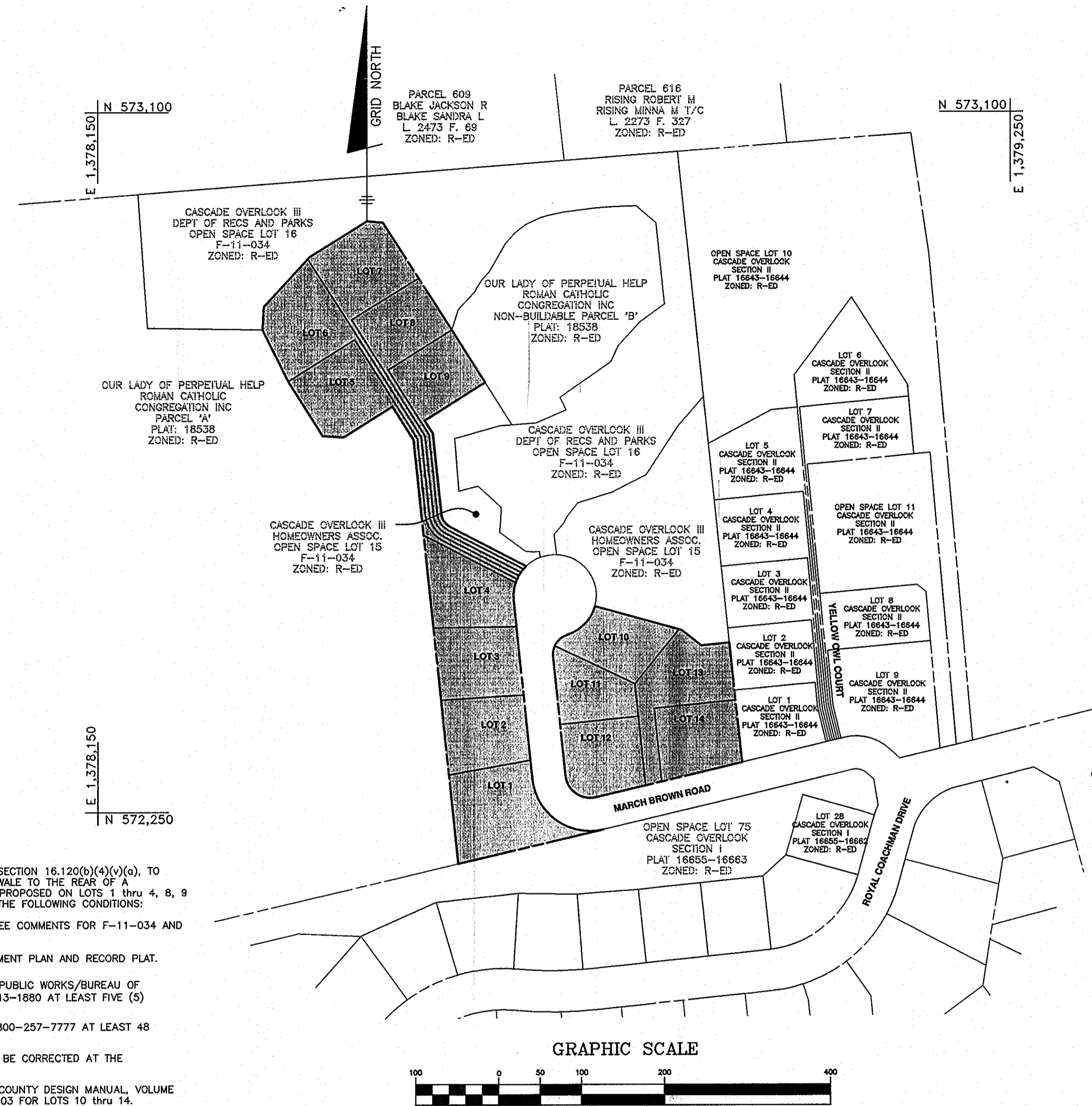


RESIDENTIAL SITE DEVELOPMENT PLAN CASCADE OVERLOOK, SECTION III LOTS 1 thru 14

GENERAL NOTES

- THIS PROJECT IS IN CONFORMANCE WITH THE LATEST HOWARD COUNTY STANDARDS UNLESS WAIVERS HAVE BEEN APPROVED.
- THE SUBJECT PROPERTY IS ZONED R-ED PER THE 2-2-2004 COMPREHENSIVE ZONING PLAN AND THE "COMP LITE" ZONING AMENDMENTS EFFECTIVE 7-28-2006.
- COORDINATES BASED ON NAD '83, MARYLAND COORDINATE SYSTEM AS PROJECTED BY HOWARD COUNTY GEODETIC CONTROL STATIONS 31E6 AND 31E7.
- TRACT BOUNDARY IS BASED ON A FIELD RUN BOUNDARY SURVEY PERFORMED ON OR ABOUT MARCH, 2000 BY CENTURY ENGINEERING, INC. AND VERIFIED BY BENCHMARK ENGINEERING, INC. IN OCTOBER, 2010.
- THE EXISTING TOPOGRAPHY SHOWN IS TAKEN FROM A FIELD RUN SURVEY BY BENCHMARK ENGINEERING, INC. IN OCTOBER 2010 AND FINAL PLAN F-11-034 APPROVED ON MARCH 30, 2011 WITH 2-FOOT CONTOUR INTERVALS.
- A NOISE STUDY IS NOT REQUIRED FOR THIS PROJECT.
- AN AFPO TRAFFIC STUDY IS NOT REQUIRED FOR THIS PROJECT AS IT IS LOCATED MORE THAN 1.5 MILES FROM THE NEAREST INTERSECTION OF TWO MAJOR COLLECTOR ROADWAYS.
- THIS PROPERTY IS LOCATED WITHIN THE METROPOLITAN DISTRICT.
- WATER IS PUBLIC. THE CONTRACT NUMBER IS 14-4290-D.
- SEWER IS PUBLIC. THE CONTRACT NUMBER IS 14-4290-D.
- WATER AND SEWER SERVICE TO THESE LOTS WILL BE GRANTED UNDER THE PROVISIONS OF SECTION 18.122.B OF THE HOWARD COUNTY CODE.
- PUBLIC WATER AND SEWAGE ALLOCATIONS WILL BE GRANTED AT THE TIME OF ISSUANCE OF THE BUILDING PERMIT IF CAPACITY IS AVAILABLE AT THAT TIME.
- THERE IS NO WETLANDS, STREAMS, THEIR BUFFERS, 100-YEAR FLOODPLAIN OR STEEP SLOPES LOCATED ON THESE LOTS.
- TO THE BEST OF OUR KNOWLEDGE, THERE ARE NO CEMETERY LOCATIONS ON THESE LOTS.
- THERE ARE NO HISTORIC SITES/FEATURES LOCATED ON THESE LOTS.
- STORMWATER MANAGEMENT IS PROVIDED IN ACCORDANCE WITH THE 2000 MARYLAND STORMWATER DESIGN MANUAL. THIS PROJECT MEETS THE CRITERIA OUTLINED IN THE MDE GUIDELINES TO GRANT AN ADMINISTRATIVE WAIVER. THIS PLAN RECEIVED PRELIMINARY APPROVAL (SP-05-017) ON AUGUST 11, 2006 AND FINAL PLAN APPROVAL (F-11-034) ON MARCH 30, 2011. A GRADING PERMIT SHALL BE APPROVED PRIOR TO MAY 4, 2013. THIS PLAN IS ALSO SUBJECT TO THE EXPIRATION OF THIS WAIVER UNLESS STORMWATER PRACTICES ARE CONSTRUCTED BY MAY 4, 2017.
- STORMWATER MANAGEMENT FOR LOTS 1 THRU 9 HAS BEEN PROVIDED BY A P-5 POCKET POND AND SHEETFLOW TO BUFFER CREDIT UNDER F-11-034. STORMWATER MANAGEMENT FOR LOTS 10 THRU 14 IS PROVIDED ON-LOT BY RAINGARDENS AND NON-ROOFTOP DISCONNECTION. THE RAINGARDENS SHALL BE PRIVATELY OWNED AND PRIVATELY MAINTAINED.
- THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE HOWARD COUNTY LANDSCAPE MANUAL.
 - FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING IS PART OF THE BUILDERS GRADING PERMIT APPLICATION IN THE AMOUNT OF \$1,050.00 FOR LOT 12.
 - FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING IS PART OF THE BUILDERS GRADING PERMIT APPLICATION IN THE AMOUNT OF \$1,050.00 FOR LOT 14.
- FOREST CONSERVATION FOR THIS SITE WAS PREVIOUSLY PROVIDED UNDER SDP-05-017.
- FOR FLAG OR PIPESTEM LOTS, REFUSE COLLECTION, SNOW REMOVAL AND ROAD MAINTENANCE ARE PROVIDED TO THE JUNCTION OF THE FLAG OR PIPESTEM AND ROAD RIGHT OF WAY LINE AND NOT THE FLAG OR PIPESTEM LOT DRIVEWAY.
- DRIVEWAYS SHALL BE PROVIDED PRIOR TO RESIDENTIAL OCCUPANCY TO INSURE SAFE ACCESS FOR FIRE AND EMERGENCY VEHICLES PER THE FOLLOWING MINIMUM REQUIREMENTS:
 - WIDTH - 12' (16' SERVING MORE THAN ONE RESIDENCE).
 - SURFACE - 6" OF COMPACT CRUSHER RUN BASE WITH TAR AND CHIP COATING (1-1/2" MIN.)
 - GEOMETRY - MAXIMUM 15% GRADE, MAXIMUM 10% GRADE CHANGE AND MINIMUM 45' TURNING RADIUS.
 - STRUCTURES (CULVERTS/BRIDGES) - CAPABLE OF SUPPORTING 25 GROSS TONS (H25 LOADING).
 - DRAINAGE ELEMENTS - CAPABLE OF SAFELY PASSING 100 YEAR FLOODPLAIN WITH NO MORE THAN 1 FOOT DEPTH OVER DRIVEWAY.
 - STRUCTURE CLEARANCES - MINIMUM 12 FEET.
 - MAINTENANCE - SUFFICIENT TO INSURE ALL WEATHER USE.
- WAIVER PETITION (WP-06-007) A REQUEST TO WAIVE SECTION 16.120(b)(4)(v) AND 16.121(e), TO PERMIT STORMWATER MANAGEMENT ACCESS TO BE LOCATED ON RESIDENTIAL LOTS, THE PIPESTEM AREAS OF PROPOSED LOTS 5-9 AND TO PERMIT THE SWMF FOR OUR LADY OF PERPETUAL HELP CHURCH TO BE LOCATED WITHOUT FRONTAGE ON A PUBLIC ROAD WAS APPROVED ON SEPTEMBER 22, 2005 AND NOVEMBER 15, 2005, RESPECTIVELY, SUBJECT TO THE FOLLOWING CONDITION:
 - OUR LADY OF PERPETUAL HELP CHURCH/ARCHDIOCESE OF BALTIMORE ROMAN CATHOLIC CHURCH SHALL BE A PARTY IN THE SHARED ACCESS EASEMENT AND MAINTENANCE AGREEMENT FOR THE SHARED DRIVEWAY FOR LOT 5-9 AND THE CHURCH'S SWMF, AND SHALL ONLY USE THE SHARED DRIVEWAY TO ACCESS THE SWMF FOR MAINTENANCE OR REPAIR PURPOSES.
 - THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/BUREAU OF ENGINEERING/CONSTRUCTION INSPECTION DIVISION AT 410-313-1880 AT LEAST FIVE (5) WORKING DAYS PRIOR TO THE START OF ANY WORK.
 - THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.
 - THE DECISION AND ORDER FOR PB372 (SP-05-017) WAS SIGNED MAY 25, 2006 FOR 14 RESIDENTIAL LOTS IN AN R-ED DISTRICT.
 - BOARD OF APPEALS REFERENCES: BA CASE 83-39E, BA CASE 90-24E AND BA CASE 01-51C. THE CONDITION OF 01-51C INDICATED THAT THE CONDITIONAL USE APPLIES ONLY TO THE PROPOSED MULTI-PURPOSE BUILDING AND SITE IMPROVEMENTS.
 - A PRIVATE RANGE OF ADDRESS SIGN ASSEMBLY FOR THE FLAG LOT DRIVEWAY IN THE CUL-DE-SAC SHALL BE FABRICATED AND INSTALLED BY HOWARD COUNTY BUREAU OF HIGHWAYS AT THE DEVELOPERS/OWNERS EXPENSE WHERE NEEDED. CONTACT HOWARD COUNTY TRAFFIC DIVISION AT 410-313-5752 FOR DETAILS AND COST ESTIMATES.
 - UNINTERRUPTED ACCESS TO THE EXISTING DRIVE ALONG THE SOUTH SIDE OF LOT 1 MUST BE AVAILABLE AT ALL TIMES DURING CONSTRUCTION OF HOUSE ON LOT 1.
 - ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLUS MSHA STANDARDS AND SPECIFICATIONS IF APPLICABLE.
 - EXISTING UTILITIES ARE BASED ON FIELD SURVEY LOCATION BY BENCHMARK ENGINEERING, INC., PER F-03-150, AND PER F-11-034.
 - IN ACCORDANCE OF SECTION 128 OF THE HOWARD COUNTY ZONING REGULATIONS, BAY WINDOWS, CHIMNEYS OR EXTERIOR STAIRWAYS NOT MORE THAN 16 FEET IN WIDTH MAY PROJECT NOT MORE THAN 4 FEET INTO ANY SETBACKS, PORCHES OR DECKS, OPEN OR ENCLOSED MAY PROJECT NOT MORE THAN 10 FEET INTO THE FRONT OR REAR YARD SETBACK.
 - THE SETBACK REQUIREMENT FOR THE REAR PORTIONS OF LOTS 1-6 AND LOT 9 IS THE STANDARD STRUCTURE SETBACK IN THE R-ED DISTRICT OF 25 FEET FROM THE REAR LOT LINE AS DETERMINED BY THE DEPARTMENT OF PLANNING AND ZONING ON MARCH 8, 2011.

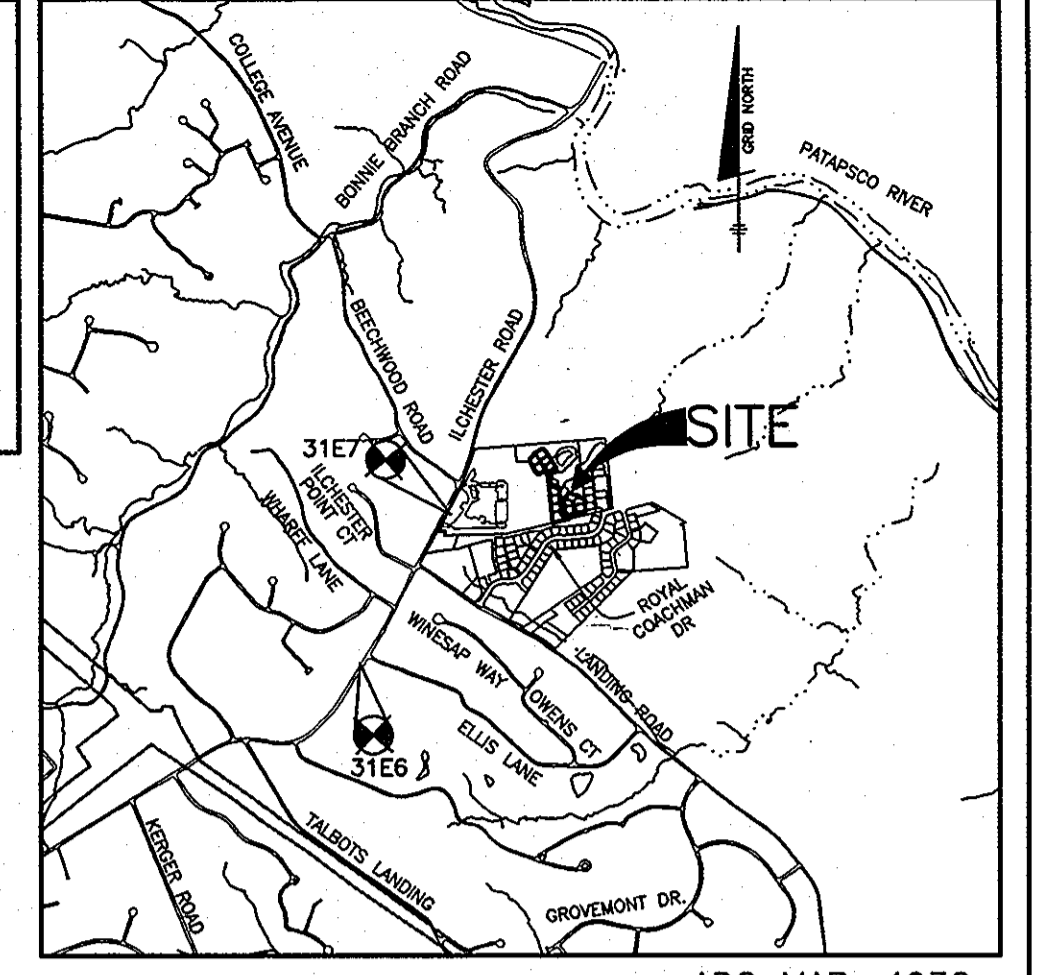
- WAIVER PETITION (WP-11-150) A REQUEST TO WAIVE SECTION 16.120(b)(4)(v)(a), TO ALLOW THE DISTANCE FROM THE CENTER OF A DRAINAGE SWALE TO THE REAR OF A STRUCTURE TO BE REDUCED TO 10 FEET FOR THE HOMES PROPOSED ON LOTS 1 THRU 4, 8, 9 AND 14 WAS APPROVED ON APRIL 13, 2011, SUBJECT TO THE FOLLOWING CONDITIONS:
 - COMPLIANCE WITH ALL SUBDIVISION REVIEW COMMITTEE COMMENTS FOR F-11-034 AND SDP-11-034.
 - THE ADDITION OF THIS NOTE TO THE SITE DEVELOPMENT PLAN AND RECORD PLAT.
- THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/BUREAU OF ENGINEERING/CONSTRUCTION INSPECTION DIVISION AT 410-313-1880 AT LEAST FIVE (5) WORKING DAYS PRIOR TO THE START OF ANY WORK.
- THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.
- ANY DAMAGE TO THE COUNTY'S RIGHT-OF-WAY SHALL BE CORRECTED AT THE DEVELOPER'S EXPENSE.
- FOR DRIVEWAY ENTRANCE DETAILS REFER TO HOWARD COUNTY DESIGN MANUAL, VOLUME IV, STANDARD DETAIL R-6.05 FOR LOTS 1 THRU 9 AND R-6.03 FOR LOTS 10 THRU 14.



BENCH MARKS NAD'83

HO. CO. #31E6	3/4" REBAR 0.5' BELOW SURFACE	5' SOUTHWEST OF ILCHESTER ROAD PAVING	500' WEST OF WHARF LANE	N 570852.3717'	E 1376700.6467'
HO. CO. #31E7	3/4" REBAR 0.5' BELOW SURFACE	9' SOUTHEAST OF ILCHESTER ROAD PAVING	250' WEST OF BEECHWOOD ROAD	N 572335.3503'	E 1377504.0332'
HO. CO. BM#2745004					ELEV. 364.78'

USED FOR VERTICAL CONTROL.



VICINITY MAP ADC MAP: 4936 GRID: H2
SCALE: 1"=2000'

LEGEND



LIMIT OF SUBMISSION

SITE ANALYSIS DATA CHART

- TOTAL PROJECT AREA: 2.92 AC.
- AREA OF PLAN SUBMISSION: 2.92 AC.
- LIMIT OF DISTURBED AREA: 2.76 AC.
- PRESENT ZONING: R-ED
- PROPOSED USE OF SITE: RESIDENTIAL SFD HOMES
- TOTAL NUMBER OF UNITS ALLOWED AS SHOWN ON FINAL PLAT(S): 14
- TOTAL NUMBER OF UNITS PROPOSED: 14
- NUMBER OF PARKING SPACES REQUIRED BY HO. CO. ZONING REGS AND/OR FDP CRITERIA: N/A
- NUMBER OF PARKING SPACES PROVIDED ON-SITE (INCLUDES HANDICAPPED SPACES): N/A
- OPEN SPACE ON-SITE: PROVIDED UNDER F-11-034 PERCENTAGE OF GROSS: N/A
- AREA OF RECREATIONAL OPEN SPACE REQUIRED: N/A
- AREA OF RECREATIONAL OPEN SPACE PROVIDED: PROVIDED UNDER F-11-034
- APPLICABLE DPZ FILE REFERENCES: SP-05-017, F-03-150, PB 372 F-11-034, WP-11-150
- BUILDING COVERAGE OF SITE: N/A PERCENTAGE OF GROSS AREA: N/A
- FLOOR SPACE ON EACH LEVEL OF BLDG PER USE: N/A
- MAXIMUM NUMBER OF EMPLOYEES, TENANTS ON SITE PER USE: N/A

ADDRESS CHART

LOT	STREET ADDRESS
1	4915 MARCH BROWN ROAD
2	4919 MARCH BROWN ROAD
3	4923 MARCH BROWN ROAD
4	4927 MARCH BROWN ROAD
5	4945 MARCH BROWN ROAD
6	4949 MARCH BROWN ROAD
7	4948 MARCH BROWN ROAD
8	4944 MARCH BROWN ROAD
9	4940 MARCH BROWN ROAD
10	4926 MARCH BROWN ROAD
11	4922 MARCH BROWN ROAD
12	4918 MARCH BROWN ROAD
13	4914 MARCH BROWN ROAD
14	4910 MARCH BROWN ROAD

SHEET INDEX

SHEET	TITLE
1	TITLE SHEET
2	HOUSE FOOTPRINTS
3	SITE DEVELOPMENT, GRADING AND LANDSCAPING PLAN
4	SITE DEVELOPMENT AND GRADING PLAN
5	GRADING, SEDIMENT & EROSION CONTROL PLAN
6	GRADING, SEDIMENT & EROSION CONTROL PLAN
7	SEDIMENT & EROSION CONTROL NOTES AND DETAILS
8	RAIN GARDEN DETAILS

STORMWATER MANAGEMENT PRACTICE CHART (SDP-11-034 Cascade Overlook, Section 3)

LOT NUMBER	ADDRESS	GREEN ROOFS	PERMEABLE PAVEMENTS	REINFORCED TURF	DISCONNECTION OF ROOFTOP RUNOFF	DISCONNECTION OF NON-ROOFTOP RUNOFF	SHEETFLOW TO CONSERVATION AREAS	RAINFATER HARVESTING	SUBMERGED GRAVEL WETLANDS	LANDSCAPE INFILTRATION	INFILTRATION BERMS	DRY WELLS	MICRO-BIORETENTION	RAIN GARDENS	SWALES	ENHANCED FILTERS
		A-1 (Y/N)	A-2 (Y/N)	A-3 (Y/N)	N-1 (QUANTITY)	N-2 (Y/N)	N-3 (Y/N)	M-1 (QUANTITY)	M-2 (QUANTITY)	M-3 (QUANTITY)	M-4 (QUANTITY)	M-5 (QUANTITY)	M-6 (QUANTITY)	M-7 (QUANTITY)	M-8 (QUANTITY)	M-9 (QUANTITY)
10	4926 March Brown Road	N	N	N	N	N	N	N	N	N	N	N	N	Y	N	N
11	4922 March Brown Road	N	N	N	N	N	N	N	N	N	N	N	N	Y	N	N
12	4918 March Brown Road	N	N	N	N	N	N	N	N	N	N	N	N	Y	N	N
13	4914 March Brown Road	N	N	N	N	Y	N	N	N	N	N	N	N	Y(2)	N	N
14	4910 March Brown Road	N	N	N	N	N	N	N	N	N	N	N	N	Y(2)	N	N

PERMIT INFORMATION CHART

SUBDIVISION NAME:	SECTION/AREA:	LOT/PARCEL #
CASCADE OVERLOOK	SECTION III	p/o 260
PLAT No. OR L/F	GRID No.	ZONE
21724-26	10	R-ED
TAX MAP NO.	ELECTION DISTRICT	CENSUS TRACT
31	1	6011.11

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Chad Danvers 10/13/11
CHIEF, DEVELOPMENT ENGINEERING DIVISION

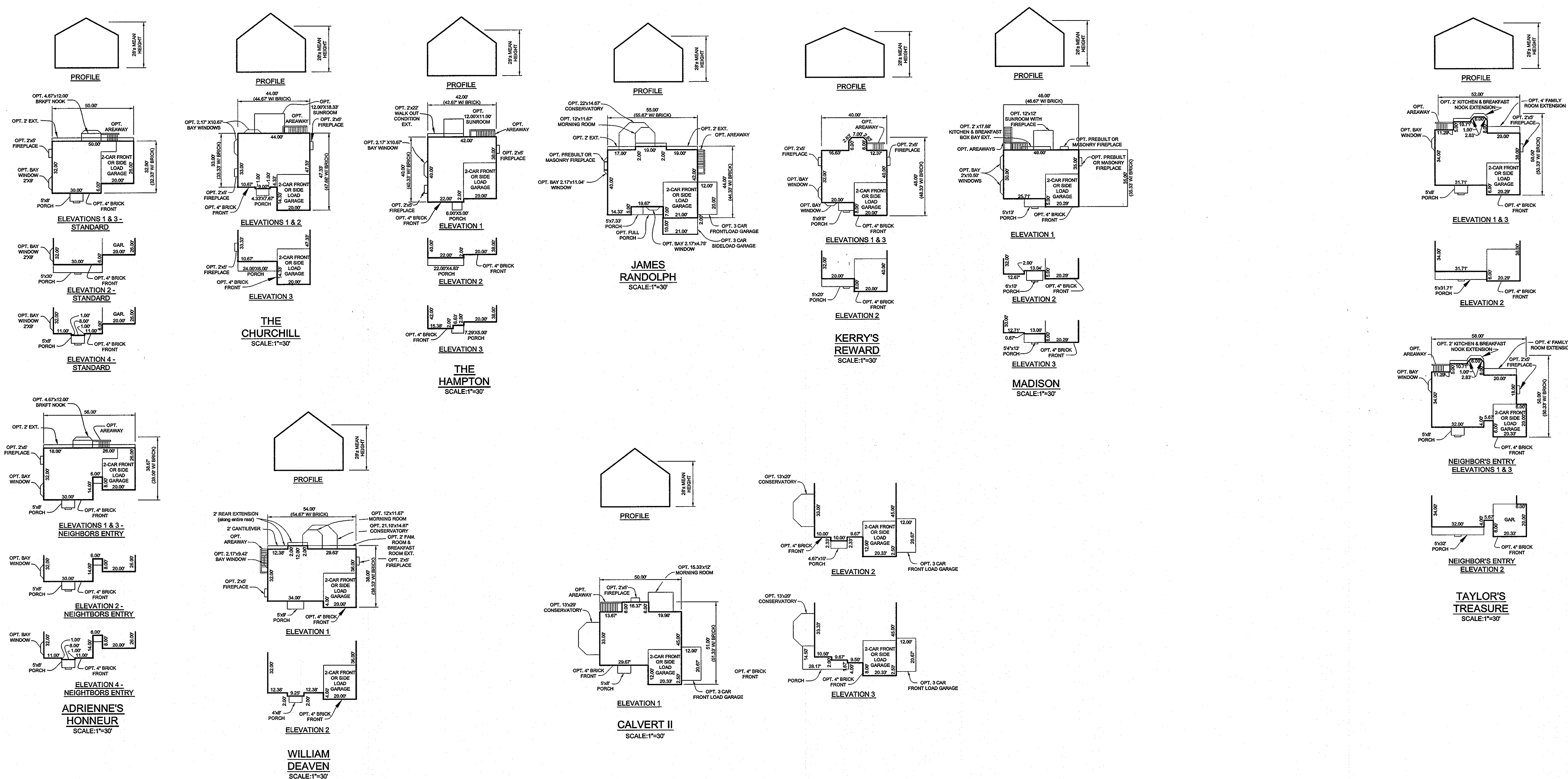
T. Muench 10-26-11
CHIEF, DIVISION OF LAND DEVELOPMENT

Dorcas & Butler 10/26/11
DIRECTOR

NO.	DATE	REVISION

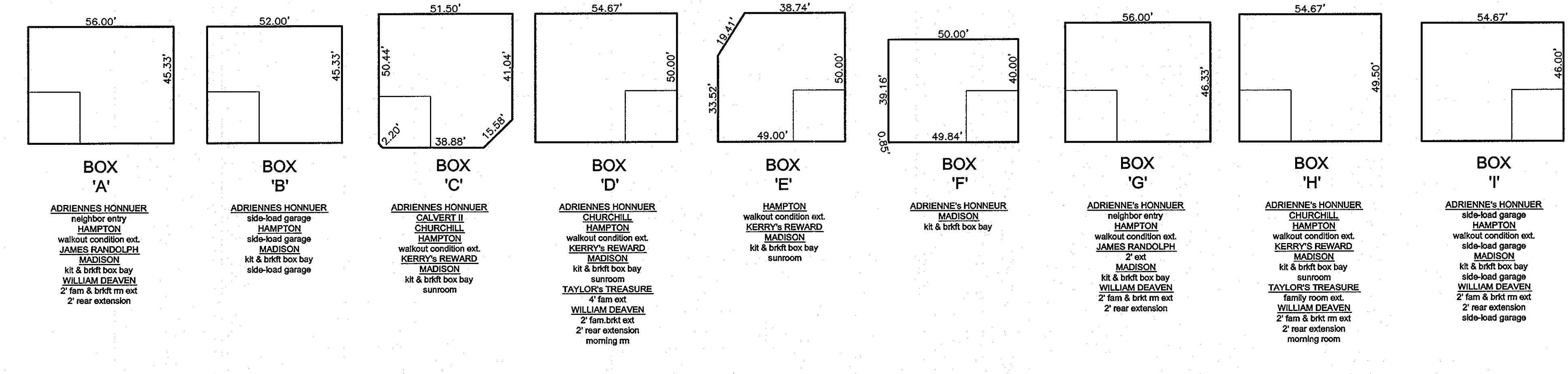
BENCHMARK ENGINEERING, INC.
6480 BALTIMORE NATIONAL PIKE SUITE 418 & ELLICOTT CITY, MARYLAND 21043
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60 THOMAS JOHNSON DRIVE FREDERICK, MARYLAND 21702
(P) 301-371-3606 (F) 301-371-3606
WWW.BEI-CVLENGINEERING.COM

OWNER: SECURITY DEVELOPMENT LLC P.O. BOX 417 ELLICOTT CITY, MARYLAND 21041 410-465-4244	BUILDER: WILLIAMSBURG GROUP, LLC c/o ROBERT CORBETT 5485 HARRIS FARM ROAD, SUITE 200 COLUMBIA, MARYLAND 21044 410-997-8800	<h2>CASCADE OVERLOOK</h2> <h3>SECTION III</h3> <p>LOTS 1 thru 14</p>
TAX MAP: 31	GRID: 10	PARCEL: p/o 260
ELECTION DISTRICT NO. 1 HOWARD COUNTY, MARYLAND		
TITLE SHEET		
DATE: OCTOBER, 2011	BEI PROJECT NO: 1676	
SCALE: AS SHOWN	SHEET 1 OF 8	



NOTE:
HOUSES AND OPTIONS LISTED BELOW EACH BOX ARE
THOSE THAT WILL FIT WITHIN THE GENERIC BOX.

HOUSES AND OPTIONS NOT LISTED WILL NOT FIT
WITHIN THE GENERIC BOX AND WILL REQUIRE A
REDLINE TO THE SDP.



APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

[Signature] 10/13/11
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

[Signature] 10-26-11
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

[Signature] 10/26/11
DIRECTOR DATE

NO.	DATE	REVISION

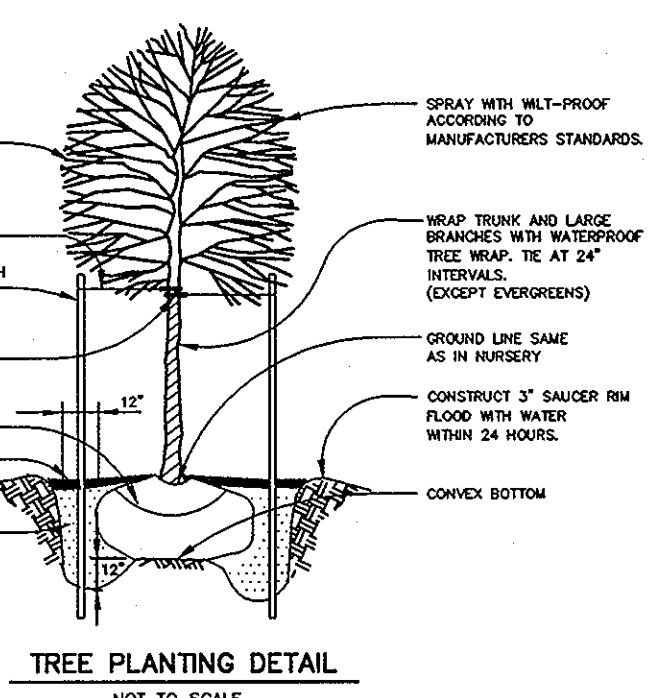
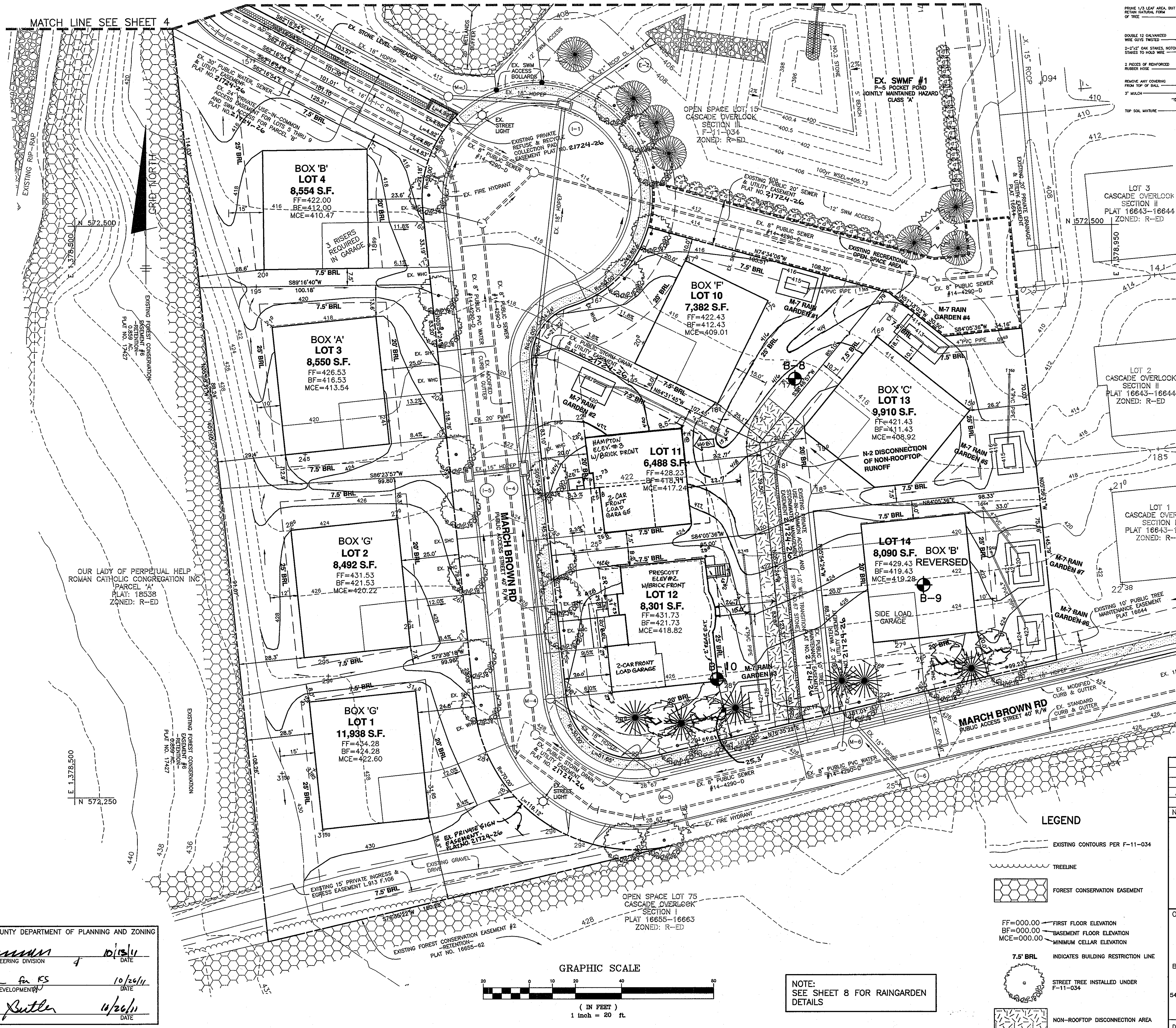
BENCHMARK ENGINEERING, INC.
ENGINEERS • LAND SURVEYORS • PLANNERS
8480 BALTIMORE NATIONAL PIKE SUITE 418 & ELLICOTT CITY, MARYLAND 21043
(P) 410-485-8105 (F) 410-485-8944
60 THOMAS JOHNSON DRIVE & FREDERICK, MARYLAND 21702
(P) 301-371-3505 (F) 301-371-3506
WWW.BE-CIVILENGINEERING.COM

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland, License No. 28859, dated 7-22-2013.

<p>OWNER: SECURITY DEVELOPMENT LLC P.O. BOX 417 ELLICOTT CITY, MARYLAND 21041 410-485-4244</p> <p>BUILDER: WILLIAMSBURG GROUP, LLC c/o ROBERT CORBETT 5485 HARRERS FARM ROAD, SUITE 200 COLUMBIA, MARYLAND 21044 410-997-8800</p> <p>DESIGN: DBT DRAWN: DBT</p>	<p>CASCADE OVERLOOK SECTION III LOTS 1 thru 14</p> <p>TAX MAP: 31 GRID: 10 ZONED: R-ED ELECTION DISTRICT NO. 1 HOWARD COUNTY, MARYLAND</p> <p>HOUSE TYPE AND GENERIC BOX DETAILS</p> <p>DATE: OCTOBER, 2011 SCALE: 1" = 30'</p> <p>PARCEL: p/o 260 ELECTION DISTRICT NO. 1 HOWARD COUNTY, MARYLAND</p> <p>BEI PROJECT NO: 1676 SHEET 2 OF 8</p>
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MATCH LINE SEE SHEET 4

MATCH LINE SEE SHEET 4



SCHEDULE A PERIMETER LANDSCAPE EDGE		
CATEGORY	ADJACENT TO ROAD (LOT 12)	ADJACENT TO ROAD (LOT 14)
LANDSCAPE TYPE	B	B
LINEAR FEET OF ROADWAY FRONTAGE/PERIMETER	87 LF	99 LF
CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR FEET) (DESCRIBE BELOW IF NEEDED)	NO	NO
CREDIT FOR WALL, FENCE OR BERM (YES, NO, LINEAR FEET) (DESCRIBE BELOW IF NEEDED)	NO	NO
NUMBER OF PLANTS REQUIRED	87 LF	99 LF
SHADE TREES	2	2
EVERGREEN TREES	3	3
OTHER TREES (2:1 SUBSTITUTE)	0	0
SHRUBS	0	0
NUMBER OF PLANTS PROVIDED	2	2
SHADE TREES	3	3
EVERGREEN TREES	3	0
OTHER TREES (2:1 SUBSTITUTE)	0	0
SHRUBS (10:1 SUBSTITUTE)	0	0

- LANDSCAPE NOTES:**
- TREES MAY NOT BE PLANTED WITHIN 5 FEET OF A DRAIN INLET, 5 FEET OF AN OPEN SPACE ACCESS STRIP, OR 10 FEET OF A DRIVEWAY.
 - THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE HOWARD COUNTY LANDSCAPE MANUAL.
 - AT THE TIME OF INSTALLMENT, ALL SHRUBS AND OTHER PLANTINGS HEREWITH LISTED AND APPROVED FOR THIS SITE, SHALL BE OF THE PROPER HEIGHT REQUIREMENTS IN ACCORDANCE WITH THE HOWARD COUNTY LANDSCAPE MANUAL. IN ADDITION, NO SUBSTITUTIONS OR RELOCATION OF REQUIRED PLANTINGS MAY BE MADE WITHOUT PRIOR REVIEW AND APPROVAL FROM THE DEPARTMENT OF PLANNING AND ZONING. ANY DEVIATION FROM THIS APPROVED LANDSCAPE PLAN MAY RESULT IN DENIAL OR DELAY IN RELEASE OF LANDSCAPE SURETY UNTIL SUCH TIME AS ALL REQUIRED MATERIALS ARE PLANTED AND/OR REVISIONS ARE MADE TO APPLICABLE PLANS AND CERTIFICATIONS.
 - THE OWNER, TENANTS AND/OR THEIR AGENTS SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE REQUIRED LANDSCAPING INCLUDING BOTH PLANT MATERIALS AND BERMS, FENCES AND WALLS. ALL PLANT MATERIALS SHALL BE MAINTAINED IN GOOD GROWING CONDITION, AND WHEN NECESSARY, REPLACED WITH NEW MATERIALS TO ENSURE CONTINUED COMPLIANCE WITH APPLICABLE REGULATIONS. ALL OTHER REQUIRED LANDSCAPING SHALL BE PERMANENTLY MAINTAINED IN GOOD CONDITION, AND WHEN NECESSARY, REPAIRED OR REPLACED.
 - FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING IS PART OF THE BUILDERS GRADING PERMIT APPLICATION IN THE AMOUNT OF \$1,050.00 FOR LOT 12.
 - FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING IS PART OF THE BUILDERS GRADING PERMIT APPLICATION IN THE AMOUNT OF \$1,050.00 FOR LOT 14.

PERIMETER LANDSCAPE PLANTING LIST				
SYMBOL	QUANTITY	NAME	REMARKS	DESCRIPTION
	4	PLATANUS X ACERIFOLIA 'BLOODGOOD' (Bloodgood London Plane)	2.5" - 3" cal.	SHADE TREES ALONG PERIMETER TO BE PROVIDED BY THE BUILDER
	6	PINUS STROBUS (Eastern White Pine)	6' - 8' hgt.	EVERGREEN TREES ALONG PERIMETER TO BE PROVIDED BY THE BUILDER

DEVELOPER'S/BUILDER'S CERTIFICATE

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

BUILDER

10-4-11
DATE

NO.	DATE	REVISION
2	6-12-12	SHOW HAMPTON ON LOT 11. REVISE GRADES ON LOTS 10 & 11
1	1-24-12	SHOW PRESCOTT, ELEV. 2 W/ 2' REAR EXT. ON LOT 12.

BENCHMARK ENGINEERING, INC.
ENGINEERS & LAND SURVEYORS & PLANNERS

8480 BALTIMORE NATIONAL PIKE & SUITE 418 ELLICOTT CITY, MARYLAND 21043
(P) 410-465-6105 (F) 410-465-6844
60 THOMAS JOHNSON DRIVE & FREDERICK, MARYLAND 21702
(P) 301-371-3505 (F) 301-371-3506
WWW.BEI-CIVILENGINEERING.COM

Professional Certification: I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland. License No. 26599-Professional-Date: 9-23-2013.

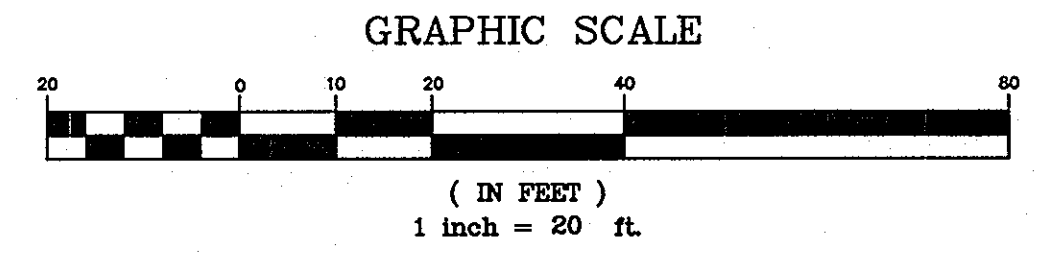
OWNER: SECURITY DEVELOPMENT LLC P.O. BOX 417 ELLICOTT CITY, MARYLAND 21041 410-465-4244	GRID: 10 ZONED: R-ED ELECTION DISTRICT NO. 1 HOWARD COUNTY, MARYLAND
BUILDER: WILLIAMSBURG GROUP, LLC c/o ROBERT CORBETT 5485 HARRIS FARM ROAD, SUITE 200 COLUMBIA, MARYLAND 21044 410-997-8800	CASCADE OVERLOOK SECTION III LOTS 1 thru 14
DESIGN: DBT	DATE: OCTOBER, 2011
DRAWN: DBT	BEI PROJECT NO: 1676
SCALE: AS SHOWN	SHEET 3 OF 8

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION 10/15/11 DATE

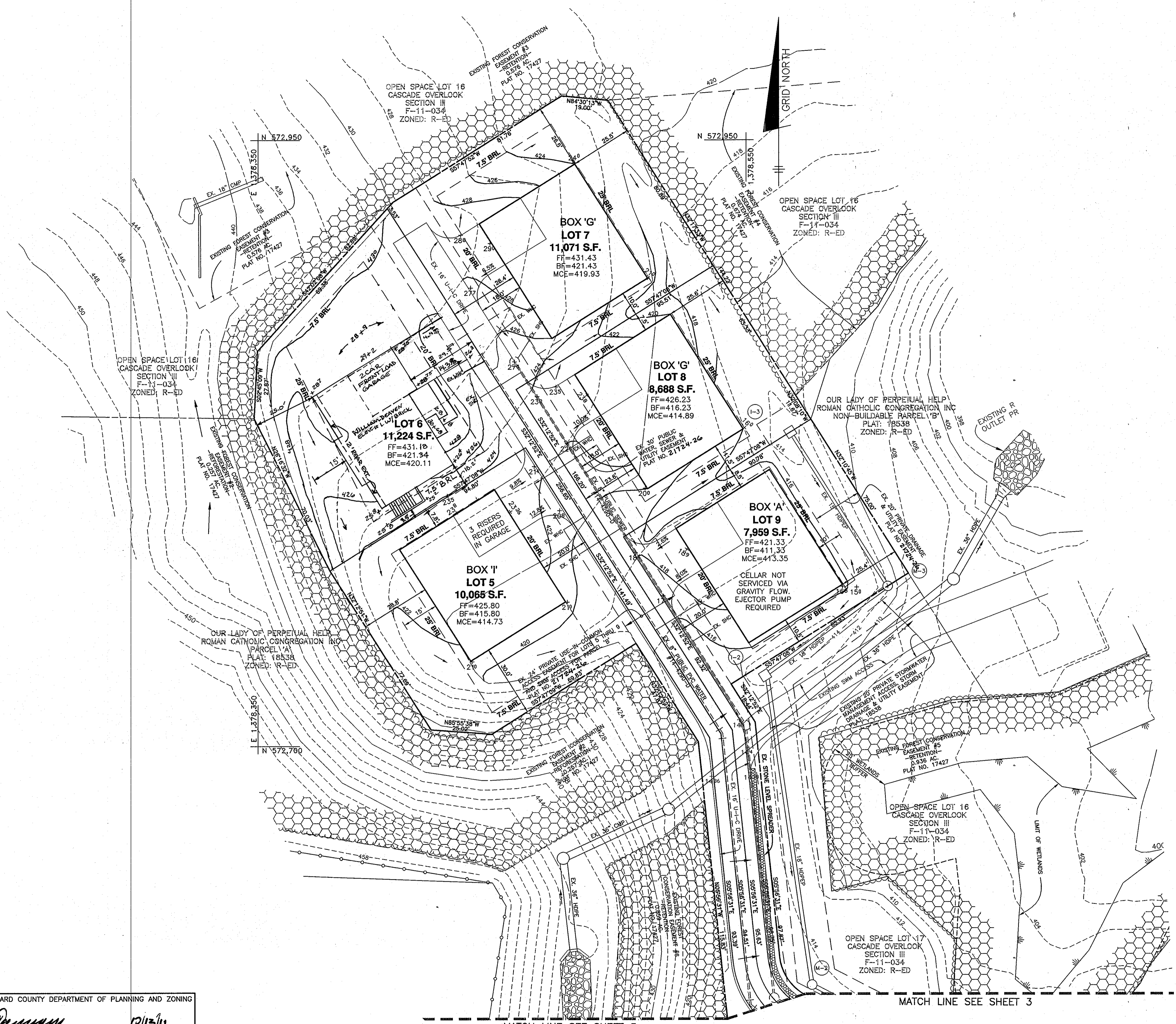
CHIEF, DIVISION OF LAND DEVELOPMENT 10/26/11 DATE

DIRECTOR 10/26/11 DATE



NOTE:
SEE SHEET 8 FOR RAINGARDEN DETAILS

- LEGEND**
- EXISTING CONTOURS PER F-11-034
 - TREELINE
 - FOREST CONSERVATION EASEMENT
 - FF=000.00 FIRST FLOOR ELEVATION
 - BF=000.00 BASEMENT FLOOR ELEVATION
 - MCE=000.00 MINIMUM CELLAR ELEVATION
 - 7.5' BRL INDICATES BUILDING RESTRICTION LINE
 - STREET TREE INSTALLED UNDER F-11-034
 - NON-ROOFTOP DISCONNECTION AREA



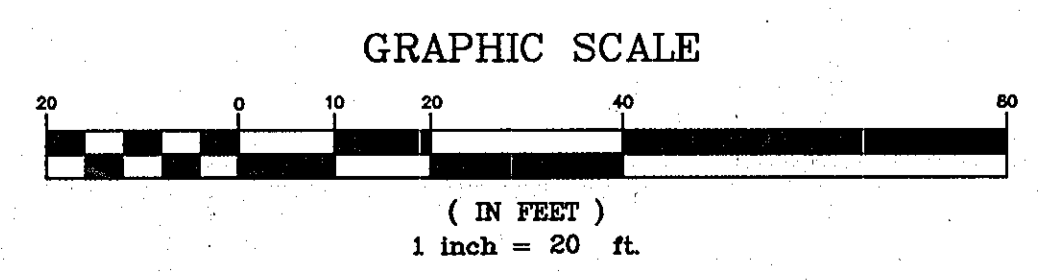
LEGEND

- EXISTING CONTOURS PER F-11-034
- TREELINE
- FOREST CONSERVATION EASEMENT
- FF=000.00 FIRST FLOOR ELEVATION
- BF=000.00 BASEMENT FLOOR ELEVATION
- MCE=000.00 MINIMUM CELLAR ELEVATION
- 7.5' BRL INDICATES BUILDING RESTRICTION LINE

1-15-13		REVISE LOT 6 TO SHOW WILLIAM DEAVEN W/ FRONT LOAD GAR. PER AS-BUILT CONDITIONS	
NO.	DATE	REVISION	
BENCHMARK ENGINEERING, INC. 6450 BALTIMORE NATIONAL PIKE SUITE 418 & ELLICOTT CITY, MARYLAND 21043 (P) 410-465-6105 (F) 410-465-6644 60 THOMAS JOHNSON DRIVE A FREDERICK, MARYLAND 21702 (P) 301-371-3005 (F) 301-371-3006 WWW.BEI-CIVILENGINEERING.COM		Professional Certification: I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland, License No. 28669, expiring on 9/23/2013.	
OWNER:		CASCADE OVERLOOK SECTION III LOTS 1 thru 14	
SECURITY DEVELOPMENT LLC P.O. BOX 417 ELLICOTT CITY, MARYLAND 21041 410-465-4244		TAX MAP: 31 GRID: 10 PARCEL: p/o 260 ZONED: R-ED ELECTION DISTRICT NO. 1 HOWARD COUNTY, MARYLAND	
BUILDER:		SITE DEVELOPMENT AND GRADING PLAN	
WILLIAMSBURG GROUP, LLC c/o ROBERT CORBETT 5485 HARRERS FARM ROAD, SUITE 200 COLUMBIA, MARYLAND 21044 410-997-8800		DATE: OCTOBER, 2011 BEI PROJECT NO: 1676 SCALE: AS SHOWN SHEET 4 OF 8	
DESIGN: DBT	DRAWN: DBT		

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

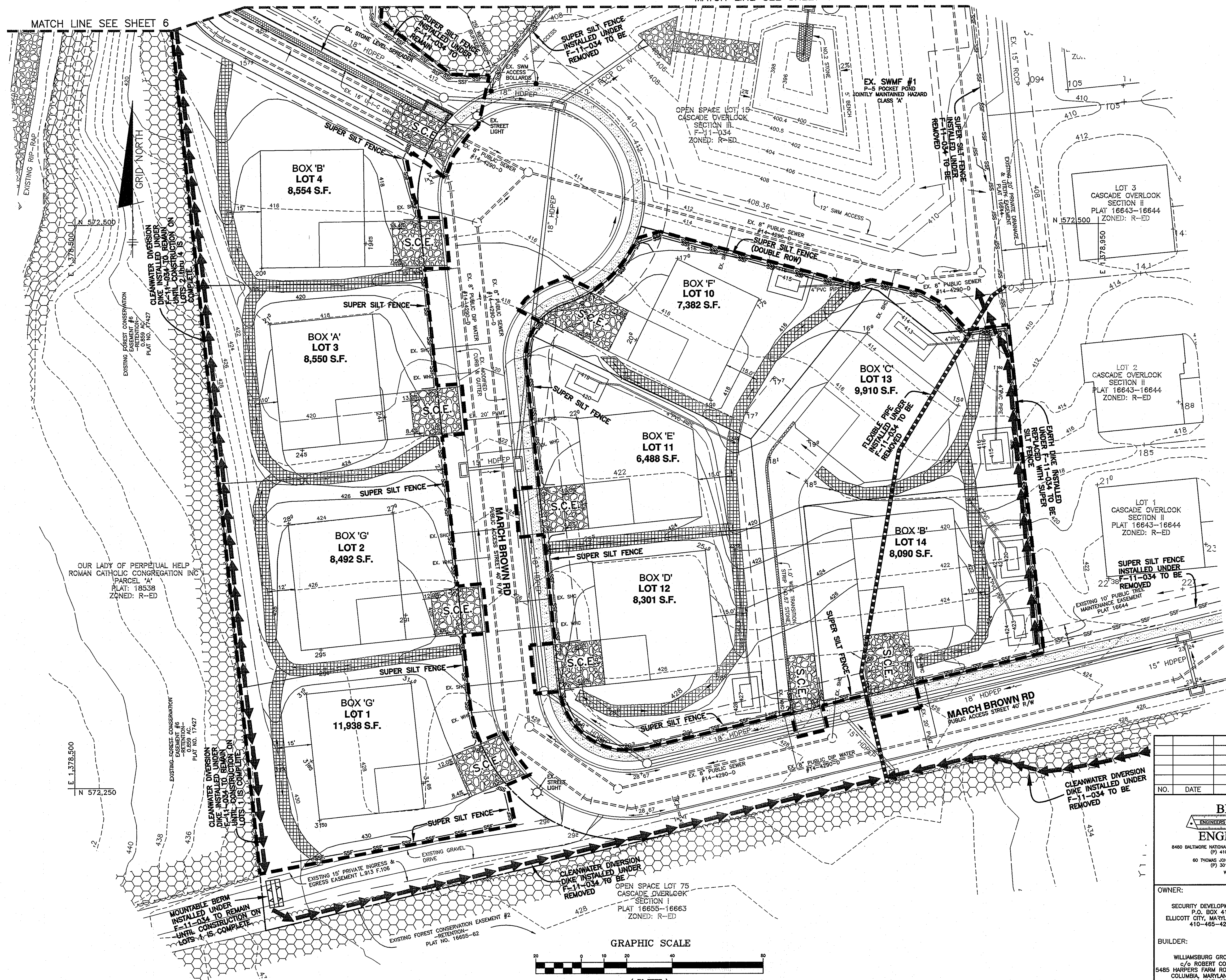
	10/13/11
CHIEF, DEVELOPMENT ENGINEERING DIVISION	DATE
	10-26-11
CHIEF, DIVISION OF LAND DEVELOPMENT	DATE
	10/26/11
DIRECTOR	DATE



MATCH LINE SEE SHEET 6

LEGEND

- EXISTING CONTOURS PER F-11-034
- TREELINE
- FOREST CONSERVATION EASEMENT
- SUPER SILT FENCE UNDER F-11-034
- EARTH DIKE UNDER F-11-034
- LIMIT OF DISTURBANCE
- SILT FENCE
- SUPER SILT FENCE
- STABILIZED CONSTRUCTION ENTRANCE
- EROSION CONTROL MATTING



ENGINEER'S CERTIFICATE

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

ENGINEER: *[Signature]* DATE: 10/3/2011

DEVELOPER'S CERTIFICATE

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

DEVELOPER: *[Signature]* DATE: 10-4-11

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

[Signature] DATE: 10/11/11

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

[Signature] DATE: 10/13/11

CHIEF, DEVELOPMENT ENGINEERING DIVISION

[Signature] DATE: 10-24-11

CHIEF, DIVISION OF LAND DEVELOPMENT

[Signature] DATE: 10/26/11

DIRECTOR

NO.	DATE	REVISION

BENCHMARK
ENGINEERS & LAND SURVEYORS & PLANNERS
ENGINEERING, INC.
8480 BALTIMORE NATIONAL PIKE SUITE 418 ELLICOTT CITY, MARYLAND 21043
(P) 410-465-8105 (F) 410-465-6444
60 THOMAS JOHNSON DRIVE A/FREDERICK, MARYLAND 21702
(P) 301-371-3068 (F) 301-371-3068
WWW.BEI-CIVILENGINEERING.COM

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland, License No. 2853-2013.

STATE OF MARYLAND
BRIAN F. CLEARY
REGISTERED PROFESSIONAL ENGINEER

OWNER: SECURITY DEVELOPMENT LLC - P.O. BOX 417 ELLICOTT CITY, MARYLAND 21041 410-465-4244

BUILDER: WILLIAMSBURG GROUP, LLC c/o ROBERT CORBETT 5485 HARRPENS FARM ROAD, SUITE 200 COLUMBIA, MARYLAND 21044 410-997-8800

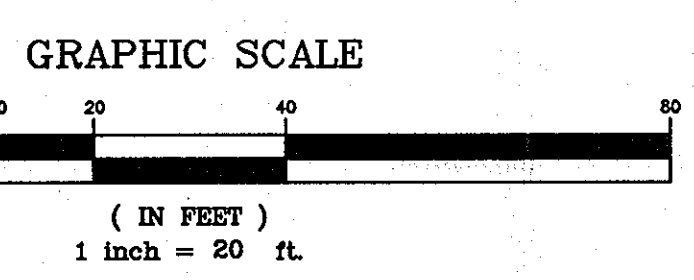
CASCADE OVERLOOK SECTION III
LOTS 1 thru 14

TAX MAP: 31 GRID: 10 PARCEL: p/o 260
ZONED: R-ED ELECTION DISTRICT NO. 1 HOWARD COUNTY, MARYLAND

SEDIMENT AND EROSION CONTROL PLAN

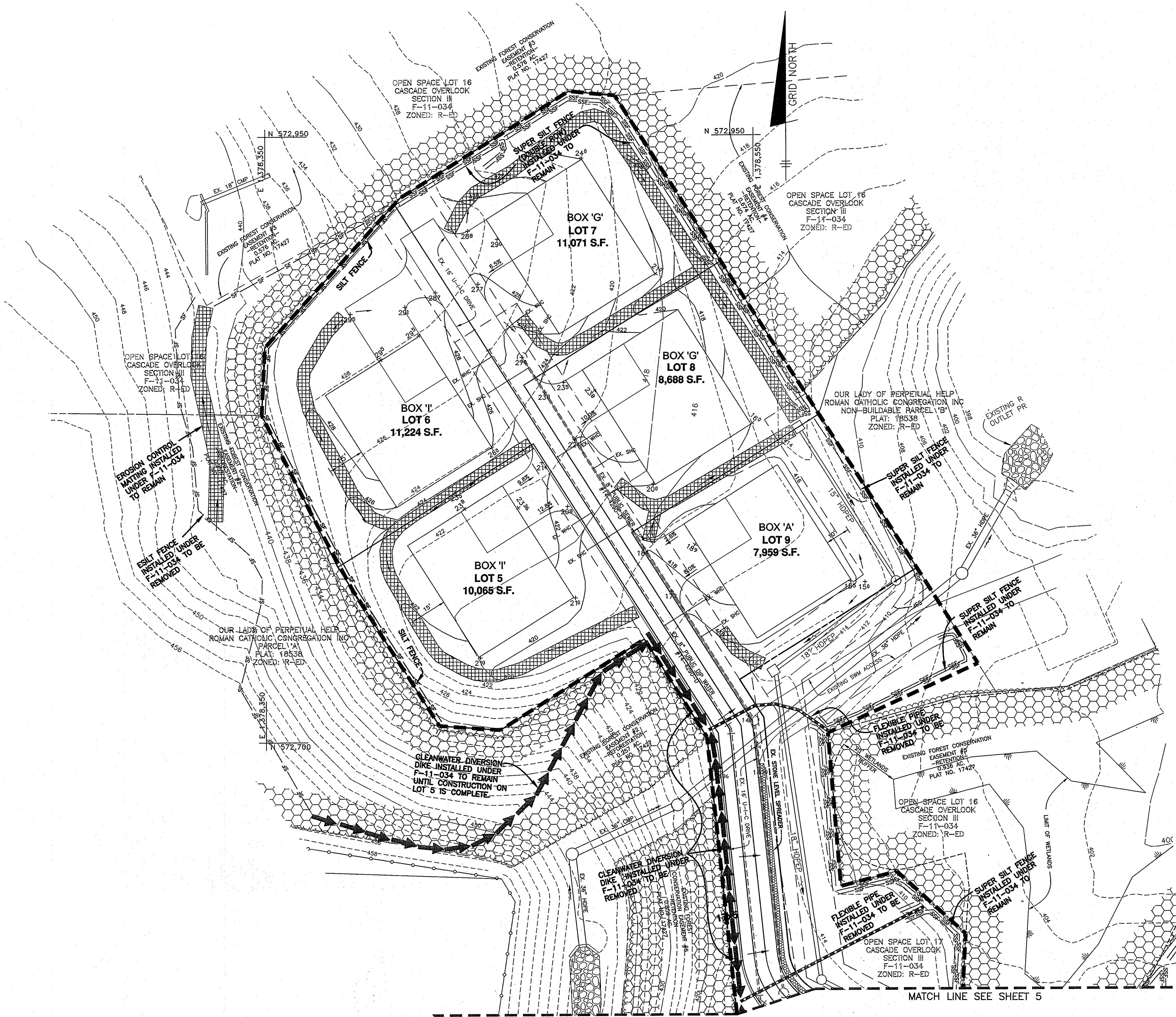
DATE: OCTOBER, 2011 BEI PROJECT NO: 1676
SCALE: AS SHOWN SHEET 5 OF 8

DESIGN: DBT DRAWN: DBT



LEGEND

- EXISTING CONTOURS PER F-11-034
- TREELINE
- FOREST CONSERVATION EASEMENT
- SUPER SILT FENCE UNDER F-11-034
- EARTH DIKE UNDER F-11-034
- LIMIT OF DISTURBANCE
- SILT FENCE
- SUPER SILT FENCE
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ENGINEER'S CERTIFICATE
 I CERTIFY THAT THIS PLAN FOR SEDIMENT AND EROSION CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

ENGINEER: *[Signature]* DATE: 10/3/2011

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

DEVELOPER: *[Signature]* DATE: 10-4-11

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

[Signature] DATE: 10/13/11
 HOWARD SOIL CONSERVATION DISTRICT

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

[Signature] DATE: 10/13/11
 CHIEF, DEVELOPMENT ENGINEERING DIVISION

[Signature] DATE: 10-26-11
 CHIEF, DIVISION OF LAND DEVELOPMENT

[Signature] DATE: 10/26/11
 DIRECTOR

NO.	DATE	REVISION

BENCHMARK
 ENGINEERS & LAND SURVEYORS & PLANNERS
ENGINEERING, INC.
 8480 BALTIMORE NATIONAL PIKE & SUITE 419 A ELLICOTT CITY, MARYLAND 21043
 (P) 410-465-6105 (F) 410-465-6644
 60 THOMAS JOHNSON DRIVE & FREDERICK, MARYLAND 21702
 (P) 301-371-3505 (F) 301-371-3506
 WWW.BE-CIVILENGINEERING.COM

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland, License No. 10182011, Date: 7-22-2013.

OWNER:
 SECURITY DEVELOPMENT LLC
 P.O. BOX 417
 ELLICOTT CITY, MARYLAND 21041
 410-465-4244

DEVELOPER:
 SECURITY DEVELOPMENT LLC
 P.O. BOX 417
 ELLICOTT CITY, MARYLAND 21041
 410-465-4244

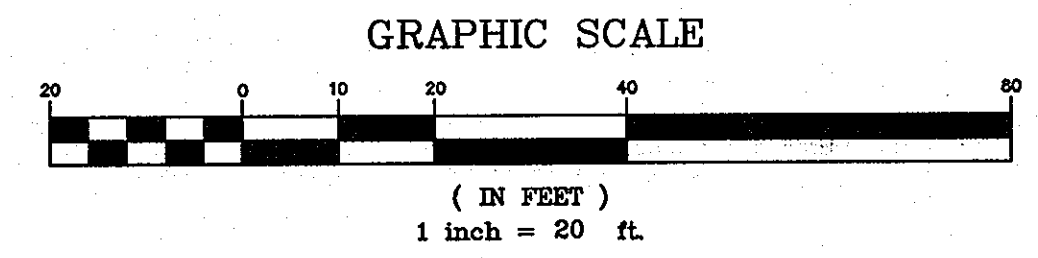
CASCADE OVERLOOK
 SECTION III
 LOTS 1 thru 14

TAX MAP: 31 GRID: 10 PARCEL: p/o 260
 ZONED: R-ED
 ELECTION DISTRICT NO. 1
 HOWARD COUNTY, MARYLAND

SITE DEVELOPMENT AND GRADING PLAN

DESIGN: DBT DRAWN: DBT

DATE: OCTOBER, 2011 BEI PROJECT NO: 1676
 SCALE: AS SHOWN SHEET 6 OF 8



MATCH LINE SEE SHEET 5

MATCH LINE SEE SHEET 5

SEDIMENT CONTROL NOTES

TOPSOIL SPECIFICATIONS

30.0 DUST CONTROL

- A MINIMUM OF 24 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF INSPECTION, LICENSES AND PERMITS, SEDIMENT CONTROL DIVISION PRIOR TO THE START OF ANY CONSTRUCTION, (313-1850).
- ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE MOST CURRENT MARYLAND STANDARDS AND SPECIFICATION FOR SOIL EROSION AND SEDIMENT CONTROL, REVISIONS THERETO.
- FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN: A) 7 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, PERIMETER SLOPES AND ALL SLOPES GREATER THAN 3:1; B) 14 DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.
- ALL SEDIMENT TRAPS/BASINS SHOWN MUST BE FENCED AND WARNING SIGNS POSTED AROUND THEIR PERIMETER IN ACCORDANCE WITH VOL. 1, CHAPTER 12 OF THE HOWARD COUNTY DESIGN MANUAL, STORM DRAINAGE.
- ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR PERMANENT SEEDINGS (SEC. 51) SOE (SEC. 54), TEMPORARY SEEDING (SEC. 50) AND MULCHING (SEC. 52). TEMPORARY STABILIZATION WITH MULCH ALONE CAN ONLY BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER GERMINATION AND ESTABLISHMENT OF GRASSES.
- ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE AND ARE TO BE MAINTAINED IN OPERATIVE CONDITION UNTIL PERMITS FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
- SITE ANALYSIS:

TOTAL AREA OF SITE	2.92	ACRES
AREA DISTURBED	1.13	ACRES
AREA TO BE ROOFED OR PAVED	1.07	ACRES
AREA TO BE VEGETATIVELY STABILIZED	2.06	ACRES
TOTAL CUT	0	CY
TOTAL FILL	0	CY
OFFSITE WASTE AREA LOCATION	A SITE WITH AN ACTIVE GRADING PERMIT	
- ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.
- ADDITIONAL SEDIMENT CONTROL MUST BE PROVIDED, IF DEEMED NECESSARY BY THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
- ON ALL SITES WITH DISTURBED AREAS IN EXCESS OF 2 ACRES, APPROVAL OF THE INSPECTION AGENCY SHALL BE REQUESTED UPON COMPLETION OF INSTALLATION OF PERIMETER EROSION AND SEDIMENT 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.
- TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE PIPE LENGTHS OR THAT WHICH CAN BE BACK FILLED AND STABILIZED WITHIN ONE WORKING DAY, WHICHEVER IS SHORTER.

TEMPORARY SEEDBED PREPARATIONS

- APPLY TO GRADED OR CLEARED AREAS LIKELY TO BE REDISTURBED WHERE A SHORT-TERM VEGETATIVE COVER IS NEEDED.
- SEEDBED PREPARATION: LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISCING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING, IF NOT PREVIOUSLY LOOSENED.
- SOIL AMENDMENTS: APPLY 600 LBS PER ACRE 10-10-10 FERTILIZER (14 LBS/1000 SQ FT).
- SEEDING: FOR PERIOD MARCH 1 THROUGH APRIL 30 AND FROM AUGUST 15 THROUGH NOVEMBER 15, SEED WITH 2-1/2 BUSHELS PER ACRE OF ANNUAL RYE (3.2 LBS/1000 SQ FT). FOR THE PERIOD MAY 1 THROUGH AUGUST 14, SEED WITH 3 LBS PER ACRE OF WEEPING LOVEGRASS (.07 LBS/1000 SQ FT). FOR THE PERIOD NOVEMBER 16 THROUGH FEBRUARY 28, PROTECT SITE BY APPLYING 2 TONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING, OR USE SOD.
- MULCHING: APPLY 1-1/2 TO 2 TONS PER ACRE (70 TO 90 LBS/1000 SQ FT) OF UNROTTED SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 218 GALLONS PER ACRE (5 GAL/1000 SQ FT) OF EMULSIFIED ASPHALT ON FLAT AREAS, ON SLOPES 8 FT OR HIGHER, USE 348 GALLONS PER ACRE (8 GAL/1000 SQ FT) FOR ANCHORING.
- REFER TO THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR RATE AND METHODS NOT COVERED.

PERMANENT SEEDBED PREPARATIONS

- SEEDBED PREPARATION: LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISCING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING, IF NOT PREVIOUSLY LOOSENED.
- SOIL AMENDMENTS: IN LIEU OF SOIL TEST RECOMMENDATIONS, USE ON OF THE FOLLOWING SCHEDULES:
- PREFERRED - APPLY 2 TONS PER ACRE DOLOMITIC LIMESTONE (92 LBS/1000 SQ FT) AND 600 LBS PER ACRE 10-10-10 FERTILIZER (14 LBS/1000 SQ FT) BEFORE SEEDING. HARROW OR DISC INTO UPPER THREE INCHES OF SOIL AT TIME OF SEEDING. APPLY 400 LBS PER ACRE 30-0-0-0 UREAFORM FERTILIZER (9 LBS/1000 SQ FT).
 - ACCEPTABLE - APPLY 2 TONS PER ACRE DOLOMITIC LIMESTONE (92 LBS/1000 SQ FT) AND 1000 LBS PER ACRE 10-10-10 FERTILIZER (23 LBS/1000 SQ FT) BEFORE SEEDING. HARROW OR DISC INTO UPPER THREE INCHES OF SOIL.
- SEEDING: FOR THE PERIODS MARCH 1 THROUGH APRIL 30 AND AUGUST 1 THROUGH OCTOBER 15, SEED WITH 60 LBS PER ACRE (14 LBS/1000 SQ FT) OF KENTUCKY 31 TALL FESCUE PER ACRE AND 2 LBS PER ACRE (.05 LBS/1000 SQ FT) OF WEEPING LOVEGRASS. DURING THE PERIOD OF OCTOBER 16 THROUGH FEBRUARY 28, PROTECT SITE BY: OPTION (1) 2 TONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING, OPTION (2) USE SOD. OPTION (3) SEED WITH 60 LBS PER ACRE OF KENTUCKY 31 TALL FESCUE AND MULCH WITH 2 TONS PER ACRE OF WELL ANCHORED STRAW.
- MULCHING: APPLY 1-1/2 TO 2 TONS PER ACRE (70 TO 90 LBS/1000 SQ FT) OF UNROTTED SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 218 GALLONS PER ACRE (5 GAL/1000 SQ FT) OF EMULSIFIED ASPHALT ON FLAT AREAS, ON SLOPES 8 FEET OR HIGHER, USE 348 GALLONS PER ACRE (8 GAL/1000 SQ FT) FOR ANCHORING.
- MAINTENANCE: INSPECT ALL SEEDED AREAS AND MAKE NEEDED REPAIRS, REPLACEMENTS AND RESEEDINGS.

- Topsoil salvaged from the existing site may be used provided that it meets that standards as set forth in these specifications. Typically, the depth of topsoil to be salvaged for a given soil type can be found in the representative soil profile section in the Soil Survey published by USDA-SSS in cooperation with Maryland Agricultural Experiment Station.
- Topsoil Specifications - Soil to be used as topsoil must meet the following:
 - 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 approved soil scientist and approved by the appropriate approval authority. Regardless, topsoil shall not be a mixture of contrasting texture subsoils and shall contain no more than 2% by volume of cinders, stones, slag, coarse fragments, gravel, sticks, roots, trash, or other materials larger than 1-1/2" in diameter.
 - Topsoil must be free of plants or plant parts such as Bermuda grass, quack grass, johnson grass, nutgrass, poison ivy, vitis, or others as specified.
- 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.
- For sites having disturbed areas under 5 acres:
 - Place topsoil (if required) and apply soil amendments as specified in 20.0 Vegetative Stabilization - Section 1 - Vegetative Stabilization Methods and Materials.
- For sites having disturbed areas over 5 acres:
 - On soil meeting Topsoil specifications, obtain test results dictating fertilizer and lime amendments required to bring the soil into compliance with the following:
 - 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.
 - Organic content or topsoil shall be not less than 1.5 percent by weight.
 - Topsoil having soluble salt content greater than 500 parts per million shall not be used.
 - 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 phytotoxic materials.
 - Calcium Chloride - Apply at rates that will keep surface moist. May need retreatment.

- 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.
- Place topsoil (if required) and apply soil amendments as specified in 20.0 Vegetative Stabilization - Section 1 - Vegetative Stabilization Methods and Materials.
 - Topsoil Application
 - 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.
 - Grades on the areas to be topsoiled, which have been previously established, shall be maintained, albeit 4" - 8" higher in elevation.
 - 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.
 - 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.
 - Alternative for Permanent Seeding - Instead of applying the full amounts of lime and commercial fertilizer, composted sludge and amendments may be applied as specified below:
 - 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:
 - 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.
 - 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.
 - Composted sludge shall be applied at a rate of 1 ton/1,000 square feet.
 - Composted sludge shall be amended with a potassium fertilizer applied at the rate of 4 lb/1,000 square feet, and 1/3 the normal lime application rate.

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

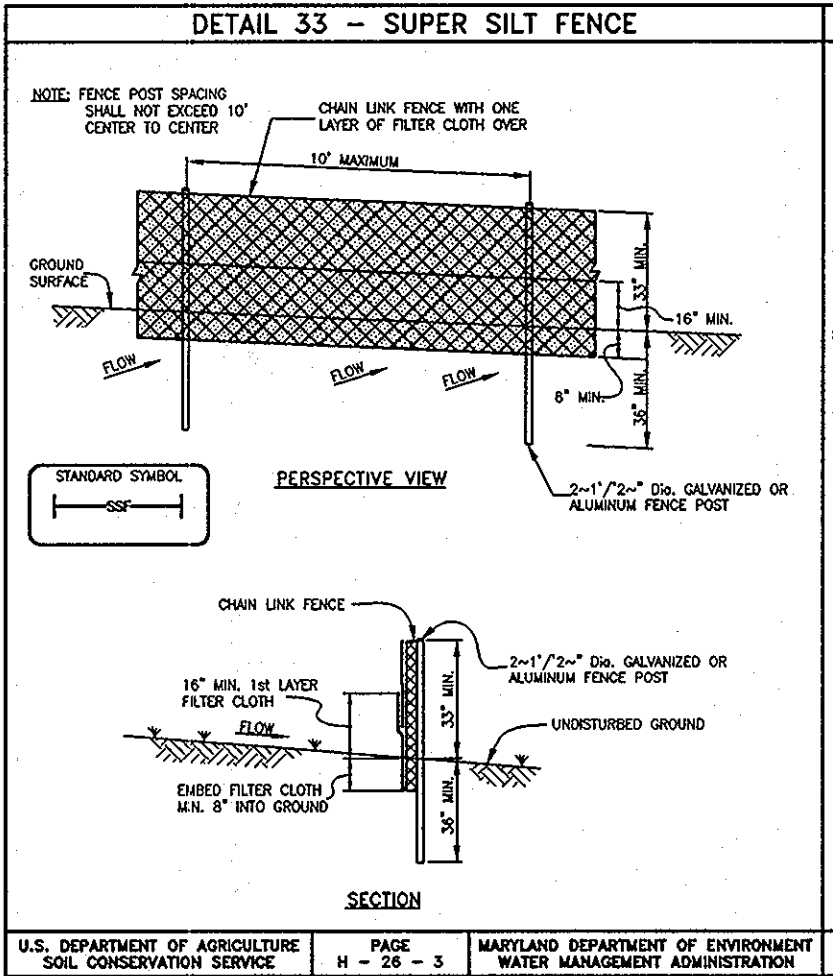
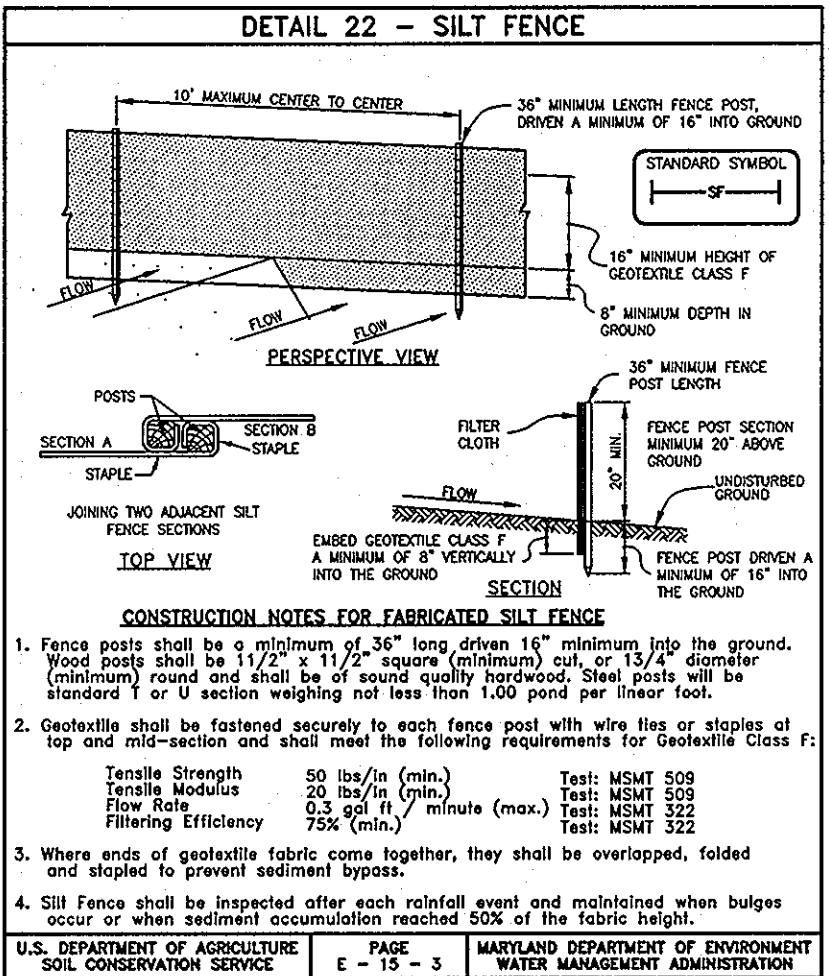
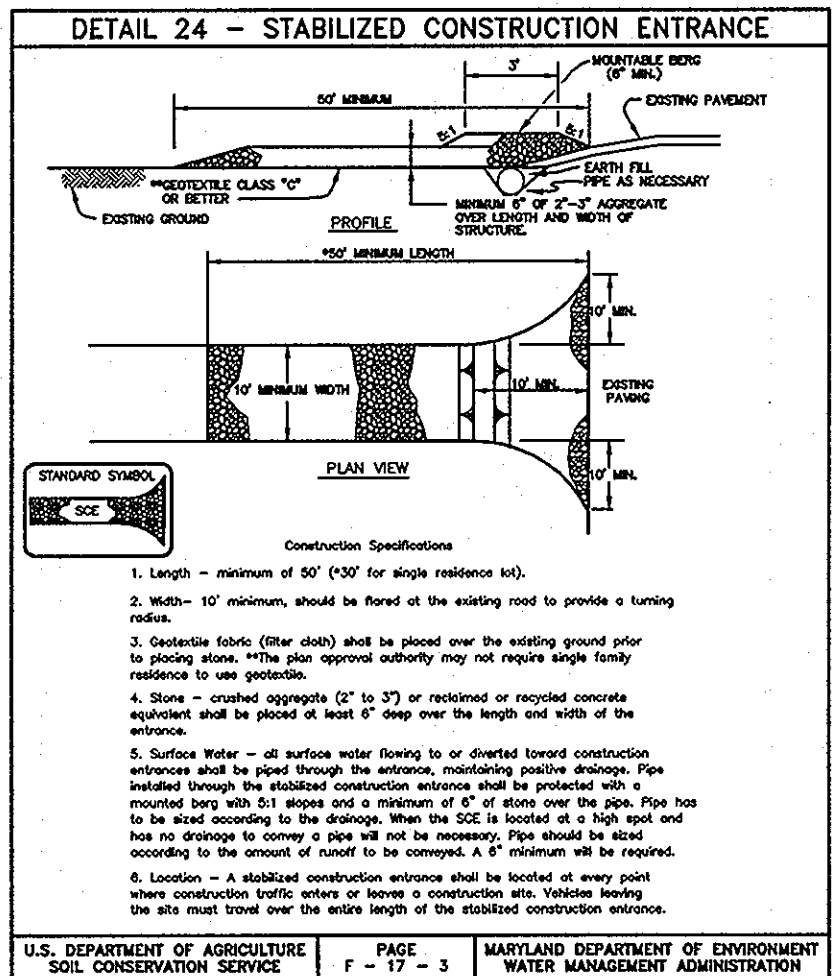
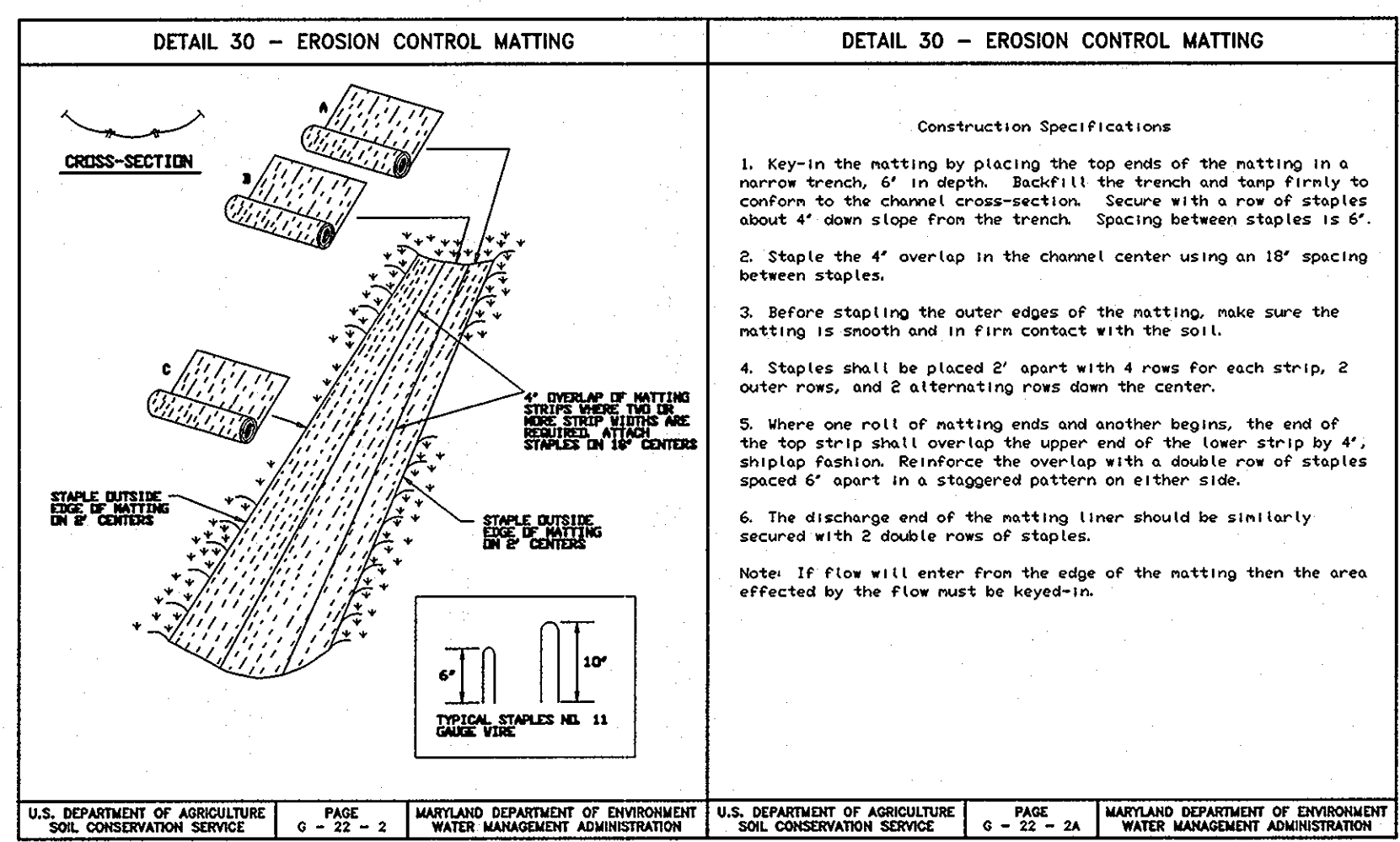
- Definition**
Controlling dust blowing and movement on construction sites and roads.
- Purpose**
To prevent blowing and movement of dust from exposed soil surfaces, reduce on and off-site damage, health hazards, and improve traffic safety.
- Conditions Where Practice Applies**
This practice is applicable to areas subject to dust blowing and movement where on and off-site damage is likely without treatment.
- Specifications**
- Temporary Methods**
- Mulches - See standards for vegetative stabilization with mulches only. Mulch should be crimped or tracked to prevent blowing.
 - Vegetative Cover - See standards for temporary vegetative cover.
 - Tillage - To roughen surface and bring clods to the surface. This is an emergency measure which should be used before soil blowing starts. Begin plowing on windward side of site. Chisel-type plows spaced about 12' apart, spring-toothed harrows, and similar plows are examples of equipment which may produce the desired effect.
 - Irrigation - This is generally done as an emergency treatment. Site is irrigated with water until the surface is moist. Repeat as needed. At no time should the site be irrigated to the point that runoff begins to flow.
 - Barriers - Solid board fences, all fences, snow fences, burlap fences, straw bales, and similar material can be used to control air currents and soil blowing. Barriers placed at right angles to prevailing currents at intervals of about 10 times their height are effective in controlling soil blowing.
- Permanent Methods**
- Permanent Vegetation - See standards for permanent vegetative cover, and permanent stabilization with sod. Existing trees or large shrubs may afford valuable protection if left in place.
 - Topsoiling - Covering with less erosive soil materials. See standards for topsoiling.
 - Stone - Cover surface with crushed stone or coarse gravel.
- References**
- Agriculture Handbook 346. Wind Erosion Forces in the United States and Their Use in Predicting Soil Loss.
 - Agriculture Information Bulletin 354. How to Control Wind Erosion, USDA-ARS.

SEQUENCE OF CONSTRUCTION

NOTIFY SEDIMENT CONTROL DIVISION 48 HOURS PRIOR TO START OF WORK

- Obtain grading permit. (day 1)
 - Install silt fences and super silt fences and remove any devices installed under F-11-034 that are designated as "to be removed" under this SDP. (day 2-6)
 - Install stabilized construction entrance. (day 7)
 - Excavate for foundation, rough grade and stabilize in accordance with the temporary seedbed notes (day 8-10)
 - Construct house, backfill and construct driveway. (day 11-80)
 - Final grade and stabilize in accordance with the permanent seedbed notes. Flush storm drain system (day 81-85)
 - Upon approval from the Howard County sediment control inspector, remove sediment control devices and stabilize any remaining disturbed areas (day 86-89)
- * - indicates single house construction

ENGINEER'S CERTIFICATE	
I CERTIFY THAT THIS PLAN FOR SEDIMENT AND EROSION CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.	
ENGINEER	10/3/2011 DATE
DEVELOPER'S CERTIFICATE	
I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN FOR SEDIMENT AND EROSION CONTROL AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT.	
DEVELOPER	10-4-11 DATE
THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT	
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING	
CHIEF, DEVELOPMENT ENGINEERING DIVISION	10/13/11 DATE
CHIEF, DIVISION OF LAND DEVELOPMENT	10-26-11 DATE
DIRECTOR	10/26/11 DATE



CONSTRUCTION SPECIFICATIONS

- 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.
- Chain link fence shall be fastened securely to the fence posts with wire ties. The lower tension wire, brace and trim rods, drive chains and post caps are not required except on the ends of the fence.
- Filter cloth shall be fastened securely to the chain link fence with ties spaced every 24" at the top and mid section.
- Filter cloth shall be embedded a minimum of 8" into the ground.
- When two sections of filter cloth abut each other, they shall be overlapped by 6" and folded.
- Maintenance shall be performed as needed and all bulges removed when "bulges" develop in the silt fence, or when silt reaches 50% of fence height.
- 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/min (max.)	Test: MSMT 322
Filtering Efficiency	75% (min.)	Test: MSMT 322

SUPER SILT FENCE DESIGN CRITERIA

Slope	Slope Steadiness	Slope Length (Maximum)	Silt Fence Length (Maximum)
0 - 10%	0 - 10:1	Unlimited	Unlimited
10 - 20%	10:1 - 5:1	200 feet	1,500 feet
20 - 35%	5:1 - 3:1	100 feet	1,000 feet
35 - 50%	3:1 - 2:1	50 feet	500 feet
50% +	2:1 +	100 feet	250 feet

NO.	DATE	REVISION
BENCHMARK ENGINEERS & LAND SURVEYORS & PLANNERS ENGINEERING, INC. 840 BALTIMORE NATIONAL PIKE SUITE 418 & ELLICOTT CITY, MARYLAND 21043 (P) 410-465-6105 (F) 410-465-6844 60 THOMAS JOHNSON DRIVE & FREDERICK, MARYLAND 21702 (P) 301-371-5008 (F) 301-371-5006 WWW.BE-CMLENGINEERS.COM		
OWNER: SECURITY DEVELOPMENT LLC P.O. BOX 417 ELLICOTT CITY, MARYLAND 21041 410-465-4244		
DEVELOPER: WILLIAMSBURG GROUP, LLC c/o ROBERT CORBETT 5485 HARRIS FARM ROAD, SUITE 200 COLUMBIA, MARYLAND 21044 410-997-8800		
CASCADE OVERLOOK SECTION III LOTS 1 thru 14		
TAX MAP: 31 GRID: 10 PARCEL: p/o 260 ZONED: R-EJ ELECTION DISTRICT NO. 1 HOWARD COUNTY, MARYLAND		
SEDIMENT & EROSION CONTROL NOTES AND DETAILS		
DATE:	OCTOBER, 2011	BEI PROJECT NO: 1676
DESIGN:	DBT	DRAWN: DBT
SCALE:	AS SHOWN	SHEET 7 OF 8

