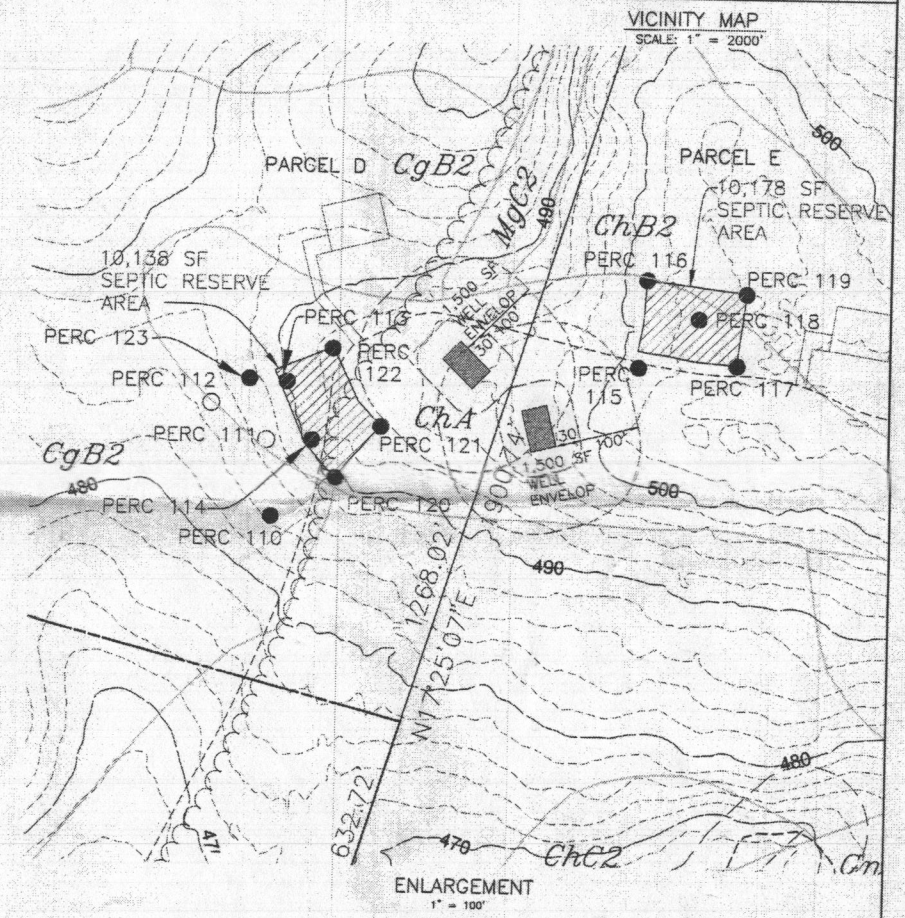
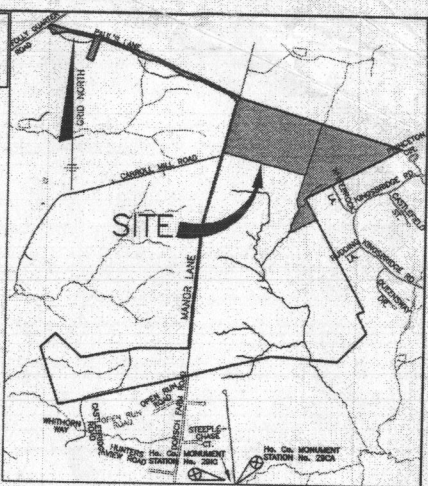


BENCHMARK
 NO. 00, 699CA 3/4" REBAR BY CAP
 NO. 00, 699CB STAMPED ALUMINUM OSM SET ON
 N 874628.130' E 1344328.000' ELEV=482.03
 N 372322.000' E 1264112.280' ELEV=486.71

- LEGEND**
- EX. CONTOURS (8'S)
 - EX. TREELINE
 - PASSING PERCOLATION TEST (CERTIFIED 12/28/06)
 - FAILING PERCOLATION TEST (CERTIFIED 2/28/06)
 - SEPTIC RESERVE AREA
 - WELL BOX LOCATION 1,500 SF
 - PROPOSED HOUSE AND DRIVEWAY
 - SOILS DELINEATION AND LABEL CUC2



- GENERAL NOTES**
- 1.) THE LOTS SHOWN HEREON COMPLY WITH THE MINIMUM OWNERSHIP WIDTH AND LOT AREA AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF THE ENVIRONMENT.
 - 2.) THIS AREA DESIGNATES A PRIVATE SEWAGE EASEMENT OF AT LEAST 10,000 S.F. AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF THE ENVIRONMENT FOR INDIVIDUAL SEWAGE DISPOSAL IMPROVEMENTS OF ANY NATURE IN THIS AREA ARE RESTRICTED UNTIL PUBLIC SEWER IS AVAILABLE. THIS EASEMENT SHALL BECOME NULL AND VOID UPON CONNECTION TO A PUBLIC SEWER SYSTEM. THE COUNTY HEALTH OFFICER SHALL HAVE THE AUTHORITY TO GRANT ADJUSTMENTS TO THE PRIVATE SEWAGE EASEMENT, REORDINATION OF A MODIFIED SEWAGE EASEMENT PLAN SHALL NOT BE REQUIRED.
 - 3.) EXACT LENGTH OF SEPTIC TRENCHES IS TO BE DETERMINED BY THE HEALTH DEPARTMENT AT THE TIME OF TRENCH LAYOUT AND INSPECTION.
 - 4.) TOPOGRAPHY SHOWN IS BASED ON HOWARD COUNTY GIS.
 - 5.) THERE ARE NO EXISTING WELLS OR SEPTIC SYSTEMS WITHIN 100' OF THIS PROJECT'S BOUNDARY EXCEPT AS NOTED.
 - 6.) PERCOLATION TEST RESULTS WERE CERTIFIED ON 12/28/06 BY THE HEALTH OFFICER. THIS PLAN ADDS THE WELL ENVELOPS AND THE SEPTIC RESERVE AREAS.
 - 7.) ANY CHANGES TO A PRIVATE SEWAGE EASEMENT SHALL REQUIRE A REVISED PERCOLATION CERTIFICATION PLAN.
 - 8.) SEPTIC TANK FOR THESE PARCELS ARE TO BE 2,000 GALLONS.
 - 9.) AN ADVANCED PRE-TREATMENT SYSTEM, WHICH UTILIZED CURRENTLY ACCEPTABLE TECHNOLOGY TO PERFORM NITROGEN REDUCTION, MUST BE INSTALLED ON THE SEPTIC SYSTEM REQUIREMENTS. THIS ADVANCED PRE-TREATMENT SYSTEM SHALL BE LIMITED TO THE SYSTEM THAT HAS COMPLETED AND PASSED THE FIELD VERIFICATION AS DETERMINED BY MOE AND LISTED IN THE WEBSITE FOR BAY RESTORATION FUND. THE BEST AVAILABLE TECHNOLOGY FOR REMOVING NITROGEN FROM ONSITE SYSTEMS. A SUPPLEMENTAL SITE PLAN WITH ALL OF THE NECESSARY DETAILS FOR INSTALLATION OF THE SEPTIC SYSTEM WILL BE REQUIRED PRIOR TO THE RELEASE OF THE BUILDING PERMITS AND SYSTEM INSTALLATION PERMITS.
 - 10.) THE PURPOSE OF THIS PERCOLATION CERTIFICATION PLAN IS TO SHOW THE REQUIRED 10,000 SQUARE FOOT SEPTIC RESERVE AREAS AND 1,500 SQUARE FOOT WELL ENVELOPS FOR PARCELS "D" AND "E".

PLAN VIEW
1" = 200'

SYMBOL	HYDRO	HYDROLOGIC GROUP	SOILS CHART
MS	YES	0	MADE LIME
MS2	YES	0	MADE LIME
MS3	YES	0	MADE LIME
MS4	YES	0	MADE LIME
MS5	YES	0	MADE LIME
MS6	YES	0	MADE LIME
MS7	YES	0	MADE LIME
MS8	YES	0	MADE LIME
MS9	YES	0	MADE LIME
MS10	YES	0	MADE LIME
MS11	YES	0	MADE LIME
MS12	YES	0	MADE LIME
MS13	YES	0	MADE LIME
MS14	YES	0	MADE LIME
MS15	YES	0	MADE LIME
MS16	YES	0	MADE LIME
MS17	YES	0	MADE LIME
MS18	YES	0	MADE LIME
MS19	YES	0	MADE LIME
MS20	YES	0	MADE LIME
MS21	YES	0	MADE LIME
MS22	YES	0	MADE LIME
MS23	YES	0	MADE LIME
MS24	YES	0	MADE LIME
MS25	YES	0	MADE LIME
MS26	YES	0	MADE LIME
MS27	YES	0	MADE LIME
MS28	YES	0	MADE LIME
MS29	YES	0	MADE LIME
MS30	YES	0	MADE LIME
MS31	YES	0	MADE LIME
MS32	YES	0	MADE LIME
MS33	YES	0	MADE LIME
MS34	YES	0	MADE LIME
MS35	YES	0	MADE LIME
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MS37	YES	0	MADE LIME
MS38	YES	0	MADE LIME
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MS50	YES	0	MADE LIME
MS51	YES	0	MADE LIME
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MS69	YES	0	MADE LIME
MS70	YES	0	MADE LIME
MS71	YES	0	MADE LIME
MS72	YES	0	MADE LIME
MS73	YES	0	MADE LIME
MS74	YES	0	MADE LIME
MS75	YES	0	MADE LIME
MS76	YES	0	MADE LIME
MS77	YES	0	MADE LIME
MS78	YES	0	MADE LIME
MS79	YES	0	MADE LIME
MS80	YES	0	MADE LIME
MS81	YES	0	MADE LIME
MS82	YES	0	MADE LIME
MS83	YES	0	MADE LIME
MS84	YES	0	MADE LIME
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MS91	YES	0	MADE LIME
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MS93	YES	0	MADE LIME
MS94	YES	0	MADE LIME
MS95	YES	0	MADE LIME
MS96	YES	0	MADE LIME
MS97	YES	0	MADE LIME
MS98	YES	0	MADE LIME
MS99	YES	0	MADE LIME
MS100	YES	0	MADE LIME

I CERTIFY THAT THE INFORMATION SHOWN HEREON IS BASED ON FIELD WORK PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION, AND IS CORRECT, TO THE BEST OF KNOWLEDGE AND BELIEF.

JOHN M. CARRIE, P.E., PLAN PREPARER FOR BENCHMARK ENGINEERING, INC. 2/4/15

APPROVED FOR PRIVATE WATER AND SEWERAGE SYSTEM HOWARD COUNTY HEALTH DEPARTMENT

HOWARD COUNTY HEALTH OFFICER 2/25/15

BENCHMARK ENGINEERING, INC.
 8440 BALTIMORE NATIONAL, PRINCE GEORGE, MARYLAND 21043
 (P) 410-465-8100 (F) 410-465-8844
 WWW.BE-ENG.COM

OWNER PARCEL E:
 MARY CARTER CARROLL, NATALIE C. ZIEGLER, TRUSTEE AND JESSICA M. ZIEGLER TRUSTEE
 11 RIVERSIDE DR., APT 16M6
 NEW YORK, NY 10023

OWNER PARCEL D:
 NATALIE C. ZIEGLER, TRUSTEE A
 4288 MANOR LANE
 ELLICOTT CITY, MD 21042
 410-740-6880

PROJECT: CARROLL/ZIEGLER BULK PARCEL SUBDIVISION NON-BUILDABLE BULK PARCELS D AND E

LOCATION: TAX MAP: 23, GRID: 23 P/O PARCEL: 148 SECOND ELECTION DISTRICT HOWARD COUNTY, MARYLAND

TITLE: PARCELS D AND E PERCOLATION CERTIFICATION PLAN

DATE: FEBRUARY, 2015 **PROJECT NO.:** 1939

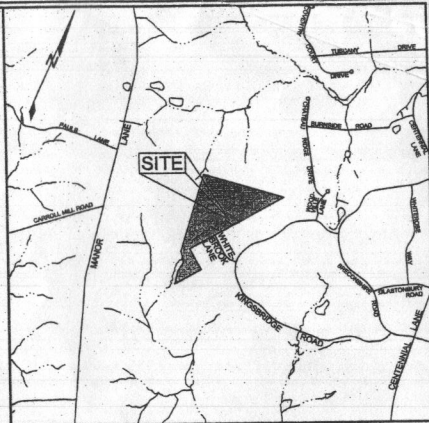
DRAFT: JC **DESIGN:** JC **CHECK:** JC **SCALE:** 1" = 200' **SHEET:** 1 OF 1

SOILS LEGEND			
SYMBOL	NAME / DESCRIPTION	GROUP	Kc FACTOR
GbA	GLENELO LOAM, 3 TO 8 PERCENT SLOPES	A	0.28
GbB	GLENELO LOAM, 8 TO 15 PERCENT SLOPES	A	0.28
GbC	GLENELO-URBAN LAND COMPLEX, 0 TO 3 PERCENT SLOPES	A	0.28
GbD	GLENELO-URBAN LAND COMPLEX, 0 TO 8 PERCENT SLOPES	C	0.43

NOTES:
 1) SOIL INFORMATION HAS BEEN TAKEN FROM THE UNITED STATES DEPARTMENT OF AGRICULTURE, NATURAL RESOURCES CONSERVATION SERVICE, WEBB SOIL SURVEY.
 2) HIGHLY ERODIBLE SOILS ARE THOSE SOILS WITH A SLOPE GREATER THAN 15 PERCENT OR THOSE SOILS WITH A SOIL ERODIBILITY FACTOR 'Kc' GREATER THAN 0.38 AND WITH A SLOPE GREATER THAN 5 PERCENT.

LEGEND

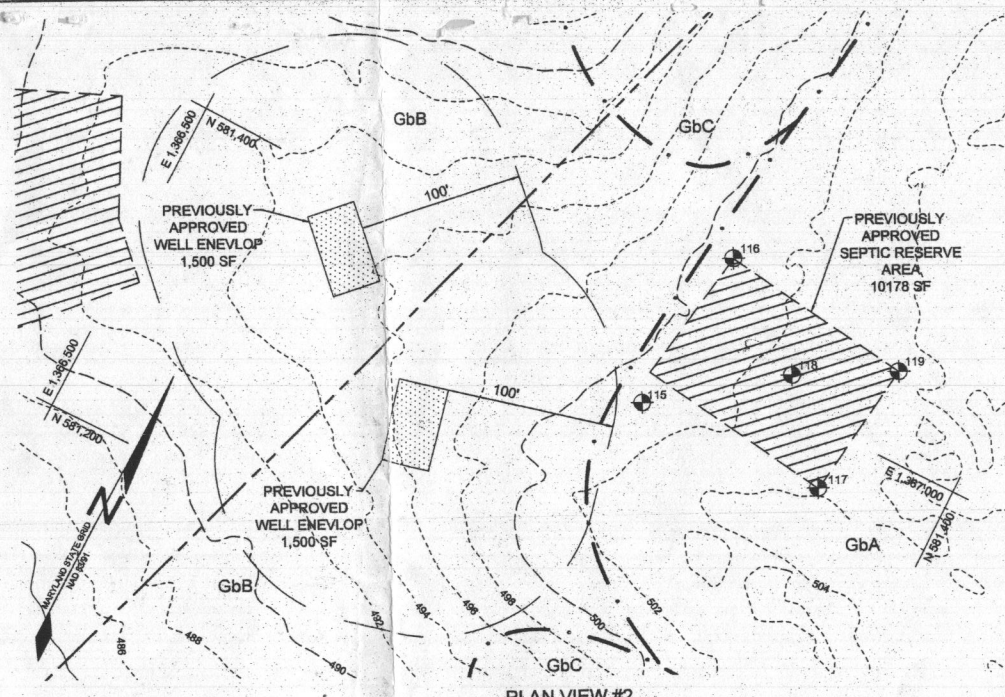
- EXISTING CONTOUR
- PROPOSED CONTOUR
- EXISTING SPOT ELEVATION
- PROPOSED SPOT ELEVATION
- DIRECTION OF FLOW
- EXISTING TREELINE
- PROPOSED TREELINE
- SOIL BOUNDARY
- EXISTING STREAM
- 100' STREAM BUFFER
- PROP. WELL AREA
- EXISTING FLOODPLAIN
- PERCOLATION TEST HOLE: PASSED
- PERCOLATION TEST HOLE: FAILED



VICINITY MAP
SCALE: 1"=200'

GENERAL NOTES

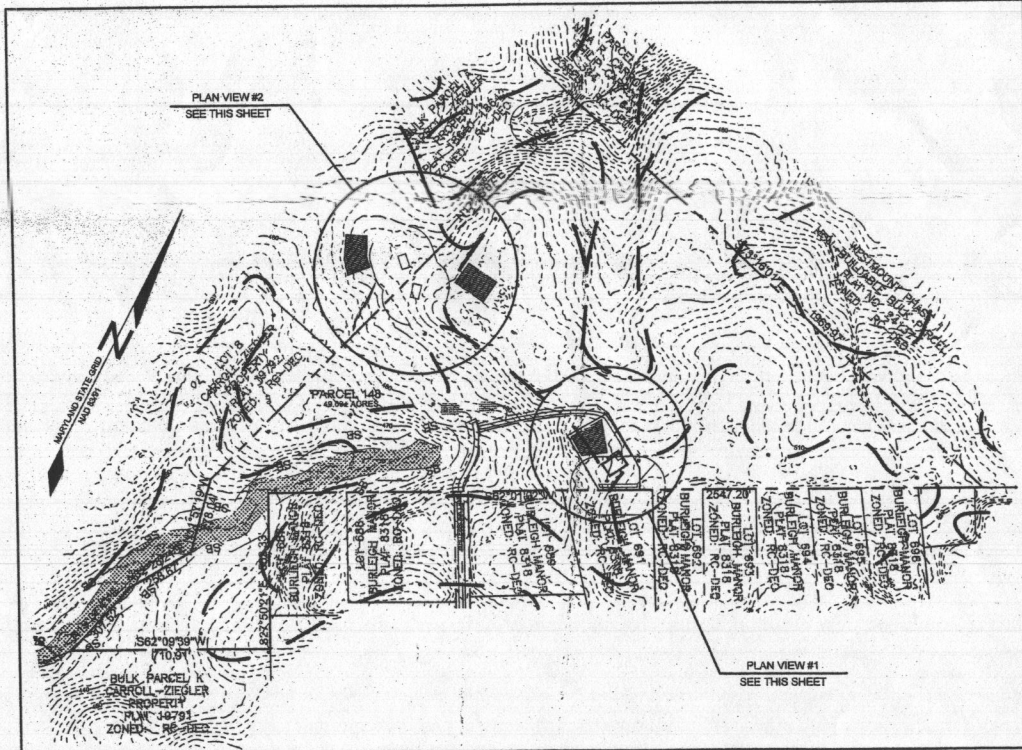
- SUBJECT PROPERTY ZONED RC-DEC PER 1006/2013 COMPREHENSIVE ZONING PLAN.
- TOTAL AREA OF PROPERTY = 60,000 AC.
- PRIVATE WATER AND PRIVATE SEWER WILL BE USED WITHIN THIS SITE.
- THIS AREA DESIGNATES A PRIVATE SEWAGE AREA OF AT LEAST 10,000 SF AS REQUIRED BY THE MARYLAND DEPARTMENT OF THE ENVIRONMENT FOR INDIVIDUAL SEWAGE DISPOSAL (COMAR 26.04.03). IMPROVEMENTS OF ANY NATURE IN THIS AREA ARE RESTRICTED UNTIL PUBLIC SEWERAGE IS AVAILABLE. THESE AREAS SHALL BECOME NULL AND VOID UPON CONNECTION TO A PUBLIC SEWERAGE SYSTEM. THE COUNTY HEALTH OFFICER SHALL HAVE THE AUTHORITY TO GRANT ADJUSTMENTS TO THE PRIVATE SEWAGE AREA. RECORDATION OF A MODIFIED SEWAGE AREA SHALL NOT BE NECESSARY.
- PLAT NO.: 19792
- DEED REFERENCE: LIBER 15008 FOLIO 408
- PROPERTY ADDRESS: 3881 WHITEBROOK LANE, ELLICOTT CITY, MARYLAND 21042
- THE LOT SHOWN HEREON COMPLY WITH THE MINIMUM OWNERSHIP, WIDTH AND LOT AREA AS REQUIRED BY THE MARYLAND DEPARTMENT OF THE ENVIRONMENT.
- ALL EXISTING WELLS, SEPTIC SYSTEMS AND SEWAGE DISPOSAL AREA WITHIN 100 FEET OF THE PROPERTY BOUNDARIES AND ALL EXISTING AND PROPOSED WELLS THAT ARE LOCATED WITHIN 200 FEET DOWN GRADIENT OF EXISTING OR PROPOSED SEPTIC SYSTEMS AND SEWAGE DISPOSAL AREA HAVE BEEN LOCATED.
- THE BOUNDARY SHOWN HERE ON IS BASED ON RECORD PLAT 19792.
- THE TOPOGRAPHY SHOWN WITHIN THE DEVELOPED AREA IS BASED ON A TOPOGRAPHIC SURVEY PERFORMED BY BENCHMARK ENGINEERING, INC. IN JANUARY & OCTOBER 2015.



PLAN VIEW #2
SCALE: 1"=50'



PLAN VIEW #1
SCALE: 1"=50'



OVERALL VIEW
SCALE: 1"=300'

PERCOLATION CERTIFICATION PLAN
ZIEGLER PROPERTY
 3881 WHITEBROOK LANE

TAX MAP 23 GRID 23
 3RD ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

DESIGN BY: PS
 DRAWN BY: ZS
 CHECKED BY: PS
 SCALE: AS SHOWN
 DATE: DECEMBER 16, 2019
 PROJECT #: 19-037
 SHEET #: 1 of 1

OWNER/DEVELOPER
 NATALIE ZIEGLER
 4288 MANOR LANE
 ELLICOTT CITY, MARYLAND 21042
 NZIEGLER@AOL.COM

SILL ENGINEERING GROUP, LLC
 11130 Dovedale Court, Suite 200
 Marriottsville, Maryland 21104
 Phone: 443.325.5976
 Fax: 410.696.2022
 Email: info@sillengineering.com
 Civil Engineering for Land Development

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. 32025, EXPIRATION DATE: JUNE 26, 2021

APPROVED: FOR PRIVATE WATER AND PRIVATE SEWAGE SYSTEMS IN ACCORDANCE WITH THE MASTER PLAN OF HOWARD COUNTY.

I CERTIFY THAT THE INFORMATION SHOWN HEREON IS BASED ON FIELD WORK PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION, AS IS CORRECT, TO THE BEST OF MY KNOWLEDGE AND BELIEF.

Paul M. Sill
 PAUL M. SILL, PE, LEED AP
 LICENSED PROFESSIONAL ENGINEER #32025
 DATE: 12/16/19

THE PURPOSE FOR THIS PERCOLATION CERTIFICATION PLAN IS TO ESTABLISH A WELL AREA AND A SEWAGE DISPOSAL AREA FOR PROPOSED LOT 1.

*14' to prop
7' w/ of well box*

