^	1inimum La	ot Size Cha	ar†
LOT No.	GROSS AREA	PIPESTEM AREA	MINIMUM LOT SIZE
2	7,602 SQ.FT.	1,301 SQ.FT.	6,301 5Q.FT.
3	7,787 SQ.FT.	1,787 SQ.FT.	6,000 SQ.FT.
4	8,150 SQ.FT.	2,150 SQ.FT.	6,000 SQ.FT.

DESIGN NARRATIVE

the open space.

This report will demonstrate how the criteria set forth in the Maryland Stormwater Design Manual, Volumes I and II (effective October 2000, revised May 2009) will be satisfied on this project. The goal of creating hydrology similar to that of "Woods in Good Condition" will be accomplished through the use of the practices contained within Chapter 5 of said manual. The achievement of this goal will remove the requirement of providing Channel Protection Volume.

Sabatelli Property is four lot single family lot subdivision including an existing house to remain. Property is zoned R-5C and located on Tax Map 50, Grid 2, Parcel No. 451 of the Howard County, Maryland Tax Map Database System. The property is an existing parcel of ground located at 9300 Old Scaggsville Road. Subdivision will utilize a proposed public water and sewer extension. The property is located in the Laurel area of Howard County in the watershed of an unnamed tributary of the Upper Patuxent River (02131104). This property is relatively rectangular in shape and runoff on—site is mainly from northeast to southwest where a stream meanders along the southwestern property line. The existing house sits at the high point / ridge of the property in the upper portion of the property along Old Scaggsville Road. A small amount of forested area exists on-site in the vicinity of the stream buffer with adjacent supplemental planting. Also, according to a field inspection conducted by Eco-Science Professionals (ESP) dated January 9, 2014, no wetlands are present on-site, but a stream and a 75 foot stream buffer exist on-site. The Web Soil Survey shows soils on the site consist of Fallsington loam (Fa). Type "D" Soils in the stream buffer area and Urban Land-Chillum-Beltsville Comples (UcB). Type "D" soils exist for the majority of the property which is located outside of the stream buffer area. The runoff from the roofs of the proposed houses is to be directed overland or through roof leaders to four (4) micro-bioretention facilities to be located on the open space and one on each of Lots 2 thru 4 in the rear of the proposed houses. Runoff from the proposed driveways will flow overland to the micro-bioretention facility located on

Natural Resource Protection: Environmentally sensitive areas do exist on-site (stream and stream buffer), therefore development has been proposed outside of the buffer area in an effort to protect this natural resource on-site.

- II. Maintenance of Natural Flow Patterns: It is the intent of the proposed design to discharge runoff similar to the characteristics and direction of this site prior to any of the proposed
- III. Reduction of impervious areas through better site design. alternative surfaces and Nonstructural Practices the design of this project utilizes a common driveway and individual driveways for the three new lots. Non-Structural practices as permitted in Chapter 5, four (4) Micro-Bioretention Areas (M-6) will be used to address ESD to the MEP requirements.
- IV. Integration of Erosion and Sediment Controls into Stormwater Strategy: Since this is a small drainage area (most of site sheet flows from northeast to the southwest toward the existing stream), silt fence, super silt fence, and erosion control matting will be utilized for erosion & sediment control. There is no direct discharge of runoff directly to a stream. All site runoff will discharge to the the existing ground or prior to entering the existing stream channel and eventually to the Upper Patuxent River. No drainage easements will be required. It is anticipated that all cut will be utilized on-site for construction at time of Grading Plan.
- Implementation of ESD Planning Techniques and practices to the Maximum Extent Practicable (MEP) The full required ESD volume is being provided
- VI. Request for a Design Manual Waiver: No Waivers related to stormwater management are being requested in

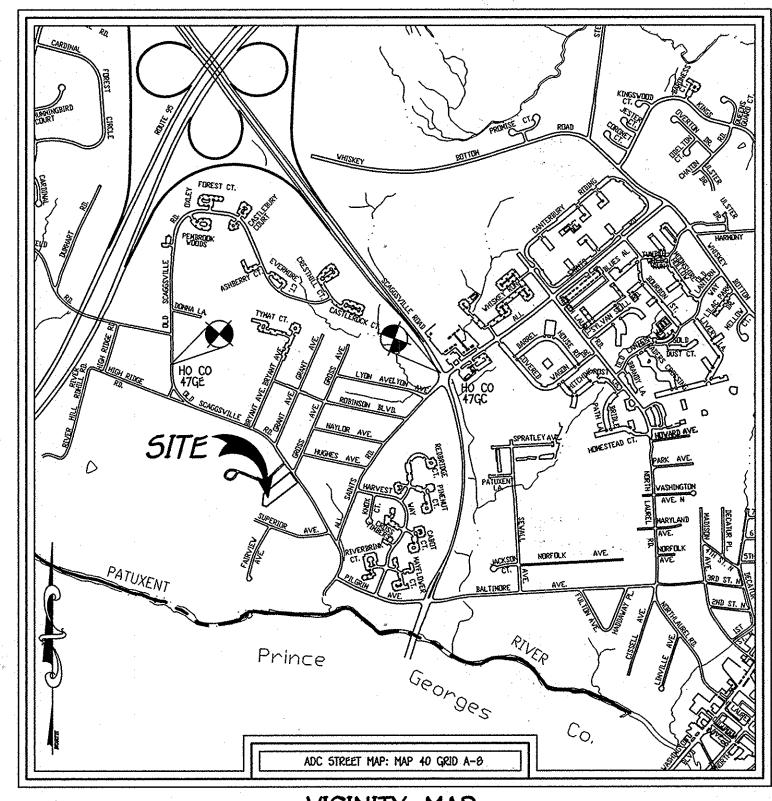
	STORMWA	ITER MAN	AGEMENT SUMMARY
AREA 10.	E50v REQUIRED CU.FT.	ESDV PROVIDED CU.FT.	REMARKS
5ПЕ	526	*1,275	MICRO-BIORETENTION (M-6)
TOTAL	526	*1,275	

SINCE A SMALL PORTION OF DRIVEWAY PAVING WAS NOT ABLE TO BE CAPTURED BY ONE OF THE FACILITIES, THE MICRO-BIORETENTIONS WERE SIZED TO PROVIDE ADDITIONAL ESDV AND TREATMENT OF EXISTING IMPERVIOUS TO COMPENSATE FOR PROPOSED IMPERVIOUS THAT WAS NOT

SITE AREA = 1.65 ACRESLOD AREA = 0.71 ACRES RCN = 77TARGET Pe = 1.0°

ENVIRONMENTAL CONCEPT PLAN SABATELLI PROPERTY LOTS 1 THRU 4 & OPEN SPACE LOT 5

TAX MAP No. 50 GRID No. 2 PARCEL NO. 451 SIXTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

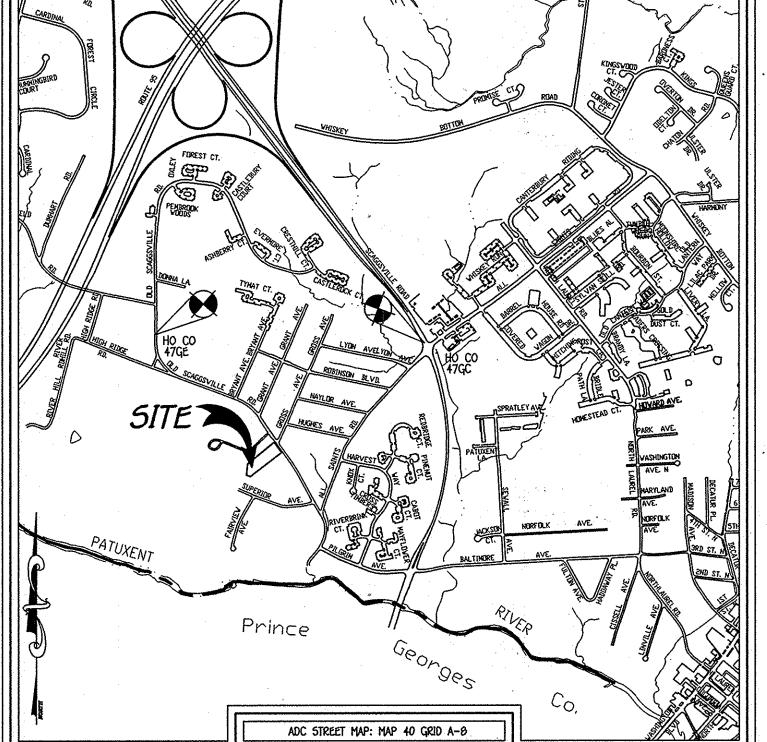


VICINITY MAP SCALE: 1" = 1200'

ELEVATION = 335.756 - VERTICAL - (NAVD '83)

E 1,350,854.953

BENCHMARK INFORMATION B.M.#1 - HOWARD COUNTY CONTROL STATION 47GC - HORIZONTAL - NAD '83) N 528,939.724 ELEVATION = 226.306 - VERTICAL - (NAVD '83) B.M.#2 - HOWARD COUNTY CONTROL STATION #47GE - HORIZONTAL - (NAD '27) N 529044.964



REMOVE ACCUMULATED SEDIMENT AND DEBRIS WHEN BULGES DEVELOP IN FENCE OR WHEN SEDIMENT REACHES 25% OF FENCE HEIGHT. REPLACE GEOTEXTILE IF TORN. IF UNDERMINING OCCURS, REINSTALL CHAIN LINK FENCING AND GEOTEXTILE. SUPER SILT FENCE, TREE PROTECTION FENCE

FASTEN 9 GAUGE OR HEAMER GALVANIZED CHAIN LINK FENCE (2% INCH MAXIMUM OPENING) 42 INCHES IN HEIGHT SECURELY TO THE FENCE POSTS WITH WIRE TIES OR HUG RINGS.

3. FASTEN WOVEN SLIT FILM GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS, SECURELY TO THE UPSLOPE SIDE OF CHAIN LINK FENCE WITH TIES SPACED EVERY 24 INCHES AT THE TOP AND MID SECTION. EMBED GEOTEXTILE AND CHAIN LINK FENCE A MINIMUM OF 8 INCHES INTO THE GROUND.

WHERE ENDS OF THE GEOTEXTILE COME TOGETHER, THE ENDS SHALL BE OVERLAPPED BY 6 INCHES, FOLDED, AND STAPLED TO PREVENT SEDIMENT BY PASS.

EXTEND BOTH ENDS OF THE SUPER SILT FENCE A MINIMUM OF FIVE HORIZONTAL FEET UPSLOPE AT 45 DEGREES TO THE MAIN FENCE ALIGNMENT TO PREVENT RUNOFF FROM GOING AROUND THE ENDS OF THE SUPER SILT FENCE.

PROVIDE MANUFACTURER CERTIFICATION TO THE INSPECTION/ENFORCEMENT AUTHORITY SHOWING THAT GEOTEXTILE USED MEETS THE REQUIREMENTS IN SECTION H-1 MATERIALS.

II FLOW

SALVANIZED CHAIN LINK FENCE WITH WOVEN SLIT FILM GEOTEXTILE

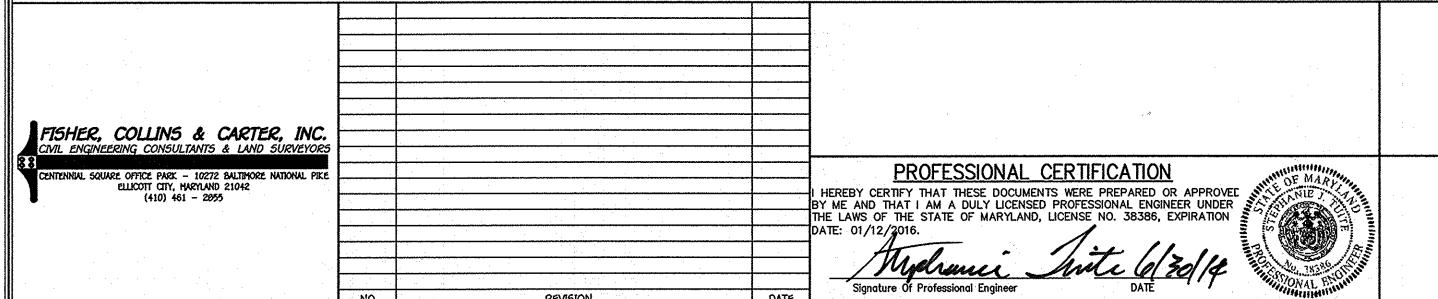
CHAIN LINK FENCING-

CROSS SECTION

WOVEN SLIT FILM GEOTEXTILE-

ELEVATION

--- 2'+ ORANGE STREAMERS



CONSTRUCTION SPECIFICATIONS

DEVELOPER/OWNER RICHARD SCOTT SABATELLI 9300 OLD SCAGGSVILLE RD LAUREL MD, 20723 CONTACT: RICHARD SCOTT SABATELLI

301-864-4043

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING Chief, Development Engineering Division SECTION PARCEL/LOT NO. SABATELLI PROPERTY PAR. 451 TAX/ZONE | ELEC. DIST. ZONE CENSUS TR. 3085/293 R-5C 02

LEGEND DESCRIPTION ---- EXISTING CONTOUR 2' INTERVAL ----- PROPOSED CONTOUR 2' INTERVAL -880-880- SUPER SILT FENCE LIMIT OF DISTURBANCE EX. LIMIT OF TREES AND FOREST PROPOSED LANDSCAPING EXISTING TREES PROPOSED GRAVEL / RIPRAP 15% TO 25% SLOPES 25% OR GREATER SLOPES - SOIL LINES AND TYPES PROPOSED FOREST CONSERVATION EASEMENT ---- EXISTING STREAM BANKS

GENERAL NOTES

- THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/BUREAU OF ENGINEERING/CONSTRUCTION INSPECTION DIVISION AT 410-313-1880 AT LEAST FIVE (5) WORKING DAYS PRIOR TO THE START OF WORK.

 THE CONTRACTOR SHALL NOTIFY (MISS UTILITY) AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING
- 3. BOUNDARY SHOWN HEREON IS BASED ON DEED. TOPOGRAPHY SHOWN IS FROM HOWARD COUNTY GIS TOPOGRAPHY AT 5' CONTOUR INTERVAL INTERPOLATED FOR 2' CONTOUR INTERVAL.

 4. THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL WHICH IS BASED UPON THE MARYLAND
- STATE PLANE COORDINATE SYSTEM. HOWARD COUNTY MONUMENT NOS. 47GC AND 47GE WERE USED FOR THIS PROJECT. 5. PREVIOUS DPZ FILE NUMBERS: N/A. 6. STORM WATER MANAGEMENT IS IN ACCORDANCE WITH THE M.D.E. STORM WATER DESIGN MANUAL, VOLUMES I & II, REVISED 2009.
- NON-STRUCTURAL PRACTICES IN ACCORDANCE WITH CHAPTER 5 ARE BEING UTILIZED.
- 7. LOTS TO BE SERVED PUBLIC WATER AND PRIVATE SEWERAGE. SHOULD PRIOR EXISTING WELL AND SEPTIC SYSTEMS REQUIRE PROPER ABANDONMENT, ABANDONMENT SHALL BE IN ACCORDANCE WITH HEALTH DEPARTMENT REQUIREMENTS.

 8. ANY DAMAGE TO THE COUNTY'S RIGHT-OF-WAY SHALL BE CORRECTED AT THE DEVELOPER'S EXPENSE.

 9. THE SUBJECT PROPERTY IS ZONED R-SC PER EFFECTIVE DATE 10/06/2013 COMPREHENSIVE ZONING PLAN.

 10. STREAM AND ITS BUFFERS EXIST ON-SITE.

 11. NO WETLANDS OR WETLAND BUFFERS, STEEP SLOPES, OR 100 YEAR FLOODPLAIN EXIST ON-SITE.

 12. SOILS DELINEATION SHOWN BASED ON NRCS WEBSOIL SURVEY.

- 13. NO CLEARING, GRADING, REMOVAL OF VEGETATIVE COVER OR TREES, PAVING AND NEW STRUCTURES SHALL BE PERMITTED WITHIN THE LIMITS OF STREAM BUFFERS AND FOREST CONSERVATION EASEMENT AREAS.

 14. LANDSCAPING WILL BE PROVIDED AT THE FINAL PLAN STAGE OF THIS PROJECT. TREES SHOWN ARE EXISTING ON-SITE TREES.
- 15. FOREST CONSERVATION OBLIGATIONS WILL BE MET BY ON-SITE RETENTION OF EXISTING FOREST AND AFFORESTATION PLANTING AT THE
- 16. SOIL BORINGS ARE REQUIRED FOR THIS PROJECT, ONLY VERIFICATION OF DEPTH TO GROUNDWATER WILL BE REQUIRED
- 17. APPROVAL OF THIS ECP DOES NOT CONSTITUTE AN APPROVAL OF ANY SUBSEQUENT AND ASSOCIATED SUBDIVISION PLAN/PLAT AND/OR SITE DEVELOPMENT PLAN AND/OR RED-LINE REVISION PLAN. REVIEW OF THIS PROJECT FOR COMPLIANCE WITH THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS AND THE HOWARD COUNTY ZONING REGULATIONS SHALL OCCUR AT THE SUBDIVISION PLAN/PLAT AND/OR SITE DEVELOPMENT PLAN STAGES AND/OR RED-LINE REVISION PROCESS. 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.

Specimen Tree Chart

Key	Species	Size (in.dbh)	CRZ (feet radius)	Comments
	Red oak	48.5	72.75	good
	Red oak	44.5	66.75	poor, heavily trimmed, limb dieback
	Southern red oak	42.5	63.75	poor, major trunk rot
	Southern red oak	47.5	71.25	good
	White oak	30.5	45.75	good .
	Red maple	30	45	good
	Tulip poplar	32	48	fair, some limb dieback
	Linden	32	48	good
	Silver maple	37	55.5	fair, splits into multiple stems above breast height, short with limited crown possibly the result of historical trimmed.

SITE ANALYSIS DATA CHART

TOTAL AREA OF THIS SUBMISSION = 1.65 AC.+. LIMIT OF DISTURBED AREA = 0.71 Ac. +

PRESENT ZONING DESIGNATION = R-SC (PER 10/06/2013 COMPREHENSIVE ZONING PLAN) PROPOSED USE: RESIDENTIAL

BUILDING COVERAGE OF SITE: N/A. PREVIOUS HOWARD COUNTY FILES: N/A TOTAL AREA OF FLOODPLAIN LOCATED ON SITE 0.00 AC+

TOTAL AREA OF SLOPES IN EXCESS OF 15% = 0.09 AC± (25% SLOPES OR GREATER = 0.00 AC±) TOTAL AREA OF ERODIBLE SOILS = 1.39 AC+

TOTAL AREA OF STREAMS AND STREAM BUFFERS = 0.31 AC+ (LOCATED WITHIN OPEN SPACE LOT 5)

TOTAL AREA OF WETLANDS (INCLUDING BUFFER) = 0.00 AC. ±

TOTAL AREA OF FOREST = 0.24 AC+, ALL OF WHICH IS TO BE PLACED IN FOREST CONSERVATION EASEMENT.

TOTAL GREEN OPEN AREA = 0.97 AC+ TOTAL IMPERVIOUS AREA = 0.44 AC* (0.20 AC* PROPOSED)

DENSITY TABULATION 1.65 AC+ X 4 LOTS/ACRE = 6 LOTS MAXIMUM.

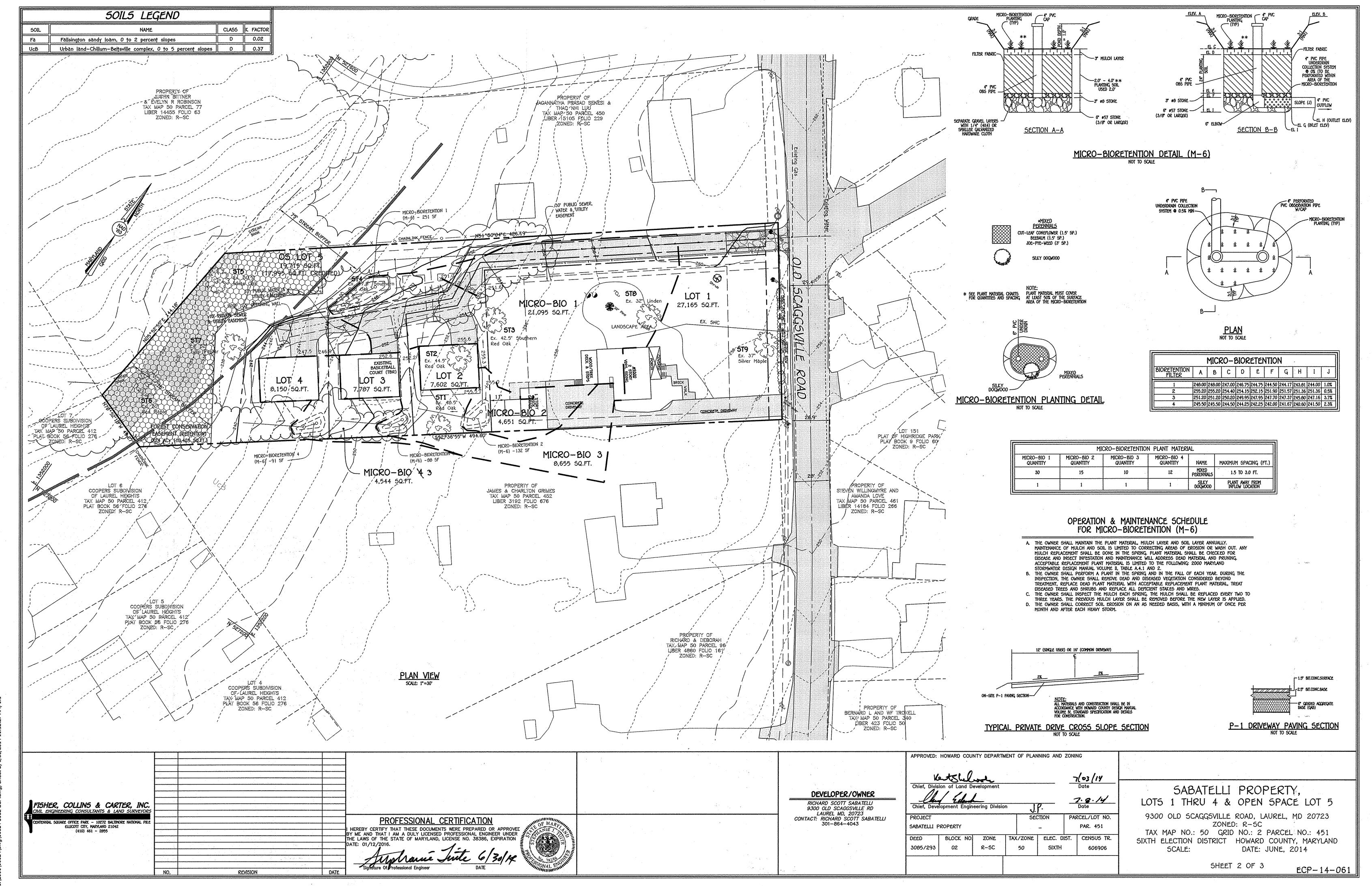
MINIMUM OPEN SPACE REQUIRED = 71,937 5Q.FT. + X 0.25 = 17,984 5Q.FT. + OPEN SPACE PROVIDED = 19,715 5Q.FT. + (17,995 5Q.FT. + CREDITED) LOT PROPOSED = 4 LOTS. AREA OF PROPOSED BUILDABLE LOTS = 50,704.50.FT.+.

> SABATELLI PROPERTY, LOTS 1 THRU 4 & OPEN SPACE LOT 5

> 9300 OLD SCAGGSVILLE ROAD, LAUREL, MD 20723 ZONED: R-5C

TAX MAP NO.: 50 GRID NO.: 2 PARCEL NO.: 451 SIXTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND 5CALE: DATE: JUNE, 2014

ECP-14-061



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