

PRELIMINARY EQUIVALENT SKETCH PLAN

SOMERVILLE ESTATES

LOTS 1 THRU 7, AND OPEN SPACE LOTS 8-10

FIRST ELECTION DISTRICT

HOWARD COUNTY, MARYLAND

SHEET INDEX

NO	TITLE
1	COVER SHEET
2	PRELIMINARY EQUIVALENT SKETCH PLAN
3	PRELIMINARY ROAD PROFILE AND TYPICAL SECTION
4	PRELIMINARY GRADING AND SEDIMENT CONTROL PLAN
5	PRELIMINARY LANDSCAPING AND FOREST CONSERVATION PLAN
6	PRELIMINARY SOILS AND DRAINAGE AREA MAP
7	PRELIMINARY SWM PLAN

MINIMUM LOT SIZE CHART

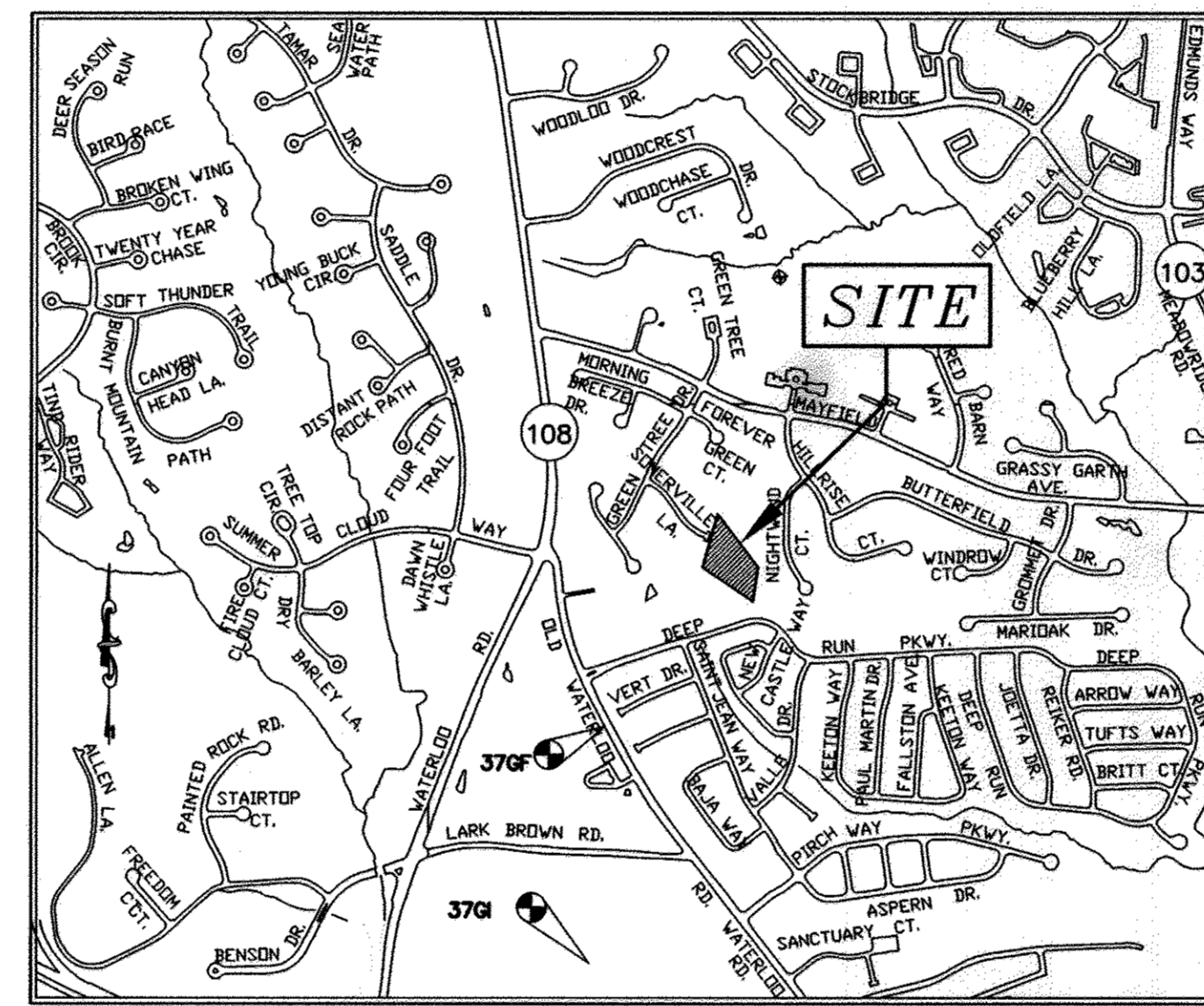
LOT NO.	GROSS AREA	PIPESTEM AREA	MINIMUM LOT SIZE
2	6,695 SQ. FT.	347 SQ.FT.	6,348 SQ. FT.
3	6,599 SQ. FT.	555 SQ.FT.	6,044 SQ. FT.
4	7,029 SQ. FT.	760 SQ.FT.	6,269 SQ. FT.
5	7,300 SQ. FT.	707 SQ.FT.	6,593 SQ. FT.
6	8,020 SQ. FT.	365 SQ.FT.	7,655 SQ. FT.
O/S 9	5,973 SQ. FT.	345 SQ.FT.	5,628 SQ. FT.
O/S 10	12,937 SQ. FT.	909 SQ.FT.	12,028 SQ. FT.

LEGEND

	LOD	LIMIT OF DISTURBANCE
	PR	STORM DRAIN PIPE
	PR	STORM DRAIN INLET
	A-1	EARTH DIKE
	SSF	SUPER SILT FENCE
	DF	DIVERSION FENCE
		AREA TREATED BY DRYWELLS (M-5)
		AREA TREATED BY MICRO-BIO. (M-6)

OWNER

HARMONY BUILDERS INC.
4228 COLUMBIA RD.
ELLCOTT CITY MD, 21042
(410) 461-0833



VICINITY MAP
SCALE: 1"=1000'

GENERAL NOTES:

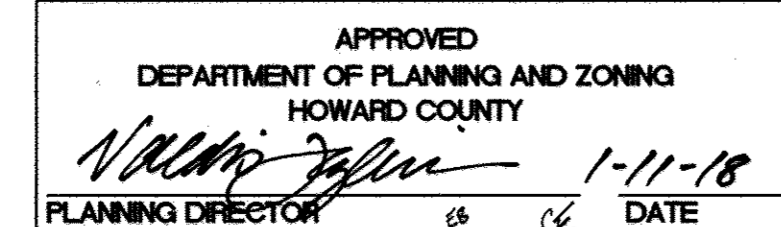
- THIS SUBJECT PROPERTY IS ZONED R-SC PER THE OCTOBER 6, 2013 COMPREHENSIVE ZONING PLAN.
- THE PROJECT IS IN CONFORMANCE WITH THE LATEST HOWARD COUNTY STANDARDS UNLESS WAIVERS HAVE BEEN APPROVED.
- TOPOGRAPHY WITHIN 200' OF SITE BOUNDARY SHOWN HEREON IS BASED ON FIELD RUN SURVEY WITH MAXIMUM TWO FOOT CONTOUR INTERVAL, PERFORMED BY MILDENBERG, BOENDER & ASSOC., INC. ON OR ABOUT FEBRUARY 2016. OTHER TOPOGRAPHY SHOWN IS BASED ON HOWARD COUNTY GIS.
- BOUNDARY SHOWN HEREON IS BASED ON A FIELD RUN MONUMENTED BOUNDARY SURVEY PERFORMED ON OR ABOUT OCTOBER, 2016 BY MILDENBERG, BOENDER & ASSOC INC.
- COORDINATES BASED ON NAD '83 (HORIZONTAL) AND NAVD '88 (VERTICAL) MARYLAND COORDINATE SYSTEM AS PROJECTED BY HOWARD COUNTY GEODETIC CONTROL STATIONS
STA. No. 37GF N 555,697.236 E 1,372,015.045 ELEV. 292.995
STA. No. 37GF N 555,222.147 E 1,370,948.649 ELEV. 330.872
- PROJECT BACKGROUND:**
ADDRESS: 8126 FOREVER GREEN CT, ELKRIDGE, MD 21075
LOCATION: TAX MAP : 37 PARCEL: 532 GRID: 14
ELECTION DISTRICT: FIRST
DEED REFERENCE :17307'002
PREVIOUS PROJECT NUMBERS: ECP-17-031, WP-18-024
- SITE AREA TABULATION**
TOTAL AREA: 1.96 AC±
AREA OF 100 YEAR FLOODPLAIN: 0.0 AC±
TOTAL NET AREA: 1.96 AC±
MINIMUM LOT SIZE PROPOSED: 6,000 S.F.
NUMBER OF BUILDABLE LOTS: 7
NUMBER OF OPEN SPACE LOTS: 3
TYPE OF PROPOSED UNIT: SFD
AREA OF BUILDABLE LOTS 1.18 AC±
AREA OF ROAD ROW: 0.17 AC±
AREA OF ROAD DEDICATION: 0.17 AC±
AREA OF OPEN SPACE REQUIRED: (25%) 0.49 AC±
AREA OF OPEN SPACE PROVIDED (CREDITED): (30%) 0.60 AC±
AREA OF OPEN SPACE (NON-CREDITED): 1,255 S.F. OR 0.03 AC± (PIPESTEM AREAS FOR OPEN SPACE LOTS 9 & 10) EXISTING WATER AND SEWER CONTRACT NO. 14-3588-D.
- WATER IS PUBLIC.
- SEWER IS PUBLIC.
- STORMWATER MANAGEMENT IS PROVIDED BY M-6 MICRO-BIOTENTION FACILITIES AND DRYWELL IN ACCORDANCE WITH THE 2007 MARYLAND STORMWATER DESIGN MANUAL.
- FOREST STAND DELINEATION WAS PERFORMED BY ECO-SCIENCE PROFESSIONALS, INC. IN OCTOBER, 2016.
- NO WETLAND, STREAM OR ITS BUFFERS EXISTS ON-SITE.
- NO FLOODPLAIN EXIST ON-SITE.
- NO STEEP SLOPES EXIST ON-SITE.
- NO HISTORIC STRUCTURES, CEMETERIES, OR GRAVE SITES EXIST ON-SITE.
- SITE IS NOT ADJACENT TO A DESIGNATED SCENIC ROAD.
- APFO ROAD TEST WAS PROVIDED BY TRAFFIC GROUP IN JUNE 2017.
- NOISE STUDY IS NOT REQUIRED.
- ALL EXISTING STRUCTURES ARE TO BE REMOVED.
- FOREST CONSERVATION OBLIGATIONS IN ACCORDANCE WITH SECTION 16.1200 OF THE HOWARD COUNTY CODE AND FOREST CONSERVATION ACT FOR THIS SUBDIVISION WILL BE FULFILLED BY A PAYMENT OF FEE-IN-LIEU FOR 0.29 ACRES OF AFFORESTATION. FEE-IN-LIEU FOR 0.29 ACRES (12,634 SQ. FT.) OF AFFORESTATION IN THE AMOUNT OF \$ 9,475.00 WILL BE POSTED AT FINAL PLAN STAGE.
- ALL LANDSCAPING REQUIREMENTS SHALL BE FULFILLED AT THE FINAL PLAN STAGE IN ACCORDANCE WITH SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL.
- PER SECTION 16.121(g) OF THE HOWARD COUNTY SUBDIVISION AND LAND USE REGULATIONS, OPEN SPACE FOR THIS SUBDIVISION HAS BEEN PROVIDED THROUGH THE CREATION OF OPEN SPACE LOTS 8-10.
- A PRE-SUBMISSION COMMUNITY MEETING FOR THIS PROJECT WAS HELD ON OCTOBER 18, 2016 AT 6:00PM AT THE ELKRIDGE FIRE HALL.
- THIS DEVELOPMENT PLAN IS SUBJECT TO THE AMENDED FIFTH EDITION OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS PER COUNCIL BILL 45-2003 AND THE ZONING REGULATIONS AS AMENDED BY COUNCIL BILL 75-2003. DEVELOPMENT OR CONSTRUCTION ON LOTS MUST COMPLY WITH SETBACK AND BUFFER REGULATIONS IN EFFECT AT THE TIME OF SUBMISSION OF THE BUILDING / GRADING PERMIT.
- ALL LOTS/RESIDENTIAL UNITS IN THIS SUBDIVISION ARE SUBJECT TO THE MHU FEE-IN-LIEU REQUIREMENT THAT IS TO BE CALCULATED AND PAID TO THE DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS AT THE TIME OF BUILDING PERMIT ISSUANCE BY THE PERMIT APPLICANT.
- THE SEPTIC SYSTEM MUST BE PROPERLY ABANDONED WITH DOCUMENTATION SENT TO THE HEALTH DEPARTMENT PRIOR TO HEALTH DEPARTMENT SIGNATURE OF THE FINAL RECORD PLAT.
- A PRIVATE RANGE OF ADDRESS SIGN ASSEMBLY SHALL BE FABRICATED AND INSTALLED BY HOWARD COUNTY BUREAU OF HIGHWAYS AT THE DEVELOPERS/OWNERS EXPENSE. CONTACT HOWARD COUNTY TRAFFIC DIVISION AT 410-313-2430 FOR DETAILS AND COST ESTIMATES.
- GEOTECHNICAL REPORT WAS PROVIDED BY GEOTECHNICAL ENVIRONMENTAL TESTING CONSULTANTS, INC.
- THIS PLAN IS SUBJECT TO WP-18-024, SEEKING AN ALTERNATIVE COMPLIANCE TO SECTIONS 16.1205(g)(7) WHICH STATES THAT STATE CHAMPION TREES, TREES 75% OF THE DIAMETER OF STATE CHAMPION TREES AND TREES 30" IN DIAMETER OR LARGER SHALL BE LEFT IN AN UNDISTURBED CONDITION DURING CONSTRUCTION. THIS ALTERNATIVE COMPLIANCE WAS APPROVED ON SEPTEMBER 21, 2017 SUBJECT TO THE FOLLOWING CONDITIONS:
 - THE APPROVAL OF THIS ALTERNATIVE COMPLIANCE REQUEST APPLIES ONLY TO THE TWO (2) SPECIMEN TREES AS SHOWN TO BE REMOVED ON THE PLAN EXHIBIT. THE REMOVAL OF ANY OTHER SPECIMEN TREE ON THE SUBJECT PROPERTY IS NOT PERMITTED UNDER THIS REQUEST UNLESS IT CAN BE SUFFICIENTLY DEMONSTRATED BY THE APPLICANT TO BE JUSTIFIED.
 - THE DEVELOPER SHALL PLANT FOUR (4) 2 1/2" INCH MINIMUM CALIPER NATIVE SHADE TREES IN ADDITION TO THE REQUIRED PERIMETER LANDSCAPING TO MITIGATE THE REMOVAL OF THE TWO SPECIMEN TREES. INCLUDE THE ADDITIONAL TREES ON SP-17-011 AND ALL SUBSEQUENT PLANS. THESE TREES WILL BE BONDED ALONG WITH THE REQUIRED PERIMETER LANDSCAPING AS PART OF THE FINAL SUBDIVISION PLAN.

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 17942, EXP DATE 09/03/18



R. JACOB HIKMAT P.E.

12118117
DATE:



PLANNING DIRECTOR
DATE

Project	date	description	approval
16-015	DEC. 2017	engineering	MMM
MMM	MMM	MMM	MMM
MMM	MMM	MMM	MMM
MMM	MMM	MMM	MMM

no.	description	revisions	date

SOMERVILLE ESTATES
LOTS 1-7 AND OPEN SPACE LOTS 8-10
TAX MAP 37, GRID 14, PARCEL 532
FIRST ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
COVER SHEET

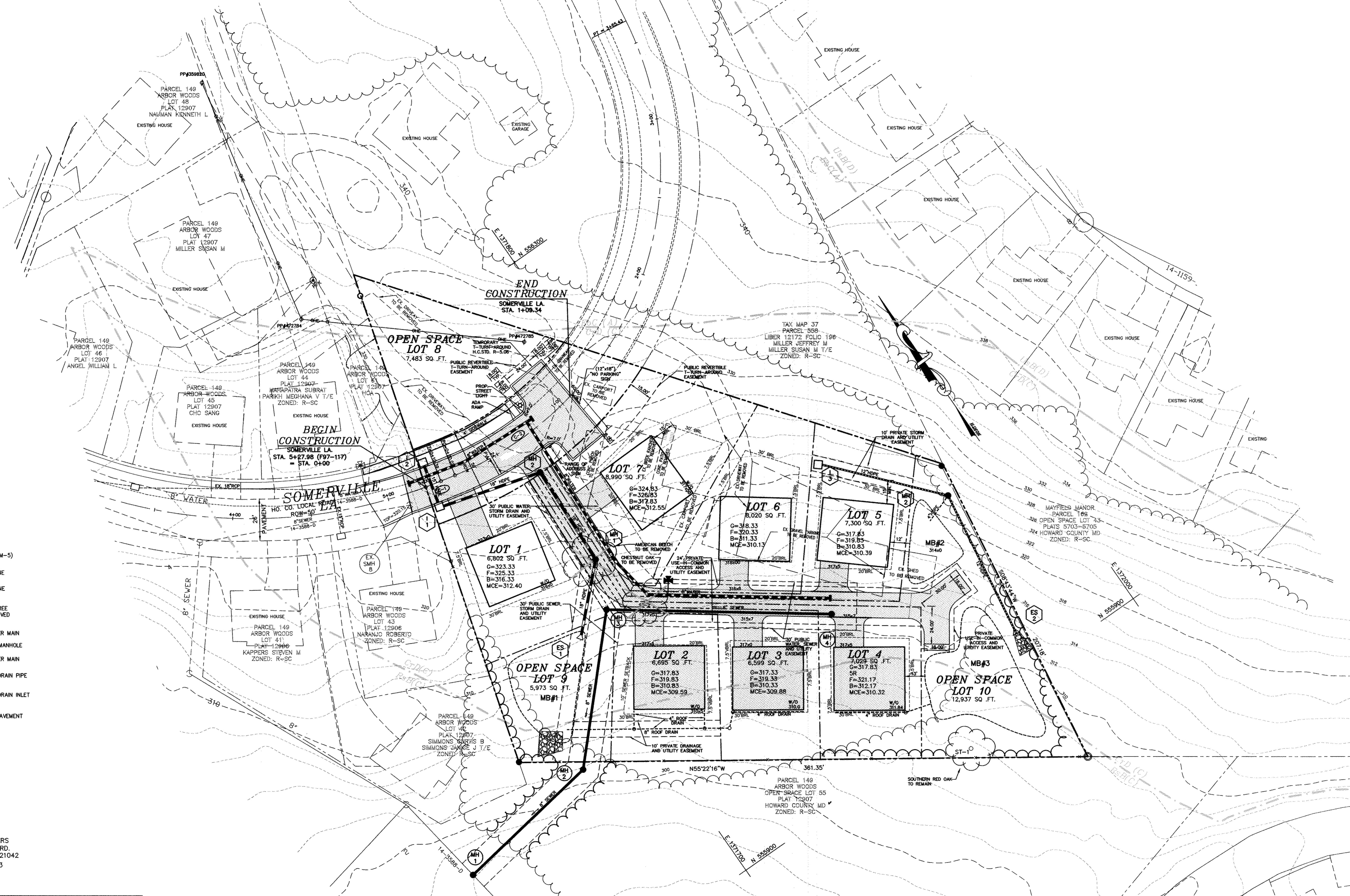
MILDENBERG, BOENDER & ASSOC., INC.
Surveyors
Engineers Planners
7650-R Cross Drive, Columbia, Maryland 21044
(410) 997-0296 Tel. (410) 997-0296 Fax

SOILS TABLE

SYMBOL	RATING	NAME	K FACTOR	MAP NO.	COMMENTS
Cd	(C)	CROOM AND EVESBORO SOILS, 10-15%	.37	19	HIGHLY ERODIBLE
Ebc	(A)	EVESBORO LOAMY SAND, 2-10% SLOPES.	.17	19	
RaB	(C)	RUSSETT FINE SANDY LOAM, 2 TO 5% SLOPES	.24	19	

CENTERLINE CURVE TABLE

CURVE	LENGTH (FT)	RADIUS (FT)	DELTA	TANGENT (FT)	CHORD LENGTH (FT)	CHORD DIR
C-1	10.39	320.00	01°51'36"	5.19	10.39	S76°20'15"E
C-2	89.32	210.00	24°22'11"	45.35	80.65	S87°27'09"E



LEGEND

- DRY-WELL (M-5)
- EX. TREE LINE
- PR. TREE LINE
- SPECIMEN TREE TO BE REMOVED
- PR. 8" SEWER MAIN
- PR. SEWER MANHOLE
- PR. 8" WATER MAIN
- PR. STORM DRAIN PIPE
- PR. STORM DRAIN INLET
- PROPOSED PAVEMENT

OWNER

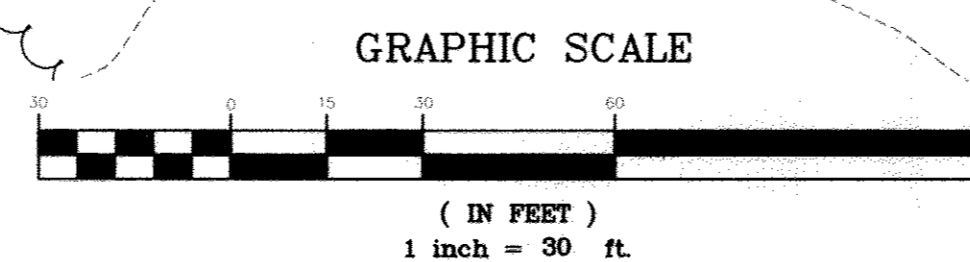
HARMONY BUILDERS
4228 COLUMBIA RD.
ELLCOTT CITY MD. 21042
(410) 461-0833

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R. JACOB HIKMAT P.E. DATE: 12/18/17

APPROVED
DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY
Volker & Davis 1-11-18
PLANNING DIRECTOR DATE

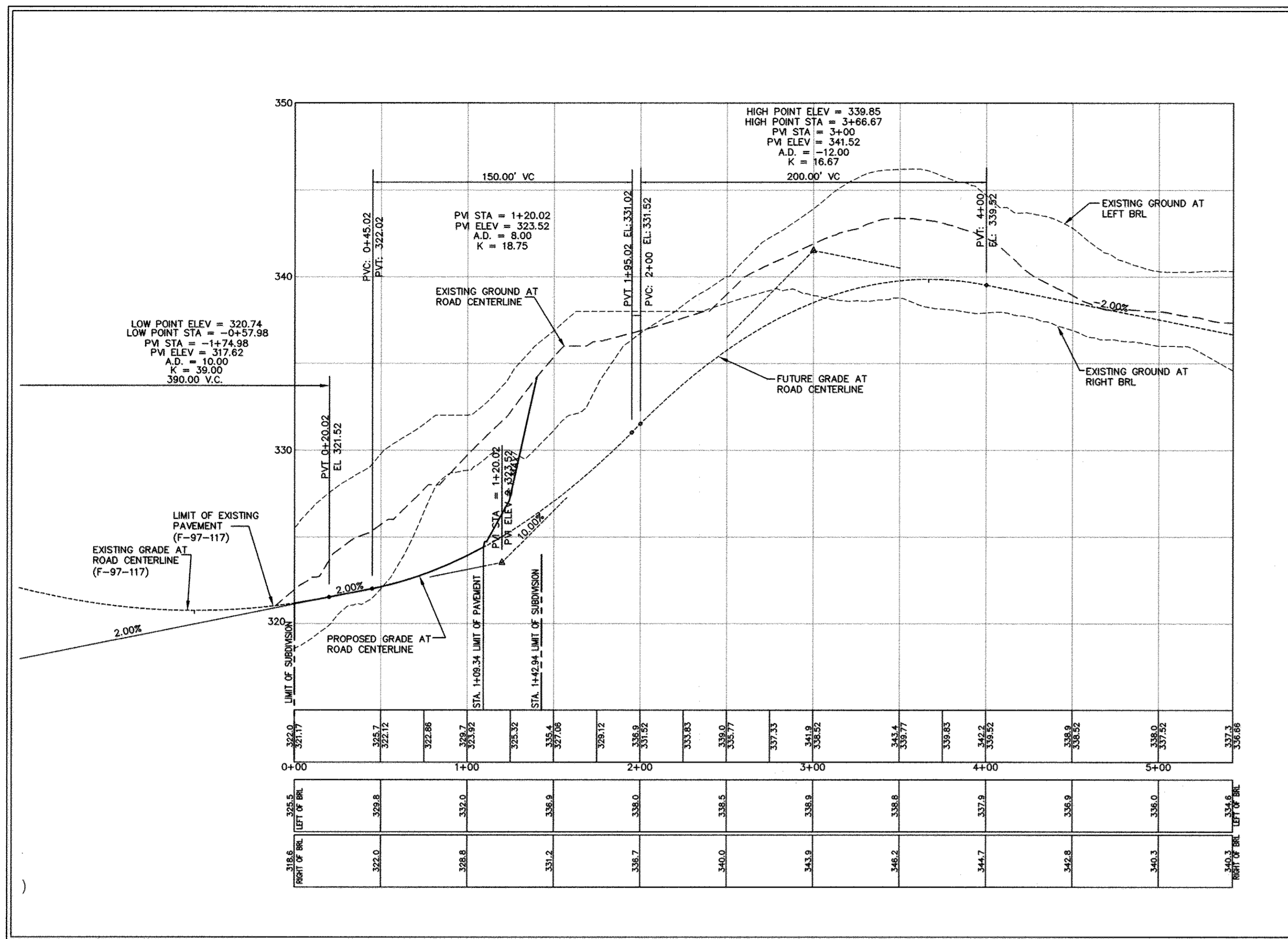


Project	date	DEC. 2017	engineering	MM	approval	RH
16-015	illustration	MM	scale	1" = 30'		

no.	description	revisions	date

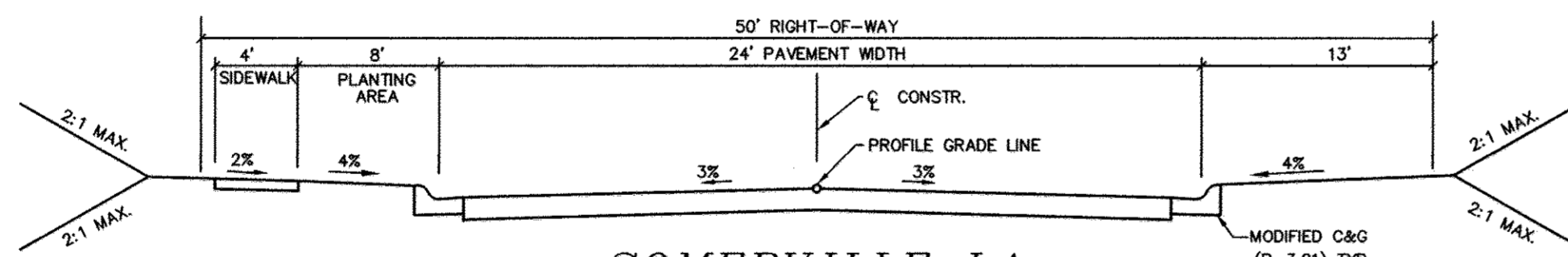
SOMERVILLE ESTATES
LOTS 1-7 AND OPEN SPACE LOTS 8-10
TAX MAP 37, GRID 14, PARCEL 532
FIRST ELECTION DISTRICT HOWARD COUNTY, MARYLAND
PRELIMINARY EQUIVALENT SKETCH PLAN

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



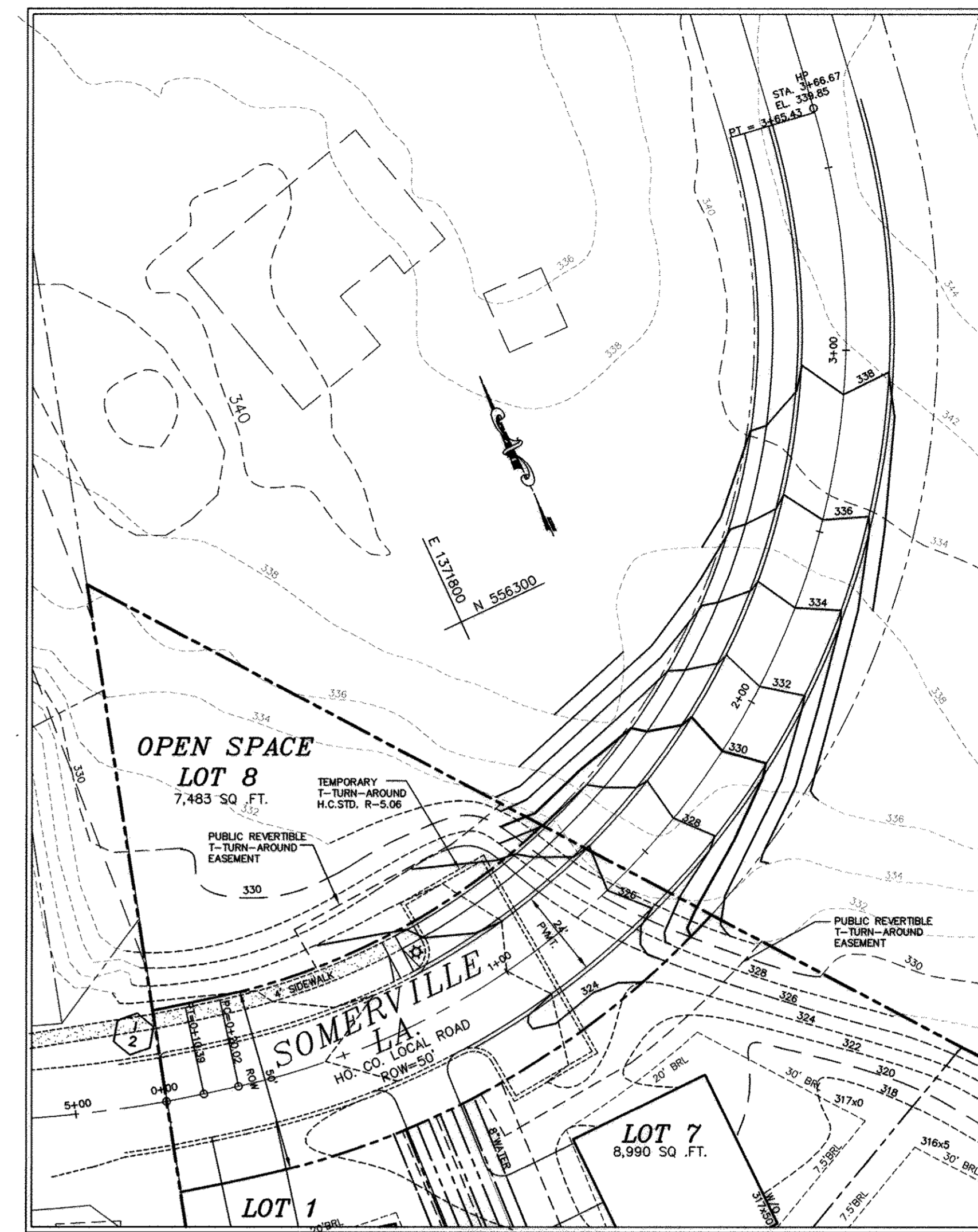
**PROFILE - SOMERVILLE LANE
EXTENSION**

(PUBLIC - LOCAL ROAD, 30 M.P.H. DESIGN SPEED)
SCALE: 1"=50' HOR
1"=5' VER



SOMERVILLE LA.

CLASSIFICATION: ACCESS STREET
DESIGN SPEED: 30 MPH
HO.CO.STD.R-1.02
N.T.S.



**POTENTIAL FUTURE SOMERVILLE LANE
EXTENSION**

SCALE: 1"=50'

OWNER
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ELLCOTT CITY, MD, 21042
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APPROVED
DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY
N. JACOBI
PLANNING DIRECTOR 1-11-18 DATE

project	16-015	date	DEC. 2017
illustration	MMM	engineering	MMM
scale	1"=50'	approval	RJH

no.	description	date

SOMERVILLE ESTATES
LOTS 1-7 AND OPEN SPACE LOTS 8-10
TAX MAP 37, GRID 14, PARCEL 532
FIRST ELECTION DISTRICT HOWARD COUNTY, MARYLAND
PRELIMINARY ROAD PROFILE AND TYPICAL SECTION.

MILDENBERG, BOENDER & ASSOC., INC.
Engineers Planners Surveyors
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(410) 997-0296 Tel. (410) 997-0298 Fax.

SOILS TABLE

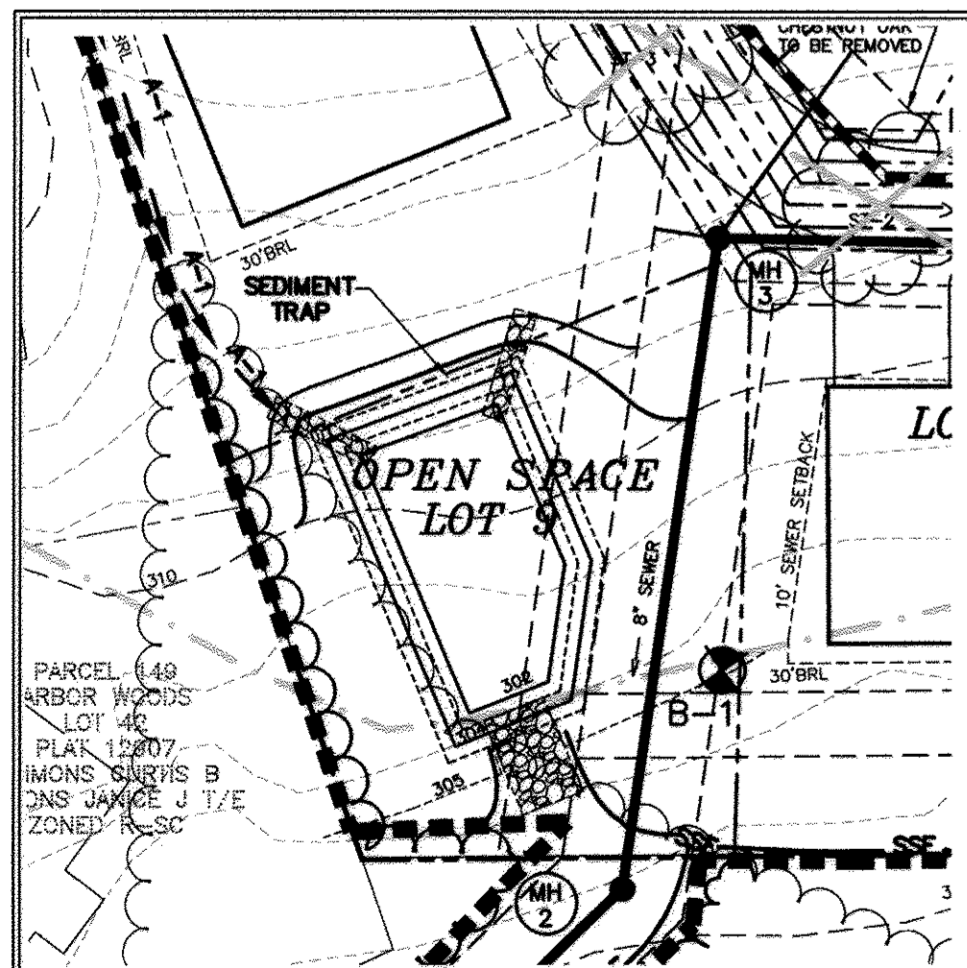
SYMBOL	RATING	NAME	K FACTOR	MAP NO.	COMMENTS
CrD	(C)	CROOM AND EVESBORO SOILS, 10-15%	.37	19	HIGHLY ERODIBLE
EbC	(A)	EVESBORO LOAMY SAND, 2-10% SLOPES.	.17	19	
RbB	(C)	RUSSETT FINE SANDY LOAM, 2 TO 5% SLOPES	.24	19	

LEGEND

- DRY-WELL (M-5)
- EX. TREE LINE
- PR. TREE LINE
- SPECIMEN TREE TO BE REMOVED
- 8" SEWER
- PR. 8" SEWER MAIN
- PR. SEWER MANHOLE
- PR. 8" WATER MAIN
- PR. STORM DRAIN PIPE
- PR. STORM DRAIN INLET
- PROPOSED PAVEMENT
- LOD
- EARTH DIKE
- SUPER SILT FENCE
- DIVERSION FENCE

SEDIMENT TRAP (ST II) DATA

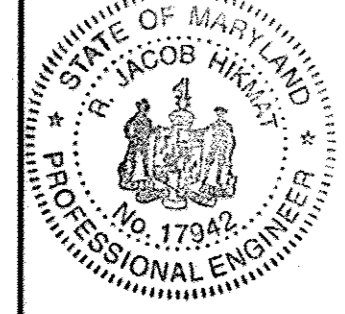
DRAINAGE AREA: 0.57 AC.
 TOTAL STORAGE REQUIRED: 2,052 C.F.
 TOTAL STORAGE PROVIDED: 2,350 C.F.
 WET STORAGE REQUIRED: 1,026 C.F.
 WET STORAGE PROVIDED: 1,035 C.F.
 DRY STORAGE REQUIRED: 1,026 C.F.
 DRY STORAGE PROVIDED: 1,315 C.F.
 EX. GROUND ELEV. @ OUTLET: 304.0
 BOTTOM ELEVATION: 302.0
 BOTTOM DIMENSIONS: 22'x43'
 WEIR LENGTH: 10'
 WEIR CREST ELEV.: 304.0
 TOP OF EMBANKMENT ELEV.: 305.0
 TOP OF EMBANKMENT WIDTH: 4'
 SIDE SLOPE: 2:1
 OUTLET PROTECTION LENGTH: 10'
 OUTLET PROTECTION DEPTH: 9"



SEDIMENT TRAP

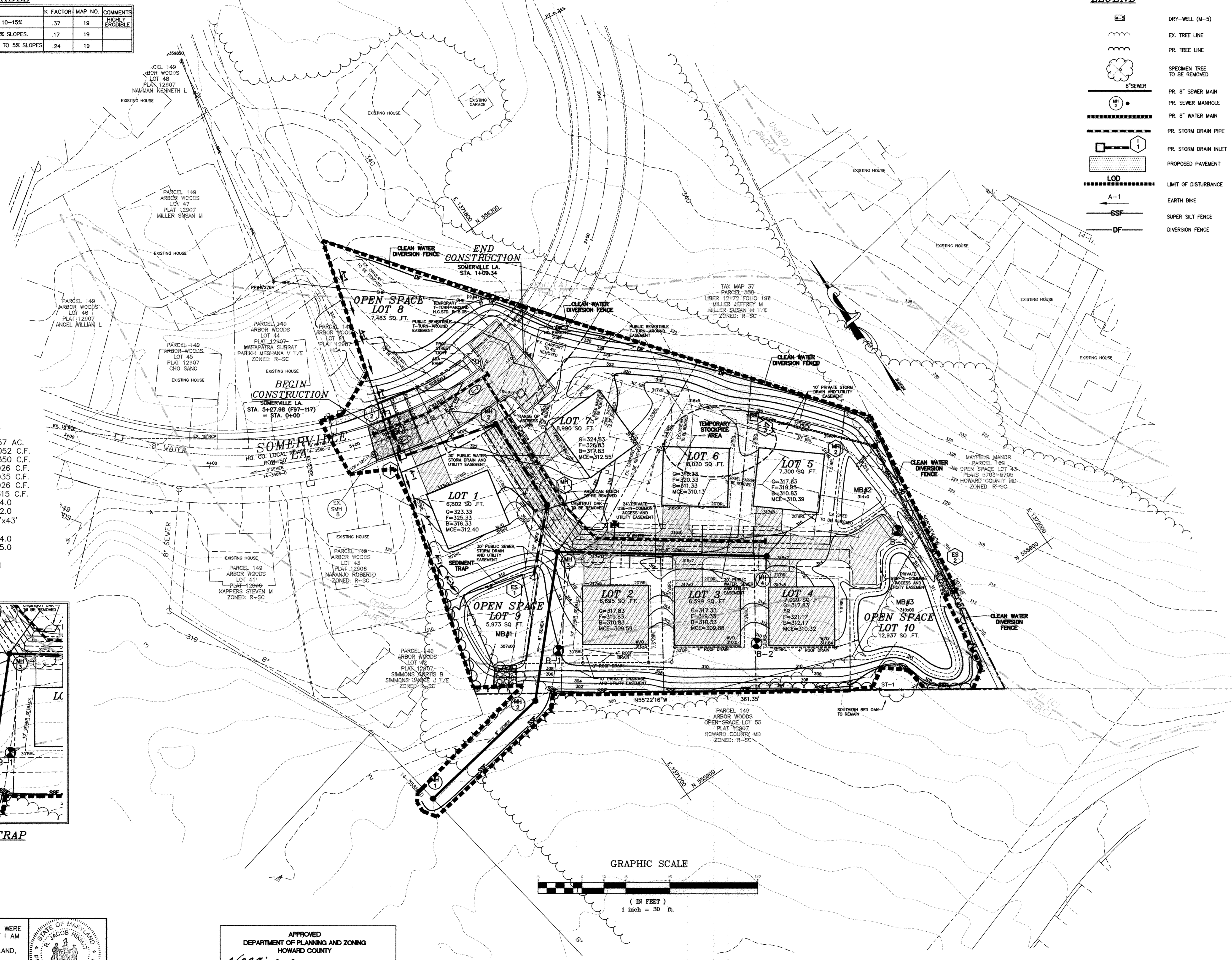
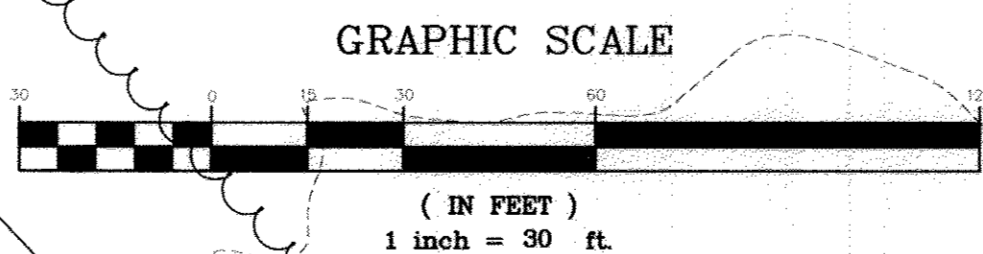
OWNER
 HARMONY BUILDERS
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 ELLICOTT CITY MD, 21042
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APPROVED
 DEPARTMENT OF PLANNING AND ZONING
 HOWARD COUNTY
N. JACOB HIKMAT 1-11-18
 PLANNING DIRECTOR DATE



Project	16-015	date	DEC. 2017
Illustration	MM	engineering	MM
scale	1"=30'	approval	RJH

no.	description	date

SOMERVILLE ESTATES
 LOTS 1-7 AND OPEN SPACE LOTS 8-10
 TAX MAP 37, GRID 14, PARCEL 532
 FIRST ELECTION DISTRICT HOWARD COUNTY, MARYLAND
PRELIMINARY GRADING AND SEDIMENT CONTROL PLAN

MILDENBERG, BOENDER & ASSOC., INC.
 Engineers Planners Surveyors
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Ebc	(A)	EVESBORO LOAMY SAND, 2-10% SLOPES.	.17	19	
Rsb	(C)	RUSSETT FINE SANDY LOAM, 2 TO 5% SLOPES	.24	19	

STREET TREE CALCULATIONS

SOMERVILLE LANE - 200 / 40 = 5

STREET TREE PLANTING SCHEDULE

QUANTITY	SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE
5	○	PRUNUS SARSCENTHI OR EQUIVALENT	SARGENT CHERRY OR EQUIVALENT	2 1/2" - 3" CAL.
TOTAL				5 STREET TREES

FOREST CONSERVATION WORKSHEET

NET TRACT AREA:
 A. Total tract area.....=1.96
 B. Area within 100 year floodplain.....=0.00
 C. Area to remain in agricultural production.....=0.09
 D. Net tract area.....=1.96

LAND USE CATEGORY: (from table 3.2.1, page 40, Manual)
 Input the number "1" under the appropriate land use zoning, and limit to only one entry.

ARA MDR IDA HDR MPD CIA
 0 0 0 1 0 0

E. Afforestation Threshold.....15% x D = 0.29
 F. Conservation Threshold.....20% x D = 0.39

EXISTING FOREST COVER:

G. Existing forest cover (excluding floodplain).....=0.00
 H. Area of forest above afforestation threshold.....=0.00
 I. Area of forest above conservation threshold.....=0.00

BREAK EVEN POINT

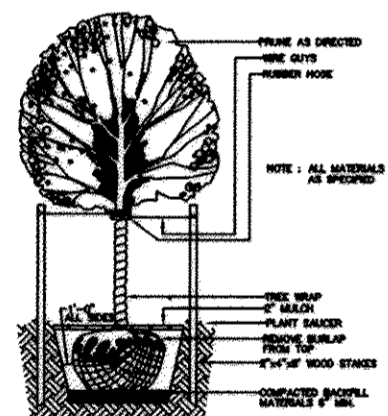
J. Forest retention above threshold with no mitigation.....=0.00
 K. Clearing permitted without mitigation.....=0.00

PROPOSED FOREST CLEARING:

L. Total area of forest to be cleared.....=0.00
 M. Total area of forest to be retained.....=0.00

PLANTING REQUIREMENTS:

N. Reforestation for clearing above conservation threshold.....=0.00
 P. Reforestation for clearing below conservation threshold.....=0.00
 Q. Credit for retention above conservation threshold.....=0.00
 R. Total reforestation required.....=0.00
 S. Total afforestation required.....=0.29
 T. Total reforestation and afforestation required.....=0.29



TYPICAL DECIDUOUS TREE PLANTING DETAIL
 NOT TO SCALE

SCHEDULE A: PERIMETER LANDSCAPED EDGE

CATEGORY	ADJACENT TO PERIMETER PROPERTIES					TOTAL
	A (PERIMETER 1)	A (PERIMETER 2)*	A (PERIMETER 3)	A (PERIMETER 4)	A (PERIMETER 5)	
LANDSCAPE TYPE	393.94 LF	117.12 LF	159.49 LF	361.35 LF	207.18 LF	
CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR FEET)	NO	NO	NO	NO	NO	
CREDIT FOR WALL, FENCE, OR BERM (YES, NO, LINEAR FEET)	NO	NO	NO	NO	NO	
NUMBER OF PLANTS REQUIRED	7 SHADE TREES 0 EVERGREEN TREES 0 SHRUBS	2 SHADE TREES 0 EVERGREEN TREES 0 SHRUBS	3 SHADE TREES 0 EVERGREEN TREES 0 SHRUBS	6 SHADE TREES 0 EVERGREEN TREES 0 SHRUBS	3 SHADE TREES 0 EVERGREEN TREES 0 SHRUBS	21 SHADE TREES 0 EVERGREEN TREES 0 SHRUBS
NUMBER OF PLANTS PROVIDED	7 SHADE TREES 0 EVERGREEN TREES 0 OTHER TREES (2:1 SUBSTITUTION) 0 SHRUBS (10:1 SUBSTITUTION)	6 SHADE TREES 0 EVERGREEN TREES 0 SUBSTITUTION TREES 0 SHRUBS	3 SHADE TREES 0 EVERGREEN TREES 0 SUBSTITUTION TREES 0 SHRUBS	6 SHADE TREES 0 EVERGREEN TREES 0 SUBSTITUTION TREES 0 SHRUBS	3 SHADE TREES 0 EVERGREEN TREES 0 SUBSTITUTION TREES 0 SHRUBS	25 SHADE TREES 0 EVERGREEN TREES 0 SUBSTITUTION TREES 0 SHRUBS

* PERIMETER 2- THE ADDITIONAL 4 SHADE TREES PROVIDED IN LIEU OF REMOVAL OF 2 SPECIMEN TREES HAVE BEEN ADDED TO PERIMETER 2 AS PER WP-18-024.

LANDSCAPE REQUIREMENT PLANTING SCHEDULE

QUANTITY	SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE
11	○	ACER RUBRUM 'RED SUNSET'	RED SUNSET RED MAPLE	2 1/2" - 3" CAL.
10	○	GLEDITSIA TRIACANTHOS INERMIS 'IMPERIAL'	IMPERIAL THORNLESS HONEYLOCUST	2 1/2" - 3" CAL.

TOTAL
 21 SHADE TREES

QUANTITY	SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE
4	○	ACER RUBRUM 'RED SUNSET' OR EQUIVALENT AS OUTLINED IN THE HOWARD COUNTY LANDSCAPE MANUAL.	RED SUNSET RED MAPLE	2 1/2" - 3" CAL.

TOTAL
 4 TREES (4 SHADE TREES)

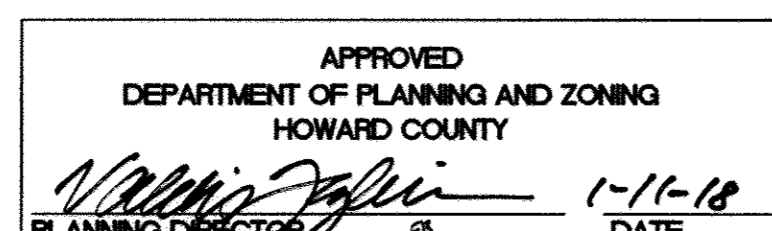
NOTE- AN ADDITIONAL 4 SHADE TREES HAVE BEEN PROVIDED IN LIEU OF 2 SPECIMEN TREES REMOVED.

TOTAL FOR THE PROJECT
 25 SHADE TREES

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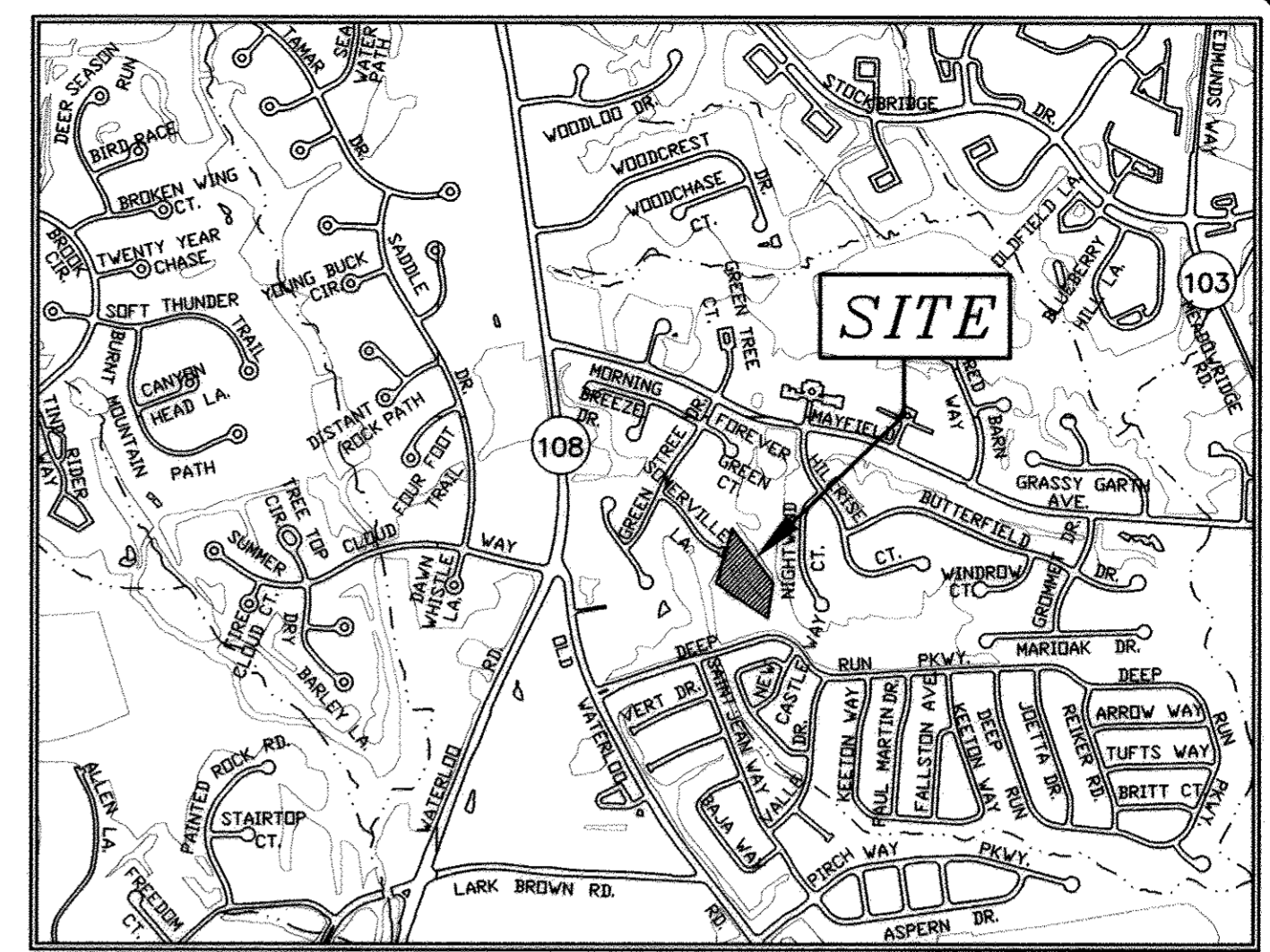
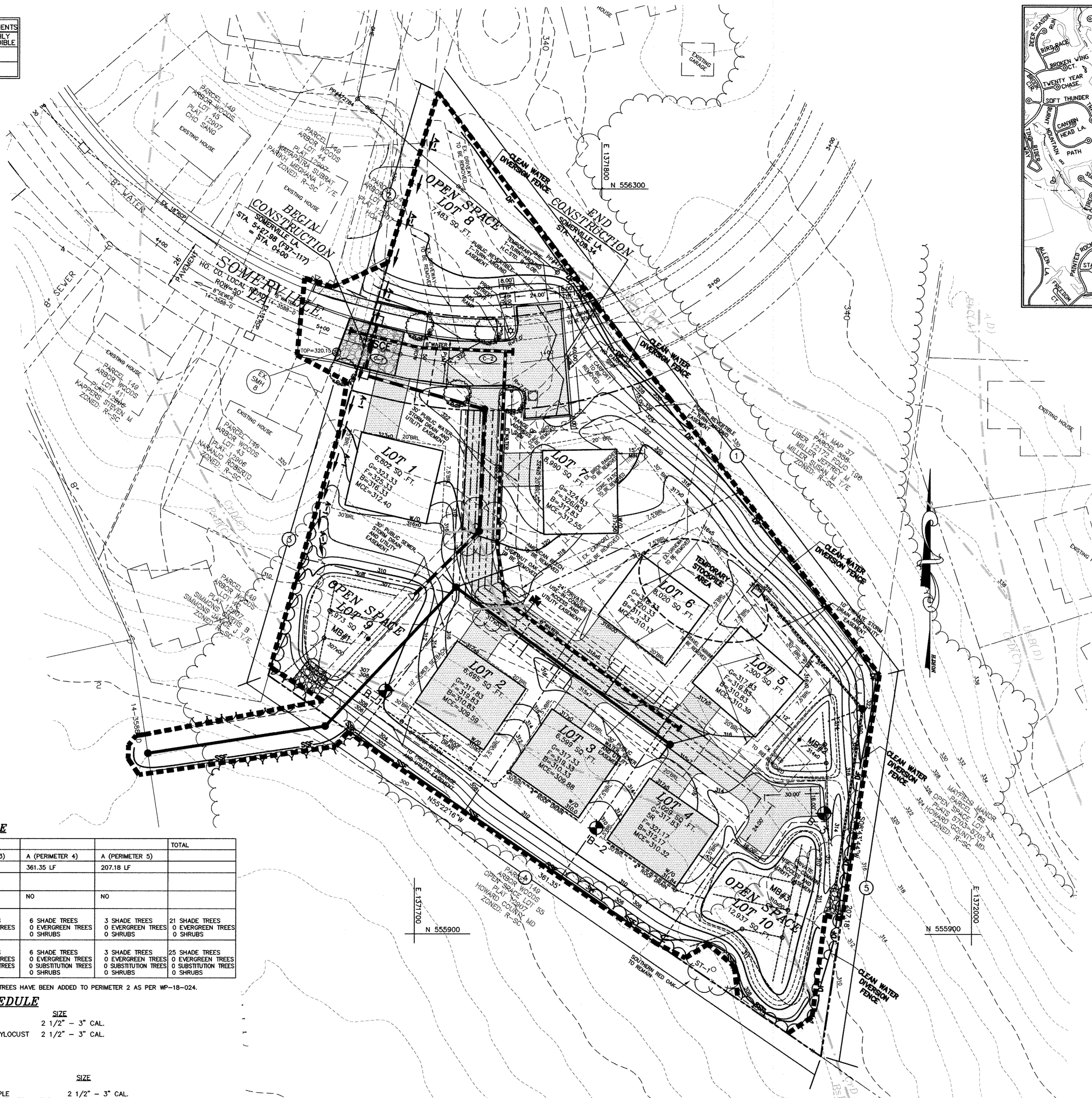


R. JACOB HIKMAT P.E. 12/18/17 DATE:



MD DNR QUALIFIED PROFESSIONAL
 Mashid Tringa 12/18/17
 MASHID TRINGA

OWNER
 HARMONY BUILDERS
 4228 COLUMBIA RD.
 ELLICOTT CITY MD, 21042
 (410) 461-0833



VICINITY MAP
 SCALE: 1"=1000'

FSD NOTES:

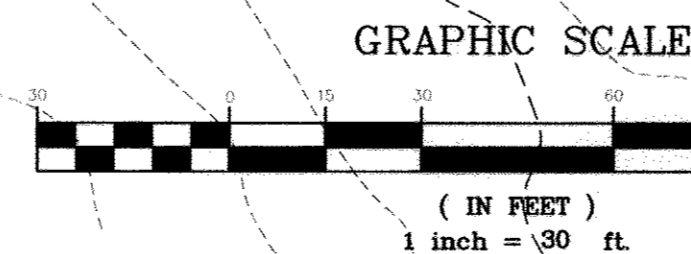
- NO RARE, THREATENED OR ENDANGERED SPECIES OR THEIR HABITATS WERE OBSERVED ON THE PROPERTY.
- SURROUNDING LAND USE IS PRIMARILY HIGH-DENSITY RESIDENTIAL DEVELOPMENT.
- THE SITE IS LOCATED WITHIN THE DEEP RUN SECTION OF THE PATAPSCO RIVER WATERSHED (02-15-09). THIS SECTION OF THE WATERSHED IS CLASSIFIED AS USE I. NO WETLANDS, STREAMS OR BUFFERS ARE PRESENT ON THE SITE.
- NO HISTORIC ELEMENTS OR CEMETERIES ARE KNOWN TO OCCUR ON THE PROPERTY.
- NO STEEP SLOPES (25% AND GREATER) ARE PRESENT ON THE SITE.
- APPROXIMATELY 1.8 ACRES OF FOREST IS PRESENT WITHIN 100 FEET OF THE SITE.

SPECIMEN TREE CHART

KEY	SPECIES	SIZE (IN DBH)	COMMENTS	ACTION
1	RED OAK	30.5"	FAIR CONDITION, LIMB DEBACK NOTED.	TO REMAIN
2	CHESNUT OAK	31"	GOOD CONDITION.	TO BE REMOVED
3	BEECH	31.5"	GOOD CONDITION.	TO BE REMOVED

LEGEND

- LOD LIMIT OF DISTURBANCE
- PR. STORM DRAIN PIPE
- PR. STORM DRAIN INLET
- A-1 EARTH DIKE
- SSF SUPER SILT FENCE
- DF DIVERSION FENCE
- AREA TREATED BY DRYWELLS (M-5)
- AREA TREATED BY MICRO-BIO. (M-6)



project	16-015	date	DEC. 2017
illustration	MMM	engineering	MMM
scale	1"=80'	approval	MMM
description		revisions	

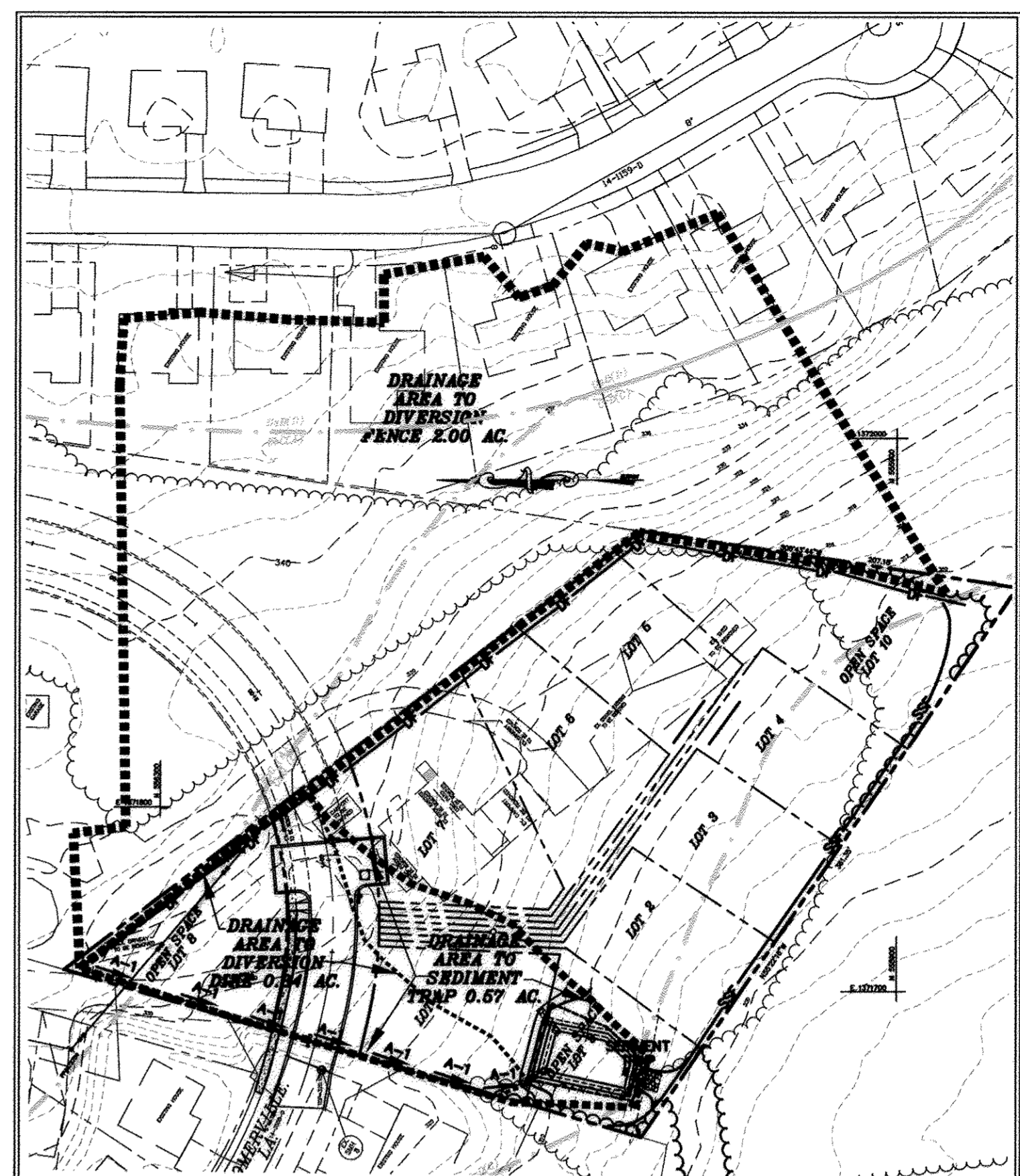
no.	description	date

SOMERVILLE ESTATES
 LOTS 1-7 AND OPEN SPACE LOTS 8-10
 TAX MAP 37, GRID 14, PARCEL 532
 FIRST ELECTION DISTRICT
 PRELIMINARY LANDSCAPE AND FOREST CONSERVATION PLAN
 HOWARD COUNTY, MARYLAND

MILDENBERG, BOENDER & ASSOC., INC.
 Engineers Planners Surveyors
 7350-B Grace Drive, Columbia, Maryland 21044
 (410) 997-0286 Tel. (410) 997-0286 Fax.

SOILS TABLE

SYMBOL	RATING	NAME	K FACTOR	MAP NO.	COMMENTS
Cd	(C)	CROOM AND EVESBORO SOILS, 10-15%	.37	19	HIGHLY ERODIBLE
EbC	(A)	EVESBORO LOAMY SAND, 2-10% SLOPES.	.17	19	
Rsb	(C)	RUSSETT FINE SANDY LOAM, 2 TO 5% SLOPES	.24	19	

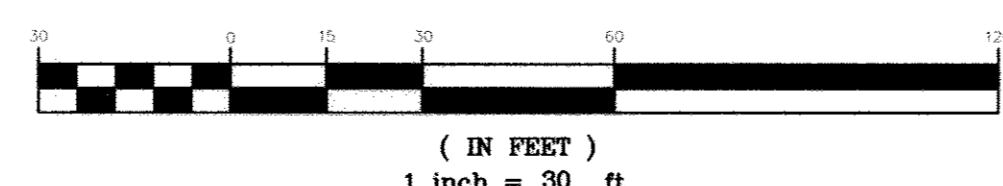


DRAINAGE AREA TO SEDIMENT CONTROL DEVICES

LEGEND

- M-5 DRY-WELL (M-5)
- EX. TREE LINE
- PR. TREE LINE
- SPECIMEN TREE TO BE REMOVED
- PR. STORM DRAIN PIPE
- PR. STORM DRAIN INLET
- PROPOSED PAVEMENT
- LIMIT OF DRAINAGE AREA

GRAPHIC SCALE



OWNER
HARMONY BUILDERS
4228 COLUMBIA RD.
ELLCOTT CITY MD, 21042
(410) 461-0833

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 17942, EXP DATE 09/03/18



APPROVED
DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY

Nadine J. ...
PLANNING DIRECTOR 1-11-18
DATE

R. JAQOB HIKMAT P.E. 12/18/17 DATE:

project	16-015	date	DEC. 2017
illustration	MMM	engineering	MMM
scale	1"=30'	approval	RJH

no.	description	revisions	date

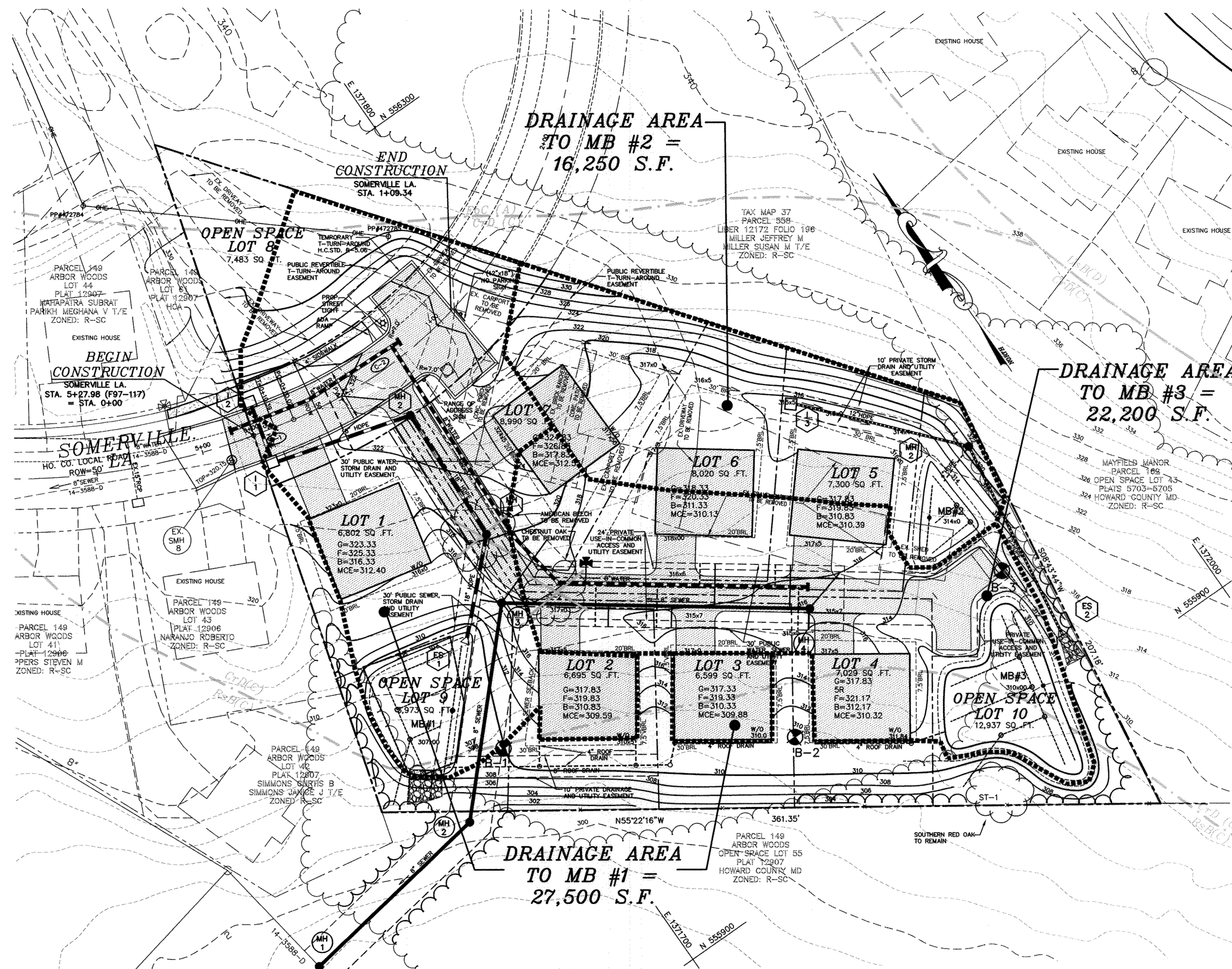
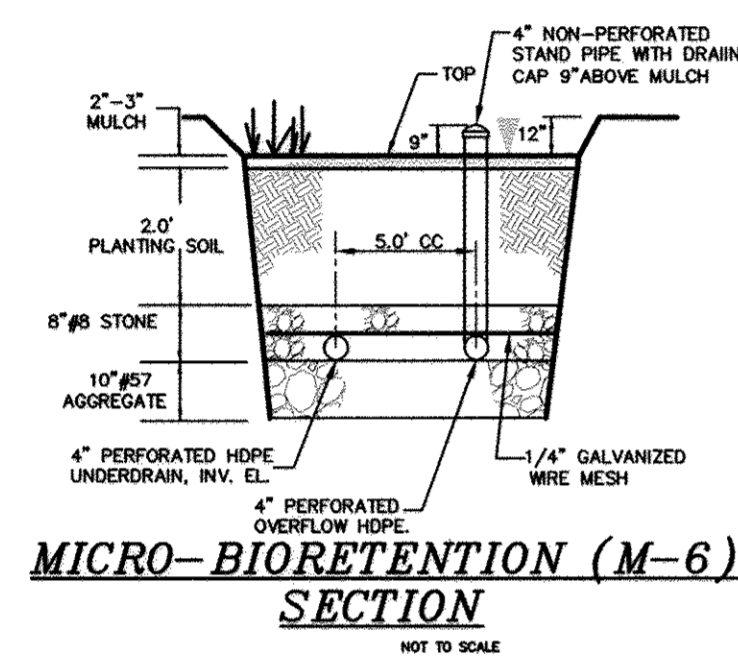
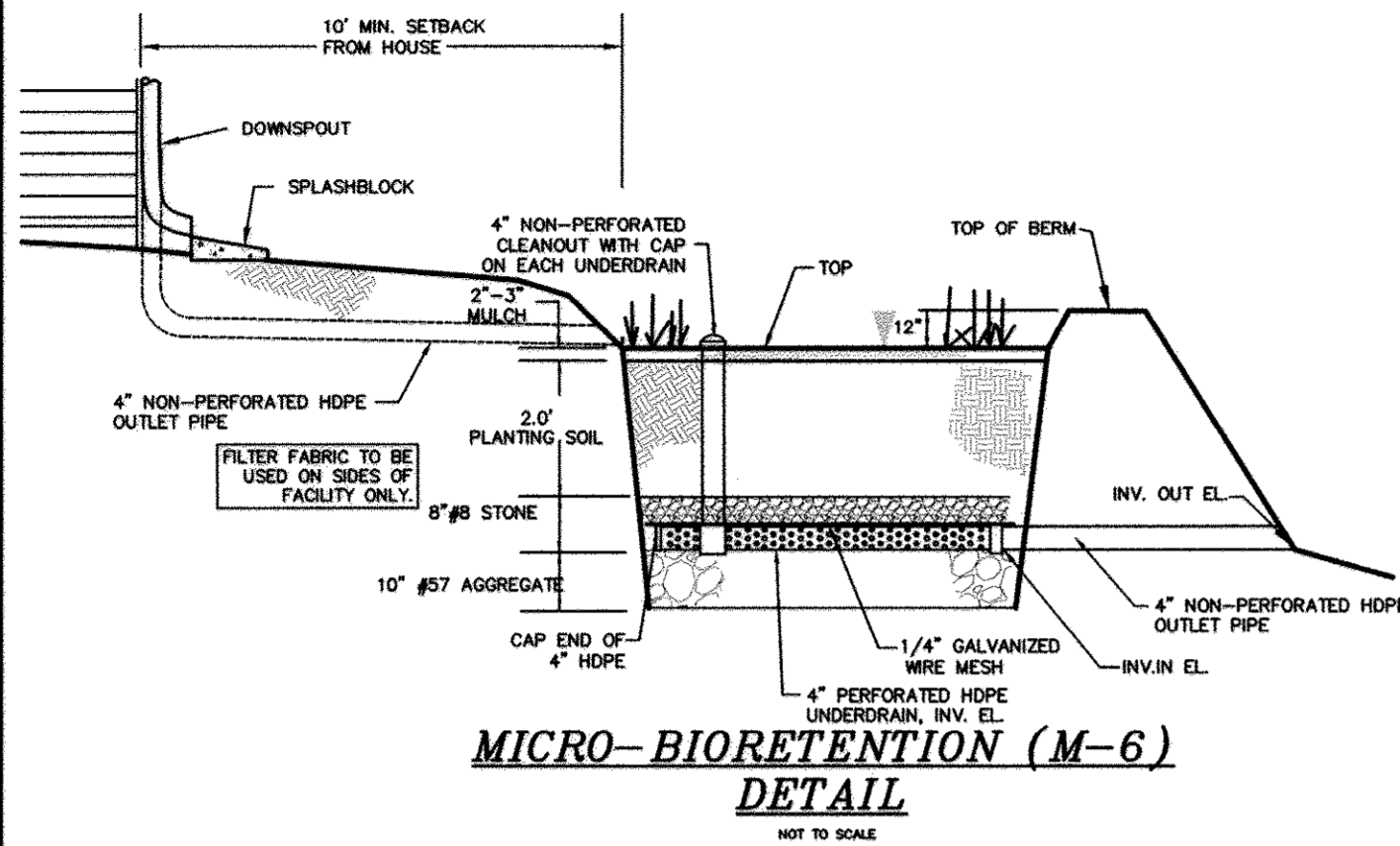
SOMERVILLE ESTATES
LOTS 1-7 AND OPEN SPACE LOTS 8-10
TAX MAP 37, GRID 14, PARCEL 532
FIRST ELECTION DISTRICT

HOWARD COUNTY, MARYLAND
SOIL AND DRAINAGE AREA MAP

MILDENBERG, BOENDER & ASSOC., INC.
Engineers Planners Surveyors
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SOILS TABLE

SYMBOL	RATING	NAME	K FACTOR	MAP NO.	COMMENTS
CrD	(C)	CROOM AND EVESBORO SOILS, 10-15%	.37	19	HIGHLY ERODIBLE
EbC	(A)	EVESBORO LOAMY SAND, 2-10% SLOPES.	.17	19	
RbB	(C)	RUSSETT FINE SANDY LOAM, 2 TO 5% SLOPES	.24	19	



SWM PRACTICES SCHEDULE

PROPOSED PRACTICES	AREA	REQUIRED ESDv	PROVIDED ESDv
MB#1	LOT 1, P/O LOT 2, 3, 7, ROW	1,526 CF	3,268 CF
MB#2	P/O LOT 5-7	418 CF	1,315 CF
MB#3	UIC D-WAY, P/O LOT 2-7	1,385 CF	4,760 CF
TOTAL		7,562 CF	9,343 CF

* BY DESIGNING ESD MEASURES FOR "WOODS IN GOOD CONDITION", WD, Rb, AND Cp REQUIREMENTS ARE MET.
* STORMWATER MANAGEMENT QUANTITY CONTROL FOR THE 10- AND 100-YEAR (Op, O) STORM EVENTS ARE MET.

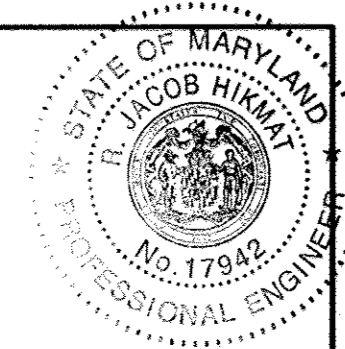
LEGEND

- LOD LIMIT OF DISTURBANCE
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R. JACOB HIKMAT P.E. 12/18/17 DATE:



APPROVED
DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY

[Signature] 1-11-18
PLANNING DIRECTOR DATE

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Illustration	MM	engineering	MM
scale	1"=30'	approval	RH

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SOMERVILLE ESTATES
LOTS 1-7 AND OPEN SPACE LOTS 8-10
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FIRST ELECTION DISTRICT HOWARD COUNTY, MARYLAND

PRELIMINARY STORMWATER MANAGEMENT PLAN

MILDENBERG, BOENDER & ASSOC., INC.
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