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 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 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 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 TO 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 DISTURBED 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.

PIPE SLOPE DRAIN

PIPE SLOPE DRAIN
CONSTRUCTION SPECIFICATIONS – PIPE SLOPE DRAIN

1. THE PIPE SLOPE DRAIN (PSD) SHALL HAVE A SLOPE OF 3 PERCENT OR STEEPER.
2. THE TOP OF THE EARTH DIKE OVER THE INLET PIPE SHALL BE AT LEAST 2 TIMES THE PIPE DIAMETER MEASURED AT THE INVERT OF THE PIPE.
3. FLEXIBLE TUBING IS PREFERRED. HOWEVER, CORRUGATED METAL PIPE OR EQUIVALENT PVC PIPE CAN BE USED. ALL CONNECTIONS SHALL BE WATERTIGHT.
4. A FLARED END SECTION SHALL BE ATTACHED TO THE INLET END OF PIPE WITH A WATERTIGHT CONNECTION. FILTER CLOTH SHALL BE PLACED UNDER THE INLET OF THE PIPE SLOPE DRAIN AND SHALL EXTEND OUT 5' FROM THE INLET. THE FILTER CLOTH SHALL BE "KEYED IN" ON ALL SIDES.
5. THE PIPE SLOPE DRAIN SHALL BE SECURELY ANCHORED TO THE SLOPE BY STAKING AT THE GROMMETS PROVIDED. SPACING FOR ANCHORS SHALL BE AS PROVIDED BY MANUFACTURER'S SPECIFICATION. IN NO CASE SHALL LESS THAN TWO (2) ANCHORS BE PROVIDED, EQUALLY SPACED ALONG THE LENGTH OF PIPE. THESE DETAILS SHOULD BE PROVIDED BY PIPE SUPPLIERS.
6. THE SOIL AROUND AND UNDER THE PIPE AND END SECTION SHALL BE HAND TAMPED IN 4 INCH LIFTS TO THE TOP OF THE EARTH DIKE.
7. ALL PIPE CONNECTIONS SHALL BE WATERTIGHT.
8. WHENEVER POSSIBLE WHERE A PSD DRAINS AN UNSTABILIZED AREA, IT SHALL OUTLET INTO A SEDIMENT TRAP OR BASIN. IF THIS IS NOT POSSIBLE THEN THE SLOPE DRAIN WILL DISCHARGE INTO A STABLE CONVEYANCE THAT LEADS TO A SEDIMENT TRAP OR BASIN. WHEN DISCHARGING INTO A TRAP OR BASIN THE PSD SHALL DISCHARGE AT THE SAME ELEVATION AS THE WET POOL ELEVATION. THE DISCHARGE FROM THE PSD MUST BE AS FAR AWAY FROM THE SEDIMENT CONTROL OUTLET AS POSSIBLE.
9. WHEN THE DRAINAGE AREA IS STABILIZED, THE PSD SHALL DISCHARGE ONTO A STABILIZED AREA AT A NON-EROSIVE VELOCITY.
10. INSPECTION AND ANY REQUIRED MAINTENANCE SHALL BE PERFORMED PERIODICALLY AND AFTER EACH RAIN EVENT.
11. THE INLET MUST BE KEPT OPEN AT ALL TIMES.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE B - 5 - 4A	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL 4 - PIPE SLOPE DRAIN

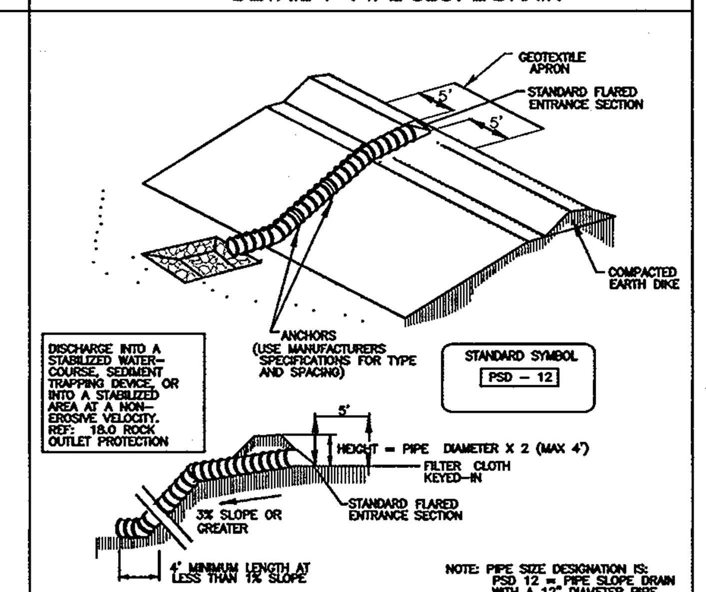
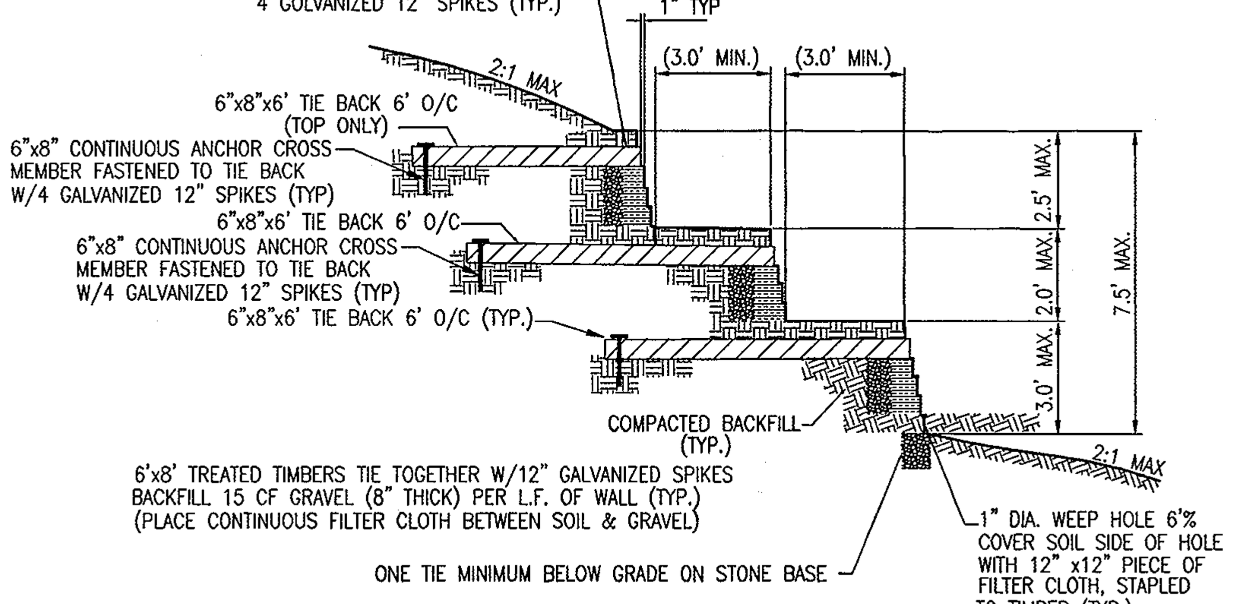


Table 6 Design Criteria for Pipe Slope Drain

Size	Pipe/Tubing Diameter (D) In	Maximum Drainage Area (Acres)
PSD–12	12	0.5
PSD–18	18	1.5
PSD–21	21	2.5
PSD–24	24	3.5
PSD–24 (2)	24	5.0

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE B - 5 - 4	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION



TIERED WALL DETAIL
OR APPROVED EQUAL
NOT TO SCALE

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 (410–313–1855).
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. G). 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 :

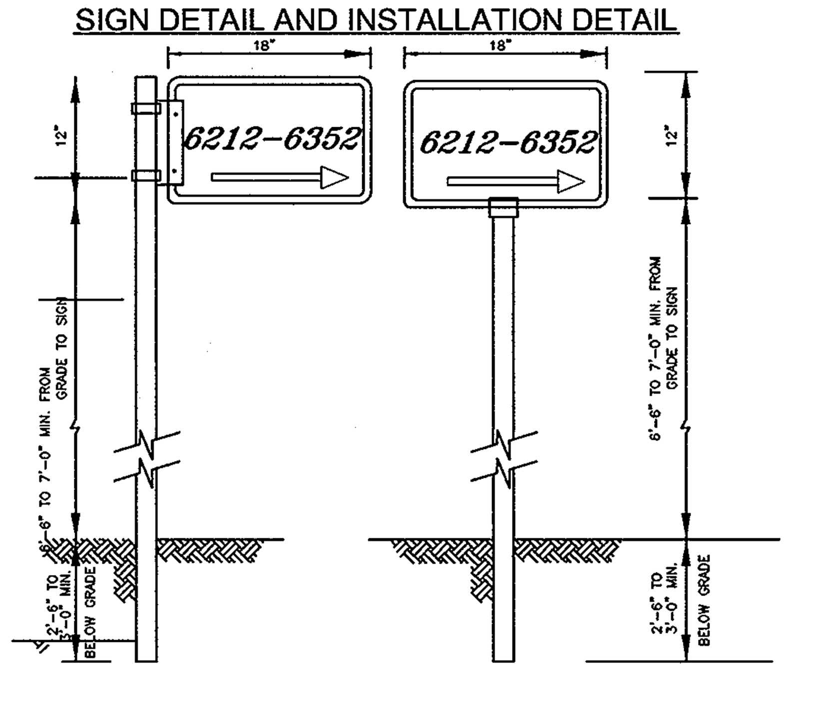
TOTAL AREA	12.92 Acres
AREA DISTURBED	15.16 Acres
AREA TO BE ROOFED OR PAVED	6.478 Acres
AREA TO BE VEGETATIVELY STABILIZED	6.44 Acres
TOTAL CUT	12,300 CY
TOTAL FILL	12,300 CY
WASTE/BORROW LOCATION	*

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.

* TO BE DETERMINED BY CONTRACTOR, WITH PRE-APPROVAL OF THE SEDIMENT CONTROL INSPECTOR WITH AN APPROVED AND ACTIVE GRADING PERMIT

ALL SIGN POSTS USED FOR TRAFFIC CONTROL SIGNS INSTALLED FOR THIS PROJECT SHALL BE MOUNTED ON A 2" GALVANIZED STEEL, PERFORATED, SQUARE TUBE POST (14 GAUGE) INSERTED INTO A 2–1/2" GALVANIZED STEEL, PERFORATED, SQUARE TUBE POST (14 GAUGE) INSERTED INTO A 2–1/2" GALVANIZED STEEL, PERFORATED, SQUARE TUBE SLEEVE (12 GAUGE)– 3' LONG. A GALVANIZED STEEL POLE CAP SHALL BE MOUNTED ON TOP OF EACH POST.

SIGN DETAIL AND INSTALLATION DETAIL



ALL SIGN POST USED FOR TRAFFIC CONTROL SIGNS INSTALLED ON PRIVATE ROADS SHALL BE MOUNTED ON A 2" GALVANIZED STEEL, PERFORATED, SQUARE TUBE POST (14 GAUGE) INSERTED INTO A 2–1/2" GALVANIZED STEEL, PERFORATED, SQUARE TUBE SLEEVE (12 GAUGE) – 3' LONG. A GALVANIZED STEEL POLE CAP SHALL BE MOUNTED ON TOP OF EACH POST.

FOR THE SIGN PLACEMENT IN THE PUBLIC ROW, SIGN SHALL BE FABRICATED IN THE COUNTY SIGN SHOP AT THE EXPENSE OF THE DEVELOPER.

OWNER
TAYLOR FAMILY LIMITED PARTNERSHIP
4100 COLLEGE AVENUE
ELLICOTT CITY, MD 21043
(410)465–3500

DEVELOPER
RYAN HOMES
6031 UNIVERSITY BLVD.
SUITE 250
ELLICOTT CITY, MARYLAND 21043
(410) 796–0980

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION	DATE 9/23/09
CHIEF, DIVISION OF LAND DEVELOPMENT	DATE 9/24/09
DIRECTOR, DEP.	DATE 9/24/09

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

HOWARD S.C.D. DATE 9/9/09

BY THE DEVELOPER:

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

SIGNATURE OF DEVELOPER DATE 8-28-09

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."

SIGNATURE OF ENGINEER DATE 8/27/09

NO.	REVISION	DATE

SITE DEVELOPMENT PLAN

SEDIMENT AND EROSION CONTROL NOTES & DETAILS
WORTHINGTON FIELDS, PHASE 6

LOTS 90-148
SINGLE FAMILY DETACHED UNITS

TAX MAP 25 BLOCK 20 — PARCEL P/O '98'
2ND ELECTION DISTRICT — HOWARD COUNTY, MARYLAND
REF.: S–98–18, PB–366 (APP. 6/16/99), P–00–07, F–01–60 (PHASE 1), P–01–01, F–01–206 (PHASE 2), P–02–08, F–02–270 (PHASE 3), P–03–07,F–03–207 (PHASE 4),P–04–12,F–05–019 (PHASE 5),F–07–002

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. 16193 PROFESSIONAL ENGINEER
ROBERT H. VOGEL, PE No.16193

DESIGN BY:	RJ
DRAWN BY:	JMR/KG
CHECKED BY:	RHV
DATE:	AUGUST 2009
SCALE:	AS SHOWN
W.O. NO.:	99–11

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: 09–27–2010

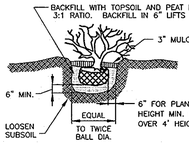
SDP-09-056

LANDSCAPE SCHEDULE NOTE:

1. ALL PLANT MATERIALS SHALL BE FULL AND HEAVY, BE WELL FORMED AND SYMMETRICAL, CONFORM TO THE MOST CURRENT AAN SPECIFICATIONS AND BE INSTALLED IN ACCORDANCE WITH HRD PLANTING SPECIFICATIONS.
2. CONTRACTOR SHALL VERIFY LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO DIGGING.
3. FINAL LOCATION OF PLANT MATERIAL MAY NEED TO VARY TO MEET FINAL FIELD CONDITIONS. TREES SHALL NOT BE PLANTED IN THE BOTTOM OF DRAINAGE SWALES.
3. CONTRACTOR SHALL VERIFY PLANT QUANTITIES PRIOR TO BIDDING. IF PLAN DIFFERS FROMLANDSCAPE SCHEDULE, THE PLAN SHALL GOVERN.
4 THE OWNER, TENANT AND/OR THEIR AGENTS SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE REQUIRED LANDSCAPING, INCLUDING BOTH LAND MATERIALS AND BERMS, FENCES & WALLS. ALL PLANT MATERIALS SHALL BE MAINTAINED IN GOOD GROWING CONDITION, AND WHEN APPLICABLE REGULATIONS. ALL OTHER REQUIRED LANDSCAPING SHALL BE PERMANENTLY MAINTAINED IN GOOD CONDITION AND WHEN NECESSARY, REPAIRED OR REPLACED.
5. AT THE TIME OF INSTALLMENT, ALL SHRUBS & OTHER PLANTINGS HEREWITH LISTED & APPROVED FOR THIS SITE, SHALL BE OF THE PROPER HEIGHT REQUIREMENTS IN ACCORDANCE WITH THE HOWARD COUNTY LANDSCAPING MANUAL, IN ADDITION, NO SUBSTITUTIONS OR RELOCATION OF REQUIRED PLANTINGS MAY BE MADE WITHOUT PRIOR REVIEW & APPROVAL FROM THE DEPARTMENT OF PLANNING & ZONING. ANY DEVIATION FROM THIS APPROVAL LANDSCAPE PLAN MAY RESULT IN DENIAL OR DELAY IN THE RELEASE OF LANDSCAPE SURETY UNTIL SUCH TIME AS ALL REQUIRED MATERIALS ARE PLANTED AND/OR REVISIONS ARE MADE TO APPLICABLE PLANS AND CERTIFICATES.
6. OTHIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL.
7. NO CLEARING OF EXISTING VEGETATION IS PERMITTED WITHIN THE LANDSCAPE EDGE FOR WHICH CREDIT IS BEING TAKEN; HOWEVER, LANDSCAPE MAINTENANCE IS AUTHORIZED.

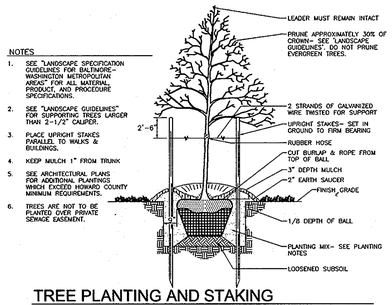
B G & E NOTE:

1. THERE IS NO BGE WIREZONE ON THIS SITE .



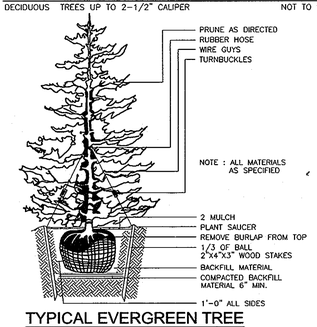
SHRUB PLANTING DETAIL

NOT TO SCALE



TREE PLANTING AND STAKING

DECIDUOUS TREES UP TO 2-1/2" CALIPER — NOT TO SCALE



TYPICAL EVERGREEN TREE PLANTING DETAIL

NOT TO SCALE

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 CODE AND THE HOWARD COUNTY LANDSCAPE MANUAL. I/WE FURTHER CERTIFY THAT UPON COMPLETION, A CERTIFICATION OF LANDSCAPE INSTALLATION, ACCOMPANIED BY AN EXECUTED ONE (1) YEAR GUARANTEE OF PLANT MATERIALS, WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.

SIGNATURE OF DEVELOPER — DATE 8-28-09

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION	DATE 9/23/09
CHIEF, DIVISION OF LAND DEVELOPMENT	DATE 9/24/09
DIRECTOR, DEP.	DATE

LEGEND:

- EXISTING CONTOUR
- PROPOSED CONTOUR
- EXISTING CURB AND GUTTER
- EXISTING UTILITY POLE
- EXISTING LIGHT POLE
- EXISTING MAILBOX
- EXISTING SIGN
- EXISTING SANITARY MANHOLE
- EXISTING SANITARY LINE
- EXISTING CLEANOUT
- EXISTING FIRE HYDRANT
- EXISTING WATER LINE
- EXISTING SEWER LINE
- EXISTING STORM DRAIN LINE
- EXISTING FENCE
- PROPERTY LINE
- RIGHT-OF-WAY LINE
- EXISTING STREET TREES (F-07-002)
- EXISTING VEGETATION (APPROXIMATE LOCATION)
- PROPOSED TREES
- PROPOSED TREELINE
- EXISTING TREELINE (FIELD LOCATED)
- EXISTING FOREST CONSERVATION EASEMENT (PLAT# 19741-19746)
- EXISTING PRIVATE USE-IN-COMMON ACCESS EASEMENT (PLAT# 19741-19746, AND 17480)
- EXISTING PRIVATE DRAINAGE, AND UTILITY EASEMENT (PLAT# 19741-19746)
- EXISTING PUBLIC SWM, STORMDRAIN AND UTILITY EASEMENT (PLAT# 19741-19746)
- EXISTING VARIABLE WIDTH PUBLIC SIGHT DISTANCE EASEMENT (PLAT# 19741-19746)
- EXISTING PUBLIC WATER, SEWER, AND UTILITY EASEMENT (PLAT# 19741-19746)

OWNER
TAYLOR FAMILY LIMITED PARTNERSHIP
4100 COLLEGE AVENUE
ELLICOTT CITY, MD 21043
(410)465-3500

DEVELOPER
RYAN HOMES
6031 UNIVERSITY BLVD.
SUITE 250
ELLICOTT CITY, MARYLAND 21043
(410) 796-0980

NO.	REVISION	DATE

SITE DEVELOPMENT PLAN

LANDSCAPE PLAN AND DETAILS
WORTHINGTON FIELDS, PHASE 6

LOTS 90-148
SINGLE FAMILY DETACHED UNITS

TAX MAP 25 BLOCK 20 — PARCEL P/O '98'
2ND ELECTION DISTRICT — HOWARD COUNTY, MARYLAND
REF.: S-98-18, PB-366 (APP. 6/16/99), P-00-07, F-01-60 (PHASE 1), P-01-01, F-01-206 (PHASE 2), P-02-08, F-02-270 (PHASE 3), P-03-07,F-03-207 (PHASE 4),P-04-12,F-05-019 (PHASE 5),F-07-002

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. 16193 — PROFESSIONAL ENGINEER
ROBERT H. VOGEL, P.E. No.16193

DESIGN BY:	RJ
DRAWN BY:	JMR/KG
CHECKED BY:	RHV
DATE:	AUGUST 2009
SCALE:	AS SHOWN
W.O. NO.:	99-11

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: 09-27-2010

SHEET 11 OF 13

SDP-09-056

LANDSCAPE PLAN

SCALE: 1"=50'

LEGEND:

- EXISTING CONTOUR
- PROPOSED CONTOUR
- EXISTING CURB AND GUTTER
- EXISTING UTILITY POLE
- EXISTING LIGHT POLE
- EXISTING MAILBOX
- EXISTING SIGN
- EXISTING SANITARY MANHOLE
- EXISTING SANITARY LINE
- EXISTING CLEANOUT
- EXISTING FIRE HYDRANT
- EXISTING WATER LINE
- EXISTING SEWER LINE
- EXISTING STORM DRAIN LINE
- EXISTING FENCE
- PROPERTY LINE
- RIGHT-OF-WAY LINE
- EXISTING STREET TREES (F-07-002)
- EXISTING VEGETATION (APPROXIMATE LOCATION)
- PROPOSED PLANTS
- PROPOSED TREELINE
- EXISTING TREELINE (FIELD LOCATED)
- EXISTING FOREST CONSERVATION EASEMENT (PLAT# 19741-19746)
- EXISTING PRIVATE USE-IN-COMMON ACCESS EASEMENT (PLAT# 19741-19746, AND 17480)
- EXISTING PRIVATE DRAINAGE, AND UTILITY EASEMENT (PLAT# 19741-19746)
- EXISTING PUBLIC WATER, SEWER, AND UTILITY EASEMENT (PLAT# 19741-19746)
- EXISTING PUBLIC SIDEWALK EASEMENT (PLAT# 17480)

OWNER
TAYLOR FAMILY LIMITED PARTNERSHIP
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DEVELOPER
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NO.	REVISION	DATE

SITE DEVELOPMENT PLAN

LANDSCAPE PLAN AND DETAILS
WORTHINGTON FIELDS, PHASE 6

LOTS 90-148
SINGLE FAMILY DETACHED UNITS

TAX MAP 25 BLOCK 20 — PARCEL P/O '98'
2ND ELECTION DISTRICT — HOWARD COUNTY, MARYLAND
REF.: S-98-18, PB-366 (APP. 6/16/99), P-00-07, F-01-60 (PHASE 1), P-01-01, F-01-206 (PHASE 2), P-02-08, F-02-270 (PHASE 3), P-03-07,F-03-207 (PHASE 4),P-04-12,F-05-019 (PHASE 5),F-07-002

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STATE OF MARYLAND — ROBERT HARRIS VOGEL — No. 16193 — PROFESSIONAL ENGINEER — 8/21/09
ROBERT H. VOGEL, PE No.16193

DESIGN BY:	RJ
DRAWN BY:	JMR/KG
CHECKED BY:	RHV
DATE:	AUGUST 2009
SCALE:	AS SHOWN
W.O. NO.:	99-11

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: 09-27-2010

SHEET 12 OF 13

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SIGNATURE OF DEVELOPER — DATE 8/28/09

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 9/22/09
CHIEF, DIVISION OF LAND DEVELOPMENT — DATE 9/24/09
DIRECTOR, DEP. — DATE 9/24/09

TRASH PAD LANDSCAPING SCHEDULE	
QUAN.	TRASH PAD LOCATION
6	AT USE-IN-COMMON DRIVE FOR LOT 90-96
4	AT USE-IN-COMMON DRIVE FOR LOT 111-120

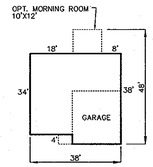
FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING PROVIDED PER THE LANDSCAPE MANUAL SHALL BE POSTED WITH THE GRADING PERMIT IN THE AMOUNT OF $5,550.00 FOR THE REQUIRED TOTAL OF 7 SHADE TREES, 13 EVERGREEN TREES AND 50 SHRUBS.

LANDSCAPE SCHEDULE				
KEY	QUAN.	BOTANICAL NAME	SIZE	REM.
+	7	ACER CAMPESTRE HEDGE MAPLE	2 1/2"-3" CAL.	B & B
	13	ARBORVITAE TECHNY THUJA OCCIDENTAILS 'TECHNY'	6'-8' HT.	B & B
	40	TAXUS CUSPIDATA 'NANA/DWARF' JAPANESE YEW	18"-24" SP	B & B
	10	JUNIPERUS CHINENSIS 'PFITZERIANA COMPACTA'/COMPACT PFITZER JUNIPER	2 1/2" HT.	B & B

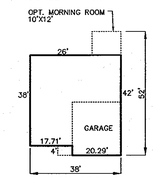
SCHEDULE A PERIMETER LANDSCAPE EDGE					
CATEGORY	ADJACENT TO ROADWAYS				
LOT NUMBERS	LOT 90	LOT 105	LOT 106	LOT 123	LOT 140
PERIMETER/FRONTAGE DESIGNATION LANDSCAPE TYPE	1 A	2 B	3 B	4 B	5 B
LINEAR FEET OF ROADWAY FRONTAGE/PERIMETER	138'	117'	108'	75'	90'
CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR FEET DESCRIBE BELOW IF NEEDED)	NO	NO	NO	NO	NO
CREDIT FOR WALL, FENCE OR BERM (YES, NO, LINEAR FEET DESCRIBE BELOW IF NEEDED)	NO	NO	NO	NO	NO
NUMBER OF PLANTS REQUIRED SHADE TREES 1:50	1:50 3	1:50 2	1:50 2	1:50 2	1:50 2
EVERGREEN TREES 1:40	1:40 3	1:40 3	1:40 3	1:40 2	1:40 2
SHRUBS 1:4	–	–	–	–	–
NUMBER OF PLANTS PROVIDED SHADE TREES	3	2	2	–	–
EVERGREEN TREES	3	3	3	2	2
OTHER TREES (2:1 SUBSTITUTION)	–	–	–	–	–
SHRUBS (10:1 SUBSTITUTION)	–	–	–	*20	*20
DESCRIBE PLANT SUBSTITUTION CREDITS BELOW IF NEEDED)					

* SHRUBS HAVE BEEN PROVIDED INPLACE OF (4) SHADE TREES ON LOTS 123 & 140 DUE TO SIGHT DISTANCE EASEMENT ALONG THE PERIMETER AND TO ALLOW FOR CLEAR VISIBILITY OF THE INTERSECTION AT WINTER WAY AND ACADEMY ROAD.

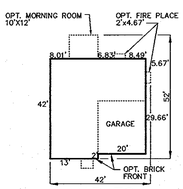
SDP-09-056



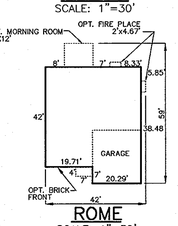
FLORENCE
SCALE: 1"=30'



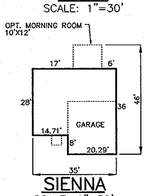
MILAN
SCALE: 1"=30'



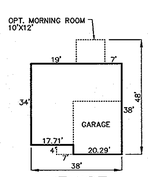
NAPLES
SCALE: 1"=30'



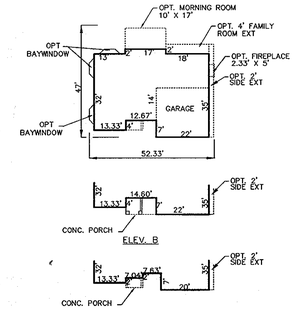
ROME
SCALE: 1"=30'



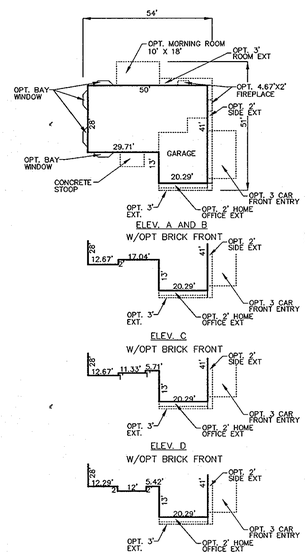
SIENNA
SCALE: 1"=30'



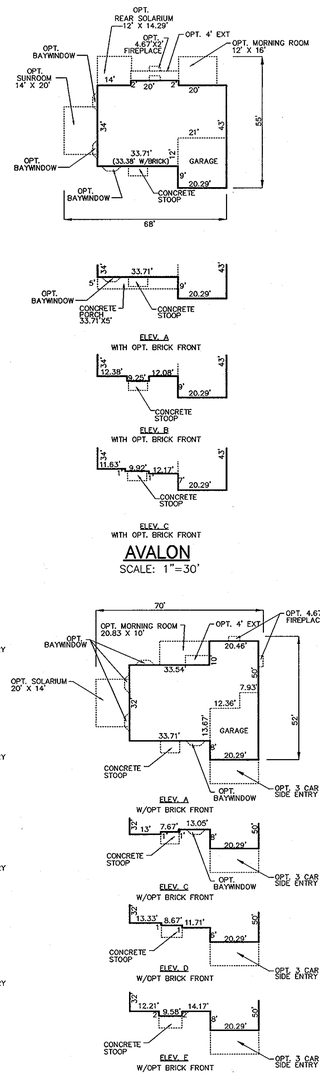
VENICE
SCALE: 1"=30'



ZACHARY
SCALE: 1"=30'

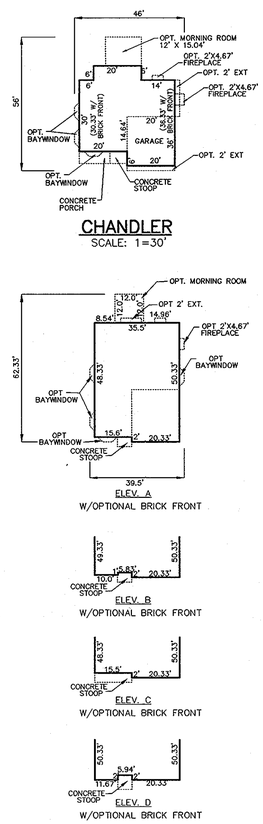


VICTORIA
SCALE: 1"=30'



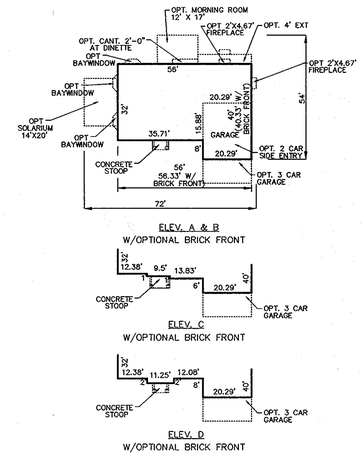
AVALON
SCALE: 1"=30'

WAVERLY
SCALE: 1"=30'

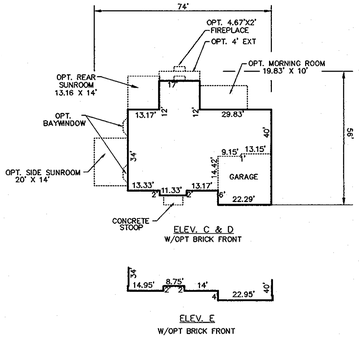


CHANDLER
SCALE: 1=30'

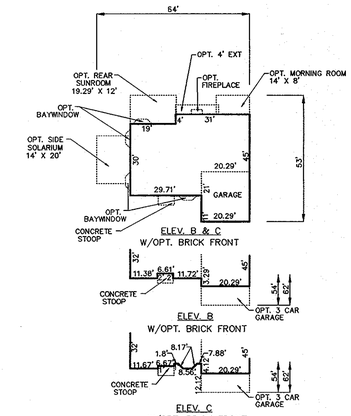
TAYLOR
SCALE: 1=30'



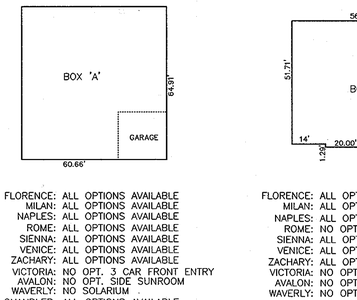
COURTLAND
SCALE: 1"=30'



HIGHGROVE
SCALE: 1"=30'



OBERLIN
SCALE: 1"=30'



FLORENCE: ALL OPTIONS AVAILABLE
MILAN: ALL OPTIONS AVAILABLE
NAPLES: ALL OPTIONS AVAILABLE
ROME: ALL OPTIONS AVAILABLE
SIENNA: ALL OPTIONS AVAILABLE
VENICE: ALL OPTIONS AVAILABLE
ZACHARY: ALL OPTIONS AVAILABLE
VICTORIA: NO OPT. 3 CAR FRONT ENTRY
AVALON: NO OPT. SIDE SUNROOM
WAVERLY: NO SOLARIUM
CHANDLER: ALL OPTIONS AVAILABLE
TAYLOR: ALL OPTIONS AVAILABLE
COURTLAND: NO OPT. SIDE SOLARIUM
HIGHGROVE: NO SUNROOM ON SIDE
OBERLIN: NO OPT. SOLARIUM

FLORENCE: ALL OPTIONS AVAILABLE
MILAN: NO OPT. MORNING RM
NAPLES: ALL OPTIONS AVAILABLE
ROME: NO OPT. MORNING RM
SIENNA: ALL OPTIONS AVAILABLE
VENICE: ALL OPTIONS AVAILABLE
ZACHARY: ALL OPTIONS AVAILABLE
VICTORIA: NO OPT. 3 CAR FRONT ENTRY
AVALON: NO OPT. SIDE SUNROOM
WAVERLY: NO SOLARIUM
NO OPT. 3 CAR SIDE ENTRY
CHANDLER: ALL OPTIONS AVAILABLE
TAYLOR: NO OPT. MORNING RM
COURTLAND: NO OPT. SOLARIUM
NO OPT. MORNING RM
W/OPT. 3 CAR GAR.
NO OPT. 3 CAR GAR.
W/OPT. MORNING RM
HIGHGROVE: DOES NOT FIT
OBERLIN: NO OPT. SIDE SOLARIUN

FLORENCE: ALL OPTIONS AVAILABLE
MILAN: NO OPT. MORNING RM
NAPLES: ALL OPTIONS AVAILABLE
ROME: NO OPT. MORNING RM
SIENNA: ALL OPTIONS AVAILABLE
VENICE: ALL OPTIONS AVAILABLE
ZACHARY: ALL OPTIONS AVAILABLE
VICTORIA: NO OPT. 3 CAR FRONT ENTRY
NO OPT. 3' GARAGE EXT.
AVALON: DOES NOT FIT
WAVERLY: DOES NOT FIT
CHANDLER: ALL OPTIONS AVAILABLE
TAYLOR: DOES NOT FIT
COURTLAND: DOES NOT FIT
HIGHGROVE: DOES NOT FIT
OBERLIN: NO OPT. SOLARIUM

FLORENCE: ALL OPTIONS AVAILABLE
MILAN: NO OPT. MORNING RM
NAPLES: ALL OPTIONS AVAILABLE
ROME: NO OPT. MORNING RM
SIENNA: ALL OPTIONS AVAILABLE
VENICE: ALL OPTIONS AVAILABLE
ZACHARY: NO OPT. MORNING RM.
NO OPT. 4' FAMILY RM EXT.
VICTORIA: NO OPT. MORNING RM
NO OPT. 2' SIDE EXT.
NO OPT. 4' FAMILY RM EXT.
AVALON: DOES NOT FIT
WAVERLY: DOES NOT FIT
CHANDLER: ALL OPTIONS AVAILABLE
TAYLOR: NO OPT. MORNING RM
COURTLAND: DOES NOT FIT
HIGHGROVE: DOES NOT FIT
OBERLIN: DOES NOT FIT

FLORENCE: NO OPT. MORNING RM
MILAN: DOES NOT FIT
NAPLES: DOES NOT FIT
ROME: DOES NOT FIT
SIENNA: NO OPT. MORNING RM
VENICE: NO OPT. MORNING RM
ZACHARY: DOES NOT FIT
VICTORIA: DOES NOT FIT
AVALON: DOES NOT FIT
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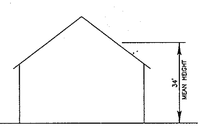
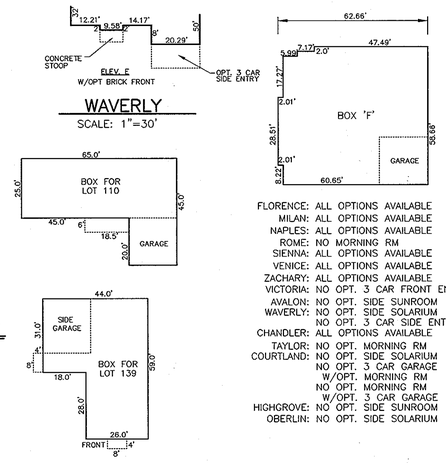
OBERLIN: DOES NOT FIT



TYPICAL HOUSE MODEL ELEVATION DETAIL
SCALE: 1"=30'



FLORENCE: ALL OPTIONS AVAILABLE
MILAN: ALL OPTIONS AVAILABLE
NAPLES: ALL OPTIONS AVAILABLE
ROME: NO MORNING RM
SIENNA: ALL OPTIONS AVAILABLE
VENICE: ALL OPTIONS AVAILABLE
ZACHARY: ALL OPTIONS AVAILABLE
VICTORIA: NO OPT. 3 CAR FRONT ENTRY
AVALON: NO OPT. SIDE SUNROOM
WAVERLY: NO OPT. SIDE SOLARIUM
NO OPT. 3 CAR GARAGE
W/OPT. MORNING RM
NO OPT. MORNING RM
W/OPT. 3 CAR GARAGE
HIGHGROVE: NO OPT. SIDE SUNROOM
OBERLIN: NO OPT. SIDE SOLARIUM

FLORENCE: NO OPT. MORNING RM
MILAN: NO OPT. MORNING RM
NAPLES: NO OPT. MORNING RM
ROME: DOES NOT FIT
SIENNA: NO OPT. MORNING RM
VENICE: NO OPT. MORNING RM
ZACHARY: NO OPT. MORNING RM
VICTORIA: NO OPT. MORNING RM
NO OPT. 3 CAR FRONT ENTRY
NO OPT. 3' RM EXT W/OPT. 3' GARAGE EXT OR OPT. 2' HOME OFFICE EXT.
NO OPT. 3' GARAGE EXT OR OPT. 2' HOME OFFICE EXT W/OPT. 3' RM EXT
AVALON: NO OPT. SIDE SUNROOM
NO OPT. REAR SOLARIUM
NO OPT. MORNING RM
NO OPT. 4' RM EXT
WAVERLY: DOES NOT FIT
CHANDLER: NO OPT. MORNING RM
TAYLOR: DOES NOT FIT
COURTLAND: NO OPT. MORNING RM.
NO OPT. SIDE SOLARIUM
NO OPT. 3 CAR GARAGE
HIGHGROVE: DOES NOT FIT
OBERLIN: NO OPT. MORNING RM.
NO OPT. 4' EXT.
NO OPT. REAR SUNROOM
NO OPT. SIDE SOLARIUM
NO OPT. BRICK FACING

FLORENCE: ALL OPTIONS AVAILABLE
MILAN: NO MORNING RM
NAPLES: NO MORNING RM
ROME: DOES NOT FIT
SIENNA: ALL OPTIONS AVAILABLE
VENICE: ALL OPTIONS AVAILABLE
ZACHARY: ALL OPTIONS AVAILABLE
VICTORIA: NO OPT. MORNING RM
AVALON: NO OPT. SIDE SUNROOM
NO OPT. REAR SOLARIUM
NO OPT. MORNING RM
NO OPT. 4' RM EXT
WAVERLY: DOES NOT FIT
CHANDLER: NO OPT. MORNING RM
TAYLOR: DOES NOT FIT
COURTLAND: NO OPT. MORNING RM.
NO OPT. SIDE SOLARIUM
NO OPT. 3 CAR GARAGE
HIGHGROVE: DOES NOT FIT
OBERLIN: NO OPT. MORNING RM.
NO OPT. 4' EXT.
NO OPT. REAR SUNROOM

FLORENCE: ALL OPTIONS AVAILABLE
MILAN: ALL OPTIONS AVAILABLE
NAPLES: ALL OPTIONS AVAILABLE
ROME: ALL OPTIONS AVAILABLE
SIENNA: ALL OPTIONS AVAILABLE
VENICE: ALL OPTIONS AVAILABLE
ZACHARY: NO OPT. 2' SIDE EXT
VICTORIA: DOES NOT FIT
AVALON: DOES NOT FIT
WAVERLY: DOES NOT FIT
CHANDLER: ALL OPTIONS AVAILABLE
TAYLOR: ALL OPTIONS AVAILABLE
COURTLAND: DOES NOT FIT
HIGHGROVE: DOES NOT FIT
OBERLIN: DOES NOT FIT

FLORENCE: NO OPT. MORNING RM
MILAN: NO OPT. MORNING RM
NAPLES: NO OPT. MORNING RM
ROME: DOES NOT FIT
SIENNA: NO OPT. MORNING RM
VENICE: NO OPT. MORNING RM
ZACHARY: NO OPT. MORNING RM
NO OPT. 2' SIDE EXT
VICTORIA: DOES NOT FIT
AVALON: DOES NOT FIT
WAVERLY: NO OPT. MORNING RM
CHANDLER: NO OPT. MORNING RM
TAYLOR: DOES NOT FIT
COURTLAND: DOES NOT FIT
HIGHGROVE: DOES NOT FIT
OBERLIN: DOES NOT FIT

HOUSE BOXES FOR CUSTOM HOUSES
SCALE: 1"=30'

OWNER
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SITE DEVELOPMENT PLAN

HOUSE FOOTPRINT PLAN
WORTHINGTON FIELDS, PHASE 6

LOTS 90-148
SINGLE FAMILY DETACHED UNITS

TAX MAP 25 BLOCK 20 PARCEL P/O '98'
2ND ELECTION DISTRICT HOWARD COUNTY, MARYLAND
REF.: S-98-18, PB-366 (APP. 6/16/99), P-00-07, F-01-60 (PHASE 1), P-01-01, F-01-206 (PHASE 2), P-02-08, F-02-270 (PHASE 3), P-03-07,F-03-207 (PHASE 4),P-04-12,F-05-019 (PHASE 5),F-07-002

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 HOWARD VOGEL No. 16193 PROFESSIONAL ENGINEER
9/1/09
ROBERT H. VOGEL, PE No.16193

DESIGN BY: RJ
DRAWN BY: JMR/KG
CHECKED BY: RHV
DATE: AUGUST 2009
SCALE: AS SHOWN
W.O. NO.: 99-11

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: 09-27-2010

SHEET 13 OF 13

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION	DATE 9/23/09
CHIEF, DIVISION OF LAND DEVELOPMENT	DATE 9/24/09
DIRECTOR, DEP	DATE 9/24/09

SDP-09-056