

**BENCHMARK**  
 NAD83 HORIZONTAL  
 BENCHMARK ENGINEERING TRAVERSE #1  
 GPS REBAR AND CAP E 1360700.0456  
 N 541265.3877 ELEVATION: 302.16

BENCHMARK ENGINEERING TRAVERSE #2  
 GPS REBAR AND CAP E 1360876.9550  
 N 540859.2930 ELEVATION: 304.16

**VICINITY MAP**  
 SCALE: 1" = 2000'  
 ADC MAP: 5053  
 GRID: H6

**GENERAL NOTES**

- SUBJECT PROPERTY ZONED R-20 PER THE 2-2-04 COMPREHENSIVE ZONING PLAN AND THE COMP LITE ZONING AMENDMENTS EFFECTIVE 7-28-06.
- PROJECT BOUNDARY IS BASED ON BOUNDARY SURVEY BY BENCHMARK ENGINEERING, INC. IN FEBRUARY, 2013. TOPOGRAPHY IS BASED ON FIELD RUN TOPO PERFORMED BY BENCHMARK ENGINEERING, INC. IN FEBRUARY, 2013.
- THERE ARE NO LIMITS OF WETLANDS, STREAMS, THEIR REQUIRED BUFFERS, 100YR FLOODPLAIN OR STEEP SLOPES LOCATED ON THIS SITE.
- TO THE BEST OF OUR KNOWLEDGE, THERE ARE NO CEMETERIES LOCATED ON THIS PROPERTY.
- APPROVAL OF THIS ENVIRONMENTAL CONCEPT PLAN (ECP) DOES NOT CONSTITUTE AN APPROVAL OF ANY SUBSEQUENT AND ASSOCIATED SUBDIVISION AND/OR SITE DEVELOPMENT PLAN.
- THIS PROJECT COMPLIES WITH THE HOWARD COUNTY FOREST CONSERVATION REQUIREMENTS BY THE FILING OF A DECLARATION OF INTENT AS THE LIMIT OF CLEARING SHALL BE LESS THAN 20,000 S.F. AND THE SINGLE LOT IS GREATER THAN 40,000 S.F.
- REVIEW OF THIS PROJECT FOR COMPLIANCE WITH THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS AND THE HOWARD COUNTY ZONING REGULATIONS SHALL OCCUR AT THE SUBDIVISION AND/OR SITE DEVELOPMENT PLAN STAGES. THEREFORE, THE APPLICANT AND CONSULTANT SHOULD EXPECT ADDITIONAL AND MORE DETAILED COMMENTS (INCLUDING THOSE THAT MAY ALTER OVERALL SITE DESIGN) AS THIS PROJECT PROGRESSES.

**LEGEND**

- EXISTING TREELINE
- PROPOSED TREELINE
- PROJECT BOUNDARY
- IMPERVIOUS AREA
- ROOFTOP DISCONNECT FLOWPATH
- NON-ROOFTOP DISCONNECT AREA
- LIMIT OF DISTURBANCE
- SUPER SILT FENCE

**Site Analysis Data Sheet**

Gross Area	0.93 ac
100yr Floodplain	0.0 ac
Steep Slopes 15% or greater	0.0 ac
Net Area	0.93 ac
Wetlands	0.0 ac
Wetlands Buffer	0.0 ac
Stream	0.0 ac
Stream Buffer	0.0 ac
Forested Area (per FSD)	0.81 ac
Erodible Soils	0.0 ac
Limit of Disturbance	0.33 ac
Impervious Area	0.11 ac
Green Space	0.83 ac

**Design Narrative:**

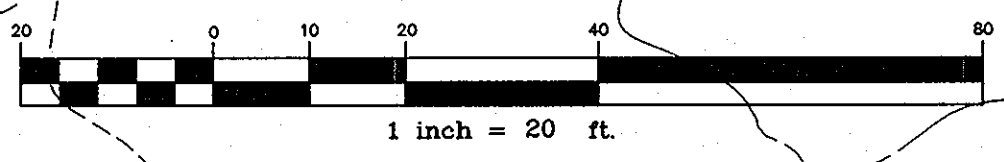
The proposed development will consist of 1 single family detached home with a driveway accessing off of the end of an existing driveway which accesses off of Savage Guilford Road. There are no environmentally sensitive areas (i.e. steep slopes 25% or greater, wetlands, streams, or their buffers) on this property.

Treatment of the house shall be via N-1 Disconnection of Rooftop Runoff. The driveway shall be treated via N-2 Disconnection of Non-Rooftop Runoff.

The natural flow pattern of the property shall be preserved. The proposed N-1 Disconnection of Rooftop is designed to disperse the rooftop runoff along different areas of the property so there is not one concentrated area of flow. This will help to mimic the layout of the natural ground as the runoff re-enters the ground as treated.

Reduction of impervious areas has been implemented as best as possible by utilizing the narrowest allowed driveways for single residence with a 2-car garage. The forest clearing being shown is the minimum necessary to construct the home and driveway.

As a result of utilizing environmental site design to the maximum extent practical, SWM has been completely addressed without structural practices.



**SOILS CHART - NRCS SOILS**

SYMBOL	HYDRIC	HYDROLOGIC GROUP	NAME
UcB	NO	D	URBAN LAND-CHILLUM-BELTSVILLE COMPLEX, 0 TO 5 PERCENT SLOPES

**ESD PRACTICE SUMMARY TABLE**

Practice	Contrib Area	Disconn Length	Discon Slope	ESD=	Pe Treated	
(N-1) Rooftop Disconnection #1	500 sf	75 ft	3.3%	685	1.0 inches	
(N-1) Rooftop Disconnection #2	500 sf	100 ft	2.3%		1.0 inches	
(N-1) Rooftop Disconnection #3	500 sf	100 ft	2.75%		1.0 inches	
(N-1) Rooftop Disconnection #4	500 sf	100 ft	2.25%		1.0 inches	
Practice	Pervious Length	Imp Length	Discon Length	Imp Ratio	Per Ratio	Pe Treated
(N-2) Non-Rooftop Disconnection #1	0'	20	20	>1:1	1:1	1.0 inches
(N-2) Non-Rooftop Disconnection #2	0'	12	12	>1:1	1:1	1.0 inches
(N-2) Non-Rooftop Disconnection #3	130'	12	6	0.5:1	<0.1:1	0.2 inches

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

*[Signature]* 5/1/13  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

*[Signature]* 5/09/13  
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

**BENCHMARK ENGINEERING, INC.**  
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 301-710-5666  
 WWW.BE-CMENGINEERING.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. 33697, Expiration Date: 7-23-2015.

**CLEVENGER PROPERTY**  
 PARCEL 908  
 RESIDENTIAL  
 TAX MAP: 0047 GRID: 0005 PARCEL: 0908 ZONED: R-20  
 SAVAGE GUILFORD ROAD ELECTION DISTRICT NO. 6 HOWARD COUNTY, MARYLAND

**ENVIRONMENTAL CONCEPT PLAN**

OWNER: MIKE AND ELIZABETH CLEVENGER  
 12008 OPEN RUN ROAD ELLICOTT CITY, MARYLAND 21042 443-463-4430

DESIGN: DBT DRAWN: DBT SCALE: AS SHOWN SHEET 1 OF 1

DATE: APRIL, 2013 BEI PROJECT NO: 2498