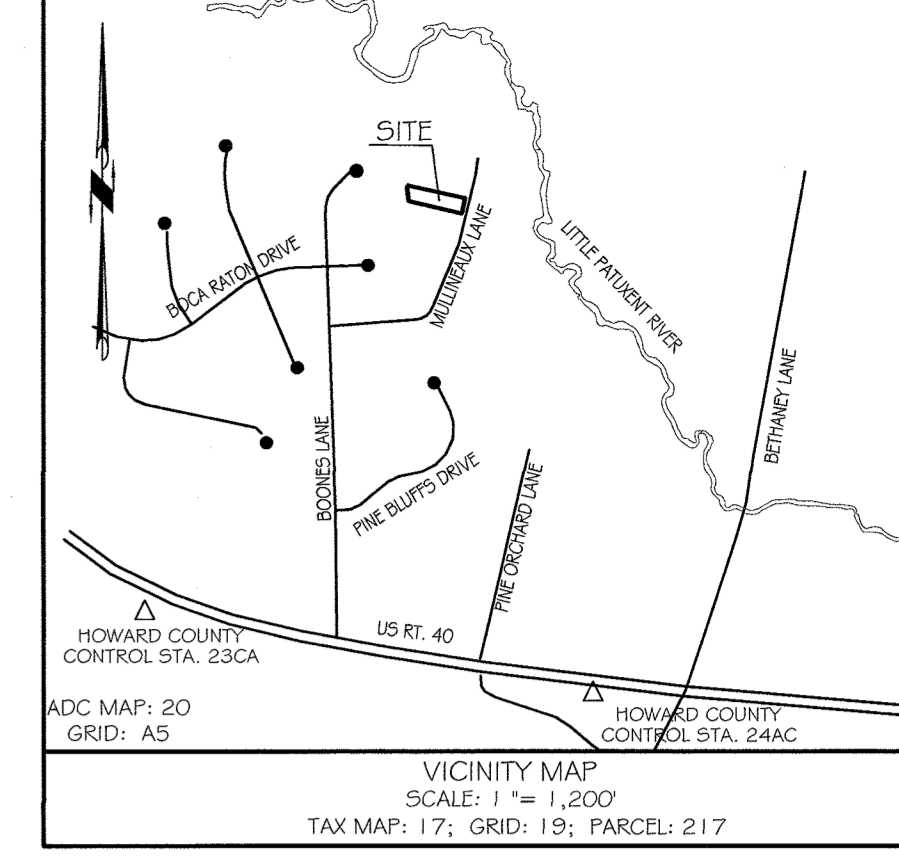
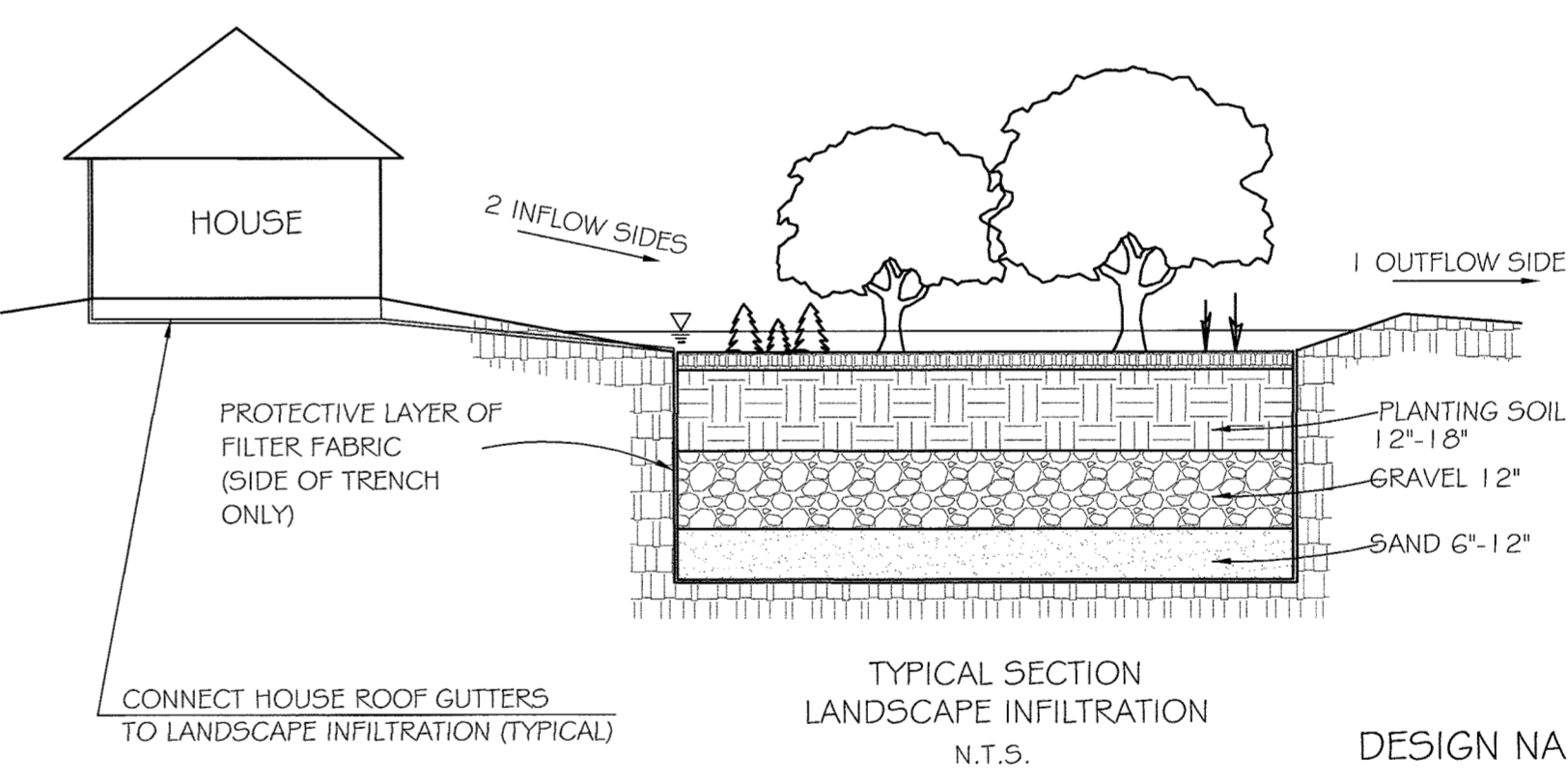
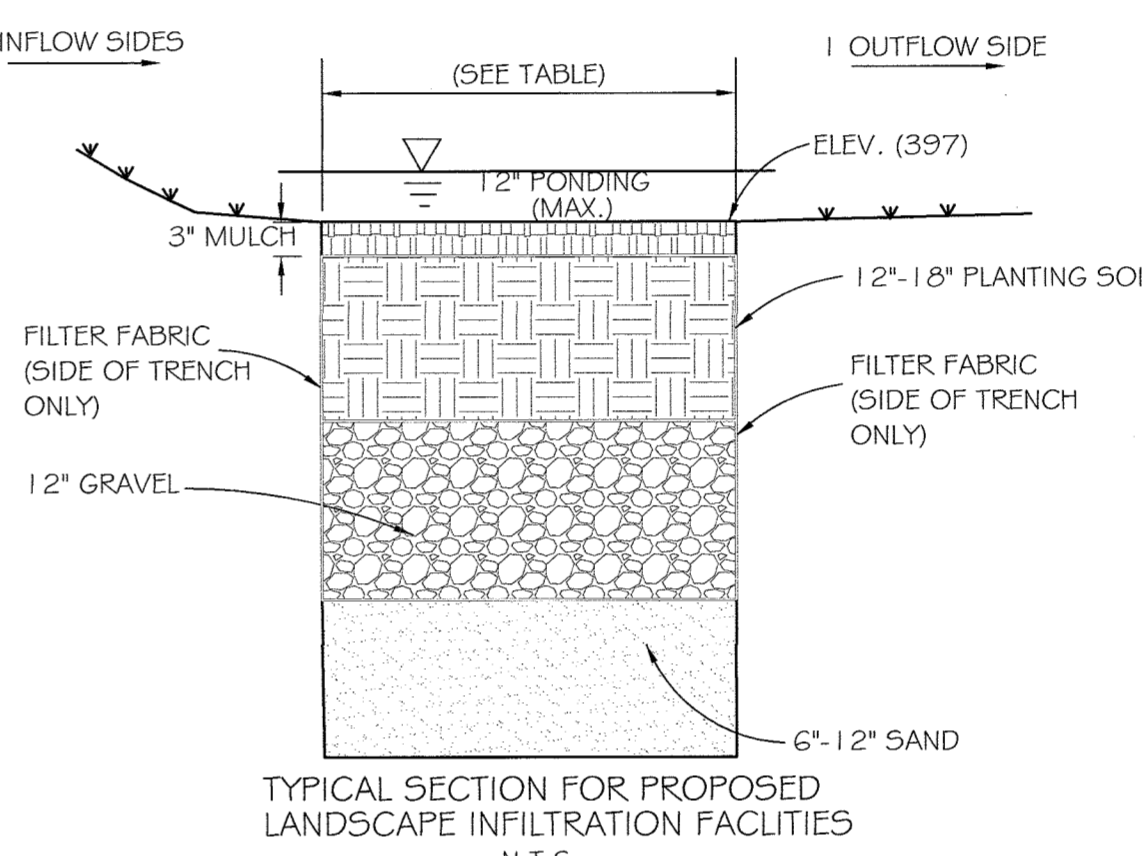


**LEGEND**

DIVERSION FENCE	DF	DF	DF
SILT FENCE	SF	SF	SF
LIMIT OF DISTURBANCE	LOD		
PROPOSED HOUSE SITE:	[House Footprint]		
TO BE REMOVED	[Hatched Area]		
EXISTING TREELINE	[Wavy Line]		
SOIL LINE	[Dashed Line]		
STABILIZED CONSTRUCTION ENTRANCE	[SCE Box]		
LANDSCAPE INFILTRATION	[Infiltration Area]		
DRAINAGE AREA TO SWM FACILITY	[Dashed Box]		



- GENERAL NOTES**
- OWNER: GEORGE & SUSAN VARGHESE  
DEED REFERENCE: LIBER 17221 AT FOLIO 434  
DATE: OCTOBER 27, 2016  
GRANTOR: MARGARET ANN HARPER
  - TAX MAP: 17 GRID: 19 PARCEL: 217
  - THE SUBJECT PROPERTY IS NOT LOCATED IN SPECIAL FLOOD HAZARD AREA PER NATIONAL FLOOD INSURANCE PROGRAM, FLOOD INSURANCE RATE MAP, COMMUNITY PANEL NO. 24027C00400.
  - TOPOGRAPHY & PLANIMETRIC FEATURES SHOWN HEREON TAKEN FROM COPYRIGHTED GIS DATA FROM HOWARD COUNTY, SUPPLEMENTED WITH FIELD LOCATIONS BY VANMAR ASSOCIATES, INC. CONTOUR INTERVAL IS 2 FEET. VERTICAL DATUM IS NAVD83.
  - THE BASIS OF BEARINGS FOR THIS PLAN IS THE MARYLAND COORDINATE SYSTEM (NAD83) PER HOWARD COUNTY SURVEY CONTROL STATIONS STA. 23CA N. 586,035.645 E. 1,348,305.607 STA. 24AC N. 587,389.550 E. 1,351,173.252 DISTANCES SHOWN HEREON ARE GROUND DISTANCES.
  - THERE ARE NO WELLS OR SEPTIC SYSTEMS WITHIN 100' OF THE PROPERTY BOUNDARY UNLESS OTHERWISE SHOWN HEREON.
  - SOIL TYPE: GLENELG URBAN LAND (GhB), GLADSTONE SILT LOAM (GhC) SOILS MAP NO. 27
  - THE SUBJECT PROPERTY IS ZONED R-20 IN ACCORDANCE WITH THE OCTOBER 6, 2013 COMPREHENSIVE ZONING REGULATIONS.
  - THE LOTS SHOWN HEREON COMPLY WITH THE MINIMUM OWNERSHIP WIDTH AND LOT AREAS REQUIRED BY THE MARYLAND DEPARTMENT OF THE ENVIRONMENT.
  - THERE ARE NO HISTORIC SITES OR CEMETERIES ON THIS PROPERTY.
  - APPROVAL OF THIS ECP PLAN DOES NOT CONSTITUTE ANY APPROVALS OF SUBSEQUENT SUBDIVISION PLANS, SITE DEVELOPMENT PLANS OR RED-LINE REVISIONS TO APPROVED SDP PLANS, FOREST CONSERVATION PLANS AND GRADING OR BUILDING PERMITS. THE APPLICANT AND CONSULTANT SHOULD EXPECT ADDITIONAL AND MORE DETAILED COMMENTS THAT MAY ALTER THE SITE DESIGN, HOUSE OR STRUCTURE LOCATION, DRIVEWAY LOCATION, GRADING, TREE CLEARING AND/OR OTHER REQUIREMENTS AS THE DEVELOPMENT PLAN PROGRESSES THROUGH THE PLAN REVIEW AND/OR PERMIT APPLICATION PROCESS IN ACCORDANCE WITH THE SUBDIVISION, LAND DEVELOPMENT AND ZONING REGULATIONS AND THE FOREST CONSERVATION REQUIREMENTS.
  - NO ENVIRONMENTAL FEATURES EXIST WITHIN THE LOD.
  - THERE ARE NO STEEP SLOPES, FLOODPLAIN, WETLANDS OR OTHER ENVIRONMENTAL FEATURES LOCATED ON THE SITE AS DETERMINED DURING A FIELD INVESTIGATION PERFORMED BY VANMAR ASSOCIATES, INC. OCTOBER, 2016.
  - EXISTING WATER AND SEWER PER MULLINEAUX LANE WATER AND SEWER AS-BUILT PLAN CF-W-8186.
  - DISTURBED AREA = 18,000 S.F.
  - THIS LOT IS LESS THAN 40,000 SF AND IS EXEMPT BASED ON SEC. 16.1-202(b)(1)(i) FROM FOREST CONSERVATION MITIGATION.
  - THE LANDSCAPING WILL BE ADDRESSED AT THE SDP STAGE.



- DESIGN NARRATIVE**
- THE PROPOSED DEVELOPMENT CONSISTS OF THE REMOVAL & CONSTRUCTION OF ONE (1) SINGLE FAMILY HOME AND DRIVEWAY.
  - THERE ARE NO STEEP SLOPES, WATERWAYS, FLOODPLAINS, WETLANDS OR BUFFERS ON THE PROPERTY AND THIS PLAN IS EXEMPT FROM FOREST CONSERVATION.
  - NATURAL FLOW PATTERNS WILL NOT BE AFFECTED BY THE PROPOSED SUBDIVISION.
  - IMPERVIOUS AREAS HAVE BEEN REDUCED THROUGH THE USE OF DISCONNECTIONS.
  - STORMWATER MANAGEMENT REQUIREMENTS WILL BE ADDRESSED USING (M-3) LANDSCAPE INFILTRATION. SWM IS IN ACCORDANCE WITH THE 2009 REVISIONS OF THE 2000 MD STORMWATER DESIGN MANUAL AND ADDRESSES ESD TO THE MEP.

**SWM TREATMENT SUMMARY**

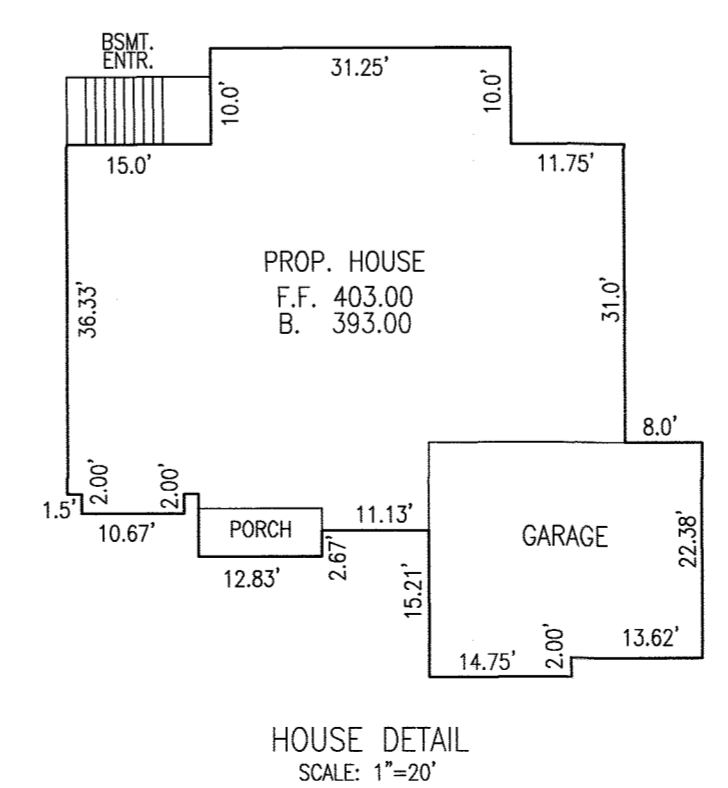
PRACTICE	DRAINAGE AREA	IMPERVIOUS AREA TREATED	METHODOLOGY	VOLUME (ESD) REQUIRED	VOLUME (ESD) PROVIDED
M-3 LANDSCAPE INFILTRATION (HOUSE AND DRIVEWAY)	14,000 S.F.	4,734 S.F.	$ESD_v = P_e \cdot R_v \cdot A \cdot I \cdot 2$ where $P_e = 1.0$ & $R_v = 0.95$	429 c.f.	616 c.f.
TOTAL ESD PROVIDED				429 c.f.	616 c.f.
ESD <sub>v</sub> REQUIRED				429 c.f.	

**SITE ANALYSIS DATA SHEET**

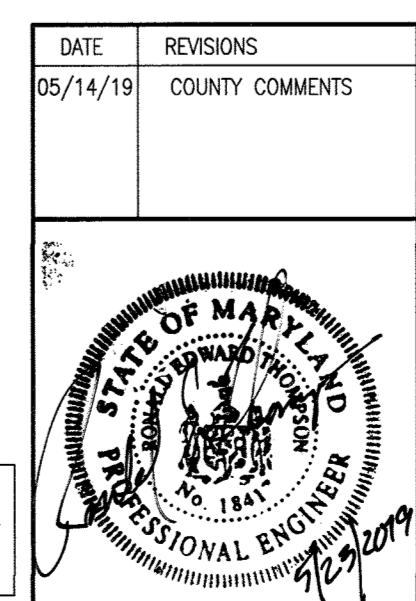
	ACRES
EXISTING SITE USE	RESIDENTIAL
WETLANDS	0.00
WETLANDS BUFFER	0.00
FLOODPLAIN	0.00
FORESTS	0.00
STEEP SLOPES (15-24%)	0.00
STEEP SLOPES (25% OR GREATER)	0.00
TOTAL PROJECT AREA	0.79
LOD AREA	0.42
GREEN OPEN SPACE AREA	0.00
EX. IMPERVIOUS AREA	0.11
PROP. IMPERVIOUS AREA	0.11
HIGHLY ERODIBLE SOILS IN PROJECT AREA	0.729

**SOIL LEGEND**

MAP SYMBOL	MAPPING UNIT	HYDROLOGIC SOIL GROUP	HYDRIC COMPONENTS	K <sub>w</sub>	SLOPE
GhC	GLADSTONE SILT LOAM	A	NO	0.32	8-15%
GhB	GLENELG - URBAN LAND COMPLEX	B	NO	0.43	0-8%



**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. 18617, Expiration Date: 3-18-19.



**ENVIRONMENTAL CONCEPT PLAN**  
3028 MULLINEAUX LANE  
LOT 4  
MULLINEAUX HEIGHTS  
PLAT BOOK 5 FOLIO 1

TAX MAP: 17 GRID NO: 19 PARCEL NO: 217  
ELECTION DISTRICT: No. 2  
HOWARD COUNTY, MARYLAND  
EX. ZONING: R-20

SCALE: 1" = 30'  
DATE: MARCH 2019  
SHEET 1 OF 1

**VANMAR ASSOCIATES, INC.**  
Engineers Surveyors Planners  
310 South Main Street Mount Airy, Maryland 21771  
(301) 829-2890 (301) 831-3015 (410) 549-2751  
Fax (301) 831-5603 ©Copyright, Latest Date Shown

**APPROVED**  
HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

*Kent Bedrosian* 5-28-19  
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

*Chad Chubb* 6-6-19  
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE