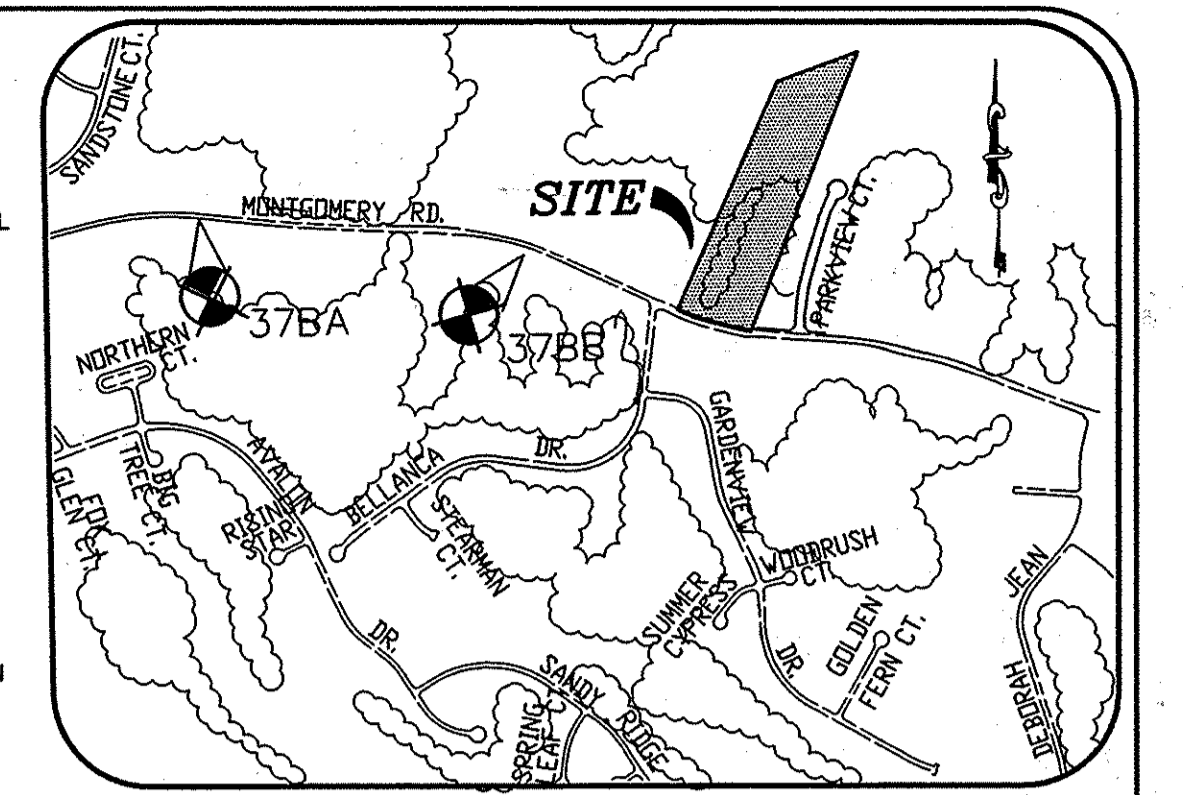


SITE ANALYSIS DATA:

1. AREA OF THE SITE = 12.03 AC ±
2. AREA OF WETLANDS AND ITS BUFFERS = 1.06 AC ±
3. AREA OF FLOODPLAIN = 0.1 AC ±
4. AREA OF EXISTING FOREST = 5.7 AC ±
5. AREA OF STEEP SLOPES 15% OR GREATER = 3,750 S.F.
6. AREA OF ERODABLE SOILS = 6.90 AC ±
7. LIMIT OF DISTURBANCE AREA = 9.20 AC ±
8. 21 NEW SINGLE FAMILY DETACHED LOTS ARE PROPOSED.
9. GREEN OPEN AREA (PERVIOUS) = 10.00 AC ±
10. PROPOSED IMPERVIOUS AREA = 2.03 AC ±

NOTES:

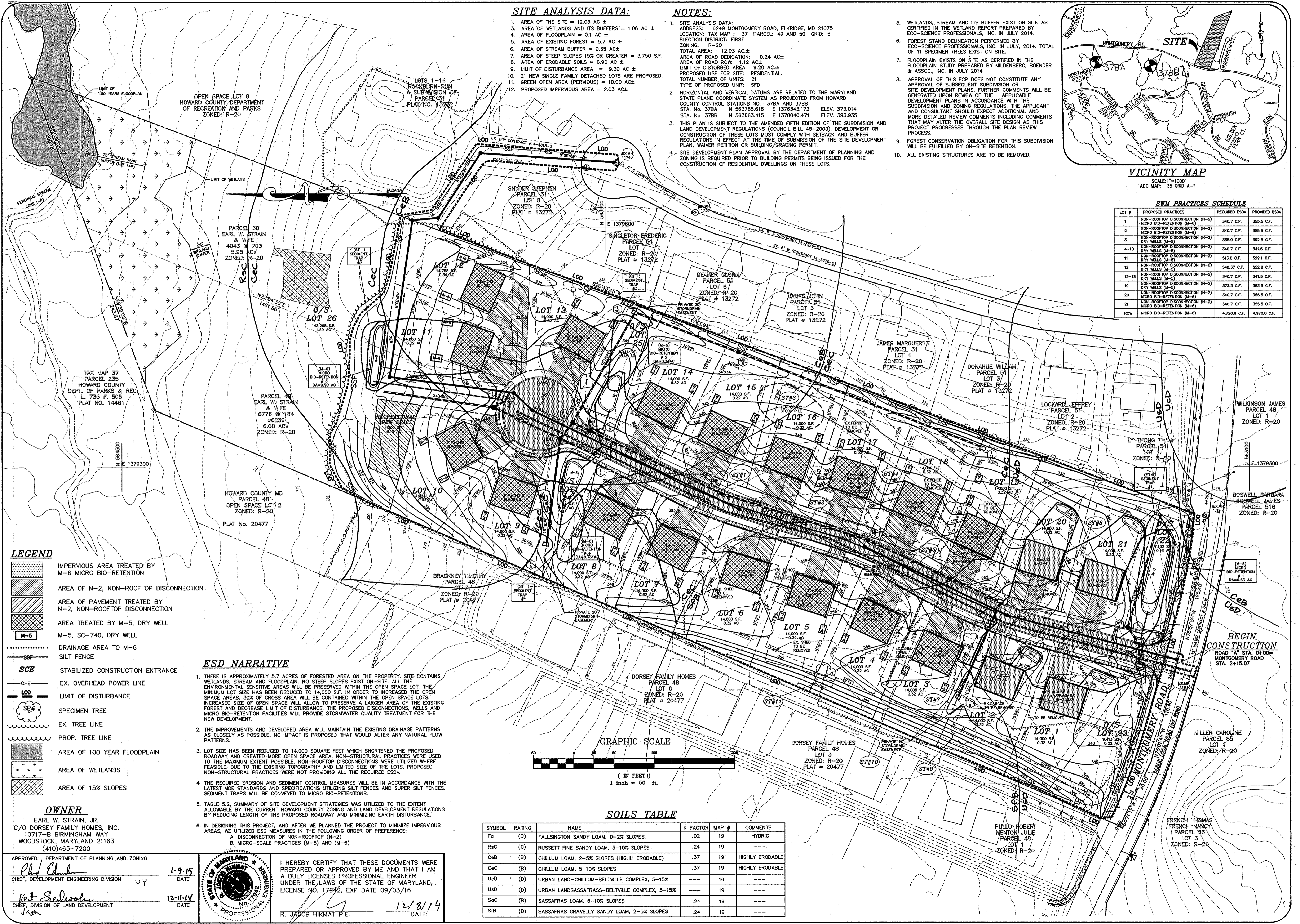
1. SITE ANALYSIS DATA:
ADDRESS: 6249 MONTGOMERY ROAD, ELK RIDGE, MD 21075
LOCATION: TAX MAP 37 PARCEL 49 AND 50 GRID: 5
ELECTION DISTRICT: FIRST
ZONING: R-20
TOTAL AREA: 12.03 AC ±
AREA OF ROAD DEDICATION: 0.24 AC ±
AREA OF ROAD ROW: 1.12 AC ±
LIMIT OF DISTURBANCE AREA: 9.20 AC ±
PROPOSED USE FOR SITE: RESIDENTIAL
TOTAL NUMBER OF UNITS: 21
TYPE OF PROPOSED UNIT: SFD
2. HORIZONTAL AND VERTICAL DATUMS ARE RELATED TO MARYLAND STATE PLANE COORDINATE SYSTEM AS PROJECTED FROM HOWARD COUNTY CONTROL STATIONS NO. 37BA AND 37BB
STA. NO. 37BA N 563366.415 E 1378040.471 ELEV. 373.014
STA. NO. 37BB N 563366.415 E 1378040.471 ELEV. 393.935
3. 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.
4. 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.
5. WETLANDS, STREAM AND ITS BUFFER EXIST ON SITE AS CERTIFIED IN THE WETLAND REPORT PREPARED BY ECO-SCIENCE PROFESSIONALS, INC. IN JULY 2014.
6. FOREST STAND DELINEATION PERFORMED BY ECO-SCIENCE PROFESSIONALS, INC. IN JULY 2014. TOTAL OF 11 SPECIMEN TREES EXIST ON SITE.
7. FLOODPLAIN EXISTS ON SITE AS CERTIFIED IN THE FLOODPLAIN STUDY PREPARED BY MILDENBERG, BOENDER & ASSOC., INC. IN JULY 2014.
8. APPROVAL OF THIS ESD 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.
9. FOREST CONSERVATION OBLIGATION FOR THIS SUBDIVISION WILL BE FULFILLED BY ON-SITE RETENTION.
10. ALL EXISTING STRUCTURES ARE TO BE REMOVED.



VICINITY MAP
SCALE: 1"=1000'
ADC MAP: 35 GRID A-1

SWM PRACTICES SCHEDULE

LOT #	PROPOSED PRACTICES	REQUIRED ESD	PROVIDED ESD
1	NON-ROOFTOP DISCONNECTION (N-2) MICRO BIO-RETENTION (M-6)	340.7 C.F.	355.5 C.F.
2	NON-ROOFTOP DISCONNECTION (N-2) MICRO BIO-RETENTION (M-6)	340.7 C.F.	355.5 C.F.
3	NON-ROOFTOP DISCONNECTION (N-2) DRY WELLS (M-5)	385.0 C.F.	392.5 C.F.
4-10	NON-ROOFTOP DISCONNECTION (N-2) DRY WELLS (M-5)	340.7 C.F.	341.5 C.F.
11	NON-ROOFTOP DISCONNECTION (N-2) DRY WELLS (M-5)	513.0 C.F.	529.1 C.F.
12	NON-ROOFTOP DISCONNECTION (N-2) DRY WELLS (M-5)	548.37 C.F.	552.8 C.F.
13-18	NON-ROOFTOP DISCONNECTION (N-2) DRY WELLS (M-5)	340.7 C.F.	341.6 C.F.
19	NON-ROOFTOP DISCONNECTION (N-2) DRY WELLS (M-5)	373.3 C.F.	383.5 C.F.
20	NON-ROOFTOP DISCONNECTION (N-2) MICRO BIO-RETENTION (M-6)	340.7 C.F.	355.5 C.F.
21	NON-ROOFTOP DISCONNECTION (N-2) MICRO BIO-RETENTION (M-6)	340.7 C.F.	355.5 C.F.
ROW	MICRO BIO-RETENTION (M-6)	4,720.0 C.F.	4,970.0 C.F.

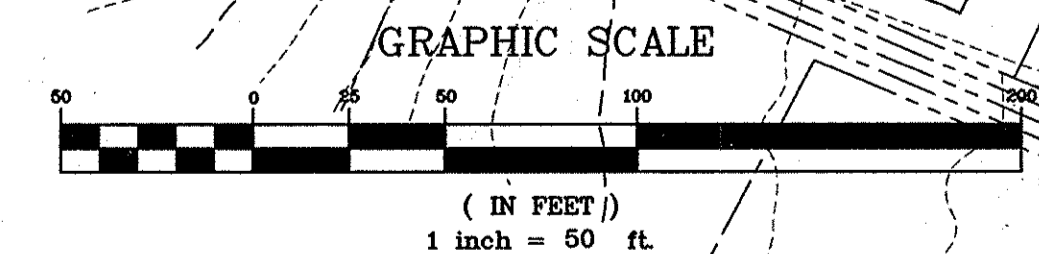


LEGEND

- 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, SC-740, DRY WELL
- DRAINAGE AREA TO M-6 SILT FENCE
- SCE STABILIZED CONSTRUCTION ENTRANCE
- OHE EX. OVERHEAD POWER LINE
- LOD LIMIT OF DISTURBANCE
- SP# SPECIMEN TREE
- EX. TREE LINE
- PROP. TREE LINE
- AREA OF 100 YEAR FLOODPLAIN
- AREA OF WETLANDS
- AREA OF 15% SLOPES

ESD NARRATIVE

1. THERE IS APPROXIMATELY 5.7 ACRES OF FORESTED AREA ON THE PROPERTY. SITE CONTAINS WETLANDS, STREAM AND FLOODPLAIN. NO STEEP SLOPES EXIST ON-SITE. ALL THE ENVIRONMENTAL SENSITIVE AREAS WILL BE PRESERVED WITHIN THE OPEN SPACE LOT. THE MINIMUM LOT SIZE HAS BEEN REDUCED TO 14,000 S.F. IN ORDER TO INCREASE THE OPEN SPACE AREAS. 30% OF GROSS AREA WILL BE CONTAINED WITHIN THE OPEN SPACE LOTS. INCREASED SIZE OF OPEN SPACE WILL ALLOW TO PRESERVE A LARGER AREA OF THE EXISTING FOREST AND DECREASE LIMIT OF DISTURBANCE. THE PROPOSED DISCONNECTIONS, WELLS AND MICRO BIO-RETENTION FACILITIES WILL PROVIDE STORMWATER QUALITY TREATMENT FOR THE NEW DEVELOPMENT.
2. 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.
3. LOT SIZE HAS BEEN REDUCED TO 14,000 SQUARE FEET WHICH SHORTENED THE PROPOSED ROADWAY AND CREATED MORE OPEN SPACE AREA. 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 ESD'S.
4. 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. SEDIMENT TRAPS WILL BE CONVEYED TO MICRO BIO-RETENTIONS.
5. TABLE 5.2, SUMMARY OF SITE DEVELOPMENT STRATEGIES WAS UTILIZED TO THE EXTENT ALLOWABLE BY THE CURRENT HOWARD COUNTY ZONING AND LAND DEVELOPMENT REGULATIONS BY REDUCING LENGTH OF THE PROPOSED ROADWAY AND MINIMIZING EARTH DISTURBANCE.
6. 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)



SOILS TABLE

SYMBOL	RATING	NAME	K FACTOR	MAP #	COMMENTS
Fa	(D)	FALLSINGTON SANDY LOAM, 0-2% SLOPES.	.02	19	HYDRIC
RaC	(C)	RUSSETT FINE SANDY LOAM, 5-10% SLOPES.	.24	19	
CeB	(B)	CHILLUM LOAM, 2-5% SLOPES (HIGHLY ERODABLE)	.37	19	HIGHLY ERODABLE
CeC	(B)	CHILLUM LOAM, 5-10% SLOPES	.37	19	HIGHLY ERODABLE
Ud	(D)	URBAN LAND-CHILLUM-BELTVILLE COMPLEX, 5-15%		19	
UsD	(D)	URBAN LANDSASSAFRASS-BELTVILLE COMPLEX, 5-15%		19	
SoC	(B)	SASSAFRAS LOAM, 5-10% SLOPES	.24	19	
SIB	(B)	SASSAFRAS GRAVELLY SANDY LOAM, 2-5% SLOPES	.24	19	

OWNER
EARL W. STRAIN, JR.
C/O DORSEY FAMILY HOMES, INC.
10717-B BIRMINGHAM WAY
WOODSTOCK, MARYLAND 21163
(410)465-7200

APPROVED: DEPARTMENT OF PLANNING AND ZONING
Chad Edmond
CHIEF, DEVELOPMENT ENGINEERING DIVISION
DATE: 1-9-15

W. J. Sedore
CHIEF, DIVISION OF LAND DEVELOPMENT
DATE: 12-11-14



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. 17842, EXP DATE 09/03/16

R. JACOB HIKMAT P.E. DATE: 12/8/14

project	date	NOV. 2014	engineering	MMW	approval
14-013	illustration	MMW	scale	1"=60'	

description	revisions	no.	date
-------------	-----------	-----	------

PINE ACRES
TAX MAP 37, PARCELS 49 AND 50, GRID 5
HOWARD COUNTY, MARYLAND
FIRST ELECTION DISTRICT
ENVIRONMENTAL CONCEPT PLAN (ECP)

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