



Bowie Mills Estates: Preliminary Plan No. 120140020

BCB

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RAW

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JAC

John Carter, Chief Area 3

Staff Report Date: 10/10/14

Description

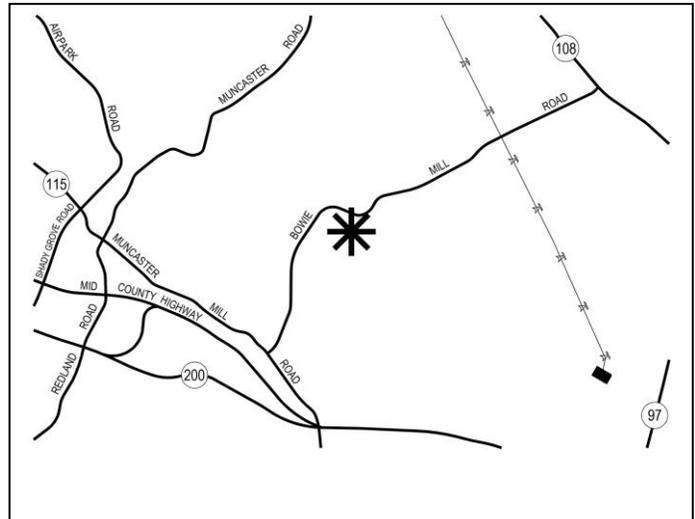
Bowie Mills Estates: Preliminary Plan No. 120140020

Request to create four (4) lots from two existing undeveloped lots; located on the south side of Bowie Mill Road, approximately 300 feet east of Fraley Farm Road; 18.07 acres; RE-2 Zone; Upper Rock Creek Master Plan

Staff Recommendation: Approval with conditions

Applicant: Jim Gibson (Owner)

Submitted: 03/7/2014



Summary

The Staff Report includes:

- Resubdivision analysis under Chapter 50-29(b)(2) to resubdivide existing lots into four new lots
- Off-site sidewalk extension to a County Ride-On bus stop at Fraley Farm Road
- Application is consistent with the Master Plan
- Approved locations for private wells and private on-site septic
- Forest Conservation met on-site with a Category 1 Conservation Easement
- Special Protection Area Water Quality Plan for Upper Rock Creek watershed

RECOMMENDATION: Approval subject to the following conditions:

- 1) Approval under this Preliminary Plan is limited to four residential lots.
- 2) The Applicant must comply with the following conditions of approval for Preliminary Forest Conservation Plan No. 120140020, approved as part of this Preliminary Plan:
 - a. Prior to Planning Board approval of the record plat, the Applicant must obtain staff approval a final forest conservation plan consistent with section 22A.00.01.09(B) of the forest conservation regulations.
 - b. Applicant must place a Category I conservation easement over all areas of forest retention and environmental buffers.
 - c. A Category I Conservation Easement approved by the M-NCPPC Office of the General Counsel must be recorded in the Montgomery County Land Records by deed prior to demolition, clearing, or grading and the Liber Folio for the easement must be referenced on the record plat.
 - d. Prior to any land disturbing activities the Applicant must delineate the Category I conservation easement area boundary with split rail fencing, or other staff approved equivalent.
 - e. Revise the Forest Conservation Plan to show reforestation of all unforested Stream Valley Buffer areas. Stream Valley Buffer forest planting activities and access routes must ensure minimal disturbance to the Stream Valley Buffer.
 - f. All reforestation plantings must be completed within the first planting season after issuance of the first sediment and erosion control permit.
 - g. The Applicant must obtain M-NCPPC approval of a five-year maintenance and management agreement prior to M-NCPPC accepting any on-site planting.
 - h. Applicant must conform to the conditions as stated in the Montgomery County Department of Permitting Service (MCDPS) Preliminary/Final Water Quality Plan approval letter dated October 02, 2014, unless otherwise amended.
- 3) The Planning Board has accepted the recommendations of the Montgomery County Department of Transportation (“MCDOT”) in its letter dated July 29, 2014, and hereby incorporates them as condition of the Preliminary Plan approval. The Applicant must comply with each of the recommendations as set forth in the letter, which may be amended by MCDOT provided that the amendments do not conflict with other conditions of the Preliminary Plan approval.
- 4) Prior to recordation of plat(s), the Applicant must satisfy the provisions of access and improvements as required by MCDOT.
- 5) The Planning Board has accepted the recommendations of the Montgomery County Department of Permitting Service (“MCDPS”) – Water Resources Section in its Water Quality Plan letter dated June 19, 2014, revised October 02, 2014 and hereby incorporates them as conditions of the Preliminary Plan approval. The Applicant must comply with each of the recommendations as set forth in the letter, which may be amended by MCDPS – Water Resources Section provided that the amendments do not conflict with other conditions of the Preliminary Plan approval.
- 6) The Planning Board has accepted the recommendations of the Montgomery County Department of Permitting Services (“MCDPS”) – Well & Septic Section in its letter dated April 21, 2014 and hereby incorporates them as conditions of the Preliminary Plan approval. Therefore, the Applicant must

comply with each of the recommendations as set forth in the letter, which may be amended by MCDPS – Well & Septic Section provided that the amendments do not conflict with other conditions of the Preliminary Plan approval.

- 7) The certified Preliminary Plan must contain the following note:

“Unless specifically noted on the plan drawing or in the Planning Board conditions of approval, the building footprints, building heights, on-site parking, site circulation, and sidewalks shown on the Preliminary Plan are illustrative. The final locations of buildings, structures and landscape will be determined at the time of issuance of building permit(s) [or] site plan approval. Please refer to the zoning data table for development standards such as setbacks, building restriction lines, building height, and lot coverage for each lot. Other limitations for site development may also be included in the conditions of the Planning Board’s approval.”

- 8) Record plat must show necessary easements.
- 9) The record plat must reflect common ingress/egress and utility easements over all shared driveways.
- 10) The Subject Property is within the Magruder High School cluster area. The Applicant must make a School Facilities Payment to MCDPS at the elementary school level at the single-family detached unit rate for all units for which a building permit is issued and a School Facilities Payment is applicable. The timing and amount of the payment will be in accordance with Chapter 52 of the Montgomery County Code.
- 11) The Adequate Public Facility (APF) review for the Preliminary Plan will remain valid for eighty-five (85) months from the date of mailing of the Planning Board resolution.

SITE DESCRIPTION

The Subject Property consists of two platted lots, Lot 44 recorded on Plat 18426 and Lot 40 recorded on Plat 15133 (Attachment B), totaling 18.07 acres (“Property” or “Subject Property”) (Image 1). The Subject Property is currently addressed as 17827 and 17815 Bowie Mill Road and is located approximately 300 east of Fraley Farm Road. The Property zoning is RE-2, and it is located in water and sewer category W-6 and S-6 respectively. The surrounding zoning is a mix of the RE-2 and RE-1 Zones with the RE-2 Zone primarily to the south and northeast and the RE-1 Zone to the north and west. The surrounding land uses are dominated by one-family detached homes on a variety of lot and parcel sizes. The Subject Property is approximately 2 miles west of Olney and 4.5 miles east of Gaithersburg. In addition, the Subject Property is located in the Upper Rock Creek Special Protection Area and in the Upper Rock Creek Master Plan.



Image 1

Currently, the Property is undeveloped and is vegetated by a mix of scattered trees and grass in the north, and forest in the south (image 2). The terrain is hilly with three areas of lower elevation in the north, center and south, and two high areas in between. The only physical improvement on the Property is an existing culvert and access drive located in the middle of the Property’s frontage with Bowie Mill Road.



Image 2

BACKGROUND

Preliminary plan No. 119792790, Bowie Mill Estates, created lot 40 as part of a 14 lot subdivision that included the three larger lots to the east of the Subject Property, and the lots directly south of the subject Property. Preliminary Plan No. 119882690 was a one lot subdivision that established lot 44. On January 3, 2008, the Planning Board heard Pre-Preliminary Plan No. 720060490 for non-binding advice regarding the resubdivision of lots 40 and 44 into four new lots. The Planning Board provided advice on the merits of the proposed resubdivision as defined in Chapter 50-29(b)(2) including the provided neighborhood and accompanying resubdivision analysis. The Planning Board did not object to the Applicant submitting the resubdivision neighborhood and analysis before them as a preliminary plan. This application is substantially unchanged from Pre-Preliminary Plan No. 720060490.

PROJECT DESCRIPTION

Preliminary Plan No. 120140020, Bowie Mill Estates (“Application” or “Preliminary Plan”) was submitted on March 7, 2014 and proposes to resubdivide the Subject Property into four (4) lots identified currently as lots A-D (Attachment B and Image 3) for four new single-family detached dwellings. Each proposed lot has an approved location for a new on-site septic system and private well. The four lots as proposed would share a driveway for access Bowie Mill Road, located in the same location as the existing culvert crossing. The Preliminary Plan provides for drainage improvements and a sidewalk along a portion of

the Property frontage west of the driveway. These improvements are proposed to extend west off-site approximately 200 feet to a Ride-On bus stop located at Fraley Farm Road. A Category I Conservation Easement (5.89 acres) is proposed for the rear of the two pipe-stem lots (Lots A and C). The lots range in size from 126,667 square feet to 281,614 square feet, all of which exceed the minimum zoning requirements.

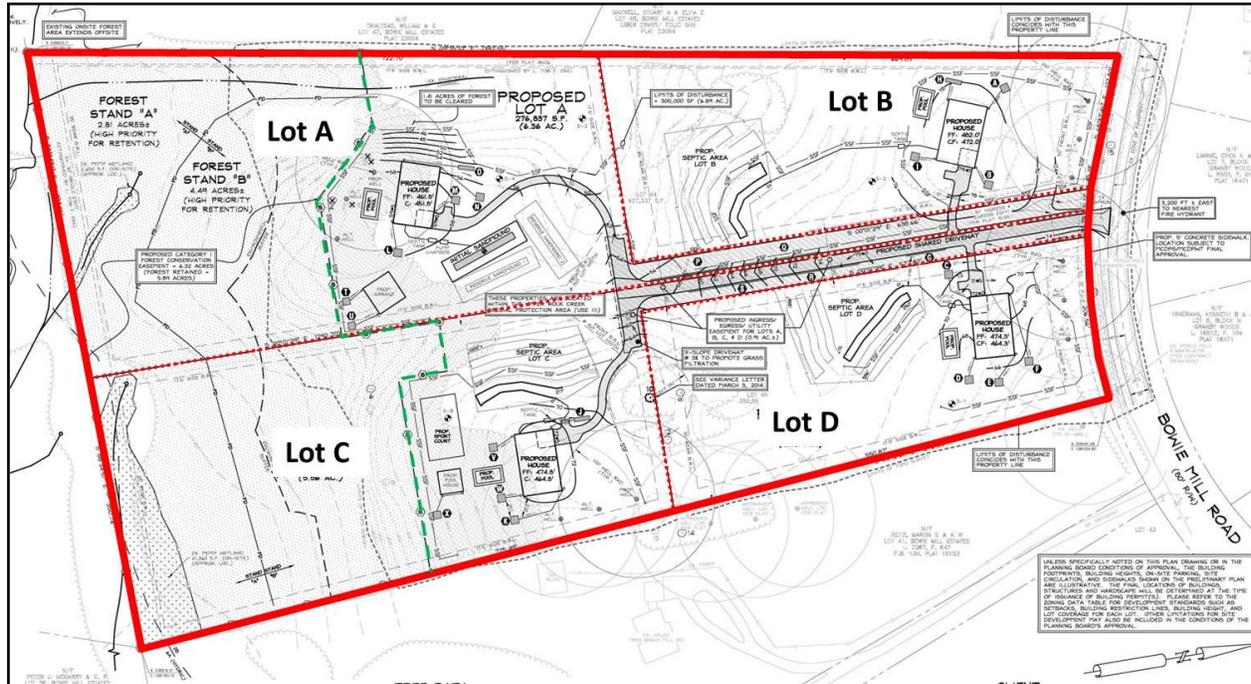


Image 3

ANALYSIS AND FINDINGS – Chapter 50

Conformance to the Master Plan

The Application substantially conforms to the recommendations of the 2004 Upper Rock Creek Master Plan (“Master Plan”). The Master Plan describes the entire Master Plan area as a low-density residential area located within the Residential Wedge of the General Plan. The Master Plan provides general recommendations for densities of about two acres or more per dwelling unit with the ultimate determination to be made by septic suitability when developing properties not recommended for cluster. The Master Plan also recommends the designation of the Upper Rock Creek watershed north of Muncaster Mill Road as a Special Protection Area that restricts properties with access to sewer to an impervious limit of eight percent. The Subject Property retained the RE-2 Zone in the latest update of the Master Plan which has a minimum lot size of two acres. The Application is proposing four lots that are 2.91 to 6.46 acres in size with individual private septic systems. The Subject Property is within the Upper Rock Creek Special Protection Area, however it is not subject to an impervious cap because it is not served by public sewer. The Applicant minimizes impervious surfaces by the use of a single shared driveway, and reducing the length of the driveway to the minimum necessary to serve the two proposed pipestem lots (Lot A and Lot C) on the southern side of the Property.

The Subject Property fronts on Bowie Mill Road, which is identified as an Arterial roadway with an 80 foot right-of-way in the Master Plan. The Master Plan also recommends that Bowie Mill Road have a bikeway (BL-20), an on-road Class II or Class III bikeway. The right-of-way for Bowie Mill Road is already 80 feet wide along the Property's frontage, therefore no additional dedication is proposed. The Applicant has coordinated with MCDOT (Attachment C) regarding improvements along the Bowie Mill Road frontage. The Applicant will provide a five-foot wide sidewalk along portions of the Property frontage and an extension off-site, and will perform grading and storm drain improvements necessary for the County to construct bikeway improvements at a later time.

Public Facilities

Roads and Transportation Facilities

The proposed vehicle and pedestrian access is adequate for the four lots proposed. Access to transit is made possible with the MCDOT coordinated frontage improvements including a sidewalk to connect the shared driveway with a Ride-On bus stop located approximately 200 feet to the west of the Property. The proposed lots do not generate 30 or more vehicle trips during the weekday morning or evening peak-hour, therefore the Application is not subject to the Local Area Transportation Review. The Subject Property is located in the Rural East Transportation Policy Area Review area, which is exempt from Transportation Policy Area Review.

Other Public Facilities and Services

All other public facilities and services are available and will be adequate to serve the proposed lots. The Subject Property is not planned for public water or public sewer service and each lot has been approved to provide for on-site well and an on-site septic treatment by the MCDPS - Well & Septic Section (Attachment D). Other services including natural gas, electric, and telecommunications are available to the Property. The Application has been reviewed by the Montgomery County Fire and Rescue Service who have approved a Fire Access Plans showing adequate fire and emergency access to the proposed lots. (Attachment E). Other public facilities and services, and health services are currently operating within the standards set by the Subdivision Staging Policy currently in effect. The Application is located within the Magruder High School Cluster, which as of July 1, 2014, is operating above 105% capacity for elementary schools and requires a school facility payment at the elementary school level.

Environment

Background

The Natural Resource Inventory/Forest Stand Delineation (NRI/FSD) #420131460 for the Property was approved on June 10, 2013. The NRI/FSD identifies the environmental constraints and forest resources on the Subject Property. The property contains 7.30 acres of forest, six trees between 24" and 30" diameter at breast (DBH), and one tree 30 inches and greater DBH on the property. There are two identified streams, 0.55 acres of wetlands, and 4.25 acres of environmental buffers on the Property. The Property is within the Upper Rock Creek watershed; a Use III watershed. The Countywide Stream Protection Strategy (CSPS) rates streams in this section of the watershed as fair overall condition.

Forest Conservation (Chapter 22A)

The Application complies with the requirements of the Forest Conservation Law. The Subject Property is 18.07 acres in size, and there is 0.47 acres of offsite improvements proposed, for a total tract area of 18.54 for the preliminary Forest Conservation Plan ("FCP")(Attachment F). The FCP identifies 1.41 acres

of forest clearing and 5.89 acres of forest retention. The amount of forest clearing is below the break-even point, however the Property is located within a Special Protection Area, and all environmental buffers must be reforested. All forest retention areas and all areas located within stream valley buffer will be protected with a Category I Conservation Easement. There is one tree located on the Subject Property that is 30 inches or greater diameter at breast height, however no impacts are proposed to this tree therefore no tree variance is required.

Water Quality Plan in a Special Protection Area

Staff finds the Application has met the requirements for Water Quality Review in Special Protection Areas. The Subject Property is located within the Upper Rock Creek Special Protection Area (“SPA”). As part of the requirements of the SPA law (Article V of the Montgomery County Code [Water Quality Review in Special Protection Areas]), a combined preliminary and final water quality plan (“WQP”) (Attachment G) must be reviewed concurrently with a preliminary plan. Under the provision of the law, MCDPS and the Planning Board have different responsibilities in the review of a WQP.

MCDPS has reviewed and conditionally approved by memo dated June 19, 2014 and amended October 02, 2014 (Attachment H) the elements of the WQP that fall under their purview, including site performance goals, stormwater management, sediment and erosion control, and the monitoring of best management practices. As part of the water quality plan, several performance goals were established for the site:

1. Minimize storm flow runoff;
2. Protect springs, wetlands and sensitive areas;
3. Minimize sediment leaving the site; and
4. Full ESD for stormwater (no waivers)

The stormwater management concept includes dry wells, micro-infiltration trenches, and non-rooftop disconnections. MCDPS also is requiring an engineered sediment control plan for this Application.

The Planning Board’s responsibility in reviewing a WQP is to determine if environmental buffer protections, SPA forest conservation and planting requirements, and environmental overlay zone requirements (including imperviousness limits) have been satisfied.

The environmental buffers are located in the southern portion of the Subject Property. A Category I Conservation Easement is proposed over all environmental buffers and adjacent upland areas. The Application is reforesting all unforested areas located in the environmental buffers per the *Environmental Guidelines*. The Upper Rock Creek SPA has provisions for an eight percent imperviousness limit on land development projects if the project is serviced by public sewer. Because this Application is served by private septic, the imperviousness limits do not apply. However, as proposed, the overall imperviousness is still below eight percent (6.4%) because the Applicant has minimized impervious surfaces to the extent possible while complying with all development regulations. Staff recommends approval of the Special Protection Area Water Quality Plan.

Compliance with the Subdivision Regulations and Zoning Ordinance

This Application has been reviewed for compliance with the Montgomery County Code, Chapter 50, the Subdivision Regulations. The Application meets all applicable sections, including the requirements for resubdivision as discussed below. For reasons discussed in the Master Plan section of this report, the

proposed lots size, width, shape and orientation are appropriate for the location of the subdivision given the recommendations in the Upper Rock Creek Master Plan. The lots are large, however they meet the intent of the green wedges established by the General Plan, and further resubdivision of these properties would be limited by available frontage, adequate width for buildings, and septic suitability. The Application has been reviewed by other applicable county agencies, all of whom have recommended approval.

The lots were reviewed for compliance with the dimensional requirements for the RE-2 Zone as specified in the Zoning Ordinance. The lots as proposed will meet all the dimensional requirements for area, frontage, and width, and new homes can meet the setbacks in that zone. A summary of this review is included in Table 1 below.

Table 1 – Data Table RE-2 Zone

PLAN DATA	Zoning Ordinance Development Standard	Proposed for Approval by the Preliminary Plan
Minimum Lot Area	87,120 sq. ft.	87,120 sq. ft. or more
Lot Width	150 ft.	150 ft. or more
Lot Frontage	25 ft.	25 ft. or more
Setbacks		
Front	50 ft. Min.	50 ft. or more ¹
Side	17 ft. Min./ 35 ft. total	17 ft. or more ¹
Rear	35 ft. Min.	35 ft. or more ¹
Lot Coverage for buildings	25% max.	Less than 25% ¹
Building Height	50 ft. max.	50 ft. or less ¹
MPDUs		No
TDRs		No
Site Plan Required		No

Conformance with Section 50-29(b)(2)

A. Statutory Review Criteria

The Subject Property includes two recorded lots. Because the lots are shown on a previously recorded record plat, this Application requires compliance with Section 50-29(b)(2) of the Subdivision Regulations as a resubdivision. In order to approve an application for resubdivision, the Planning Board must find that the proposed lot complies with all seven of the resubdivision criteria set forth in Section 50-29(b)(2), which states:

Resubdivision. Lots on a plat for the Resubdivision of any lot, tract or other parcel of land that is part of an existing subdivision previously recorded in a plat book shall be of the same character as to street frontage, alignment, size, shape, width, area and

¹ Determined by MCDPS at the time of building permit.

suitability for residential use as other lots within the existing block, neighborhood or subdivision.

B. Neighborhood Delineation

In administering Section 50-29(b)(2) of the Subdivision Regulations, the Planning Board must determine the appropriate resubdivision neighborhood for evaluating the Application. In this instance, the neighborhood selected by the Applicant, and agreed to by Staff, consists of 19² lots including the four proposed lots (Image 4). The selected neighborhood (“Neighborhood”) is identical to that submitted during the Pre-Preliminary plan No. 720060490 for analysis by Staff and non-binding advice by the Planning Board on January 3, 2008. The analyzed lots include only properties that are recorded lots in the RE-2 Zone; are adjacent to the Subject Property, or were within a reasonable distance up and down Bowie Mill Road to provide an adequate sampling of comparable lots. There are lots that are in close proximity to the Subject Property but not included in the Neighborhood because they are zoned RE-1 which allows for smaller lots than the RE-2 Zone. A map and tabular summary of the lot analysis based on the resubdivision criteria is included in table 2 and in Attachment J.

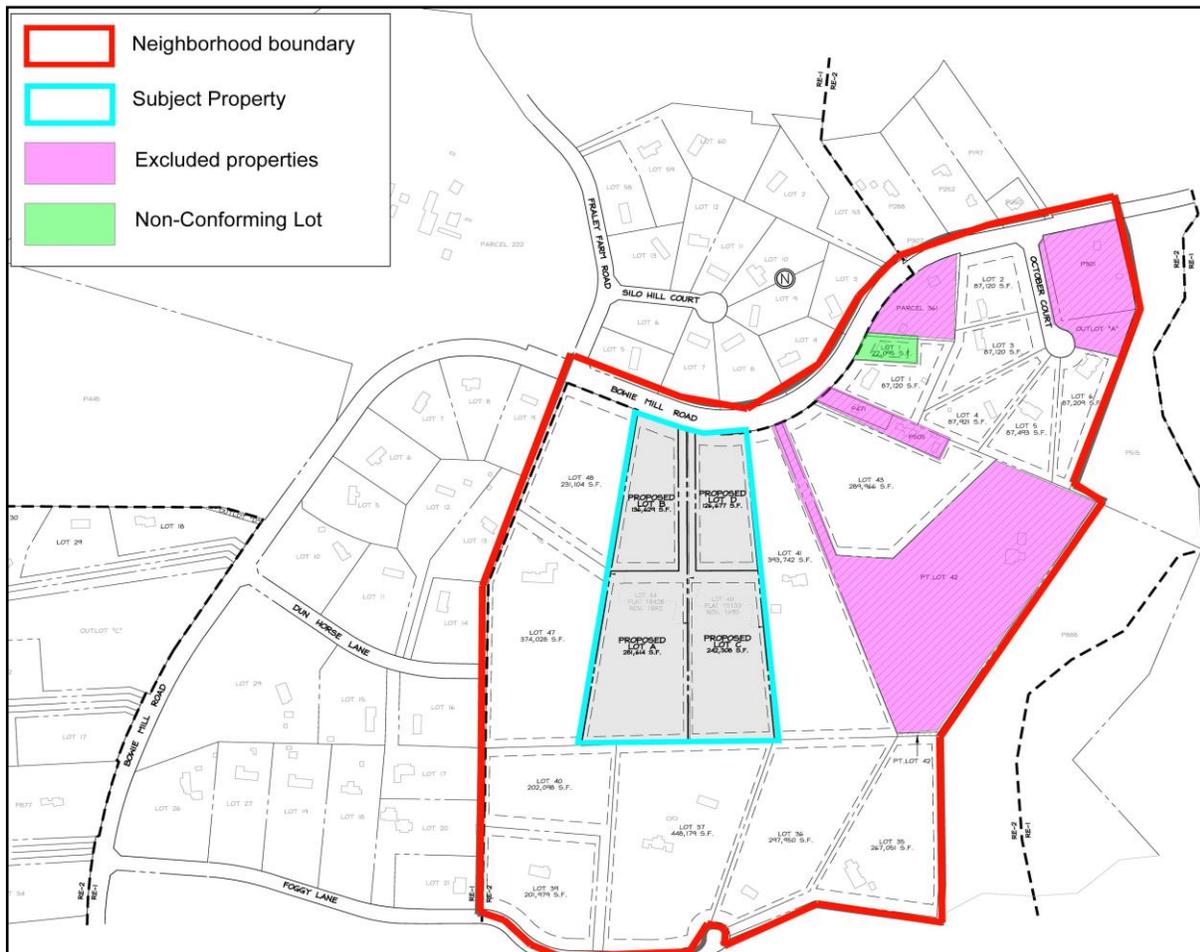


Image 4

² The actual Neighborhood submitted by the Applicant has 20 lots, however one lot at 22,095 square feet is substantially smaller than the minimum lot size allowed under current RE-2 zoning, and was generally not included in the analysis.

In performing the analysis, the above-noted resubdivision criteria were applied to the delineated Neighborhood. In all cases, the proposed lots had a high correlation with respect to the size, shape, width, area, alignment, frontage and suitability of existing lots in the Neighborhood. Therefore, the proposed lots are of the same character with respect to the resubdivision criteria as other lots within the Neighborhood. Therefore, the proposed resubdivision complies with the criteria of Section 50-29(b)(2). As set forth below, the provided tabular summary and graphical documentation support this conclusion:

Frontage:

The proposed lots will be of the same character as existing lots in the Neighborhood with respect to lot frontage. The two proposed pipestem lots have frontages of 35 feet and the rectangular lots have frontages of 169 and 202 feet. In the Neighborhood, the range of lot frontages is between 35 feet and 499 feet.

Alignment:

The proposed lots are of the same character as existing lots in the Neighborhood with respect to alignment. The alignment of the proposed lots is generally perpendicular to the street. Lots in the Neighborhood are a mix of perpendicular and parallel alignments.

Size:

The proposed lots sizes are in character with the size of existing lots in the Neighborhood. The range of lot sizes proposed by this Application is between 126,677 and 281,614 square feet. The range of lot sizes in the Neighborhood is between 87,120 and 448,179 square feet.

Shape:

The shape of the proposed lots will be in character with shapes of the existing lots in the Neighborhood. Two of the four proposed lots are pipestem in shape, and two are rectangular. The Neighborhood contains a mix of lot shapes including pipestem, rectangular, triangular and irregular shapes.

Width: (at the BRL)

The proposed lots will be in character with existing lots in the Neighborhood with respect to width. The range of width at the building line for the proposed lots is between 219 and 362 feet. The range of lot width within the Neighborhood is between 142 and 475 feet.

Area:

The proposed lots will be of the same character as existing lots in the Neighborhood with respect to buildable area. The proposed lots have buildable areas that are between 91,291 and 208,942 square feet; within the range of buildable areas for lots in the Neighborhood which range between 44,022 and 374,463 square feet.

Suitability for Residential Use:

The existing and proposed lots within the identified Neighborhood are all zoned RE-2 and are suitable for residential use.

OUTREACH AND CORRESPONDENCE

This Application was submitted and noticed in accordance with all Planning Board adopted procedures. A sign referencing the proposed modification was posted along the Property frontage with Bowie Mill Road. A presubmission meeting was held at 17815 Bowie Mill Road on June 21, 2013 at 6:00pm. Three people from the community were in attendance according to the meeting minutes. Questions raised by one of the neighbors included whether there was a covenant restricting further subdivision of the property, and about the location of the house and septic uphill from her well and too close to her barn. A second meeting was held on January 14, 2014 at the same address, and no one from the community attended. As of the drafting of this staff report, Staff has not received any correspondence from the community regarding this Application.

CONCLUSION

The proposed lots meet all requirements established in the Subdivision Regulations and the Zoning Ordinance. Access and public facilities will be adequate to serve the proposed lots, and the application has been reviewed by other applicable county agencies, all of whom have recommended approval of the plan. The Application was also reviewed under section 50-29(b)(2) of the Subdivision Regulations which require the proposed lots be of a similar character to existing lots, and are judged against seven criteria. The proposed lots are of the same character as the existing lots in the defined Neighborhood, therefore approval of the application with the conditions specified above is recommended.

Attachments

Attachment A – Preliminary Plan
Attachment B – Plats 18426 and 15133
Attachment C – MCDOT memo
Attachment D – MCDPS well & septic memo
Attachment E – Fire Marshal memo
Attachment F – Forest Conservation Plan
Attachment G – Water Quality Plan
Attachment H – MCDPS Water Quality Plan Memo
Attachment J - Resubdivision analysis

Attachment A

SITE / ZONING DATA

GROSS SITE AREA: 787,228 SQ. FT.
 PROPOSED DEDICATION: 0 SQ. FT.
 NET TRACT AREA: 787,228 SQ. FT.

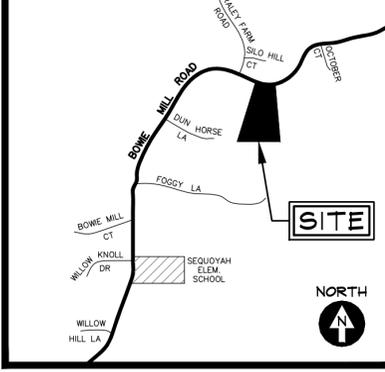
ZONING: RE-2	REQUIRED	PROVIDED			
		PROP. LOT A	PROP. LOT B	PROP. LOT C	PROP. LOT D
MINIMUM LOT AREA	87,120 S.F.	276,837 S.F.	136,629 S.F.	242,395 S.F.	131,344 S.F.
MINIMUM LOT WIDTH AT B.R.L.	150.0'	152.80'	150.71'	161.33'	211.77'
MAXIMUM LOT COVERAGE (25%)	25%	5,600 S.F. (2.0%)	4,000 S.F. (2.9%)	4,900 S.F. (2.0%)	4,000 S.F. (3.0%)
FRONT YARD SETBACK	50.0'	50'	50'	50'	50'
SETBACK FROM OTHER LOT LINES	SIDE: 17' MIN. OR 35' TOTAL REAR: 35' MINIMUM	17.5' / 35'	17.5' / 35'	17.5' / 35'	17.5' / 35'

NOTE: SITE / ZONING DATA SUBJECT TO CHANGE BASED ON FINAL ARCHITECTURAL AND SITE DESIGNS

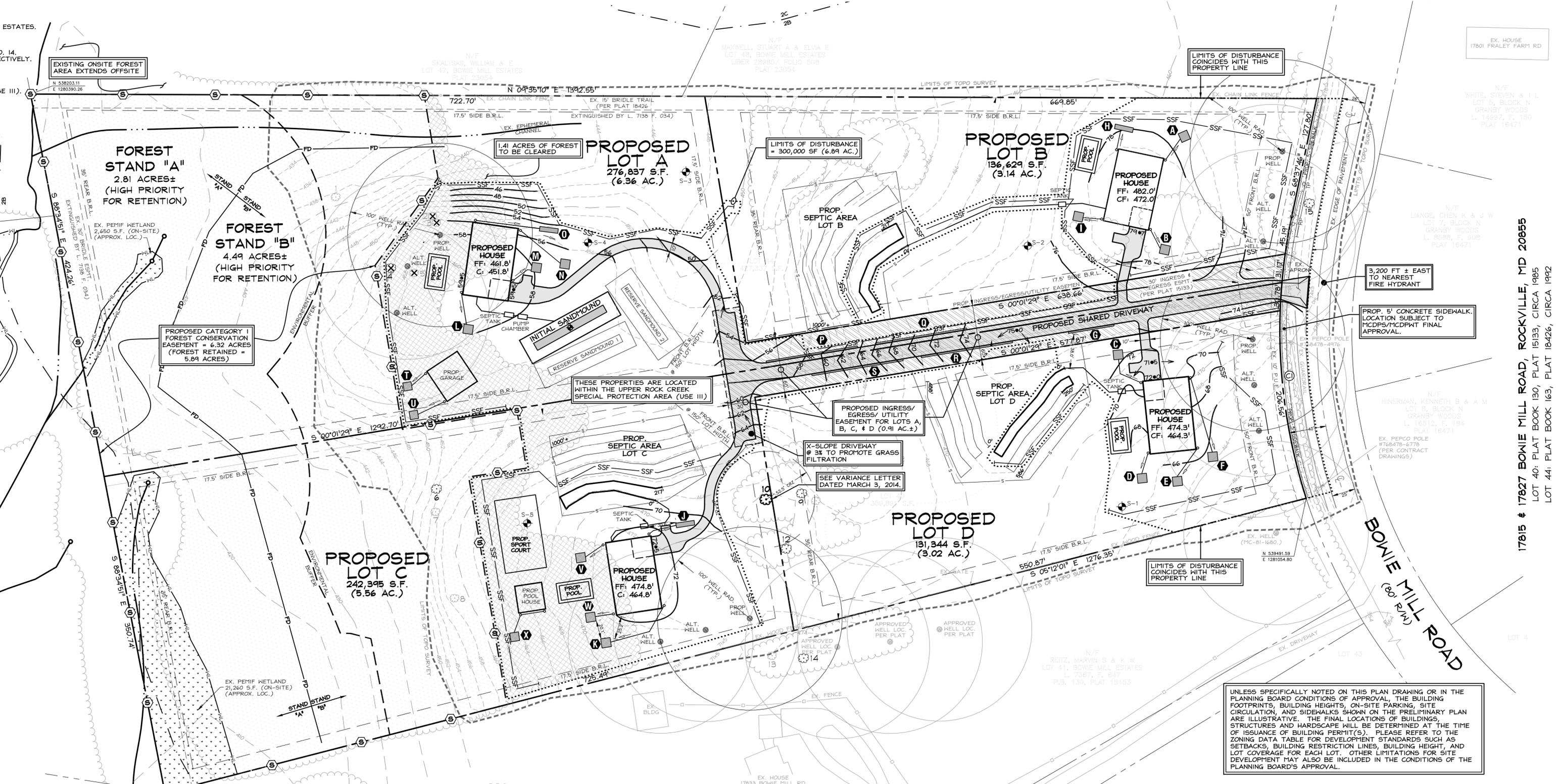
ENGINEERING, DATED APRIL, 2008.
 AS ENGINEERING, DATED APRIL, 2008.

LEGEND

EXISTING FEATURES		PROPOSED FEATURES	
	EX. TWO- AND TEN-FOOT CONTOURS		PROP. CONTOUR WITH ELEVATION
	EX. SPOT ELEVATION		PROP. WELL
	EX. CHAIN LINK OR WIRE FENCE		PROP. SANDMOUND
	EX. WOOD FENCE		PROP. SEPTIC AREA
	EX. APPROVED SEPTIC AREA		ENVIRONMENTAL BUFFER
	EX. OVERHEAD UTILITY WITH POLE		PROP. DRYWELL & MICRO-INFILTRATION TRENCH
	EX. WELL		PROP. FOREST CONSERVATION EASEMENT W/ SIGNAGE
	EX. TREE LINE		PROP. SUPER SILT FENCE
	EXISTING DECIDUOUS SPECIMEN TREE (30" OR 75% OF CHAMPION SIZE)		PROP. TREE PROTECTION FENCE
	EXISTING TREE (DECIDUOUS) (24" THRU 29.9" DBH)		LIMITS OF DISTURBANCE
	EXISTING TREE (DECIDUOUS) (12" THRU 23.9" DBH)		PROP. INGRESS / EGRESS / UTILITY EASEMENT
	EX. INFILTRATION TEST LOCATION		PROP. ROOT PRUNING & TREE PROTECTION FENCE
	EX. FOREST STAND DIVIDE		
	EX. STEEP SLOPES		
	EX. STREAM		
	SOILS BOUNDARY		
	EX. WETLAND AREA		

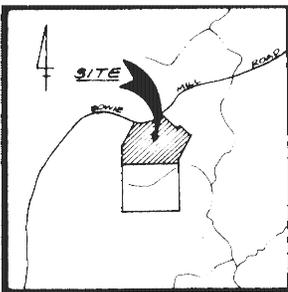


VICINITY MAP
 ADC MAP 20, GRID H-8
 SCALE: 1" = 2000'



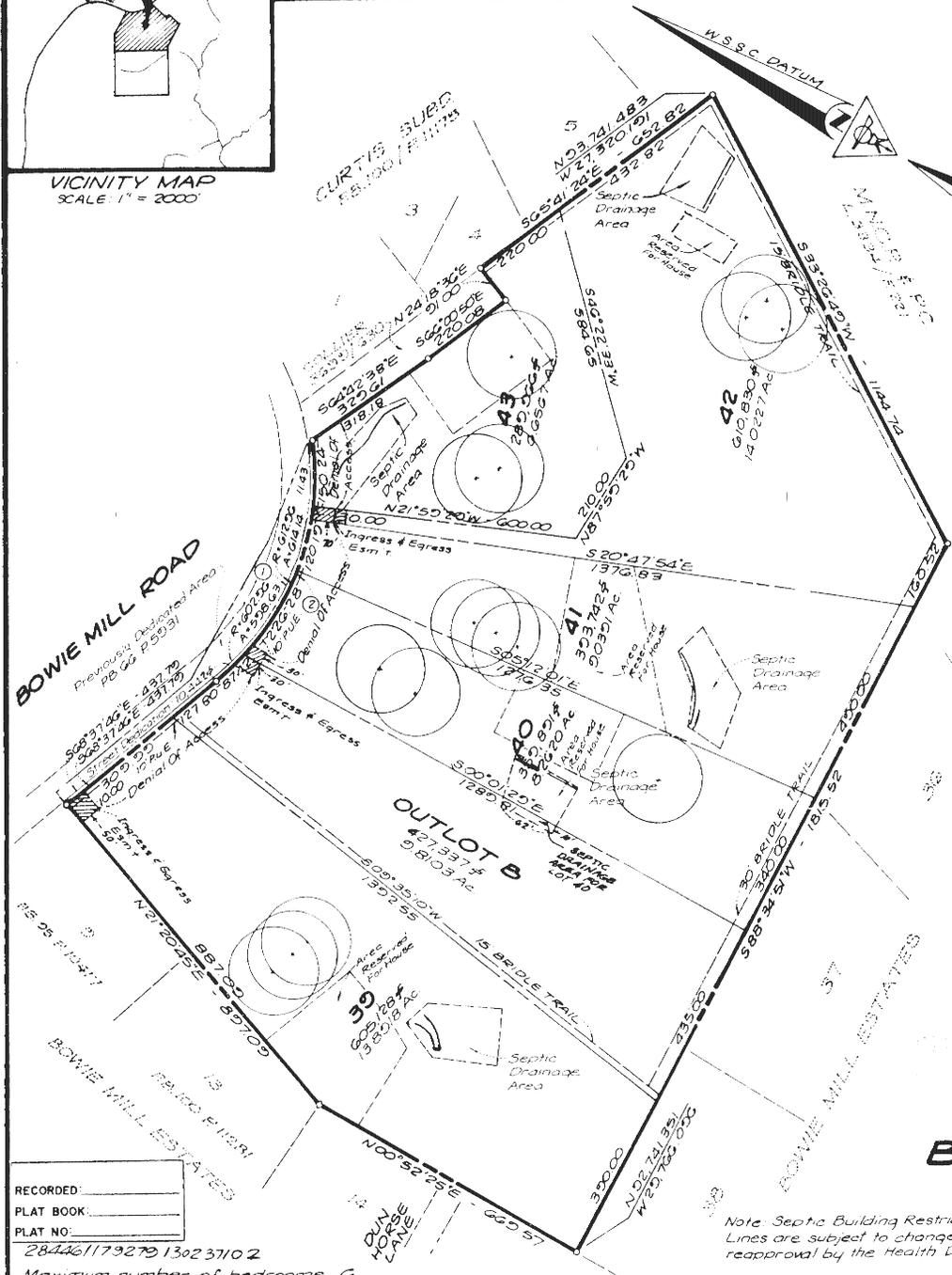
17815 & 17827 BOWIE MILL ROAD, ROCKVILLE, MD 20855
 LOT 40: PLAT BOOK 130, PLAT 15193, CIRCA 1985
 LOT 44: PLAT BOOK 163, PLAT 18426, CIRCA 1992

Attachment B SURVEYOR'S CERTIFICATE



VICINITY MAP
SCALE: 1" = 2000'

CURVE DATA					
Nº	Radius	Delta	Arc	Tan	Chord Ch Bearing
1	602.90	56°53'05"	598.63	326.60	574.35 N87°55'42"E
2	612.90	57°24'20"	614.14	335.61	508.77 S82°40'04"W



Date: Oct 10, 1984

Rodney L. Hanson
Rodney L. Hanson
Reg. Land Surveyor, Md. #3084

OWNER'S DEDICATION

I, the undersigned, Myron D. Gerber, owner of the property shown and described hereon, hereby adopt this plan of subdivision, establish the minimum building restriction lines, unless otherwise shown, dedicate the streets to public use, establish a 10-foot wide public utilities easement shown as 10' P.U.E. and recorded in Liber 3834 at Folio 457, establish easement as shown for the construction, reconstruction, operation and maintenance of storm drains, bridle trails and ingress and egress easement, and establish slope easements 20 feet wide along all streets as required by Montgomery County Ordinance #4-115. Slope easements granted hereon shall be terminated after all required public improvements abutting said easements have been lawfully completed and have been accepted for maintenance by Montgomery County, Maryland.

There are no suits of action, leases, liens or trusts on the property included in this plan of subdivision.

Date: 10/10/84
Marie A. Estrada Myron D. Gerber
Witness Myron D. Gerber

Note: Bridle trails established for community use and will be subject to terms of a covenant to be recorded in the Land Records of Montgomery County.

DEPT. OF HEALTH
MONTGOMERY COUNTY, MARYLAND
APPROVED: January 11, 1985
Donald A. Swetter, M.D.
HEALTH OFFICER

LOTS 39 THRU 43 & OUTLOT B BOWIE MILL ESTATES

8th ELECTION DISTRICT

MONTGOMERY COUNTY, MARYLAND
Scale: 1" = 200' Date: Aug 1984

HANSON & DEN OUTER, LTD.



CIVIL ENGINEERS & LAND SURVEYORS
LAND PLANNING CONSULTANTS
172 ROLLINS AVE., ROCKVILLE, MD 20852
(301) 881-6770

FILE NO. RP 773

JOB NO. 1148-AI

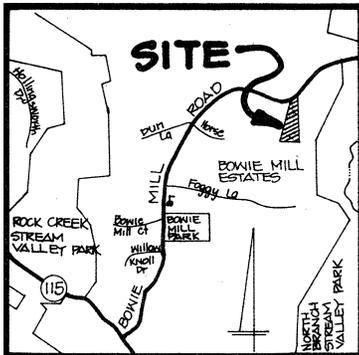
RECORDED:
PLAT BOOK:
PLAT NO:

284461179279 130237102
Maximum number of bedrooms: 6

THE MARYLAND NATIONAL CAPITAL PARK & PLANNING COMMISSION
MONTGOMERY COUNTY PLANNING BOARD
APPROVED: OCTOBER 18, 1984
William J. Swatlow CHAIRMAN
SECRETARY
TREASURER

MONTGOMERY COUNTY, MARYLAND
DEPARTMENT OF TRANSPORTATION
APPROVED: DECEMBER 10, 1984
FOR DIRECTOR

PLA-84-175



VICINITY MAP
SCALE: 1" = 2000'

PLAT NO. 18426

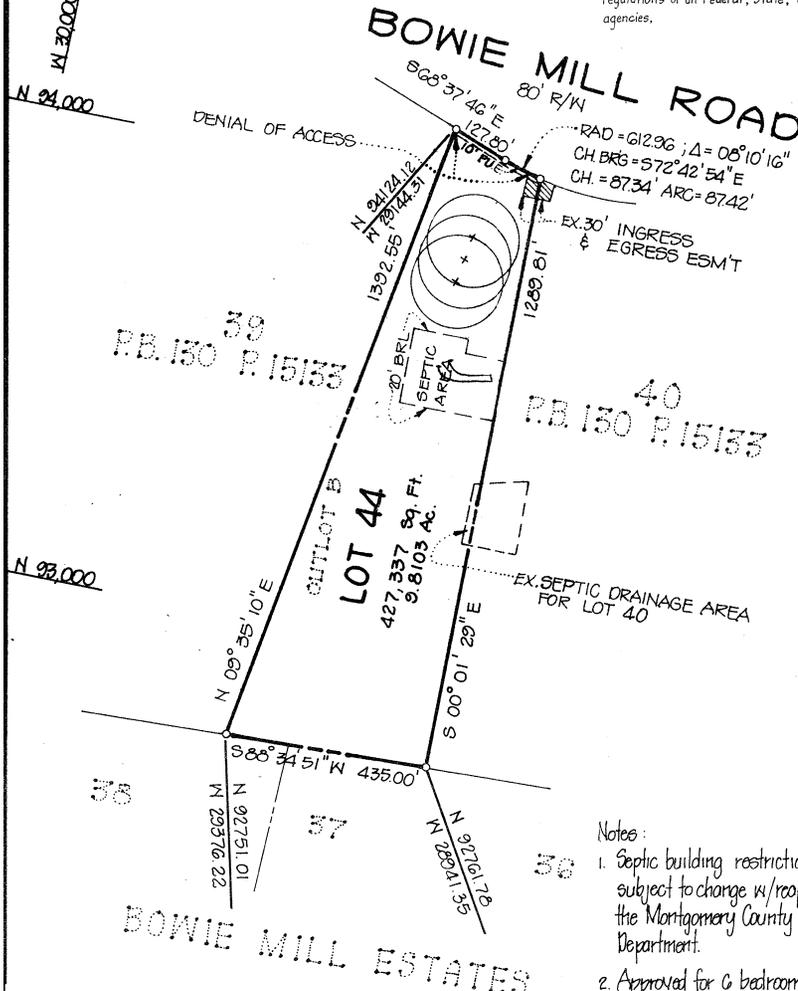
OWNERS DEDICATION

We, the undersigned, Ernest L. Henderson and Doris J. Henderson, owners of the property shown and described hereon, hereby adopt this plan of resubdivision,*

establish slope easements 50 feet wide along street as required by Montgomery County. Slope easements granted hereon shall be terminated after all required public improvements abutting said easements have been lawfully completed and have been accepted for maintenance by Montgomery County, Maryland. There are no suits of actions, leases, liens or trusts on the property included in this plan of resubdivision, except a certain note and deed of trust and the parties in interest thereto have hereon indicated their assent to this plan.

* ADDENDUM TO OWNER'S DEDICATION

grant to the parties named in a document entitled "Declaration of Terms and Provisions of Public Utility Easements" as recorded in Liber 3634, Folio 457 of the Land Records, ten (10) foot public utility easement adjacent, contiguous and parallel to the street right of way shown hereon, subject to all current and applicable regulations of all Federal, State, and local governing agencies.



DATE Sept 26 1991
 Ernest L. Henderson
 WITNESS
 Doris J. Henderson
 WITNESS

Ernest L. Henderson
 ERNEST L. HENDERSON
Doris J. Henderson
 DORIS J. HENDERSON

We hereby assent to this plan of resubdivision
 DATE Sept 26 1991
 Robert L. Brownwell
 WITNESS
 Mark W. Kugler
 WITNESS

Robert L. Brownwell
 ROBERT L. BROWNWELL-TRUSTEE
Mark W. Kugler
 MARK W. KUGLER-TRUSTEE

SURVEYOR'S CERTIFICATE

I hereby certify to the best of my knowledge and belief that upon the recording of this plat among the Land Records, the survey information shown hereon is correct and this plan meets the subdivision Regulations of this zone, and being all of the land conveyed by Ernest L. Henderson to Ernest L. & Doris J. Henderson by deed dated September 10, 1990 and recorded in Liber 3471 Folio 857 among the Land Records of Montgomery County, Maryland and that it includes a resubdivision of Outlot B in Bowie Mill Estates recorded in Plat Book 130, Plat 15133 among the aforesaid Land Records. Iron pipes marked thus -o- will be set where indicated. The total area of this plat is 427,337 square feet or 9.8103 acres of land. There is no dedication by this plat. This plat was prepared without the benefit of a Title Report.

DATE Sept 26 1991
 Ernest L. Henderson
 REGISTERED LAND SURVEYOR, MD # 3084



SUBDIVISION RECORD PLAT
 LOT 44

BOWIE MILL ESTATES

8TH ELECTION DISTRICT
 MONTGOMERY COUNTY, MARYLAND
 SCALE: 1" = 200' DATE: AUG. 1991

HANSON & DEN OUTER, LTD. FILED

- Notes:
1. Septic building restriction lines subject to change w/ reapproval by the Montgomery County Health Department.
 2. Approved for 6 bedrooms.

RECORDED:
 PLAT BOOK:
 PLAT NO:

29122018976913023710 2070194
 THE MARYLAND NATIONAL CAPITAL PARK & PLANNING COMMISSION
 MONTGOMERY COUNTY PLANNING BOARD
 APPROVED: October 17, 1991
 Chairman: John A. ...
 Asst. Secretary - Treasurer: Dorothy C. ...
 M. N. C. P. B. C. RECORD FILE NO. 584-46

MONTGOMERY COUNTY, MARYLAND
 DEPARTMENT OF TRANSPORTATION
 APPROVED: February 6, 1992
 BY: ...
 FOR DIRECTOR

HEALTH DEPARTMENT
 MONTGOMERY COUNTY, MARYLAND
 APPROVED: 2/25/92
 HAROLD D. ...
 COUNTY HEALTH OFFICER

CIVIL ENGINEERS & LAND SURVEYORS
 LAND PLANNING CONSULTANTS
 172 ROLLINS AVE., ROCKVILLE, MD 20852
 (301) 881-6770
 RE-2 ZONE
 FILE NO. R.P. 949
 JOB NO. 1148 E1
 MAR 19 1992



DEPARTMENT OF TRANSPORTATION

Isiah Leggett
County Executive

Arthur Holmes, Jr.
Director

July 29, 2014

Mr. Benjamin Berbert, Senior Planner
Area 3 Planning Division
The Maryland-National Capital
Park & Planning Commission
8787 Georgia Avenue
Silver Spring, Maryland 20910-3760

RE: Preliminary Plan No. 120140020
Bowie Mill Estates

Dear Mr. ^{Ber} Berbert:

We have completed our review of the March 11, 2014 submittal of the preliminary plan. This plan was reviewed by the Development Review Committee at its meeting on April 14, 2014*. We recommend approval of the plan based to the following comments:

* These comments reflect revisions to our DRC remarks following our July 24, 2014 field meeting with the applicant's consultant, Mr. Curt Schreffler. We appreciate all parties cooperation on this plan review.

Note: All Planning Board Opinions relating to this plan or any subsequent revision, project plans or site plans should be submitted to the Department of Permitting Services (DPS) in the package for record plats, storm drain, grading or paving plans, or application for access permit. Include this letter and all other correspondence from this department.

1. Necessary dedication shown for Bowie Mill Road (40' from centerline) in accordance with the Upper Rock Creek Master Plan. (Note: Bowie Mill Road is designated for "bike lanes" in the Upper Rock Creek Master Plan.)
2. Grant necessary slope and drainage easements prior to record plat. Slope easements are to be determined by study or set at the building restriction line in accordance with MCDOT standard 2004.31 (Suburban Minor Arterial Road, Open section: 2 lanes with bike path).
3. In accordance with Section 50-35(n) of the Montgomery County Code, we recommend the Montgomery County Planning Board require the applicant to construct five (5) foot concrete sidewalk off-site along Bowie Mill Road to provide access to the existing bus stop at Fraley Farm Road. In accordance with the discussion at the July 24th field meeting, this offsite sidewalk should

Division of Traffic Engineering and Operations

100 Edison Park Drive, 4th Floor • Gaithersburg, Maryland 20878
Main Office 240-777-2190 • TTY 240-777-6013 • FAX 240-777-2080
trafficops@montgomerycountymd.gov



be located within area between the existing edge of pavement and the tree line/hedgerows. A driveway culvert will be needed to transition the sidewalk from the road shoulder to its ultimate location behind the side ditch in front of the property.

4. Record plat to reflect a reciprocal ingress, egress, and public utilities easement to serve the lots accessed by each common driveway.
5. Relocation of utilities along existing roads to accommodate the required roadway improvements shall be the responsibility of the applicant.
6. If the proposed development will alter any existing street lights, signing, and/or pavement markings, please contact Mr. Dan Sanayi of our Traffic Engineering Design and Operations Section at (240) 777-2190 for proper executing procedures. All costs associated with such relocations shall be the responsibility of the applicant.
7. Trees in the County rights of way – spacing and species to be in accordance with the applicable MCDOT standards (unless a Design Exception is granted). Tree planning within the public right of way must be coordinated with Mr. Brett Linkletter, Chief of the Division of Highway Services, Tree Maintenance Section at (240) 777-7651.
8. Coordinate with Ms Stacy Coletta at our Division of Transit Services for the sidewalk connection to the existing bus stop pad at Fraley Farm Road. Ms Coletta may be contacted at 240-777-5836.
9. Permit and bond will be required as a prerequisite to DPS approval of the record plat. The permit will include, but not necessarily be limited to, the following improvements:
 - a. On Bowie Mill Road between the western property line and the proposed private common driveway, widen the shoulder to eight (8) feet (to accommodate the future bike lane and the three (3) foot shoulder, construct side ditch, and, and five (5) foot concrete sidewalk. The proposed graded area for the future bike lane shall be sodded. Place street trees (along this section of the frontage) behind the side ditch.
 - b. Reconstruct the existing private common driveway apron as necessary for emergency vehicle access.
 - c. No improvements will be required by the applicant for the portion of the site frontage between the driveway and the eastern property line.
 - d. Engineered channel (in accordance with the MCDOT Storm Drain Design Criteria) within the County rights-of-way and all drainage easements.
 - e. Permanent monuments and property line markers, as required by Section 50-24(e) of the Subdivision Regulations.
 - f. Erosion and sediment control measures as required by Section 50-35(j) and on-site stormwater management where applicable shall be provided by the Developer (at no cost

Mr. Benjamin Berbert
Preliminary Plan No. 120140020
July 29, 2014
Page 3

to the County) at such locations deemed necessary by the Department of Permitting Services (DPS) and will comply with their specifications. Erosion and sediment control measures are to be built prior to construction of streets, houses and/or site grading and are to remain in operation (including maintenance) as long as deemed necessary by the DPS.

- g. On Bowie Mill Road, extend the proposed five (5) feet-wide concrete sidewalk from the western limits of proposed Lot B to Fraley Farm Road, if required as an off-site amenity by the Montgomery County Planning Board.
- h. Developer shall provide street lights in accordance with the specifications, requirements, and standards prescribed by the MCDOT Division of Traffic Engineering and Operations.

Thank you for the opportunity to review the amended preliminary plan. If you have any questions or comments regarding this letter, please contact Mr. Deepak Somarajan, our new Development Review Area Engineer for this project, at deepak.somarajan@montgomerycountymd.gov or (240) 777-2194.

Sincerely,



Gregory M. Leck, Manager
Development Review Team

M:\Correspondence\FY15\Traffic\Active(120140020)\Letters\120140020, bowie mill estates, MCDOT plan review ltr.doc

cc: Jim Gibson
Jared Sims Carhart; CAS Engineering
Curt Schreffler; CAS Engineering
Preliminary Plan folder
Preliminary Plan letters notebook

cc-e: Catherine Conlon; M-NCPPC DARC
Rich Weaver; M-NCPPC Area 3
Katherine Holt; M-NCPPC Area 3
Amy Butler Stevens; MCDPS SWFMP
Atiq Panjshiri; MCDPS RWPR
Sam Farhadi; MCDPS RWPR
Bill Campbell; MCDPS WRM
Marie LaBaw; MCFRS
Bret Linkletter; MCDOT DHS
Stacy Coletta; MCDOT DHS
Pat Shepherd; MCDOT DTE

Mr. Benjamin Berbert
Preliminary Plan No. 120140020
July 29, 2014
Page 4

Dan Sanayi; MCDOT DTEO
Fred Lees; MCDOT DTEO
Seifu Kerse; MCDOT DTEO
Deepak Somarajan; MCDOT DTEO



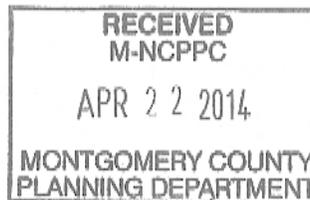
DEPARTMENT OF PERMITTING SERVICES

Isiah Leggett
County Executive

Diane R. Schwartz Jones
Director

MEMORANDUM

April 21, 2014



TO: Cathy Conlon, Development Review,
Maryland National Capital Park and Planning Commission

FROM: Gene von Gunten, Manager- Well & Septic Section
Department of Permitting Services

SUBJECT: Status of Preliminary Plan: # 120140020
Bowie Mill Estates, lots A, B, C, D

*Gene
4/21/14*

This is to notify you that the Well & Septic Section of MCDPS approved the plan received in this office on April 16, 2014.

Approved with the following reservations:

1. The record plat must be at the same scale as the preliminary plan, or submit an enlargement of the plat to match the preliminary plan.
2. The proposed houses must utilize an approved septic treatment system with Best Available Technology as approved by the State of MD.
3. All storm-water management structures must be at least 100 feet from the primary water well.

If you have any questions, contact Gene von Gunten at (240) 777-6319.

cc: Surveyor
File



Attachment E



FIRE MARSHAL COMMENTS

DATE: 17-Jun-14
TO: Curt Schreffler - curt@casengineering
CAS Engineering
FROM: Marie LaBaw
RE: Bowie Mill Estates Proposed Lots A - D
120140020

PLAN APPROVED

1. Review based only upon information contained on the plan submitted **17-Jun-14** .Review and approval does not cover unsatisfactory installation resulting from errors, omissions, or failure to clearly indicate conditions on this plan.
2. Correction of unsatisfactory installation will be required upon inspection and service of notice of violation to a party responsible for the property.

GENERAL NOTES (CONT'D)

- ALL OFFSITE EXISTING FEATURES ILLUSTRATED ON THIS PLAN ARE APPROXIMATE AND ARE INTENDED FOR ILLUSTRATIVE PURPOSES ONLY.
- ALL OFFSITE TREE SIZES AND LOCATIONS ARE APPROXIMATE.
- THERE WERE NO RTE SPECIES OBSERVED DURING OUR SITE ANALYSIS. MDE HAS INDICATED THAT NO KNOWN RTE SPECIES EXIST ON THIS SITE.
- BASED ON AVAILABLE M-NCPFC DATA, THERE ARE NO CULTURAL OR HISTORICAL FEATURES LOCATED ON THIS SITE.
- THERE ARE NO COUNTY OR STATE CHAMPION TREES LOCATED ON THIS SITE.

LEGEND

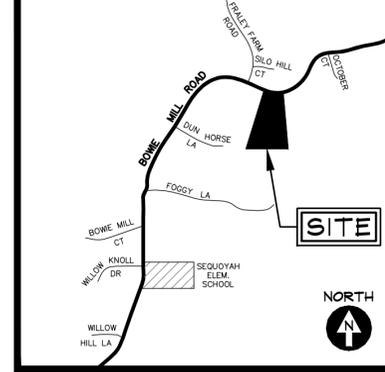
EXISTING FEATURES		PROPOSED FEATURES	
---428---430---	EX. TWO- AND TEN-FOOT CONTOURS	---62---	PROP. CONTOUR WITH ELEVATION
○ 28.0 ○	EX. SPOT ELEVATION	⊕	PROP. WELL
—○—○—	EX. CHAIN LINK OR WIRE FENCE	⊕#14	PROP. SANDMOUND
□	EX. WOOD FENCE	—S—S—	PROP. SEPTIC AREA
—S—S—	EX. APPROVED SEPTIC AREA	—E—E—	ENVIRONMENTAL BUFFER
—OH—○—	EX. OVERHEAD UTILITY WITH POLE	—S—S—	PROP. DRYWELL & SURFACE DRYWELL
○	EX. WELL	—S—S—	PROP. FOREST CONSERVATION EASEMENT W/ SIGNAGE
~~~~~	EX. TREELINE	—SSF—	PROP. SUPER SILT FENCE
⊕ 1	EXISTING DECIDUOUS SPECIMEN TREE (30" OR 75% OF CHAMPION SIZE)	—TPF—	PROP. TREE PROTECTION FENCE
⊕ 2	EXISTING TREE (DECIDUOUS) (24" THRU 29.9" DBH)	—X—X—	LIMITS OF DISTURBANCE
⊕ 3	EXISTING TREE (DECIDUOUS) (12" THRU 23.9" DBH)	—FD—FD—	PROP. FOREST CLEARING
		—TP—RP—	PROP. ROOT PRUNING & TREE PROTECTION FENCE

# Attachment F

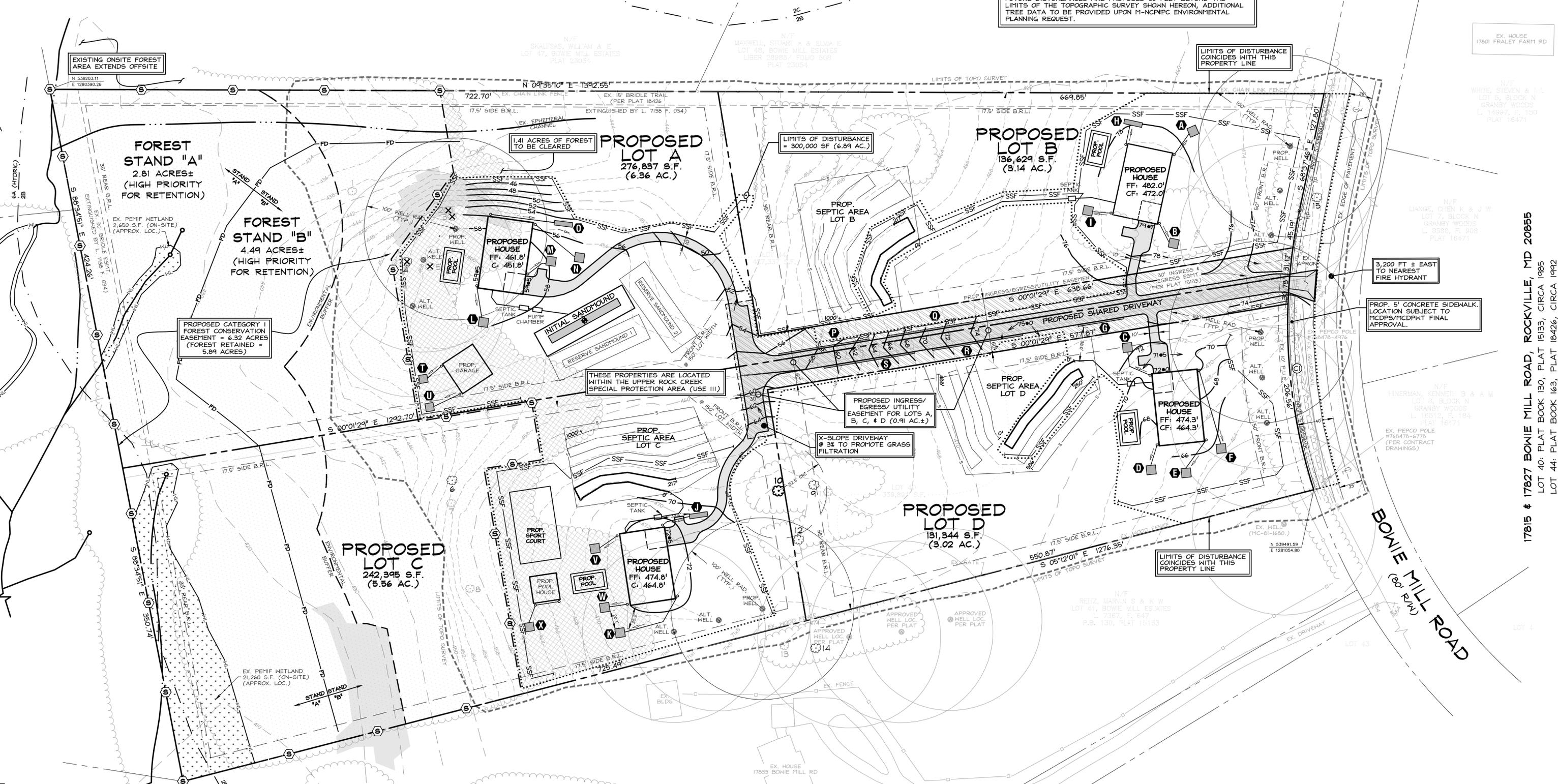
**FOREST CONSERVATION TABLE**

ACREAGE OF TRACT	18.07 ACRES		
ACREAGE OF TRACT REMAINING IN AGRICULTURAL USE	0.00 ACRES		
ACREAGE OF ROAD AND UTILITY ROW'S WHICH WILL NOT BE IMPROVED AS PART OF THE DEVELOPMENT APPLICATION	0.00 ACRES		
ACREAGE OF EXISTING FOREST, WETLANDS, FLOODPLAINS, AND STREAM VALLEY BUFFERS	7.30 ACRES		
ACREAGE OF TOTAL FOREST RETENTION	5.89 ACRES		
LAND USE CATEGORY AND CONSERVATION AND AFFORESTATION THRESHOLDS FROM THE SECTION 22A-12(a) OF THE FOREST CONSERVATION LAW	AGRICULTURAL RESOURCES AREA 3.69 ACRES; AFFORES. THRESHOLD 2.76 ACRES; CONSERV. THRESHOLD		
LINEAR FEET AND AVERAGE WIDTH OF STREAM BUFFER PROVIDED	780 FEET LONG ± 175 FEET WIDE ±		
	AREA RETAINED	AREA CLEARED	AREA PLANTED
ACREAGE OF FOREST RETAINED, CLEARED, AND PLANTED WITHIN WETLANDS	0.23 ACRES	0.00 ACRES	0.00 ACRES
ACREAGE OF FOREST RETAINED, CLEARED, AND PLANTED WITHIN 100-YEAR FLOODPLAIN	0.00 ACRES	---- ACRES	---- ACRES
ACREAGE OF FOREST RETAINED, CLEARED, AND PLANTED WITHIN IN STREAM BUFFERS	3.82 ACRES	0.00 ACRES	0.00 ACRES
ACREAGE OF FOREST RETAINED, CLEARED, AND PLANTED WITHIN PRIORITY AREAS	3.82 ACRES	0.00 ACRES	0.00 ACRES

ADDITIONAL SIGNIFICANT TREES MAY EXIST WITHIN 100 FEET OF THE SUBJECT PROPERTY WITHIN THE OFF-SITE FOREST AREA. IF FUTURE DISTURBANCES ARE PROPOSED 50 FEET BEYOND THE LIMITS OF THE TOPOGRAPHIC SURVEY SHOWN HEREON, ADDITIONAL TREE DATA TO BE PROVIDED UPON M-NCPFC ENVIRONMENTAL PLANNING REQUEST.



**VICINITY MAP**  
ADC MAP 20, GRID H-8  
SCALE: 1" = 2000'



17815 & 17827 BOWIE MILL ROAD, ROCKVILLE, MD 20855  
LOT 40: PLAT BOOK 130, PLAT 15133, CIRCA 1985  
LOT 44: PLAT BOOK 163, PLAT 18426, CIRCA 1992

# Attachment G

## GENERAL NOTES

- 1) WATER CATEGORY - 6 SEWER CATEGORY - 6
- 2) BOUNDARY INFORMATION BASED ON A SURVEY PERFORMED BY CAS ENGINEERING, DATED APRIL, 2006.
- 3) TWO-FOOT CONTOUR DATA BASED ON A SURVEY PERFORMED BY CAS ENGINEERING, DATED APRIL, 2006.
- 4) TOTAL LOT AREA:  
LOT 40 = 359,091 SQ. FT. (8.2620 ACRES)  
LOT 44 = 427,337 SQ. FT. (9.8103 ACRES)  
TOTAL AREA = 787,228 SQ. FT. (18.0723 ACRES)
- 5) PROPERTY SHOWN ON TAX MAP HT 122, LOTS 40 & 44, BOWIE MILL ESTATES.
- 6) PROPERTY SHOWN ON WSSC 200' SHEET 224 NN 05.
- 7) PROPERTY SHOWN ON MONTGOMERY COUNTY SOILS SURVEY MAP No. 14, SOIL TYPE(S): 2B & 6A. HYDROLOGIC SOIL GROUP "B" & "D", RESPECTIVELY.
- 8) FLOOD ZONE "X" PER F.E.M.A. FIRM MAPS, COMMUNITY PANEL NUMBER 2483020D.
- 9) SITE IS LOCATED IN THE UPPER ROCK CREEK WATERSHED SPA (USE III).
- 10) LOCAL UTILITIES INCLUDE:  
WATER & SEWER - PRIVATE WELL & SEPTIC  
ELECTRIC - PEPCO  
TELEPHONE - VERIZON  
GAS - N/A

## LEGEND

EXISTING FEATURES	PROPOSED FEATURES
EX. TWO- AND TEN-FOOT CONTOURS	PROP. CONTOUR WITH ELEVATION
EX. SPOT ELEVATION	PROP. SPOT ELEVATION
EX. CHAIN LINK OR WIRE FENCE	PROP. FOREST CLEARING
EX. WOOD FENCE	PROP. SANDMOUND
EX. APPROVED SEPTIC AREA	PROP. SEPTIC AREA
EX. OVERHEAD UTILITY WITH POLE	PROP. INGRESS / EGRESS / UTILITY EASEMENT
EX. WELL	ENVIRONMENTAL BUFFER
EX. OLD PERCOLATION/ WATER TABLE TEST	PROP. DRYWELL & MICRO-INFILTRATION TRENCH
EX. TREE	PROP. FOREST CONSERVATION EASEMENT
EX. STEEP SLOPES	PROP. ROOT PRUNING & TREE PROTECTION FENCE
EX. STREAM	PROP. SUPER SILT FENCE
EX. SOILS BOUNDARY	PROP. TREE PROTECTION FENCE
EX. WETLAND AREA	LIMITS OF DISTURBANCE

## SITE / ZONING DATA

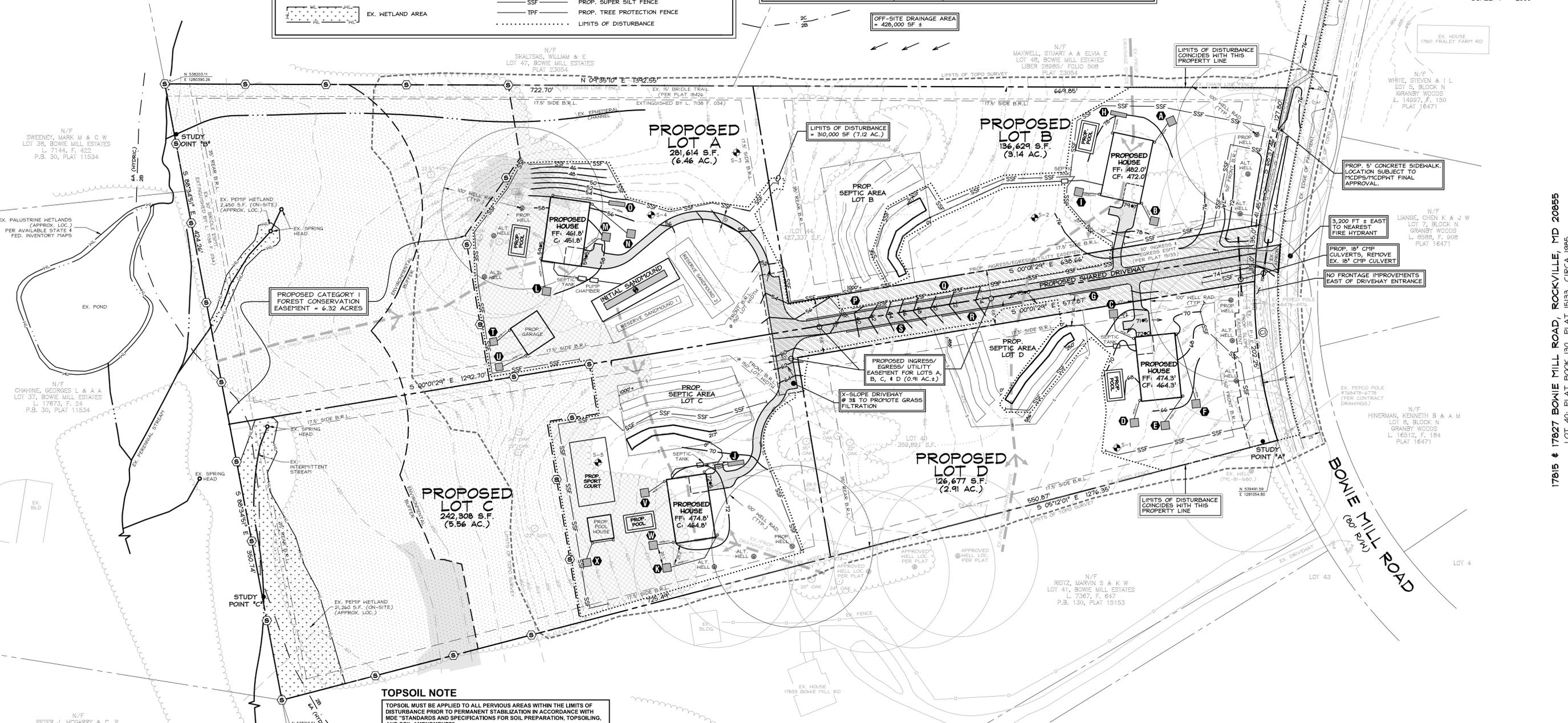
GROSS SITE AREA: 787,228 SQ. FT.  
PROPOSED DEDICATION: 0 SQ. FT.  
NET TRACT AREA: 787,228 SQ. FT.

ZONING: RE-2	REQUIRED	PROVIDED			
		PROP. LOT A	PROP. LOT B	PROP. LOT C	PROP. LOT D
MINIMUM LOT AREA	87,120 S.F.	276,837 S.F.	136,629 S.F.	242,396 S.F.	131,344 S.F.
MINIMUM LOT WIDTH AT B.R.L.	150.0'	152.80'	150.71'	161.33'	211.77'
MAXIMUM LOT COVERAGE (25%)	25%	5,600 S.F. (2.0%)	4,000 S.F. (2.9%)	4,900 S.F. (2.0%)	4,000 S.F. (3.0%)
FRONT YARD SETBACK	50.0'	50'	50'	50'	50'
SETBACK FROM OTHER LOT LINES	SIDE: 17' MIN. OR 35' TOTAL REAR: 35' MINIMUM	17.5' / 35'	17.5' / 35'	17.5' / 35'	17.5' / 35'

NOTE: SITE / ZONING DATA SUBJECT TO CHANGE BASED ON FINAL ARCHITECTURAL AND SITE DESIGNS

## IMPERVIOUS COVERAGE DATA

SPA: UPPER ROCK CREEK WATERSHED	RECOMMENDED	PROVIDED
IMPERVIOUS SURFACE COVERAGE	8%	TOTAL ACREAGE OF TRACT = 807,602 S.F. (18.54 ACRES) 51,877 S.F. (6.4%)



## VICINITY MAP

ADC MAP 20, GRID H-8  
SCALE: 1" = 2000'

N/F PETER J. MCGARRY & C. P.  
LOT 36, BOWIE MILL ESTATES  
L. 7276 / F. 437  
P.B. 30, PLAT 13134

**TOPSOIL NOTE**  
TOPSOIL MUST BE APPLIED TO ALL PERVIOUS AREAS WITHIN THE LIMITS OF DISTURBANCE PRIOR TO PERMANENT STABILIZATION IN ACCORDANCE WITH MDE "STANDARDS AND SPECIFICATIONS FOR SOIL PREPARATION, TOPSOILING, AND SOIL AMENDMENTS".

### UTILITY INFORMATION

EXISTING UNDERGROUND UTILITY LOCATIONS ARE APPROXIMATE AND MUST BE FIELD VERIFIED. UTILITY LOCATIONS ARE BASED UPON AVAILABLE RECORDS AND ARE SHOWN TO THE BEST OF OUR ABILITY.

UTILITY CO.	REQUEST DATE	BY	INFO. RECEIVED	PLAN REVISED	BY
AT&T	06/05/2013	JSC	07/15/2013	NO FACILITIES	BCB
COMCAST	06/05/2013	JSC	06/11/2013	VERIFIED	BCB
NCT	06/05/2013	JSC	06/20/2013	NO FACILITIES	BCB
PEPCO	06/05/2013	JSC	-	-	-
VERIZON	06/05/2013	JSC	06/17/2013	NO FACILITIES	BCB
W.S.S.C.	06/05/2013	JSC	06/07/2013	NO FACILITIES	JSC

SEWER CONTRACT DRAWING: N/A  
WATER CONTRACT DRAWING: N/A  
HOUSE-CONNECTION PLUMBING CARDS: N/A

**MISS UTILITY**  
FOR LOCATION OF UTILITIES, CALL "MISS UTILITY" AT 1-800-251-7777, OR LOG ON TO WWW.MISSUTILITY.NET 48 HOURS IN ADVANCE OF ANY WORK IN THIS VICINITY. THE EXCAVATOR MUST NOTIFY ALL PUBLIC UTILITY COMPANIES WITH UNDER GROUND FACILITIES IN THE AREA OF PROPOSED EXCAVATION AND HAVE THOSE FACILITIES LOCATED BY THE UTILITY COMPANIES PRIOR TO COMMENCING EXCAVATION. THE EXCAVATOR IS RESPONSIBLE FOR COMPLIANCE WITH REQUIREMENTS OF CHAPTER 36A OF THE MONTGOMERY COUNTY CODE.

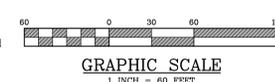
### CURVE TABLE

CURVE	LENGTH	RADIUS	CHORD	CHORD BEARING	DELTA ANGLE
C1	313.70'	612.96'	308.71'	N 75°16'55" W	2°11'01"

### SOILS

- 1) 2B GLENELG SILT LOAM, 3 TO 8 PERCENT  
THIS MODERATELY FINE-TEXTURED SOIL IS VERY DEEP, WELL DRAINED AND MODERATELY PERMEABLE. AVAILABLE WATER CAPACITY IS HIGH. PRODUCTIVITY IS HIGH. EROSION HAZARD IS SLIGHT. CAPABILITY SUBCLASS IS IIE.
- 2) 6A BAILE SILT LOAM, 0 TO 3 PERCENT (HYDRIC)  
THIS MODERATELY FINE-TEXTURED SOIL IS VERY DEEP, POORLY DRAINED AND MODERATELY PERMEABLE. AVAILABLE WATER CAPACITY IS HIGH. PRODUCTIVITY IS HIGH. EROSION HAZARD IS SLIGHT. CAPABILITY SUBCLASS IS VLN.

**OWNER**  
BOWIE MILL LLC  
5185 MACARTHUR BLVD., NW  
WASHINGTON, D.C. 20016  
(202) 364-1555 (PHONE)  
(202) 364-3404 (FAX)  
ATTN: JIM GIBSON



## PROFESSIONAL ENGINEER 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. 19568, EXPIRATION DATE 3/8/2016.

09/05/14  
DATE  
Curt A. Schreffler  
CURT A. SCHREFFLER, PE



17815 & 17827 BOWIE MILL ROAD, ROCKVILLE, MD 20855  
LOT 40: PLAT BOOK 130, PLAT 15133, CIRCA 1985  
LOT 44: PLAT BOOK 163, PLAT 18426, CIRCA 1992

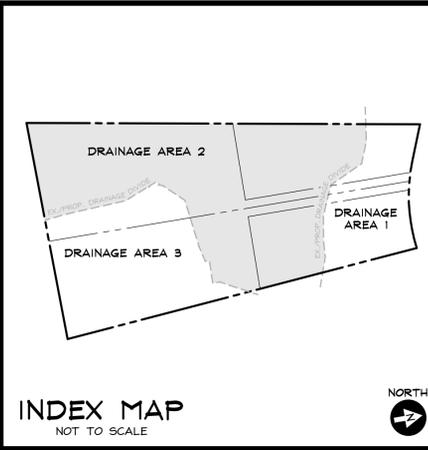
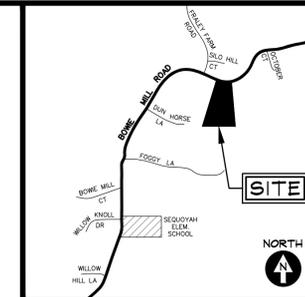
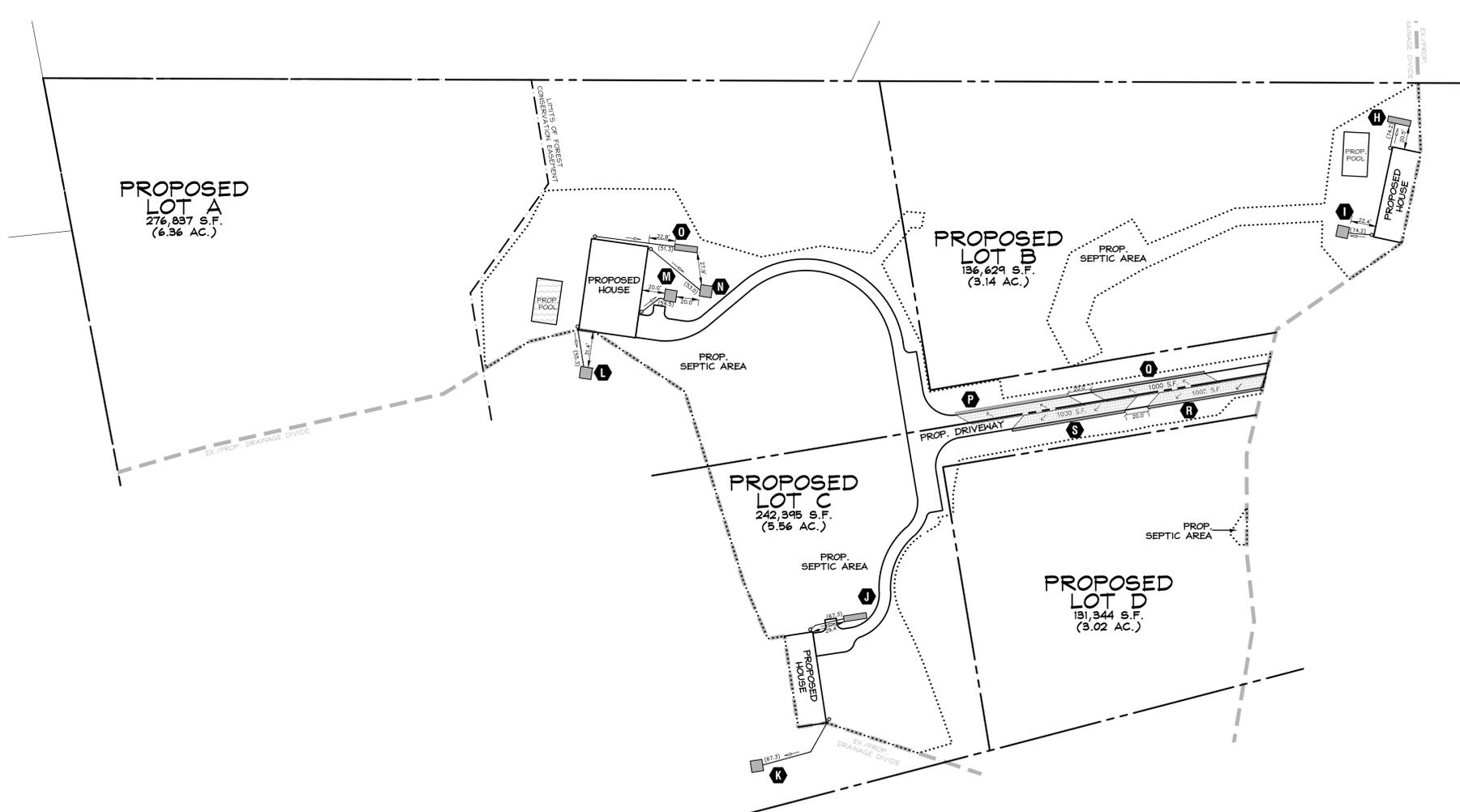
PROPOSED LOTS A, B, C & D  
**BOWIE MILL ESTATES**  
OLNEY (8TH) ELECTION DISTRICT, MONTGOMERY COUNTY, MARYLAND  
PRELIMINARY / FINAL WATER QUALITY PLAN

108 West Ridgeville Blvd., Suite 101  
Mount Airy, Maryland 21771  
301-607-8031 office  
301-607-8045 fax  
www.casengineering.com  
info@casengineering.com





**DRAINAGE AREA 2**  
SCALE 1"=60'



**VICINITY MAP**  
ADC MAP 20, GRID H-8  
SCALE: 1" = 2000'

**INDEX MAP**  
NOT TO SCALE

**ESDv CALCULATIONS**

ESD COMPUTATIONS - DRAINAGE AREA 2			
TOTAL DRAINAGE AREA FOR P _i DETERMINATION	PROPOSED IMPERVIOUS AREA FOR P _i DETERMINATION	IMPERVIOUS AREA PERCENTAGE FOR P _i DETERMINATION	P _i = RAINFALL TARGET APPLY IMPERVIOUS COVER PERCENTAGE TO TABLE 5.3 - SOIL GROUP B
437,029 S.F.	24,195 S.F.	5.5%	1.0 IN.
DRAINAGE AREA IS > 40,000 SF, USE TOTAL L.O.D. IN DRAINAGE AREA TO DETERMINE TARGET ESD _v .		I = PROPOSED IMPERVIOUS COVER FOR R, & ESD _v COMPUTATIONS (%)	
130,000 S.F.		38.6	
DETERMINE ESD _v REQUIRED FOR PROPOSED IMPERVIOUS AREAS	P _i = RAINFALL TARGET (from above)	R _v = RUNOFF VOLUME (0.05 x 0.009)	TARGET ESD _v = (P _i )(R _v )(A)/12 BASED ON LIMIT OF DISTURBANCE
1.0 IN.	0.22	TOTAL DRAINAGE AREA ESD VOLUME REQUIRED: 2383.3 CF	

DRYWELL STRUCTURE	IMPERVIOUS AREA	DRAINAGE AREA (SQ. FT.)	MIN. ESD _v (CU. FT.)	SIZE OF DRYWELL (L x W x D) FT	SURFACE AREA (S.F.)	PROVIDED DRYWELL VOLUME	Q ₁ MAXIMUM VOLUME CHECK (1-YEAR STORM)	VOLUME PROV. VIA DRYWELLS
H ROOF	HOUSE PROP. LOT B	1000	79 C.F.	20.0 (LENGTH) 5.0 (WIDTH) 5.0 (DEPTH)	102 S.F.	204 C.F.	206 C.F.	204 C.F.
I ROOF	HOUSE PROP. LOT B	1000	79 C.F.	10.0 (LENGTH) 10.25 (WIDTH) 5.0 (DEPTH)	103 S.F.	205 C.F.	206 C.F.	205 C.F.
J ROOF	HOUSE PROP. LOT C	1000	79 C.F.	20.0 (LENGTH) 5.0 (WIDTH) 5.0 (DEPTH)	102 S.F.	204 C.F.	206 C.F.	204 C.F.
K ROOF	HOUSE PROP. LOT C	1000	79 C.F.	10.0 (LENGTH) 10.25 (WIDTH) 5.0 (DEPTH)	103 S.F.	205 C.F.	206 C.F.	205 C.F.
L ROOF	HOUSE PROP. LOT A	1000	79 C.F.	10.0 (LENGTH) 10.25 (WIDTH) 5.0 (DEPTH)	103 S.F.	205 C.F.	206 C.F.	205 C.F.
M ROOF	HOUSE PROP. LOT A	1000	79 C.F.	10.0 (LENGTH) 10.25 (WIDTH) 5.0 (DEPTH)	103 S.F.	205 C.F.	206 C.F.	205 C.F.
N ROOF	HOUSE PROP. LOT A	1000	79 C.F.	10.0 (LENGTH) 10.25 (WIDTH) 5.0 (DEPTH)	103 S.F.	205 C.F.	206 C.F.	205 C.F.
O ROOF	HOUSE PROP. LOT A	1000	79 C.F.	20.0 (LENGTH) 5.0 (WIDTH) 5.0 (DEPTH)	102 S.F.	204 C.F.	206 C.F.	204 C.F.

MICRO-INFILTRATION TRENCH STRUCTURE	IMPERVIOUS AREA	DRAINAGE AREA (SQ. FT.)	MIN. ESD _v (CU. FT.)	SIZE OF DRYWELL (L x W x D) FT	SURFACE AREA (S.F.)	PROVIDED DRYWELL VOLUME	Q ₁ MAXIMUM VOLUME CHECK (1-YEAR STORM)	VOLUME PROV. VIA DRYWELLS
P DRIVEWAY	DRIVEWAY	1000	79 C.F.	100.0 (LENGTH) 2.0 (WIDTH) 2.5 (DEPTH)	200 S.F.	200 C.F.	206 C.F.	200 C.F.
Q DRIVEWAY	DRIVEWAY	1000	79 C.F.	100.0 (LENGTH) 2.0 (WIDTH) 2.5 (DEPTH)	200 S.F.	200 C.F.	206 C.F.	200 C.F.
R DRIVEWAY	DRIVEWAY	1000	79 C.F.	100.0 (LENGTH) 2.0 (WIDTH) 2.5 (DEPTH)	200 S.F.	200 C.F.	206 C.F.	200 C.F.
S DRIVEWAY	DRIVEWAY	1000	79 C.F.	100.0 (LENGTH) 2.0 (WIDTH) 2.5 (DEPTH)	200 S.F.	200 C.F.	206 C.F.	200 C.F.

POOL & DRIVEWAY	IMPERVIOUS AREA	DRAINAGE AREA (SQ. FT.)	MIN. ESD _v (CU. FT.)	ESD _v PROVIDED BY DRYWELLS	ESD _v PROVIDED BY MICRO-INFILTRATION TRENCHES
POOL PROP. LOT A	836				
POOL PROP. LOT B	836		0.00		
DRIVEWAY	10523			1,637 C.F.	800.0 C.F.
<b>TOTAL</b>	<b>12,195</b>			<b>1,637 C.F.</b>	<b>800.0 C.F.</b>

TOTAL SITE IMPERVIOUS AREA	24,195 S.F.	ESD _v PROVIDED BY DRYWELLS	1,637 C.F.	ESD _v PROVIDED BY MICRO-INFILTRATION TRENCHES	800.0 C.F.
TOTAL ESD _v PROVIDED		IS ESD _v ADEQUATE	2,437 C.F. >	2,383.3 C.F.	CHECK
		IS P _i ADEQUATE	1.02 IN >	1.00 IN	CHECK

**DRYWELL STRUCTURE SCHEDULE**

DRYWELL & MICRO-INFILTRATION TRENCH SCHEDULE - DRAINAGE AREA 2											
DRYWELL STRUCTURE	FINISHED GRADE (LOW SIDE)	FINISHED GRADE (HIGH SIDE)	ELEVATION AT TOP OF GRAVEL (1'-3" COVER)	PIPE INVERT IN FROM DOWNSPOUTS	TOTAL DEPTH OF GRAVEL (4' max. depth)	ELEVATION AT BOTTOM OF GRAVEL	TOTAL DEPTH OF SAND	ELEVATION AT BOTTOM OF SAND	TOTAL DEPTH OF STRUCTURE (gravel + sand; 5' max. depth)	TOTAL DEPTH OF STRUCTURE FROM GRADE (5' max. depth)	RECOMMENDED OVERFLOW
H	477.0	478.2	475.2	474.2	4.0 ft	471.2	1.0 ft	470.2	5.0 ft	8.0 ft	POP UP EMITTER
I	477.2	477.7	475.2	474.2	4.0 ft	471.2	1.0 ft	470.2	5.0 ft	7.5 ft	POP UP EMITTER
J	470.3	471.0	468.3	467.3	4.0 ft	464.3	1.0 ft	463.3	5.0 ft	7.7 ft	POP UP EMITTER
K	470.3	470.8	468.3	467.3	4.0 ft	464.3	1.0 ft	463.3	5.0 ft	7.5 ft	POP UP EMITTER
L	458.3	459.2	456.3	455.3	4.0 ft	452.3	1.0 ft	451.3	5.0 ft	7.9 ft	POP UP EMITTER
M	457.5	458.2	455.5	454.5	4.0 ft	451.5	1.0 ft	450.5	5.0 ft	7.7 ft	POP UP EMITTER
N	456.5	457.0	454.0	453.0	4.0 ft	450.0	1.0 ft	449.0	5.0 ft	8.0 ft	SURCHARGE @ DOWNSPOUT
O	454.2	455.0	452.3	451.3	4.0 ft	448.3	1.0 ft	447.3	5.0 ft	7.7 ft	POP UP EMITTER
MICRO-INFILTRATION TRENCH STRUCTURE	FINISHED GRADE (LOW SIDE)	FINISHED GRADE (HIGH SIDE)	ELEVATION AT TOP OF GRAVEL	TOTAL DEPTH OF GRAVEL (4' max. depth)	ELEVATION AT BOTTOM OF GRAVEL	TOTAL DEPTH OF SAND	ELEVATION AT BOTTOM OF SAND	TOTAL DEPTH OF STRUCTURE (gravel + sand; 5' max. depth)	TOTAL DEPTH OF STRUCTURE FROM GRADE (5' max. depth)	RECOMMENDED OVERFLOW	
P	456.5	464.0	AT SURFACE	1.5 ft	VARIES @ 7.5% +/-	1.0 ft	VARIES @ 7.5% +/-	2.5 ft	2.5 ft	AT SURFACE	
Q	466.0	474.0	AT SURFACE	1.5 ft	VARIES @ 8.0% +/-	1.0 ft	VARIES @ 8.0% +/-	2.5 ft	2.5 ft	AT SURFACE	
R	470.5	475.0	AT SURFACE	1.5 ft	VARIES @ 4.5% +/-	1.0 ft	VARIES @ 4.5% +/-	2.5 ft	2.5 ft	AT SURFACE	
S	460.5	468.5	AT SURFACE	1.5 ft	VARIES @ 8.0% +/-	1.0 ft	VARIES @ 10.0% +/-	2.5 ft	2.5 ft	AT SURFACE	

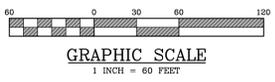
**PROFESSIONAL ENGINEER CERTIFICATION**

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. 19649, EXPIRATION DATE 3/6/2016.

09/05/14  
DATE  
*Curt A. Schreffler*  
CURT A. SCHREFFLER, PE



**OWNER**  
BOWIE MILL, LLC  
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WASHINGTON, D.C. 20016  
(202) 364-1555 (PHONE)  
(202) 364-3404 (FAX)  
ATTN: JIM GIBSON



17815 & 17827 BOWIE MILL ROAD  
PROPOSED LOTS A, B, C & D  
BOWIE MILL ESTATES  
PRELIMINARY/FINAL WATER QUALITY PLAN  
MCDPS WQP NO.: 261857

DATE	REVISION	BY
02/26/14	JSC	JSC
06/06/14	JSC	JSC
08/19/14	JSC	JSC
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17815 & 17827 BOWIE MILL ROAD, ROCKVILLE, MD 20855  
LOT 40: PLAT BOOK 130, PLAT 15133, CIRCA 1985  
LOT 44: PLAT BOOK 163, PLAT 18426, CIRCA 1992

**BOWIE MILL ESTATES**  
OLNEY (8TH) ELECTION DISTRICT, MONTGOMERY COUNTY, MARYLAND

PROPOSED LOTS A, B, C & D  
PRELIMINARY / FINAL WATER QUALITY PLAN

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CIVIL • SURVEYING • LAND PLANNING



# STANDARD EROSION AND SEDIMENT CONTROL NOTES

MAY 2013

- THE PERMITTEE SHALL NOTIFY THE DEPARTMENT OF PERMITTING SERVICES (DPS) FORTY-EIGHT (48) HOURS BEFORE COMMENCING ANY LAND DISTURBING ACTIVITY AND, UNLESS ADVISED BY THE DEPARTMENT, SHALL BE REQUIRED TO HOLD A PRE-CONSTRUCTION MEETING BETWEEN THEM OR THEIR REPRESENTATIVE, THEIR ENGINEER AND AN AUTHORIZED REPRESENTATIVE OF THE DEPARTMENT.
- THE PERMITTEE MUST OBTAIN INSPECTION AND APPROVAL BY DPS AT THE FOLLOWING POINTS:
  - AT THE REQUIRED PRE-CONSTRUCTION MEETING.
  - FOLLOWING INSTALLATION OF SEDIMENT CONTROL MEASURES AND PRIOR TO ANY OTHER LAND DISTURBING ACTIVITY.
  - DURING THE INSTALLATION OF A SEDIMENT BASIN OR STORMWATER MANAGEMENT STRUCTURE AT THE REQUIRED INSPECTION POINTS (SEE INSPECTION CHECKLIST ON PLAN). NOTIFICATION PRIOR TO COMMENCING CONSTRUCTION IS MANDATORY.
  - PRIOR TO REMOVAL OR MODIFICATION OF ANY SEDIMENT CONTROL STRUCTURE(S).
  - PRIOR TO FINAL ACCEPTANCE.
- THE PERMITTEE SHALL CONSTRUCT ALL EROSION AND SEDIMENT CONTROL MEASURES PER THE APPROVED PLAN AND CONSTRUCTION SEQUENCE, SHALL HAVE THEM INSPECTED AND APPROVED BY THE DEPARTMENT PRIOR TO ANY OTHER LAND DISTURBING ACTIVITY. SHALL ENSURE THAT ALL RUNOFF FROM DISTURBED AREAS IS DIRECTED TO THE SEDIMENT CONTROL DEVICES, AND SHALL NOT REMOVE ANY EROSION OR SEDIMENT CONTROL MEASURE WITHOUT PRIOR PERMISSION FROM THE DEPARTMENT.

- THE PERMITTEE SHALL PROTECT ALL POINTS OF CONSTRUCTION INGRESS AND EGRESS TO PREVENT THE DEPOSITION OF MATERIALS ONTO TRAVELING PUBLIC THOROUGHFARES(S). ALL MATERIALS DEPOSITED ONTO PUBLIC THOROUGHFARES(S) SHALL BE REMOVED IMMEDIATELY.
- THE PERMITTEE SHALL INSPECT PERIODICALLY AND MAINTAIN CONTINUOUSLY IN EFFECTIVE OPERATING CONDITION ALL EROSION AND SEDIMENT CONTROL MEASURES UNTIL SUCH TIME AS THEY ARE REMOVED WITH PRIOR PERMISSION FROM THE DEPARTMENT. THE PERMITTEE IS RESPONSIBLE FOR IMMEDIATELY REPAIRING OR REPLACING ANY SEDIMENT CONTROL MEASURES WHICH HAVE BEEN DAMAGED OR REMOVED BY THE PERMITTEE OR ANY OTHER PERSON.
- FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION MUST BE COMPLETED WITHIN:
  - THREE (3) CALENDAR DAYS AS TO THE SURFACE OF ALL PERIMETER DIKES, SHALES, DITCHES, PERIMETER SLOPES AND ALL SLOPES STEEPER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1); AND
  - SEVEN (7) CALENDAR DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE NOT UNDER ACTIVE GRADING.

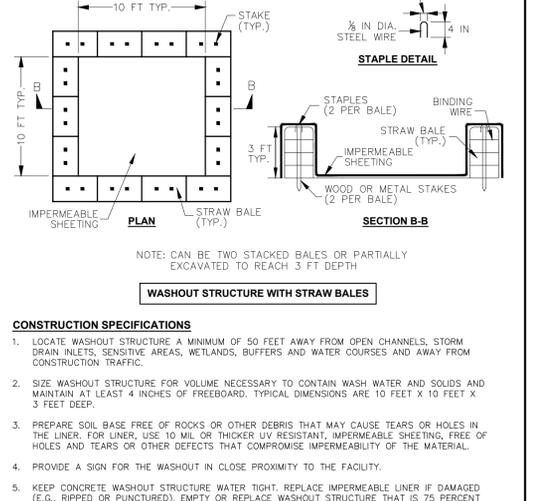
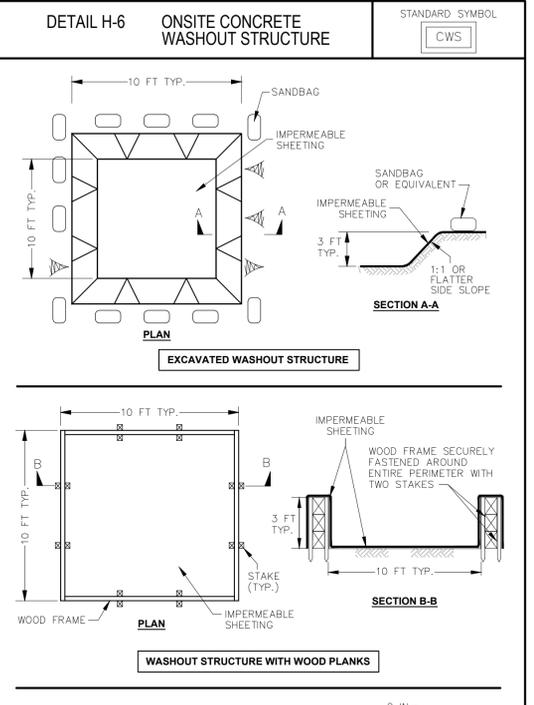
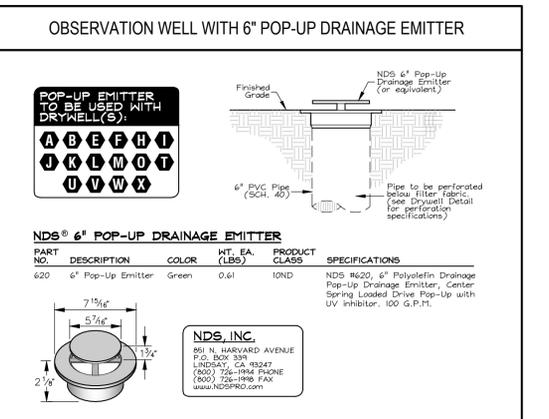
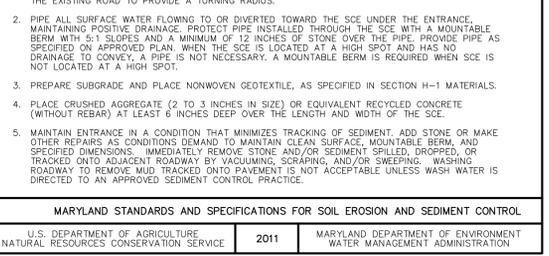
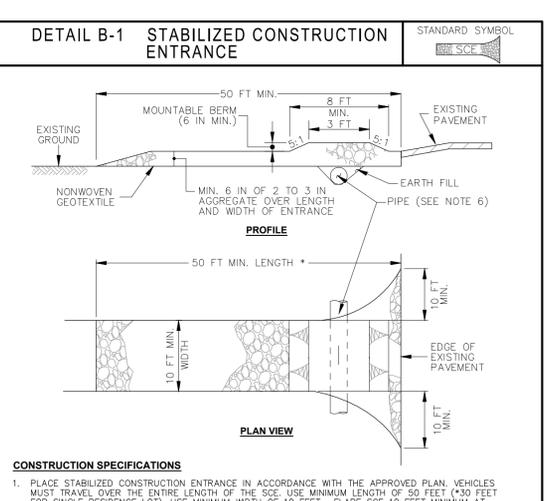
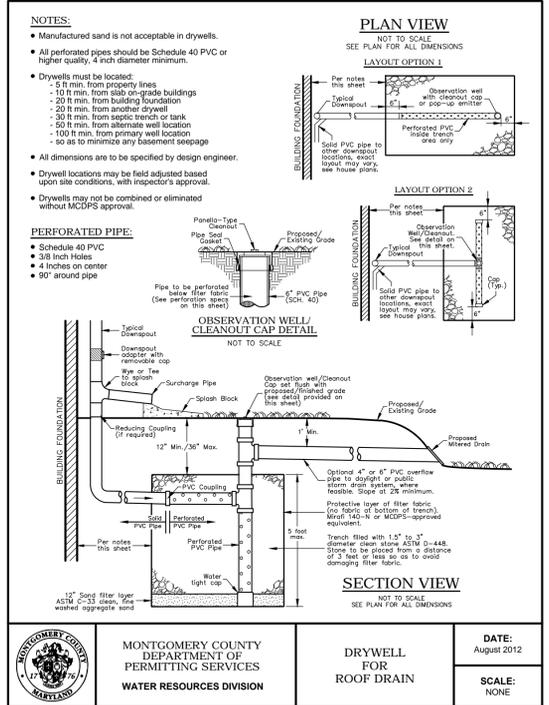
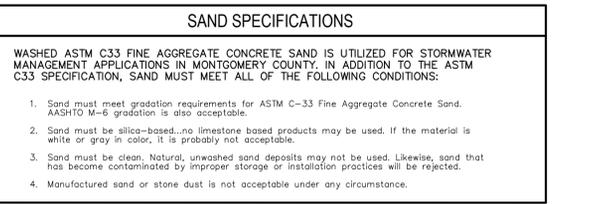
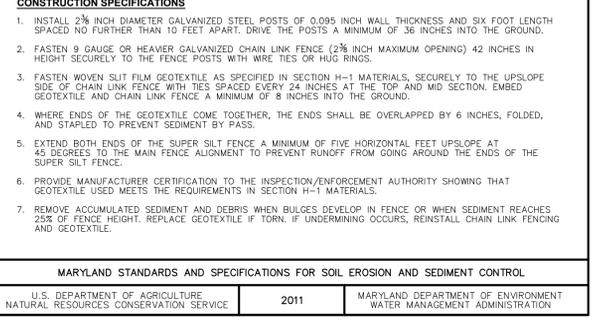
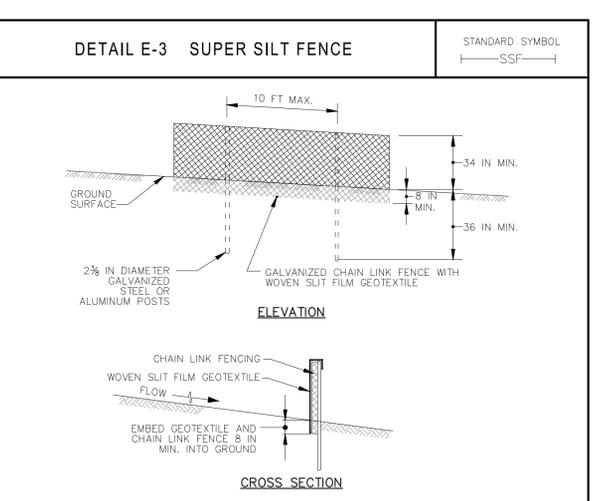
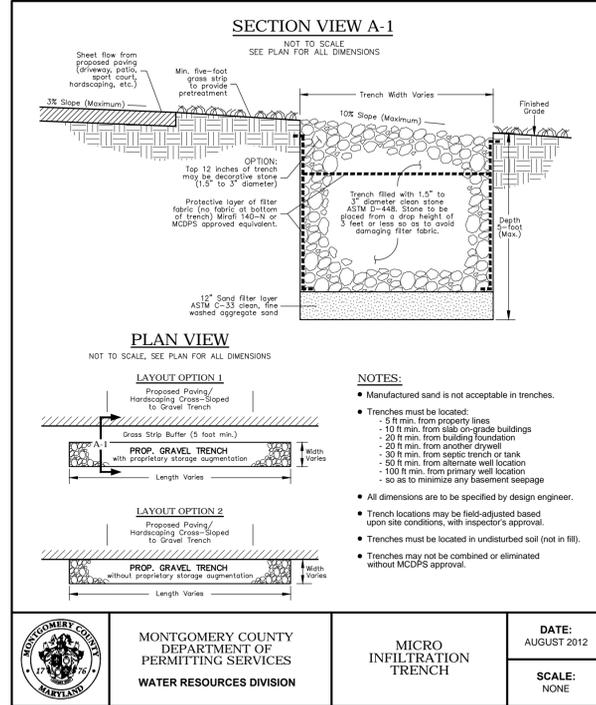
ALL AREAS DISTURBED OUTSIDE OF THE PERIMETER SEDIMENT CONTROL SYSTEM MUST BE MINIMIZED AND STABILIZED IMMEDIATELY. MAINTENANCE MUST BE PERFORMED AS NECESSARY TO ENSURE CONTINUED STABILIZATION.

- THE PERMITTEE SHALL APPLY SOD, SEED, AND ANCHORED STRAW MULCH, OR OTHER APPROVED STABILIZATION MEASURES TO ALL DISTURBED AREAS WITHIN SEVEN (7) CALENDAR DAYS AFTER STRIPPING AND GRADING ACTIVITIES HAVE CEASED ON THAT AREA. MAINTENANCE SHALL BE PERFORMED AS NECESSARY TO ENSURE CONTINUED STABILIZATION. ACTIVE CONSTRUCTION AREAS SUCH AS BORROW OR STOCKPILE AREAS, ROADWAY IMPROVEMENTS, AND AREAS WITHIN FIFTY (50) FEET OF A BUILDING UNDER CONSTRUCTION MAY BE EXEMPT FROM THIS REQUIREMENT, PROVIDED THAT EROSION AND SEDIMENT CONTROL MEASURES ARE INSTALLED AND MAINTAINED TO PROTECT THESE AREAS.
- PRIOR TO REMOVAL OF SEDIMENT CONTROL MEASURES, THE PERMITTEE SHALL STABILIZE ALL CONTRIBUTORY DISTURBED AREAS WITH PERMITTED SOIL AMENDMENTS AND TOPSOIL, SOD OR AN APPROVED PERMANENT SEED MIXTURE AND AN APPROVED ANCHORED MULCH. WOOD FIBER MULCH MAY ONLY BE USED IN SEEDING SEASON WHEN THE SLOPE DOES NOT EXCEED 10% AND GRADING HAS BEEN DONE TO PROMOTE SHEET FLOW DRAINAGE. AREAS BROUGHT TO FINISHED GRADE DURING THE SEEDING SEASON SHALL BE PERMANENTLY STABILIZED WITHIN SEVEN (7) CALENDAR DAYS OF ESTABLISHMENT. WHEN PROPERTY IS BROUGHT TO FINISHED GRADE DURING THE MONTHS OF NOVEMBER THROUGH FEBRUARY, AND PERMANENT STABILIZATION IS FOUND TO BE IMPRACTICAL, AN APPROVED TEMPORARY SEED AND STRAW ANCHORED MULCH SHALL BE APPLIED TO DISTURBED AREAS. THE FINAL PERMANENT STABILIZATION OF SUCH PROPERTY SHALL BE COMPLETED PRIOR TO THE FOLLOWING APRIL 15.

- THE SITE PERMIT, WORK, MATERIALS, APPROVED SC/SM PLANS, AND TEST REPORTS SHALL BE AVAILABLE AT THE SITE FOR INSPECTION BY DULY AUTHORIZED OFFICIALS OF MONTGOMERY COUNTY.
- SURFACE DRAINAGE FLOWS OVER UNSTABILIZED CUT AND FILL SLOPES SHALL BE CONTROLLED BY EITHER PERMANENT OR TEMPORARY DRAINAGE DEVICES. MECHANICAL DEVICES TO LOWER THE WATER DOWN SLOPE WITHOUT CAUSING EROSION. DIKES SHALL BE INSTALLED AND MAINTAINED AT THE TOP OF CUT OR FILL SLOPES UNTIL THE SLOPE AND DRAINAGE AREA IS FULLY STABILIZED. AT WHICH TIME THEY MUST BE REMOVED AND FINAL GRADING DONE TO PROMOTE SHEET FLOW DRAINAGE. MECHANICAL DEVICES MUST BE PROVIDED AT POINTS OF CONCENTRATED FLOW WHERE EROSION IS LIKELY TO OCCUR.
- PERMANENT SHALES OR OTHER POINTS OF CONCENTRATED WATER FLOW SHALL BE STABILIZED WITHIN 3 CALENDAR DAYS OF ESTABLISHMENT WITH SOD OR SEED WITH AN APPROVED EROSION CONTROL MATTING OR BY OTHER APPROVED STABILIZATION MEASURES.
- SEDIMENT CONTROL DEVICES SHALL BE REMOVED, WITH PERMISSION OF THE DEPARTMENT, WITHIN THIRTY (30) CALENDAR DAYS FOLLOWING ESTABLISHMENT OF PERMANENT STABILIZATION IN ALL CONTRIBUTORY DRAINAGE AREAS. STORMWATER MANAGEMENT STRUCTURES USED TEMPORARILY FOR SEDIMENT CONTROL SHALL BE CONVERTED TO THE PERMANENT CONFIGURATION WITHIN THIS TIME PERIOD AS WELL.
- NO PERMANENT CUT OR FILL SLOPE WITH A GRADIENT STEEPER THAN 3:1 WILL BE PERMITTED IN LAWN MAINTENANCE AREAS OR ON RESIDENTIAL LOTS. A SLOPE GRADIENT OF UP TO 2:1 WILL BE PERMITTED IN NON-MAINTENANCE AREAS PROVIDED THAT THESE AREAS ARE INDICATED ON THE EROSION AND SEDIMENT CONTROL PLAN WITH A LOW-MAINTENANCE GROUND COVER SPECIFIED FOR PERMANENT STABILIZATION. SLOPE GRADIENT STEEPER THAN 2:1 WILL NOT BE PERMITTED WITH VEGETATIVE STABILIZATION.
- THE PERMITTEE SHALL INSTALL A SPLASHBLOCK AT THE BOTTOM OF EACH DOWNSPOUT UNLESS THE DOWNSPOUT IS CONNECTED BY A DRAIN LINE TO AN ACCEPTABLE OUTLET.
- FOR FINISHED GRADING SHALL PROVIDE ADEQUATE GRADING TO PROMOTE SHEET FLOW SO AS TO PREVENT WATER FROM STANDING ON THE SURFACE OF LAWNS MORE THAN TWENTY-FOUR (24) HOURS AFTER THE END OF A RAINFALL, EXCEPT IN DESIGNATED DRAINAGE COURSES AND SHALE FLOW AREAS, WHICH MAY DRAIN AS LONG AS FORTY-EIGHT (48) HOURS AFTER THE END OF A RAINFALL.

- SEDIMENT TRAPS OR BASINS ARE NOT PERMITTED WITHIN 20 FEET OF A BUILDING WHICH IS EXISTING OR UNDER CONSTRUCTION, NO BUILDING MAY BE CONSTRUCTED WITHIN 20 FEET OF A SEDIMENT TRAP OR BASIN.
- ALL INLETS IN NON-SUMP AREAS SHALL HAVE ASPHALT BERMS INSTALLED AT THE TIME OF BASE PAVING ESTABLISHMENT.
- THE SEDIMENT CONTROL INSPECTOR HAS THE OPTION OF REQUIRING ADDITIONAL SEDIMENT CONTROL MEASURES, AS DEEMED NECESSARY.
- ALL TRAP ELEVATIONS ARE RELATIVE TO THE OUTLET ELEVATION, WHICH MUST BE ON EXISTING UNDISTURBED GROUND.
- VEGETATIVE STABILIZATION SHALL BE PERFORMED IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.
- SEDIMENT TRAP(S)/BASIN(S) SHALL BE CLEANED OUT AND RESTORED TO THE ORIGINAL DIMENSIONS WHEN SEDIMENT HAS ACCUMULATED TO THE POINT OF ONE-HALF (1/2) THE NET STORAGE DEPTH OF THE TRAP/BASIN (1/4 THE NET STORAGE DEPTH FOR ST-III) OR WHEN REQUIRED BY THE SEDIMENT CONTROL INSPECTOR.
- SEDIMENT REMOVED FROM TRAPS/BASINS SHALL BE PLACED AND STABILIZED IN APPROVED AREAS, BUT NOT WITHIN A FLOODPLAIN.
- ALL SEDIMENT BASINS AND TRAPS MUST BE SURROUNDED WITH A WELDED WIRE SAFETY FENCE. THE FENCE MUST BE AT LEAST 42 INCHES HIGH, HAVE POSTS SPACED NO FARTHER APART THAN 8 FEET, HAVE MESH OPENINGS NO GREATER THAN TWO INCHES IN WIDTH AND FOUR INCHES IN HEIGHT, WITH A MINIMUM OF 14 GAUGE WIRE. SAFETY FENCE MUST BE MAINTAINED IN GOOD CONDITION AT ALL TIMES.
- NO EXCAVATION IN THE AREAS OF EXISTING UTILITIES IS PERMITTED UNLESS THEIR LOCATION HAS BEEN DETERMINED. CALL "MISS UTILITY" AT 1-800-267-7777, 48 HOURS PRIOR TO THE START OF WORK.
- OFF-SITE SPOIL OR BORROW AREAS MUST HAVE PRIOR APPROVAL BY DPS.
- SEDIMENT TRAP/BASIN DEWATERING FOR CLEANOUT OR REPAIR MAY ONLY BE DONE WITH THE DPS INSPECTOR'S PERMISSION. THE INSPECTOR MUST APPROVE THE DEWATERING METHOD FOR EACH APPLICATION. THE FOLLOWING METHODS MAY BE CONSIDERED:
  - PUMP DISCHARGE MAY BE DIRECTED TO ANOTHER ON-SITE SEDIMENT TRAP OR BASIN, PROVIDED IT IS OF SUFFICIENT VOLUME AND THE PUMP INTAKE IS FLOATED TO PREVENT AGITATION OR SUCTION OF DEPOSITED SEDIMENTS; OR
  - THE PUMP INTAKE MAY UTILIZE A REMOVABLE PUMPING STATION AND MUST DISCHARGE INTO AN UNDISTURBED AREA THROUGH A NON-EROSIVE OUTLET; OR
  - THE PUMP INTAKE MAY BE FLOATED AND DISCHARGE INTO A DIRT BAG (12 OZ. NON-WOVEN FABRIC), OR APPROVED EQUIVALENT, LOCATED IN AN UNDISTURBED BUFFER AREA.

- REMEMBER:** DEWATERING OPERATION AND METHOD MUST HAVE PRIOR APPROVAL BY THE DPS INSPECTOR.
- THE PERMITTEE MUST NOTIFY THE DEPARTMENT OF ALL UTILITY CONSTRUCTION ACTIVITIES WITHIN THE PERMITTED LIMITS OF DISTURBANCE PRIOR TO THE COMMENCEMENT OF THOSE ACTIVITIES.
  - TOPSOIL MUST BE APPLIED TO ALL PREVIOUS AREAS WITHIN THE LIMITS OF DISTURBANCE PRIOR TO PERMANENT STABILIZATION IN ACCORDANCE WITH MDC STANDARDS AND SPECIFICATIONS FOR SOIL PREPARATION, TOPSOILING, AND SOIL AMENDMENTS.



MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL			
U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION	

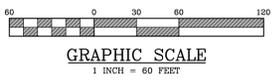
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09/05/14  
DATE

Curt A. Schreffler  
CURT A. SCHREFFLER, PE

**OWNER**  
BOWIE MILL LLC  
8185 MACARTHUR BLVD., NW  
WASHINGTON, D.C. 20016  
(202) 364-1555 (PHONE)  
(202) 364-3404 (FAX)  
ATTN: JIM GIBSON



17815 & 17827 BOWIE MILL ROAD  
PROPOSED LOTS A, B, C & D  
BOWIE MILL ESTATES  
PRELIMINARY/FINAL WATER QUALITY PLAN  
MCDPS WQP NO.: 261857

## STORM DRAIN NOTES

- ALL STORM DRAIN PIPE TO BE SCHEDULE 40 PVC OR OF HIGHER QUALITY (I.E. CAST IRON).
- DOWNSPOUT LEADERS ORIGINATING DIRECTLY FROM DOWNSPOUTS TO BE 4" DIA PVC, UNLESS NOTED OTHERWISE.
- PROVIDE CLEANOUTS, AS SHOWN ON PLAN AT A MINIMUM, OR AS REQUIRED BY PLUMBING CODE.
- MAINTAIN MINIMUM 12" COVER OVER ALL PIPE. PIPE SLOPE TO BE 2% MINIMUM.
- ALL STORM DRAIN UNDER DRIVEWAY OR PAVED AREAS TO BE BEDDED IN GRAVEL AND TO HAVE A MINIMUM OF 12" OF COVER, OR BE CAST IRON.
- ALL GUTTERS TO BE EQUIPPED WITH GUTTER DRAIN FILTERS (OR EQUIVALENT) TO PREVENT LEAVES FROM ENTERING THE STORMWATER MANAGEMENT SYSTEMS.
- SUMP PUMP DISCHARGE TO BE LOCATED SO AS TO AVOID IMPACT TO THE NEIGHBORING PROPERTIES AND TO AVOID RECIRCULATION OF WATER.
- THE PERMITTEE SHALL INSTALL A SPLASHBLOCK AT THE BOTTOM OF EACH DOWNSPOUT.

DATE	REVISION	BY	DATE
02/26/14	JSC	JSC	02/26/14
05/06/14	JSC	JSC	05/06/14
08/19/14	JSC	JSC	08/19/14
09/05/14	JSC	JSC	09/05/14

17815 & 17827 BOWIE MILL ROAD, ROCKVILLE, MD 20855  
LOT 40: PLAT BOOK 130, PLAT 15133, CIRCA 1985  
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PROPOSED LOTS A, B, C & D

**BOWIE MILL ESTATES**  
OLNEY (8TH) ELECTION DISTRICT, MONTGOMERY COUNTY, MARYLAND

PRELIMINARY / FINAL WATER QUALITY PLAN

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Experience you can build on.

4 OF 4

07-2010-2015/2016/2017/2018/2019/2020/2021/2022/2023/2024/2025/2026/2027/2028/2029/2030/2031/2032/2033/2034/2035/2036/2037/2038/2039/2040/2041/2042/2043/2044/2045/2046/2047/2048/2049/2050/2051/2052/2053/2054/2055/2056/2057/2058/2059/2060/2061/2062/2063/2064/2065/2066/2067/2068/2069/2070/2071/2072/2073/2074/2075/2076/2077/2078/2079/2080/2081/2082/2083/2084/2085/2086/2087/2088/2089/2090/2091/2092/2093/2094/2095/2096/2097/2098/2099/2100/2101/2102/2103/2104/2105/2106/2107/2108/2109/2110/2111/2112/2113/2114/2115/2116/2117/2118/2119/2120/2121/2122/2123/2124/2125/2126/2127/2128/2129/2130/2131/2132/2133/2134/2135/2136/2137/2138/2139/2140/2141/2142/2143/2144/2145/2146/2147/2148/2149/2150/2151/2152/2153/2154/2155/2156/2157/2158/2159/2160/2161/2162/2163/2164/2165/2166/2167/2168/2169/2170/2171/2172/2173/2174/2175/2176/2177/2178/2179/2180/2181/2182/2183/2184/2185/2186/2187/2188/2189/2190/2191/2192/2193/2194/2195/2196/2197/2198/2199/2200/2201/2202/2203/2204/2205/2206/2207/2208/2209/2210/2211/2212/2213/2214/2215/2216/2217/2218/2219/2220/2221/2222/2223/2224/2225/2226/2227/2228/2229/2230/2231/2232/2233/2234/2235/2236/2237/2238/2239/2240/2241/2242/2243/2244/2245/2246/2247/2248/2249/2250/2251/2252/2253/2254/2255/2256/2257/2258/2259/2260/2261/2262/2263/2264/2265/2266/2267/2268/2269/2270/2271/2272/2273/2274/2275/2276/2277/2278/2279/2280/2281/2282/2283/2284/2285/2286/2287/2288/2289/2290/2291/2292/2293/2294/2295/2296/2297/2298/2299/2300/2301/2302/2303/2304/2305/2306/2307/2308/2309/2310/2311/2312/2313/2314/2315/2316/2317/2318/2319/2320/2321/2322/2323/2324/2325/2326/2327/2328/2329/2330/2331/2332/2333/2334/2335/2336/2337/2338/2339/2340/2341/2342/2343/2344/2345/2346/2347/2348/2349/2350/2351/2352/2353/2354/2355/2356/2357/2358/2359/2360/2361/2362/2363/2364/2365/2366/2367/2368/2369/2370/2371/2372/2373/2374/2375/2376/2377/2378/2379/2380/2381/2382/2383/2384/2385/2386/2387/2388/2389/2390/2391/2392/2393/2394/2395/2396/2397/2398/2399/2400/2401/2402/2403/2404/2405/2406/2407/2408/2409/2410/2411/2412/2413/2414/2415/2416/2417/2418/2419/2420/2421/2422/2423/2424/2425/2426/2427/2428/2429/2430/2431/2432/2433/2434/2435/2436/2437/2438/2439/2440/2441/2442/2443/2444/2445/2446/2447/2448/2449/2450/2451/2452/2453/2454/2455/2456/2457/2458/2459/2460/2461/2462/2463/2464/2465/2466/2467/2468/2469/2470/2471/2472/2473/2474/2475/2476/2477/2478/2479/2480/2481/2482/2483/2484/2485/2486/2487/2488/2489/2490/2491/2492/2493/2494/2495/2496/2497/2498/2499/2500/2501/2502/2503/2504/2505/2506/2507/2508/2509/2510/2511/2512/2513/2514/2515/2516/2517/2518/2519/2520/2521/2522/2523/2524/2525/2526/2527/2528/2529/2530/2531/2532/2533/2534/2535/2536/2537/2538/2539/2540/2541/2542/2543/2544/2545/2546/2547/2548/2549/2550/2551/2552/2553/2554/2555/2556/2557/2558/2559/2560/2561/2562/2563/2564/2565/2566/2567/2568/2569/2570/2571/2572/2573/2574/2575/2576/2577/2578/2579/2580/2581/2582/2583/2584/2585/2586/2587/2588/2589/2590/2591/2592/2593/2594/2595/2596/2597/2598/2599/2600/2601/2602/2603/2604/2605/2606/2607/2608/2609/2610/2611/2612/2613/2614/2615/2616/2617/2618/2619/2620/2621/2622/2623/2624/2625/2626/2627/2628/2629/2630/2631/2632/2633/2634/2635/2636/2637/2638/2639/2640/2641/2642/2643/2644/2645/2646/2647/2648/2649/2650/2651/2652/2653/2654/2655/2656/2657/2658/2659/2660/2661/2662/2663/2664/2665/2666/2667/2668/2669/2670/2671/2672/2673/2674/2675/2676/2677/2678/2679/2680/2681/2682/2683/2684/2685/2686/2687/2688/2689/2690/2691/2692/2693/2694/2695/2696/2697/2698/2699/2700/2701/2702/2703/2704/2705/2706/2707/2708/2709/2710/2711/2712/2713/2714/2715/2716/2717/2718/2719/2720/2721/2722/2723/2724/2725/2726/2727/2728/2729/2730/2731/2732/2733/2734/2735/2736/2737/2738/2739/2740/2741/2742/2743/2744/2745/2746/2747/2748/2749/2750/2751/2752/2753/2754/2755/2756/2757/2758/275

# Attachment H



## DEPARTMENT OF PERMITTING SERVICES

Isiah Leggett  
County Executive

Diane R. Schwartz Jones  
Director

June 19, 2014

Mr. Jared Sims Carhart  
CAS Engineering  
108 W. Ridgeville Boulevard, Suite 101  
Mount Airy, Maryland 21771

Re: Preliminary/Final Water Quality Plan Request for  
Bowie Mill Estates Lots A-D  
SM File #: 261857  
Tract Size/Zone: 18.07/RE-2  
Total Concept Area: 18.07  
Lots/Block: Lots A, B, C & D  
Parcel(s): N/A  
Watershed: Upper Rock Creek

Dear Mr. Carhart:

Based on a review by the Department of Permitting Services Review Staff, the Preliminary/Final Water Quality Plan for the above mentioned site is **acceptable**. The Preliminary/Final Water Quality Plan proposes to meet required stormwater management goals via the use of fry wells, micro-infiltration trenches and non-rooftop disconnections.

The following **conditions** will need to be addressed **during** the detailed sediment control/stormwater management plan stage:

1. A detailed review of the stormwater management computations will occur at the time of detailed plan review.
2. An engineered sediment control plan must be submitted for this development.
3. Micro-infiltration areas P, Q, R and S need to be moved up or down slope to relatively flat locations. This may require shortening and widening the infiltration area. Bio swales also appear to be feasible in these areas.

This list may not be all-inclusive and may change based on available information at the time.

Payment of a stormwater management contribution in accordance with Section 2 of the Stormwater Management Regulation 4-90 **is/is not required**.

This letter must appear on the sediment control/stormwater management plan at its initial submittal. The concept approval is based on all stormwater management structures being located outside of the Public Utility Easement, the Public Improvement Easement, and the Public Right of Way unless specifically approved on the concept plan. Any divergence from the information provided to this office; or additional information received during the development process; or a change in an applicable Executive Regulation may constitute grounds to rescind or amend any approval actions taken, and to reevaluate the site for additional or amended stormwater management requirements. If there are subsequent additions or modifications to the development, a separate concept request shall be required.

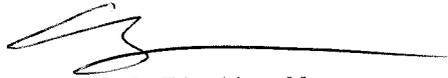
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255 Rockville Pike, 2nd Floor • Rockville, Maryland 20850 • 240-777-6300 • 240-777-6256 TTY  
[www.montgomerycountymd.gov](http://www.montgomerycountymd.gov)

Jared Sims Carhart  
June 19, 2014  
Page 2

If you have any questions regarding these actions, please feel free to contact Leo Galanko at 240-777-6242.

Sincerely,



Mark C. Etheridge, Manager  
Water Resources Section  
Division of Land Development Services

MCE: me:lmg

cc: C. Conlon  
SM File # 261857

ESD Acres:	18.07
STRUCTURAL Acres:	N/A
WAIVED Acres:	N/A



DEPARTMENT OF PERMITTING SERVICES

Isiah Leggett  
County Executive

Diane R. Schwartz Jones  
Director

October 2, 2014

Mr. Jared Sims Carhart  
CAS Engineering  
108 W. Ridgeville Boulevard, Suite 101  
Mount Airy, Maryland 21771

Re: **Revised** Preliminary/Final Water Quality Plan  
Request for Bowie Mill Estates Lots A-D  
SM File #: 261857  
Tract Size/Zone: 18.07/RE-2  
Total Concept Area: 18.07  
Lots/Block: Lots A, B, C & D  
Parcel(s): N/A  
Watershed: Upper Rock Creek

Dear Mr. Carhart:

Based on a review by the Department of Permitting Services Review Staff, the **Revised** Preliminary/Final Water Quality Plan for the above mentioned site is **acceptable**. The revision to the plan is to add a sidewalk along Bowie Mill Road. The Revised Preliminary/Final Water Quality Plan proposes to meet required stormwater management goals via the use of dry wells, micro-infiltration trenches and non-rooftop disconnections.

The following **conditions** will need to be addressed **during** the detailed sediment control/stormwater management plan stage:

1. A detailed review of the stormwater management computations will occur at the time of detailed plan review.
2. An engineered sediment control plan must be submitted for this development.
3. Micro-infiltration areas P, Q, R and S need to be moved up or down slope to relatively flat locations. This may require shortening and widening the infiltration area. Bio swales also appear to be feasible in these areas.

This list may not be all-inclusive and may change based on available information at the time.

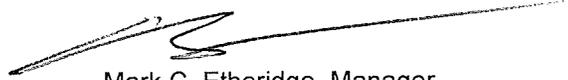
Payment of a stormwater management contribution in accordance with Section 2 of the Stormwater Management Regulation 4-90 **is not required**.

This letter must appear on the sediment control/stormwater management plan at its initial submittal. The concept approval is based on all stormwater management structures being located outside of the Public Utility Easement, the Public Improvement Easement, and the Public Right of Way unless specifically approved on the concept plan. Any divergence from the information provided to this office; or additional information received during the development process; or a change in an applicable Executive Regulation may constitute grounds to rescind or amend any approval actions taken, and to reevaluate the site for additional or amended stormwater management requirements. If there are subsequent additions or modifications to the development, a separate concept request shall be required.

Jared Sims Carhart  
October, 2 2014  
Page 2

If you have any questions regarding these actions, please feel free to contact Leo Galanko at 240-777-6242.

Sincerely,



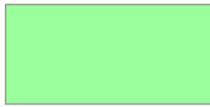
Mark C. Etheridge, Manager  
Water Resources Section  
Division of Land Development Services

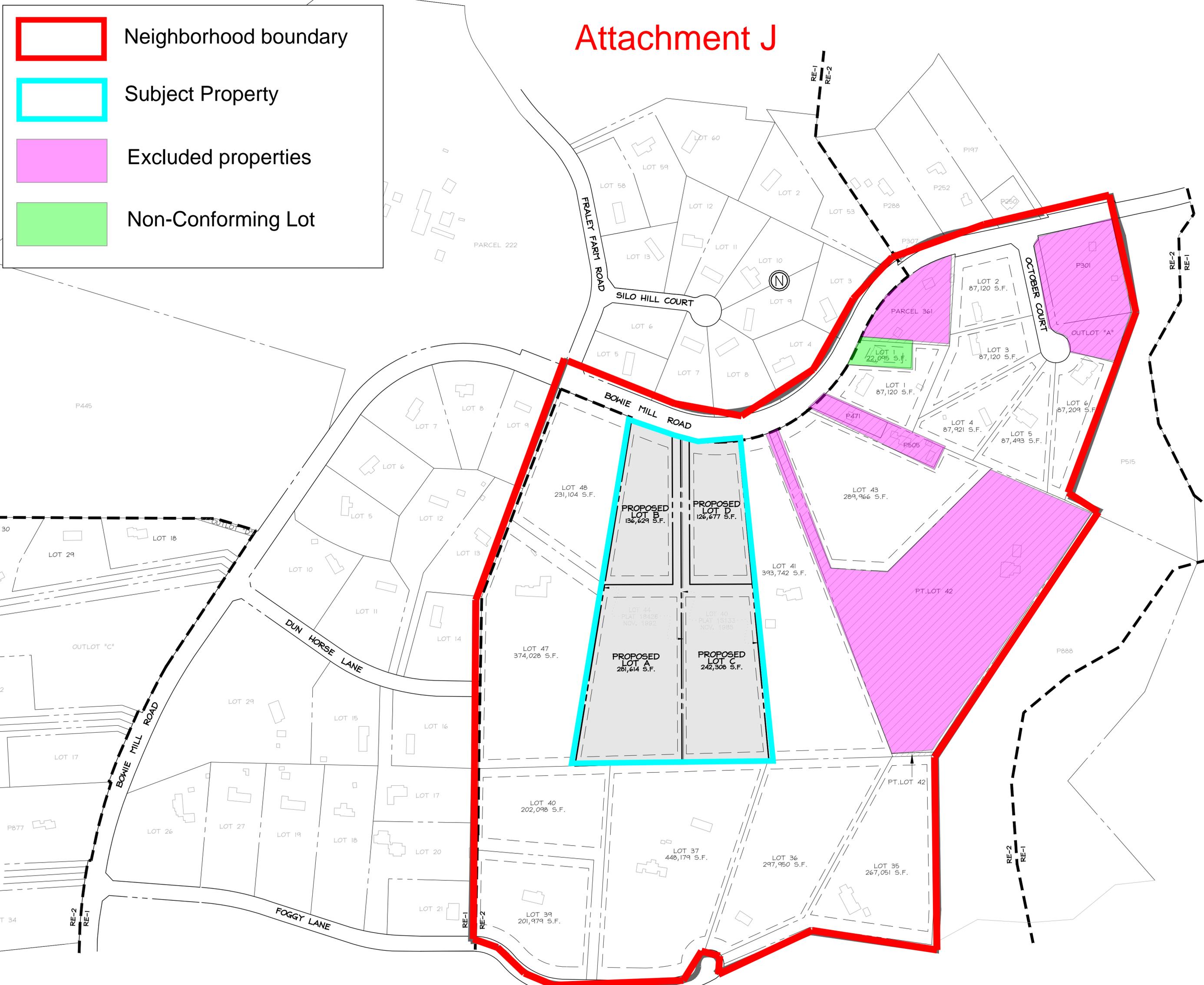
MCE: me:lmg

cc: C. Conlon  
SM File # 261857

ESD Acres:	18.07
STRUCTURAL Acres:	N/A
WAIVED Acres:	N/A

# Attachment J

-  Neighborhood boundary
-  Subject Property
-  Excluded properties
-  Non-Conforming Lot



M-NCP&PC # 120140020  
 PROPOSED LOTS A, B, C & D  
 BOWE MILL ESTATES

Job No. 06-025C

Comparable Lot Data Table (Sorted in descending order by lot size)

Lot #	Block	Frontage	Alignment	Lot Size	Lot Shape	Average Width	Buildable Area
37	-	499	perpendicular	448,179	rectangle	467	374,463
41	-	120	perpendicular	393,742	triangular	291	322,757
47	-	60	perpendicular	374,028	irregular	389	298,625
36	-	63	perpendicular	297,950	irregular	150	246,690
43	-	150	perpendicular	289,966	irregular	432	240,890
<b>A</b>	-	<b>35</b>	<b>perpendicular</b>	<b>281,614</b>	<b>pipestem</b>	<b>362</b>	<b>208,942</b>
35	-	41	perpendicular	267,051	pipestem	150	198,951
<b>C</b>	-	<b>35</b>	<b>perpendicular</b>	<b>242,308</b>	<b>pipestem</b>	<b>319</b>	<b>173,953</b>
48	-	310	perpendicular	231,104	irregular	355	173,776
40	-	42	parallel	202,098	pipestem	150	141,689
39	-	494	perpendicular	201,979	rectangle	475	146,533
<b>B</b>	-	<b>169</b>	<b>perpendicular</b>	<b>136,629</b>	<b>rectangle</b>	<b>219</b>	<b>99,410</b>
<b>D</b>	-	<b>202</b>	<b>perpendicular</b>	<b>126,677</b>	<b>rectangle</b>	<b>230</b>	<b>91,291</b>
4	-	43	perpendicular	87,921	triangular	142	44,022
5	-	35	perpendicular	87,493	triangular	175	50,159
6	-	82	perpendicular	87,209	triangular	151	49,982
3	-	148	perpendicular	87,120	irregular	190	56,195
2	-	297	corner	87,120	rectangle	297	54,911
1	-	155	perpendicular	87,120	irregular	196	54,220
1	-	109	perpendicular	22,095	rectangle	100	8,967

1. Lot statistics taken from available record plats.
2. Parts of lots and parcels were not included.
3. Longest front property line used for frontage calculation on corner lots
4. 50' Front BRL (per RE-2 Zone) assumed for buildable area calculations.

M-NCP&PC # 120140020  
 PROPOSED LOTS A, B, C & D  
 BOWE MILL ESTATES

Job No. 06-025C

Comparable Lot Data Table (Sorted in descending order by frontage)

Lot #	Block	Frontage	Alignment	Lot Size	Lot Shape	Average Width	Buildable Area
37	-	499	perpendicular	448,179	rectangle	467	374,463
39	-	494	perpendicular	201,979	rectangle	475	146,533
48	-	310	perpendicular	231,104	irregular	355	173,776
2	-	297	corner	87,120	rectangle	297	54,911
<b>D</b>	-	<b>202</b>	<b>perpendicular</b>	<b>126,677</b>	<b>rectangle</b>	<b>230</b>	<b>91,291</b>
<b>B</b>	-	<b>169</b>	<b>perpendicular</b>	<b>136,629</b>	<b>rectangle</b>	<b>219</b>	<b>99,410</b>
1	-	155	perpendicular	87,120	irregular	196	54,220
43	-	150	perpendicular	289,966	irregular	432	240,890
3	-	148	perpendicular	87,120	irregular	190	56,195
41	-	120	perpendicular	393,742	triangular	291	322,757
1	-	109	perpendicular	22,095	rectangle	100	8,967
6	-	82	perpendicular	87,209	triangular	151	49,982
36	-	63	perpendicular	297,950	irregular	150	246,690
47	-	60	perpendicular	374,028	irregular	389	298,625
4	-	43	perpendicular	87,921	triangular	142	44,022
40	-	42	parallel	202,098	pipestem	150	141,689
35	-	41	perpendicular	267,051	pipestem	150	198,951
<b>A</b>	-	<b>35</b>	<b>perpendicular</b>	<b>281,614</b>	<b>pipestem</b>	<b>362</b>	<b>208,942</b>
<b>C</b>	-	<b>35</b>	<b>perpendicular</b>	<b>242,308</b>	<b>pipestem</b>	<b>319</b>	<b>173,953</b>
5	-	35	perpendicular	87,493	triangular	175	50,159

1. Lot statistics taken from available record plats.
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M-NCP&PC # 120140020  
 PROPOSED LOTS A, B, C & D  
 BOWE MILL ESTATES

Job No. 06-025C

Comparable Lot Data Table (Sorted in descending order by width)

Lot #	Block	Frontage	Alignment	Lot Size	Lot Shape	Average Width	Buildable Area
39	-	494	perpendicular	201,979	rectangle	475	146,533
37	-	499	perpendicular	448,179	rectangle	467	374,463
43	-	150	perpendicular	289,966	irregular	432	240,890
47	-	60	perpendicular	374,028	irregular	389	298,625
<b>A</b>	-	<b>35</b>	<b>perpendicular</b>	<b>281,614</b>	<b>pipestem</b>	<b>362</b>	<b>208,942</b>
48	-	310	perpendicular	231,104	irregular	355	173,776
<b>C</b>	-	<b>35</b>	<b>perpendicular</b>	<b>242,308</b>	<b>pipestem</b>	<b>319</b>	<b>173,953</b>
2	-	297	corner	87,120	rectangle	297	54,911
41	-	120	perpendicular	393,742	triangular	291	322,757
<b>D</b>	-	<b>202</b>	<b>perpendicular</b>	<b>126,677</b>	<b>rectangle</b>	<b>230</b>	<b>91,291</b>
<b>B</b>	-	<b>169</b>	<b>perpendicular</b>	<b>136,629</b>	<b>rectangle</b>	<b>219</b>	<b>99,410</b>
1	-	155	perpendicular	87,120	irregular	196	54,220
3	-	148	perpendicular	87,120	irregular	190	56,195
5	-	35	perpendicular	87,493	triangular	175	50,159
6	-	82	perpendicular	87,209	triangular	151	49,982
36	-	63	perpendicular	297,950	irregular	150	246,690
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40	-	42	parallel	202,098	pipestem	150	141,689
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M-NCP&PC # 120140020  
 PROPOSED LOTS A, B, C & D  
 BOWE MILL ESTATES

Job No. 06-025C

Comparable Lot Data Table (Sorted in descending order by buildable area)

Lot #	Block	Frontage	Alignment	Lot Size	Lot Shape	Average Width	Buildable Area
37	-	499	perpendicular	448,179	rectangle	467	374,463
41	-	120	perpendicular	393,742	triangular	291	322,757
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