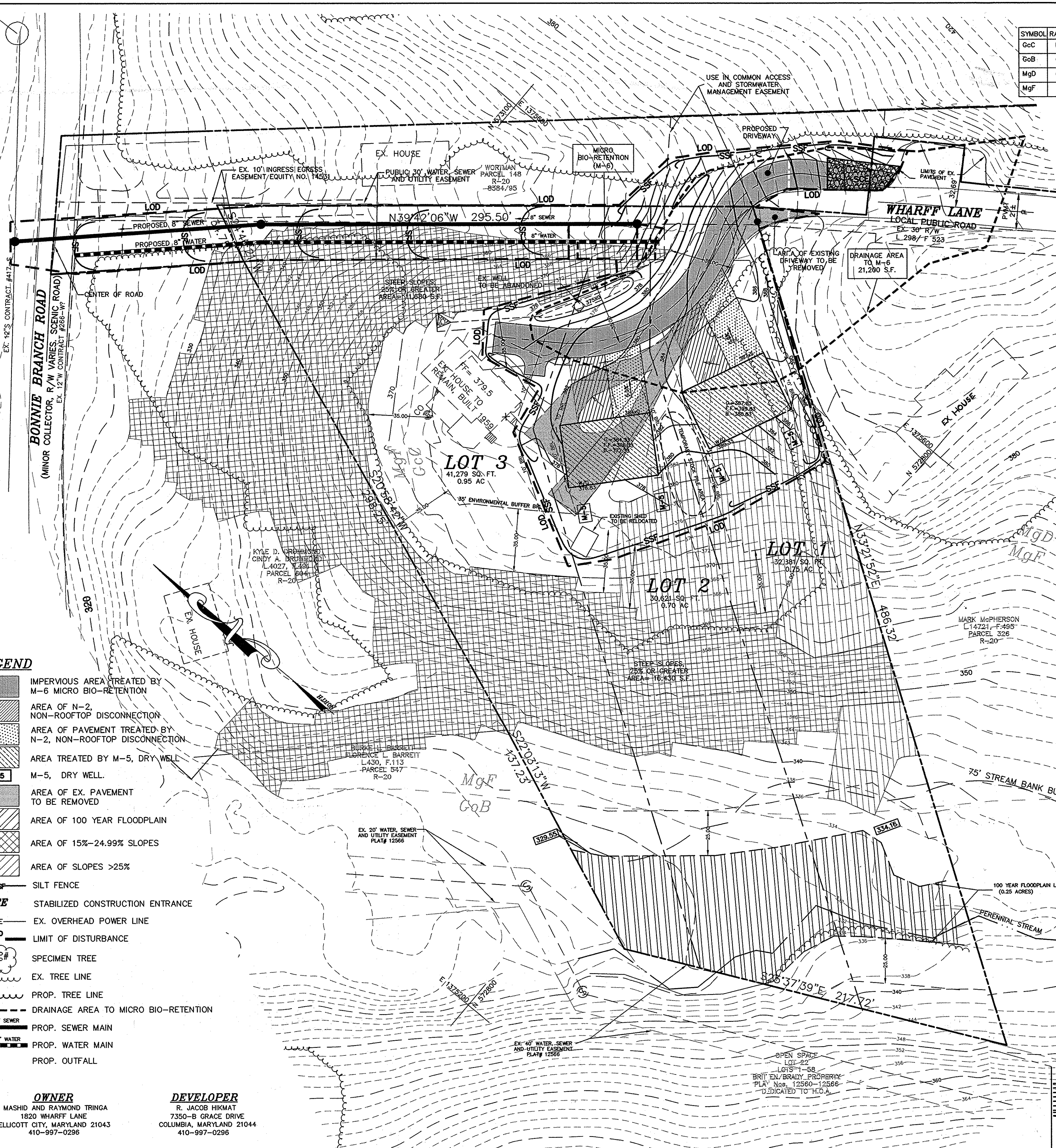
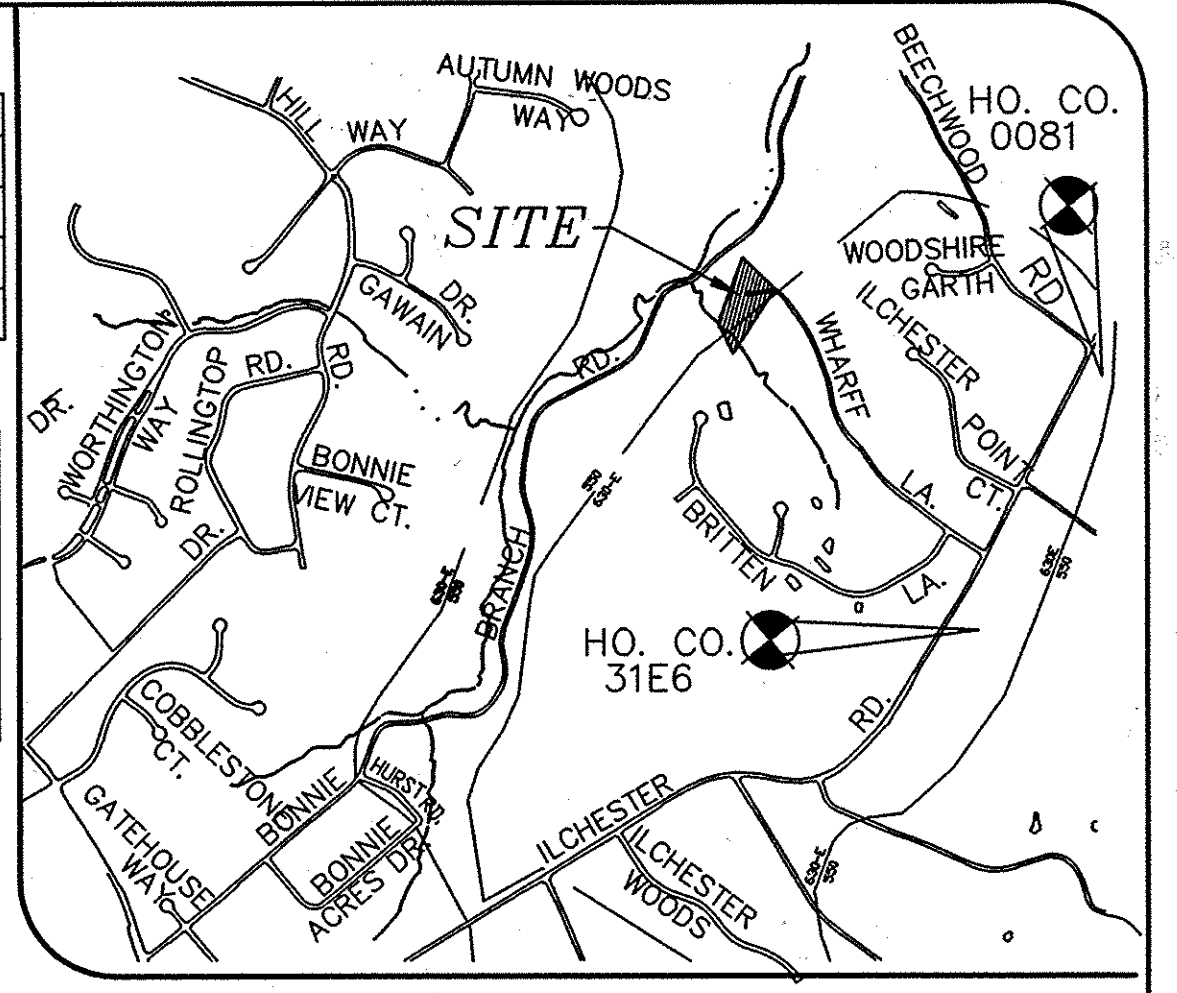


SOILS TABLE				
SYMBOL	RATING	NAME	K FACTOR	MAP #
GcC	(B)	GLADSTONE-LEGORE COMPLEX, 8-15% SLOPES	.20	19
GcB	(C)	GLENVILLE-ODORUS SILT LOAM, 0-8% SLOPES	.37	19
MgD	(B)	MANOR-BANNERTOWN SANDY LOAM, 15-25% SLOPES, ROCKY	.24	19
MgF	(B)	MANOR-BANNERTOWN SANDY LOAM, 25-65% SLOPES, VERY ROCKY	.24	19

SWM PRACTICES SCHEDULE			
AREA	PROPOSED PRACTICES	REQUIRED ESDv	PROVIDED ESDv
LOT 1	N-2, NON-ROOFTOP DISCONNECTION M-5, DRY WELLS	348.0 C.F.	357.3 C.F.
LOT 2	N-2, NON-ROOFTOP DISCONNECTION M-5, DRY WELLS	336.2 C.F.	349.4 C.F.
UIC	M-2, MICRO BIO-RETENTION	561.5 C.F.	595.0 C.F.



SITE ANALYSIS DATA:

- AREA OF THE SITE = 2.41 AC ±
- AREA OF WETLANDS AND ITS BUFFERS = 0
- AREA OF FLOODPLAIN AND ITS BUFFERS = 0.45 AC ±
- AREA OF EXISTING FOREST = 0.68 AC ±
- AREA OF STREAM BUFFER = 0.44 AC ±
- AREA OF SLOPES 25% OR GREATER = 0.65 AC ±
- AREA OF SLOPES 15%-24.99% = 3.05 AC ±
- AREA OF ERODABLE SOILS = 0
- LIMIT OF DISTURBANCE AREA = 0.90 AC ±
- TWO NEW SINGLE FAMILY DETACHED LOTS ARE PROPOSED.
- PROPOSED GREEN OPEN SPACE AREA = 2.14 AC ±
- PROPOSED IMPERVIOUS AREA = 0.23 AC ±
- IN ACCORDANCE WITH HOWARD COUNTY REGULATIONS, FEE-IN-LIEU OF OPEN SPACE IS PROPOSED.

NOTES:

- SITE ANALYSIS DATA:
ADDRESS: 4820 WHARFF LANE, ELLICOTT CITY, MD 21043
LOCATION: TAX MAP: 31 PARCEL: 315 GRID: 10
ELECTION DISTRICT: SECOND
ZONING: R-20
TOTAL TRACT AREA: 2.41 AC ±
NUMBER OF LOTS PROPOSED: 3
AREA OF ROAD DEDICATION: 0
LIMIT OF DISTURBED AREA: 0.90 AC ±
PROPOSED USE FOR SITE: RESIDENTIAL
TYPE OF PROPOSED UNIT: SFD
- HORIZONTAL AND VERTICAL DATUMS ARE RELATED TO THE MARYLAND STATE PLANE COORDINATE SYSTEM AS PROJECTED FROM HOWARD COUNTY CONTROL STATIONS NO. 31E6 AND 0081
STA. No. 31E6 N 570852.354 E 1,376,700.52 ELEV. 482.194
STA. No. 0081 N 572,335.335 E 1,377,504.03 ELEV. 477.946
- THIS PLAN IS SUBJECT TO THE AMENDED FIFTH EDITION OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS (COUNCIL BILL 45-2003). DEVELOPMENT OR CONSTRUCTION OF THESE LOTS MUST COMPLY WITH SETBACK AND BUFFER REGULATIONS IN EFFECT AT THE TIME OF SUBMISSION OF THE SITE DEVELOPMENT PLAN, WAIVER PETITION OR BUILDING/GRADING PERMIT.
- SITE DEVELOPMENT PLAN APPROVAL BY THE DEPARTMENT OF PLANNING AND ZONING IS REQUIRED PRIOR TO BUILDING PERMITS BEING ISSUED FOR THE CONSTRUCTION OF RESIDENTIAL DWELLINGS ON THESE LOTS.
- FOREST STAND AND WETLAND DELINEATIONS WAS PREPARED BY ECO-SCIENCE PROFESSIONAL. NO WETLANDS EXIST ON SITE AS CERTIFIED IN THE WETLAND LETTER PREPARED BY MILDBERG, BOENDER & ASSOC., INC. IN JULY 2014.
- USE 1 STREAM AND ITS 75' BUFFER EXIST ON SITE.
- FOREST CONSERVATION OBLIGATION FOR THIS SUBDIVISION WILL BE FULFILLED BY ON SITE RETENTION.
- APPROVAL OF THIS ECP DOES NOT CONSTITUTE ANY APPROVAL OF SUBSEQUENT SUBDIVISION OR SITE DEVELOPMENT PLANS. FURTHER COMMENTS WILL BE GENERATED UPON REVIEW OF THE APPLICABLE DEVELOPMENT PLANS IN ACCORDANCE WITH THE SUBDIVISION AND ZONING REGULATIONS. THE APPLICANT AND CONSULTANT SHOULD EXPECT ADDITIONAL AND MORE DETAILED REVIEW COMMENTS INCLUDING COMMENTS THAT MAY ALTER THE OVERALL SITE DESIGN AS THIS PROJECT PROGRESSES THROUGH THE PLAN REVIEW PROCESS.
- ALL EXISTING STRUCTURES ON LOT 3 ARE TO REMAIN UNLESS OTHERWISE NOTED ON THE PLAN.
- FLOODPLAIN STUDY WAS PREPARED BY MILDBERG, BOENDER & ASSOC. AND APPROVED UNDER F-4-001.
- NO SPECIMEN TREES WERE LOCATED ON SITE.

ESD NARRATIVE

- THERE IS APPROXIMATELY 0.65 ACRES OF FORESTED AREA ON THE PROPERTY. SITE CONTAINS STEEP SLOPES, STREAM AND FLOODPLAIN. NO WETLANDS EXIST ON-SITE. ALL THE ENVIRONMENTAL SENSITIVE AREAS WILL BE PRESERVED. THE PROPOSED DISCONNECTIONS AND DRY WELLS AND MICRO BIO-RETENTION FACILITY WILL PROVIDE STORMWATER QUALITY TREATMENT FOR THE NEW DEVELOPMENT.
- THE IMPROVEMENTS AND DEVELOPED AREA WILL MAINTAIN THE EXISTING DRAINAGE PATTERNS AS CLOSELY AS POSSIBLE. NO IMPACT IS PROPOSED THAT WOULD ALTER ANY NATURAL FLOW PATTERNS.
- NON-STRUCTURAL PRACTICES WERE USED TO THE MAXIMUM EXTENT POSSIBLE. NON-ROOFTOP DISCONNECTIONS WERE UTILIZED WHERE FEASIBLE. DUE TO THE EXISTING TOPOGRAPHY AND LIMITED SIZE OF THE LOTS, PROPOSED NON-STRUCTURAL PRACTICES WERE NOT PROVIDING ALL THE REQUIRED ESDv.
- THE REQUIRED EROSION AND SEDIMENT CONTROL MEASURES WILL BE IN ACCORDANCE WITH THE LATEST MDE STANDARDS AND SPECIFICATIONS UTILIZING SILT FENCES AND SUPER SILT FENCES. NO CONCENTRATION FLOW IS PROPOSED. NO SEDIMENT TRAPS OR BASINS ARE REQUIRED.
- TABLE 5.2, SUMMARY OF SITE DEVELOPMENT STRATEGIES WERE UTILIZED TO THE EXTENT ALLOWABLE BY THE CURRENT HOWARD COUNTY ZONING AND LAND DEVELOPMENT REGULATIONS BY UTILIZING A SHARED DRIVEWAY AND MINIMIZING EARTH DISTURBANCE.
- IN DESIGNING THIS PROJECT, AND AFTER WE PLANNED THE PROJECT TO MINIMIZE IMPERVIOUS AREAS, WE UTILIZED ESD MEASURES IN THE FOLLOWING ORDER OF PREFERENCE:
A. DISCONNECTION OF NON-ROOFTOP (N-2)
B. MICRO-SCALE PRACTICES (M-5) AND (M-6)

LEGEND

- IMPERVIOUS AREA TREATED BY M-6 MICRO BIO-RETENTION
- AREA OF N-2, NON-ROOFTOP DISCONNECTION
- AREA OF PAVEMENT TREATED BY N-2, NON-ROOFTOP DISCONNECTION
- AREA TREATED BY M-5, DRY WELL
- M-5, DRY WELL
- AREA OF EX. PAVEMENT TO BE REMOVED
- AREA OF 100 YEAR FLOODPLAIN
- AREA OF 15%-24.99% SLOPES
- AREA OF SLOPES >25%
- SILT FENCE
- STABILIZED CONSTRUCTION ENTRANCE
- EX. OVERHEAD POWER LINE
- LIMIT OF DISTURBANCE
- SPECIMEN TREE
- EX. TREE LINE
- PROP. TREE LINE
- DRAINAGE AREA TO MICRO BIO-RETENTION
- PROP. SEWER MAIN
- PROP. WATER MAIN
- PROP. OUTFALL

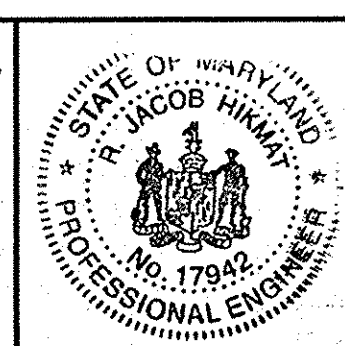
OWNER
MASHID AND RAYMOND TRINGA
1820 WHARFF LANE
ELLICOTT CITY, MARYLAND 21043
410-997-0296

DEVELOPER
R. JACOB HIKMAT
7350-B GRACE DRIVE
COLUMBIA, MARYLAND 21044
410-997-0296

APPROVED: DEPARTMENT OF PLANNING AND ZONING

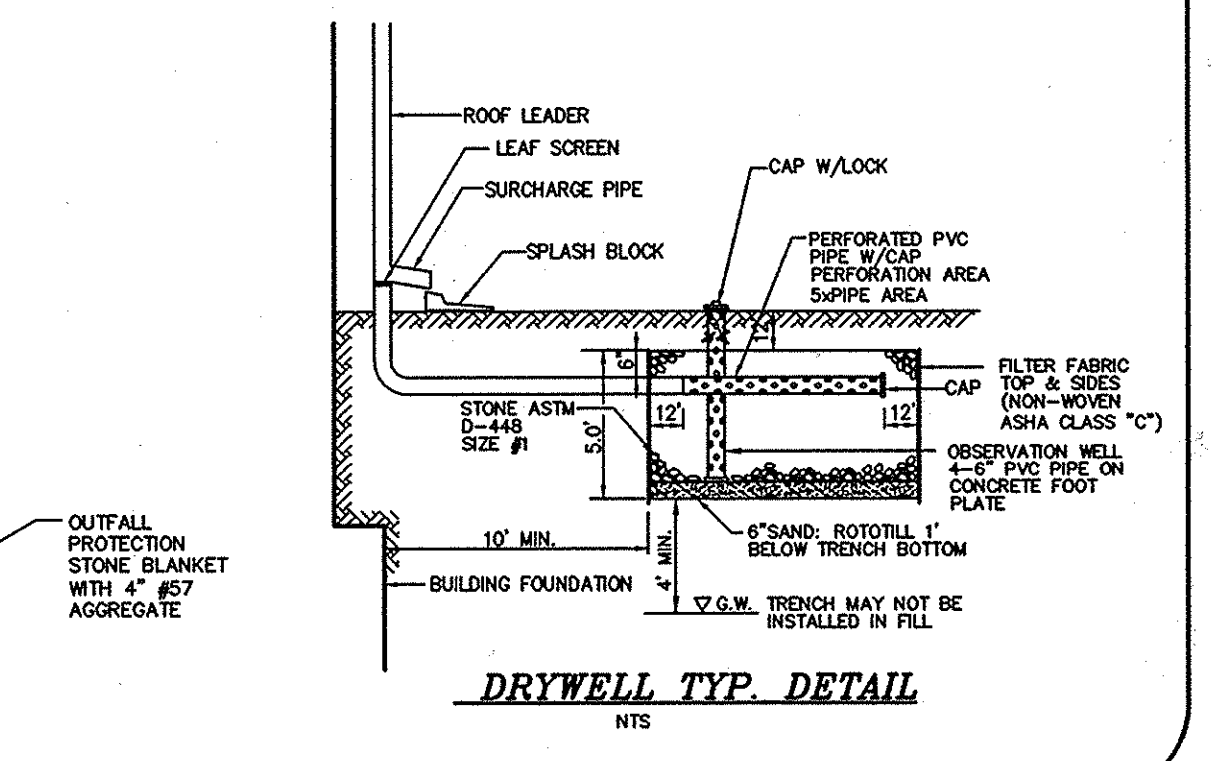
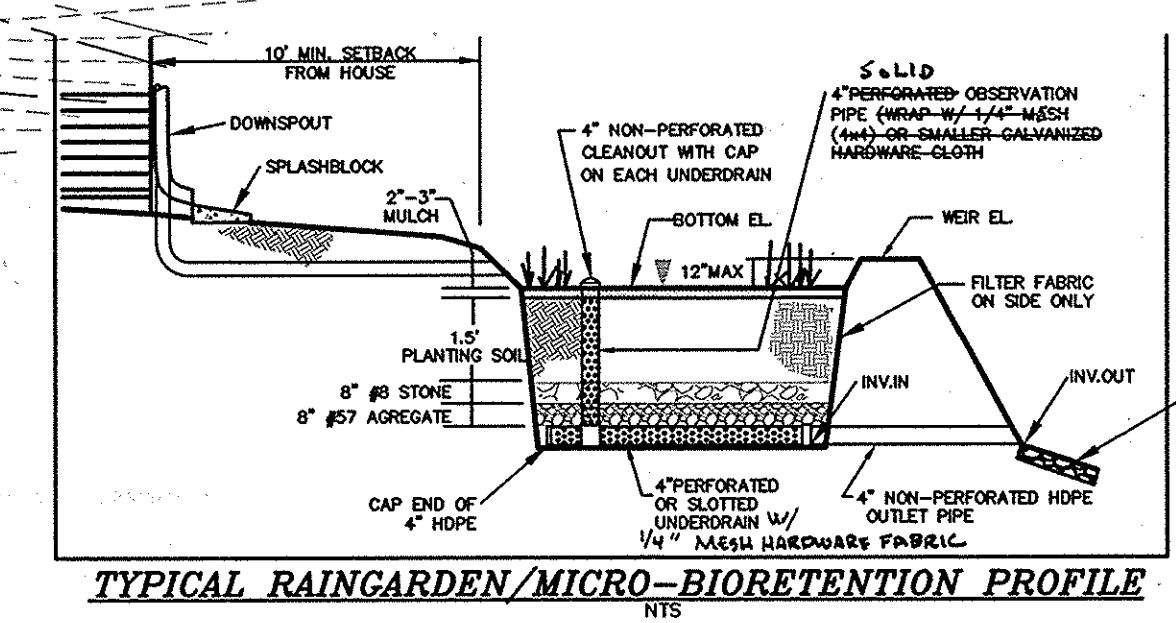
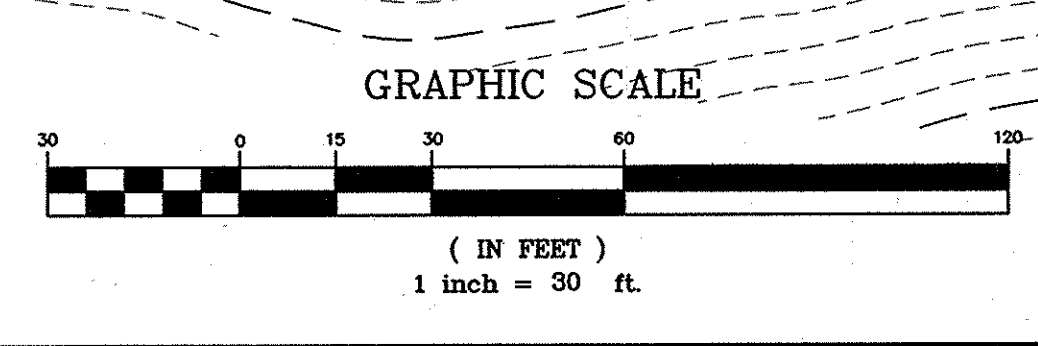
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 DATE: 9/26/14

CHIEF, DIVISION OF LAND DEVELOPMENT
 DATE: 9/25/14



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. 17942, EXP DATE 09/03/16

R. JACOB HIKMAT P.E.
DATE: 9/17/14



date: SEP 2014
project: 01-037
illustration: MAM
scale: 1"=30'approval: RH

date: _____
description: _____
revisions: _____

BRANDON WOODS
LOTS 1 THRU 3
TAX MAP 31 PARCEL 315 GRID 10
SECOND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
ENVIRONMENTAL CONCEPT PLAN (ECP)

MILDBERG, BOENDER & ASSOC., INC.
Engineers Planners Surveyors
7350-B Grace Drive, Columbia, Maryland 21044
(410) 997-0296 Tel. (410) 997-0298 Fax.

1 OF 1

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