SHEET INDEX SHEET NO. DESCRIPTION TITLE SHEET ENVIRONMENTAL CONCEPT PLAN ENVIRONMENTAL CONCEPT PLAN & STORMWATER MANAGEMENT DETAILS SCHEMATIC GRADING, SEDIMENT & EROSION CONTROL PLAN STORMWATER DRAINAGE AREA MAP

ENVIRONMENTAL CONCEPT PLAN

LINDEN GROVE

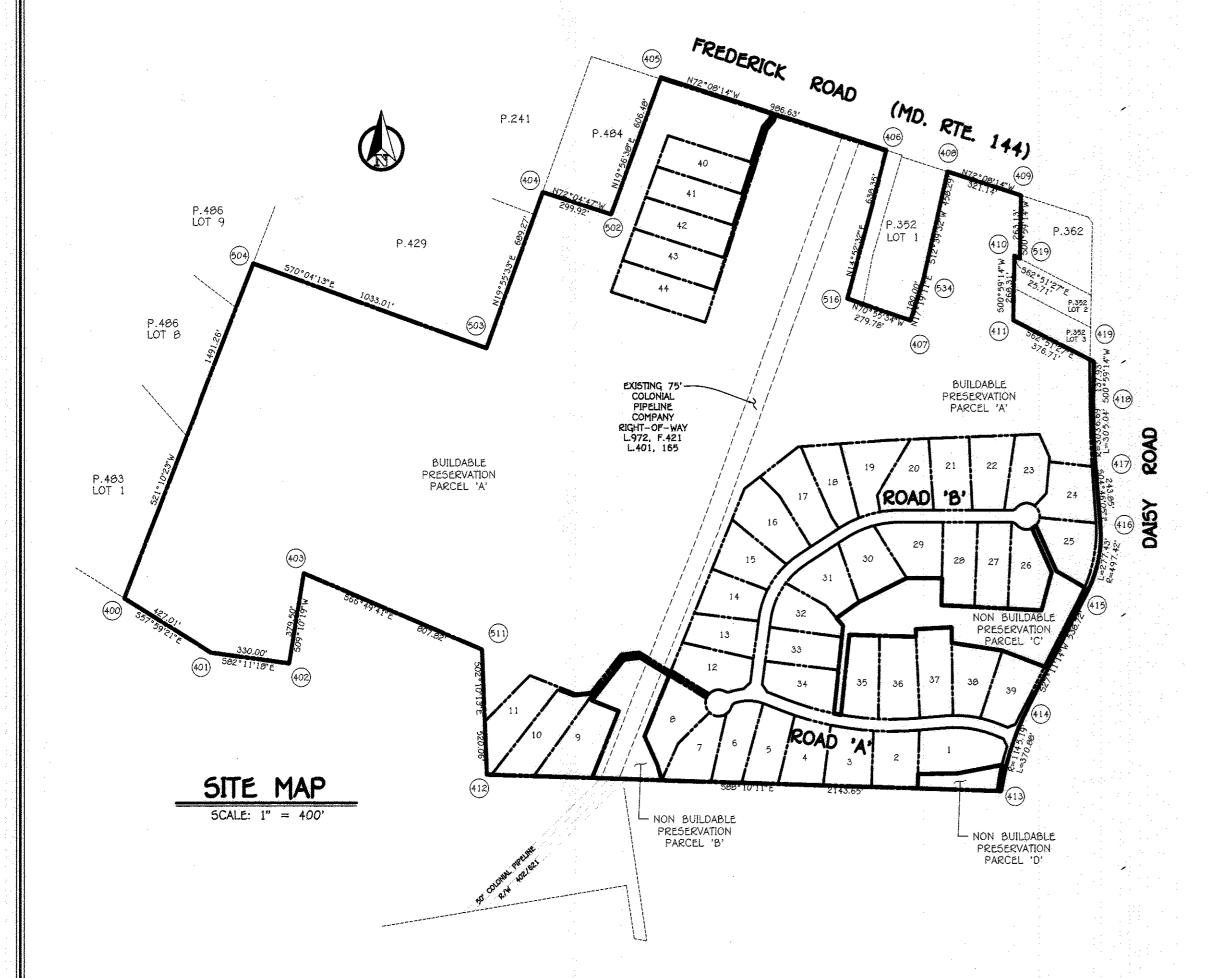
LOTS 1 THRU 44, BUILDABLE PRESERVATION PARCEL 'A' & NON-BUILDABLE PRESERVATION PARCELS 'B' THRU 'D'

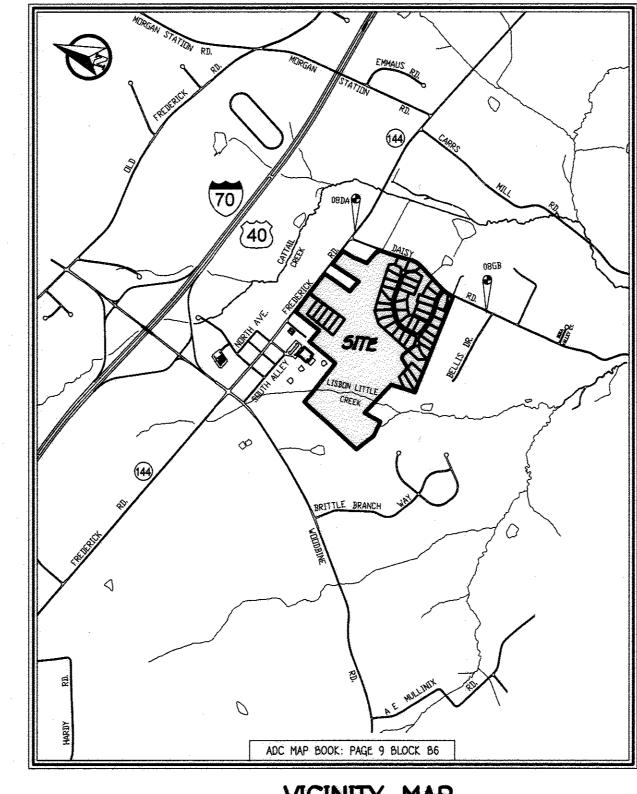
SWM NARRATIVE:

THE PROPOSED SWM FACILITIES FOR THIS PROJECT WILL CONSIST OF MICRO BIO-RETENTION FACILITIES, DRY WELLS ROOFTOP DISCONNECTIONS, NON-ROOFTOP DISCONNECTIONS AND SEVERAL BIO-RETENTION FACILITIES. UTILIZING ALL OF THESE FACILITIES WILL ALLOW US TO PROVIDE THE REQUIRED Pe AND ESDY VOLUMES AND RUNOFF AMOUNTS TO MEET THE ENVIRONMENTAL SITE DESIGN TO THE MAXIMUM EXTENT POSSIBLE (ESD TO THE MEP) TO REFLECT A WOODED CONDITION FOR THIS SITE THE SWM REPORT FOR THIS PROJECT CONTAINS A SUMMARY TABLE TO INDICATE THE VOLUMES PROVIDED TO THESE FACILITIES.

ZONED: RC-DEO TAX MAP No. 7 GRID No. 18 & TAX MAP No. 8 GRID No. 13 PARCEL No. 5 4th ELECTION DISTRICT HOWARD COUNTY, MARYLAND

	ROADWAY	INFORMATION CHAR	7	
ROAD NAME	CLASSIFICATION	DESIGN SPEED	POSTED SPEED LIMIT	R/W WIDTH
ROAD 'A'	PUBLIC ACCESS STREET	30 M.P.H.	25 M.P.H.	50'
ROAD 'B'	PUBLIC ACCESS STREET	30 M.P.H.	25 M.P.H.	50'





SITE ANALYSIS DATA CHART

A. TOTAL AREA OF THIS SUBMISSION = 176,680 ac. +

LIMIT OF DEVELOPABLE AREA = 50.898 AC. + (LOTS ONLY) LIMIT OF DISTURBED AREA = 2.095.517.68 Sq. Ft. or 48.11 Ac= PRESENT ZONING DESIGNATION = RC-DEO (PER 10/06/13 COMPREHENSIVE ZONING PLAN). PROPOSED USE: RESIDENTIAL SUBDIVISION (SINGLE FAMILY DETACHED) OPEN SPACE ON SITE: N/A RECREATIONAL AREA PROVIDED: N/A BUILDING COVERAGE OF SITE: 173,250 SQ.FT. OR 3.98 Ac.+ TOTAL AREA OF FLOODPLAIN: 6.204 Ac. TOTAL AREA OF SLOPES: 25% or GREATER = 0.60 Ac. 15%-24.99% = 1.94 Ac.NET TRACT AREA = 169.076 Ac+

(TOTAL SITE AREA - FLOODPLAIN - STEEP SLOPES AREA) TOTAL AREA OF WETLANDS (INCLUDING BUFFER) = 1.57 Ac+ TOTAL AREA OF STREAMS (INCLUDING BUFFER) = 7.84 AC= TOTAL AREA OF FOREST = 4.30 Ac. + - 0.06 Ac. + (ROADWAY WIDENING) = 4.24 AC. + REMAINING TOTAL GREEN OPEN AREA = 117.11 Ac. ±

AREA OF ERODIBLE 501L5 = 18.92 Ac. + (WITHIN AREA OF DEVELOPMENT)

DESIGN NARRATIVE:

THE NATURAL AREAS OF THIS PROJECT ARE BEING PRESERVED BY FLOODPLAIN EASEMENTS AND WILL REMAIN UNDEVELOPED. IN ADDITION, THERE ARE PERENNIAL STREAMS, WETLANDS, FLOODPLAIN AND STEEP SLOPES LOCATED ON THE UNDEVELOPED PORTIONS OF THIS LAND. THESE AREAS WILL REMAIN UNDISTURBED EXCEPT FOR PLANTING FOR FOREST CONSERVATION OBLIGATION. THE EXISTING ON-SITE FOREST WILL BE PROTECTED BY FOREST CONSERVATION EASEMENTS. THE ERODIBLE SOILS HAVE BEEN IDENTIFIED IN THE SOILS CHART AND IN THE SITE ANALYSIS, THE TOTAL AREA OF THE PROJECT IS 176.680 AC. THE LIMITS OF DISTURBANCE AREA IS 37.95 AC. THE MAJORITY OF THIS SITE WILL REMAIN INDEVELOPED AND PROVIDE 125.70 ACRES OF GREEN SPACE. THE PROPOSED IMPERVIOUS AREAS INCLUDE THE ROADWAYS, HOUSES AND DRIVEWAYS. THIS SUBDIVISION IS A 1 AC LOT CLUSTER SUBDIVISION. THIS PROJECT IS UTILIZED AS A TURF FARM AND THERE IS NOT ANY EXPANSIVE AREAS OF FOREST OUTSIDE OF THE FLOODPLAIN AREA. THE FOREST IS PROTECTED THRU THE FLOODPLAIN, DRAINAGE AND UTILITY EASEMENT.

OWNER & DEVELOPER:

HERITAGE LAND DEVELOPMENT

15950 NORTH AVENUE

LISBON, MARYLAND 21765

410-489-7900

GENERAL NOTES

PROPERTY ZONED RC-DEO PER 10/6/13 COMPREHENSIVE ZONING PLAN.

2. AREA TABULATION: A. TOTAL TRACT AREA = 176.680 Ac+ B. AREA OF PROPOSED ROAD R/W = 4.411 Ac±

C. AREA OF PROPOSED BUILDABLE LOTS = 50.898 Ac= D. AREA OF PROPOSED BUILDABLE PRESERVATION PARCELS 'A' = 113.032 Ac=

E. AREA OF PROPOSED NON-BUILDABLE PRESERVATION PARCELS = 7.539 Ac+ NUMBER OF LOTS/PARCELS PROPOSED = 48

A. BUILDABLE LOTS = 44 B. BUILDABLE PRESERVATION PARCELS =

C. NON-BUILDABLE PRESERVATION PARCELS = 3 MODERATE INCOME HOUSING UNITS REQUIRED = 5 MIHU

 $(45 \text{ UNITS} \times 10\% = 5 \text{ MIHU})$ SOILS INFORMATION TAKEN FROM (NRCS) HOWARD COUNTY SOIL SURVEY. SOILS MAP NUMBERS 2 & 6. FOREST STAND & WETLANDS DELINEATION REPORT DATED DECEMBER, 2016 WAS PREPARED BY ECO-SCIENCE PROFESSIONAL, INC

THERE ARE STEEP SLOPES OF 25% OR GREATER ON SITE OF 0.60 ACRES. NO CEMETERIES EXIST ON SITE BY VISUAL OBSERVATION OR LISTED IN AVAILABLE HOWARD COUNTY CEMETERY INVENTORY MAP.

THERE ARE NO HISTORIC HOUSE STRUCTURES ON-SITE. SITE IS ADJACENT TO TWO SCENIC ROADS (DAISY ROAD & FREDERICK ROAD. A SCENIC ROADS REPORT HAS BEEN PROVIDED BY FISHER, COLLINS & CARTER, INC. DATED 10/24/16. O. THE TRAFFIC STUDY FOR THIS PROJECT WAS PREPARED BY MARS GROUP DATED APRIL 19, 2016.

11. THERE ARE EXISTING STRUCTURES LOCATED WITHIN BUILDABLE PRESERVATION PARCEL 'A' TO REMAIN. PER THE ZONING OFFICE, A BARN IS A PERMITTED ACCESSORY USE TO A PRINCIPAL FARM US A DWELLING IS NOT RECILIZED IN ORDER TO RETAIN THE BARN

APPROVED: DEPARTMENT OF PLANNING AND ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION

9.01.17

9.6.17

12 BUILDABLE PRESERVATION PARCEL 'A' TO BE PRIVATELY OWNED AND ENCLIMBERED BY AN EASEMENT AGREEMENT WITH THE OLD LISBON

13. NON-BUILDABLE PRESERVATION PARCELS 'B' THRU 'D' WILL BE OWNED BY THE OLD LISBON PROPERTY HOMEOWNERS ASSOCIATION, INC. AND THE PRESERVATION EASEMENT WILL BE HELD BY HOWARD COUNTY, MARYLAND.

15. DRIVEWAYS SHALL BE PROVIDED PRIOR TO ISSUANCE OF A USE AND OCCUPANCY PERMIT FOR ANY NEW DWELLINGS TO ENSURE SAFE ACCESS FOR FIRE AND EMERGENCY VEHICLES PER THE

A) WIDTH - 12 FEET (16 FEET) SERVING MORE THAN ONE RESIDENCE);

B) SURFACE — SIX (6") INCHES OF COMPACTED CRUSHER RUN BASE WITH TAR AND CHIP COATING.

:) Geometry — Maximum 15% grade, Maximum 10% grade Change and 45—foot turning radius;: D) STRUCTURES (CULVERTS/BRIDGES) - CAPABLE OF SUPPORTING 25 GROSS TONS (H25-LOADING);

) Drainage elements - capable of safely passing 100 year flood with no more than 1 foot depth OVER SURFACE: F) STRUCTURE CLEARANCES - MINIMUM 12 FEET:

G) MAINTENANCE - SUFFICIENT TO ENSURE ALL WEATHER USE. 16. FOR FLAG OR PIPESTEM LOTS, REFUSE COLLECTION, SNOW REMOVAL AND ROAD MAINTENANCE ARE PROVIDED TO THE JUNCTION OF THE FLAG OR PIPESTEM AND ROAD RIGHT-OF-WAY LINE AND NOT

17. ARTICLES OF INCORPORATION FOR THE OLD LISBON PROPERTY HOMEOWNERS ASSOCIATION, INC. WILL BE FILED WITH THE STATE DEPARTMENT OF ASSESSMENTS AND TAXATION PRIOR TO RECORDATION

18. A PRE-SUBMISSION COMMUNITY MEETING WAS HELD FOR THIS PROJECT ON FEBRUARY 23, 2017 AT GLENWOOD LIBRARY IN COOKSVILLE. 19. ALL EXISTING WELL AND SEPTIC SYSTEMS WHICH ARE NOT UTILIZED IN THE LOT DESIGN WILL BE ABANDONED PRIOR TO RECORDATION OF THE FINAL PLAT.

20. THIS AREA DESIGNATES A PRIVATE SEWERAGE EASEMENT OF AT LEAST 10,000 SQUARE FEET AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF THE ENVIRONMENT FOR INDIVIDUAL SEWAGE DISPOSAL. IMPROVEMENTS OF ANY NATURE IN THIS AREA ARE RESTRICTED UNTIL PUBLIC SEWERAGE IS AVAILABLE. THESE EASEMENTS SHALL BECOME NULL AND VOID UPON CONNECTION TO A PUBLIC SEWERAGE SYSTEM. THE COUNTY HEALTH OFFICER SHALL HAVE THE AUTHORITY TO GRANT ADJUSTMENTS TO THE PRIVATE SEWERAGE EASEMENT. RECORDATION OF A MODIFIED EASEMENT

21. THE LOTS SHOWN HEREON COMPLY WITH THE MINIMUM OWNERSHIP WIDTH AND LOT AREA AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF THE ENVIRONMENT.

22, ANY CHANGES TO THE PRIVATE SEWERAGE AREA SHALL REQUIRE A REVISED PERC CERTIFICATION PLAN.

23. NO GRADING, REMOVAL OF VEGETATIVE COVER OR TREES, PAVING AND NEW STRUCTURES SHALL BE PERMITTED WITHIN THE LIMITS OF WETLANDS, PERENNIAL STREAM(5), OR THEIR REQUIRED BUFFERS, FLOODPLAIN AND FOREST CONSERVATION EASEMENT AREAS. 24. THE 100 YEAR FLOODPLAIN DELINEATED ON THIS PLAN HAS BEEN DETERMINED TO BE "NOT CRITICAL" BASED ON A REPORT PREPARED BY FISHER, COLLINS AND CARTER, INC. ON

25. THE FOREST CONSERVATION REQUIREMENTS PER SECTION 16.1200 OF THE HOWARD COUNTY CODE AND FOREST CONSERVATION MANUAL FOR THIS SUBDIVISION WILL BE FULFILLED BY ON-SITE CREDITED RETENTION OF 4.24 ACRES AND 12.21 ACRES OF ON-SITE AFFORESTATION.

26. PERIMETER LANDSCAPING FOR THIS DEVELOPMENT SHALL BE IN ACCORDANCE WITH SECTION 16.124 OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS AND LANDSCAPE MANUAL. FINAL LANDSCAPING REVIEW AND SURETY IS DEFERRED UNTIL THE FINAL SUBDIMISION PLAN STAGE.

27. STREET TREES ALONG PUBLIC ROADS WILL BE PROVIDED AT THE FINAL PLAN STAGE AND WILL BE BONDED WITH THE DEVELOPER'S AGREEMENT FOR PUBLIC ROAD IMPROVEMENTS. 20. THE PROJECT IS IN CONFORMANCE WITH THE LATEST HOWARD COUNTY STANDARDS UNLESS WAIVERS HAVE BEEN APPROVED. 29. THE EXISTING TOPOGRAPHY INFORMATION SHOWN IS BASED ON HOWARD COUNTY AERIAL CONTOURS AND SUPPLEMENTED WITH A FIELD RUN TOPOGRAPHIC SURVEY PERFORMED ON OR ABOUT 7/21/16

30. BOUNDARY INFORMATION IS BASED ON A SURVEY PERFORMED ON OR ABOUT 11/11/14 BY FISHER, COLLINS & CARTER, INC

31. COORDINATES BASED ON NAD '83, MARYLAND COORDINATE SYSTEM AS PROJECTED BY HOWARD COUNTY GEODETIC CONTROL STATIONS NOS:

CONTROL STATION NO. 08 DA N 606,934.18

CONTROL STATION NO. 08 GB N 603,764.82 £ 1,294,691.90

32. THIS PROPERTY IS NOT LOCATED WITHIN THE METROPOLITAN DISTRICT. PRIVATE WELL AND SEPTIC WILL BE UTILIZED FOR THIS PROJECT 33. STORM WATER MANAGEMENT IS IN ACCORDANCE WITH THE M.D.E. STORM WATER DESIGN MANUAL, VOLUMES I & II, REVISED 2009. WE ARE PROVIDING STORM WATER MANAGEMENT BY THE USE OF 3
AREAS OF (N-1) ROOFTOP DISCONNECTION CREDIT, 3 AREAS OF (N-2) NON-ROOFTOP DISCONNECTION CREDIT, 83 AREAS OF (M-5) DRYWELLS, 8 (M-6) MICRO-BIORETENTION FACILITIES AND 6

(F-6) BIO-RETENTION FACILITIES TO MEET AND EXCEED THE REQUIRED ESD VOLUME. 34. STORM WATER MANAGEMENT DEVICES LOCATED ON INDIVIDUAL LOTS WILL BE OWNED AND MAINTAINED BY THAT PARTICULAR LOT OWNER AND SUBJECT TO THE REQUIREMENTS OF A RECORDED

DECLARATION OF COVENANT. SWM DEVICES LOCATED WITHIN THE PUBLIC R/W WILL BE PRIVATELY OWNED AND JOINTLY MAINTAINED, AND SWM DEVICES LOCATED ON PARCELS WILL BE OWNED AND

MAINTAINED BY THE H.O.A., SWM FACILITIES SERVING PUBLIC ROADS, BUT LOCATED ON PRIVATE LOTS WILL BE PRIVATELY OWNED AND JOINTLY MAINTAINED. 35. A NOISE STUDY IS REQUIRED FOR THIS PROJECT.

36. ALL WELLS MUST BE DRILLED PRIOR TO HOWARD COUNTY HEALTH DEPARTMENT SIGNATURE OF THE FINAL PLAT. 37. ALL EXISTING WELL AND SEPTIC COMPONENTS TO BE ABANDONED OR REPLACED MUST BE PROPERLY ABANDONED AND REPLACEMENT COMPONENTS APPROVED BY THE HEALTH DEPARTMENT PRIOR TO

36. APPROVAL OF THIS ECP DOES NOT CONSTITUTE AN APPROVAL OF ANY SUBSEQUENT AND ASSOCIATED SUBDIVISION PLAN/PLAT AND/OR SITE DEVELOPMENT PLAN AND/OR REDLINE REVISION PLAN.

REVIEW OF THIS PROJECT FOR COMPLIANCE WITH THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS SHALL OCCUR AT THE SUBDIVISION PLAN/PLAT AND/OR SITE DEVELOPMENT PLAN STAGES AND/OR REDLINE 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.



"Professional 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. 20748, Expiration Date 2-22-19."

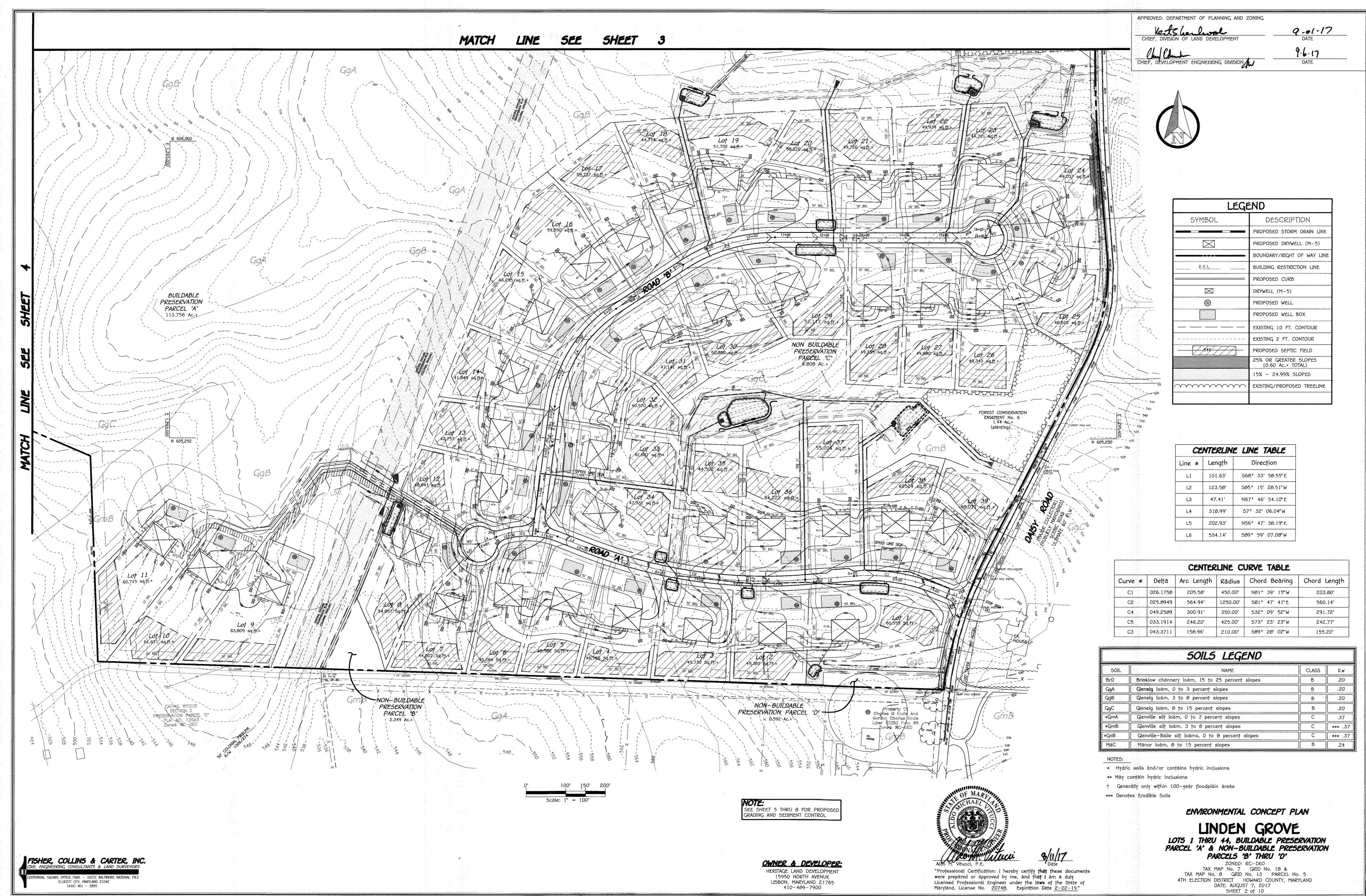


ZONED: RC-DEO TAX MAP No. 7 GRID No. 18 & TAX MAP No. 8 GRID No. 13 PARCEL No. 5 4TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

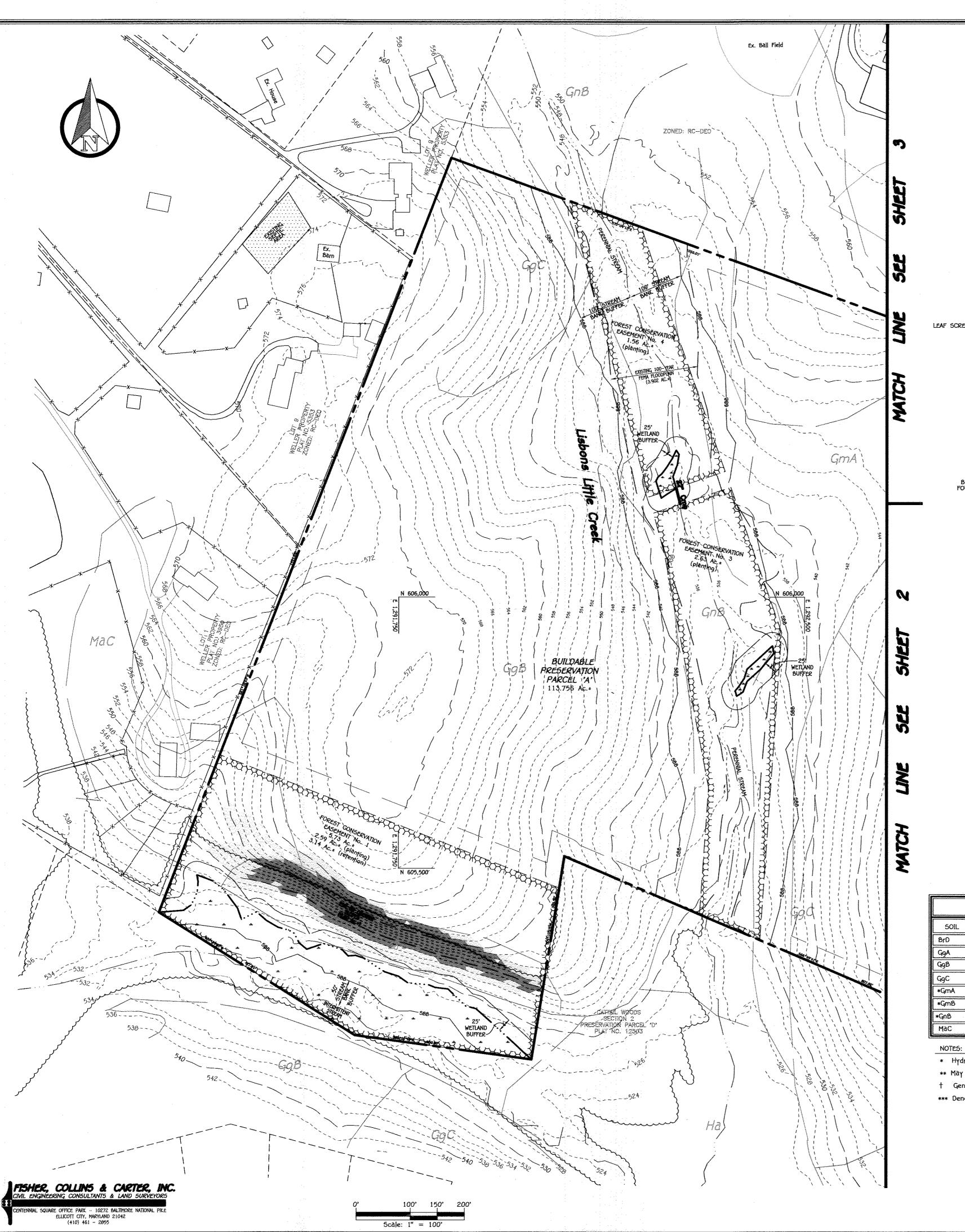
DATE: AUGUST 7, 2017 SHEET 1 of 10

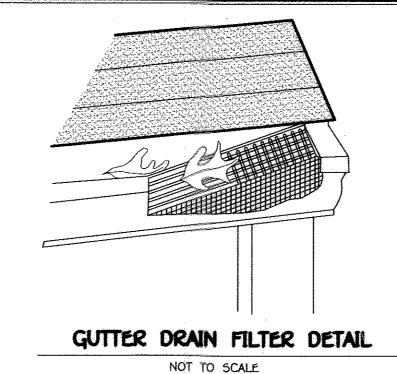
PARCEL 'A' & NON-BUILDABLE PRESERVATION PARCELS 'B' THRU 'D'

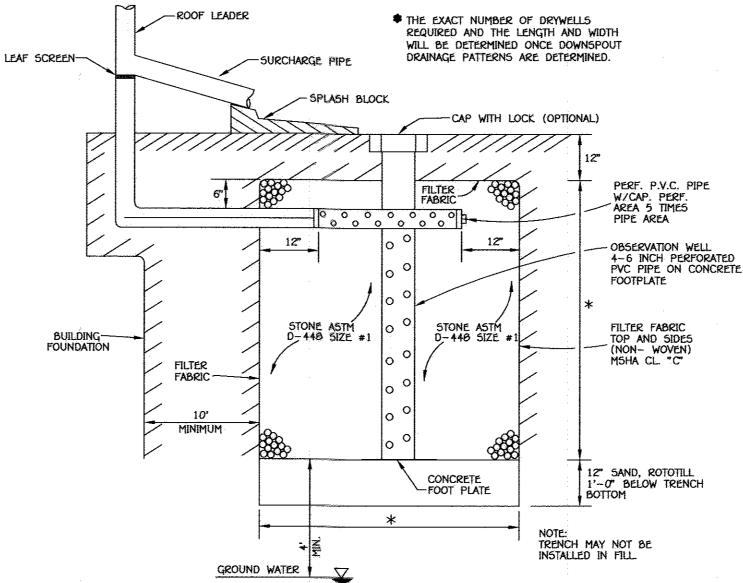
FISHER, COLLINS & CARTER, INC. PLUCOTT CITY, MARYLAND 21042











DRY WELL DETAIL (M-5) NOT TO SCALE

Operation And Maintenance Schedule For Drywells (M-5)

- 1. The owner shall inspect the monitoring wells and structures on a quarterly basis and after every heavy storm event. 2. The owner shall record the water levels and sediment build up in the monitoring wells over a period of several days to insure trench drainage.
- 3. The owner shall maintain a log book to determine the rate at which the facility drains.
- 4. When the facility becomes clogged so that it does not drain down within a seventy two (72) hour time period,
- 5. The maintenance log book shall be available to Howard County for inspection to insure compliance with operation and
- 6. Once the performance characteristics of the infiltration facility have been verified, the monitoring schedule can be reduced to an annual basis unless the performance data indicates that a more frequent schedule is required.

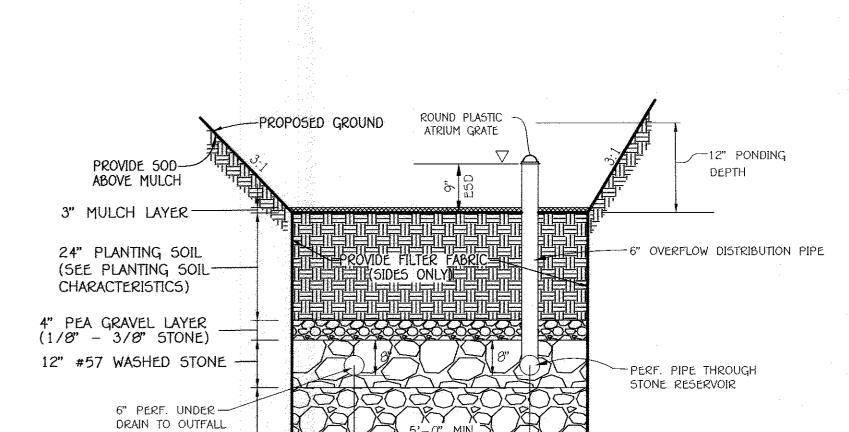
50ILS LEGEND					
50IL	NAME	CLA55	Kw		
BrD	Brinklow channery loam, 15 to 25 percent slopes	В	.20		
GgA	Glenelg loam, 0 to 3 percent slopes	В	.20		
GgB	Glenelg loam, 3 to 8 percent slopes	В	.20		
G ₉ C	Glenelg loam, 8 to 15 percent slopes	В	.20		
*GmA	Glenville silt loam, 0 to 3 percent slopes	С	.37		
*GmB	Glenville silt loam, 3 to 8 percent slopes	С	*** .37		
*GnB	Glenville-Baile silt loams, 0 to 8 percent slopes	С	*** .37		
MaC	Manor loam, 8 to 15 percent slopes	В	.24		

- * Hydric soils and/or contains hydric inclusions
- ** May contain hydric inclusions
- t Generally only within 100-year floodplain areas
- *** Denotes Erodible Soils



OWNER & DEVELOPER HERITAGE LAND DEVELOPMENT 15950 NORTH AVENUE LISBON, MARYLAND 21765 410-489-7900

'Professional 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. $\underline{20748}$, Expiration Date $\underline{2-22-19}$."



APPROVED: DEPARTMENT OF PLANNING AND ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION OF

9-01-17

9.6.17

MICRO BIO-RETENTION SECTION WITH 6" OVERFLOW DISTRIBUTION PIPE

NO SCALE

18" #57 WASHED STONE-TO PROVIDE THE 25% ESDV REQ.

Operation And Maintenance Schedule For Bio-retention Areas (M-6)

1. The owner shall maintain the plant material, mulch layer and soil layer annually, maintenance of mulch and soil is limited to correcting areas of erosion or wash out. Any mulch replacement shall be done in the spring. Plant material shall be checked for disease and insect infestation and maintenance will address dead material and pruning. Acceptable replacement plant material is limited to the following: 2000 Maryland stormwater design manual volume II, table A.4.1 and 2.

2. The owner shall perform a plant in the spring and in the fall each year. during the inspection, the owner shall remove dead and diseased vegetation considered beyond treatment, replace dead plant material with acceptable replacement plant material. Treat diseased trees and shrubs and replace all deficient stakes and wires.

3. The owner shall inspect the mulch each spring. The mulch shall be replaced every two to three years, The previous mulch layer shall be removed before the new layer is applied.

4. The owner shall correct soil erosion on an as needed basis, with a minimum of once per month and after each heavy

16' (TWO OR MORE USERS) 16' (TWO OR MORE USERS) 12' (SINGLE USERS) -ON-SITE P-1 PAVING SECTION ALL MATERIALS AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH HOWARD COUNTY DESIGN MANUAL VOLUME IV, STANDARD SPECIFICATION AND DETAILS FOR CONSTRUCTION.

TYPICAL PRIVATE DRIVE CROSS SLOPE SECTION (N-2)

NOT TO SCALE

Operation & Maintenance Schedule For Privately Owned And Maintained Disconnection Of Non-rooftop Runoff (N-2)

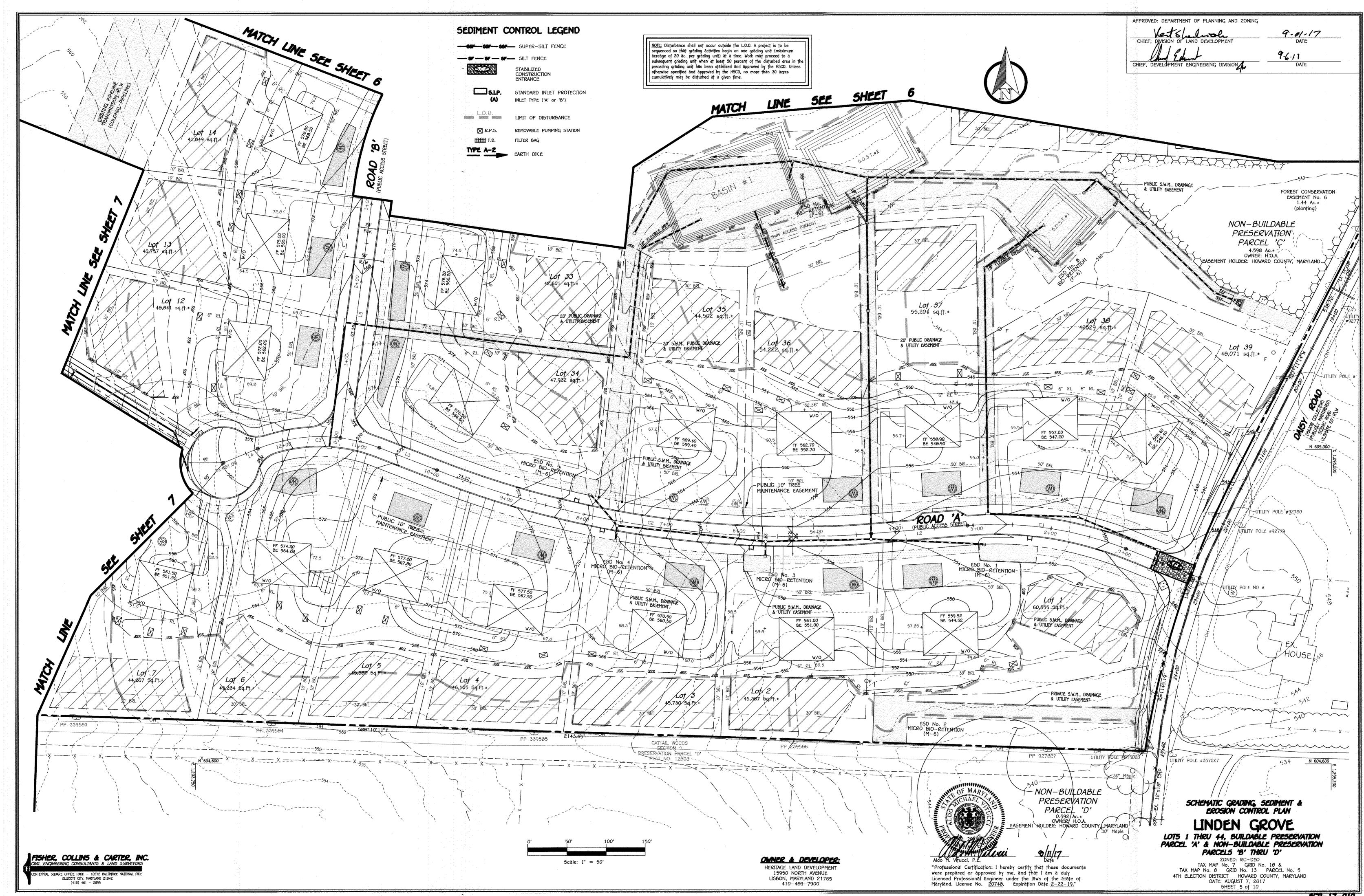
1. Maintenance Of Areas Receiving Disconnection Runoff Is Generally No Different Than That Required For Other Lawn Or Landscaped Areas. The Areas Receiving Runoff Should Be Protected From Future Compaction Or Development Of Impervious Area. In Commercial Areas, Foot Traffic Should Be Discouraged As Well.

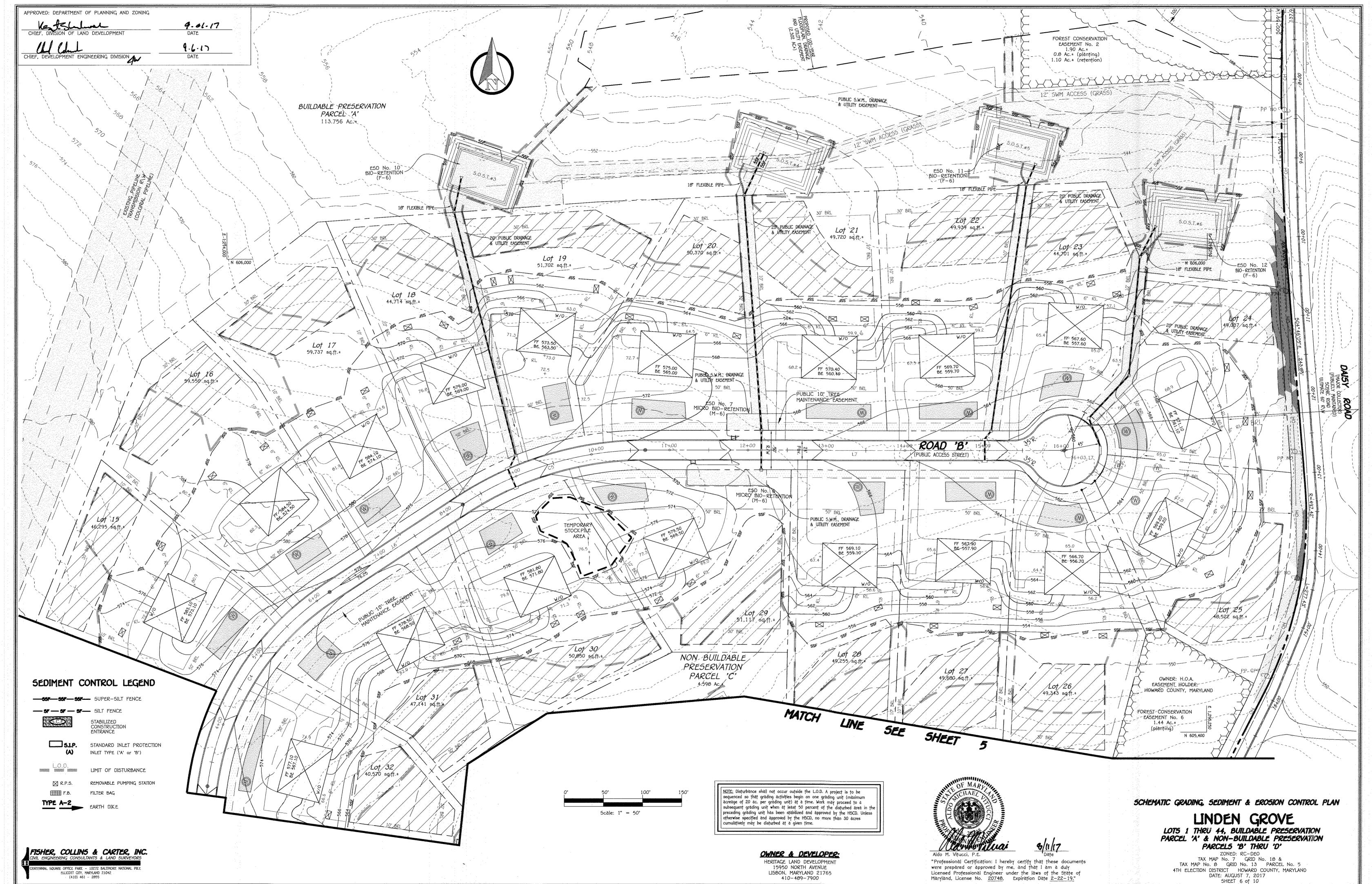
ENVIRONMENTAL CONCEPT PLAN & STORMWATER MANAGEMENT DETAILS

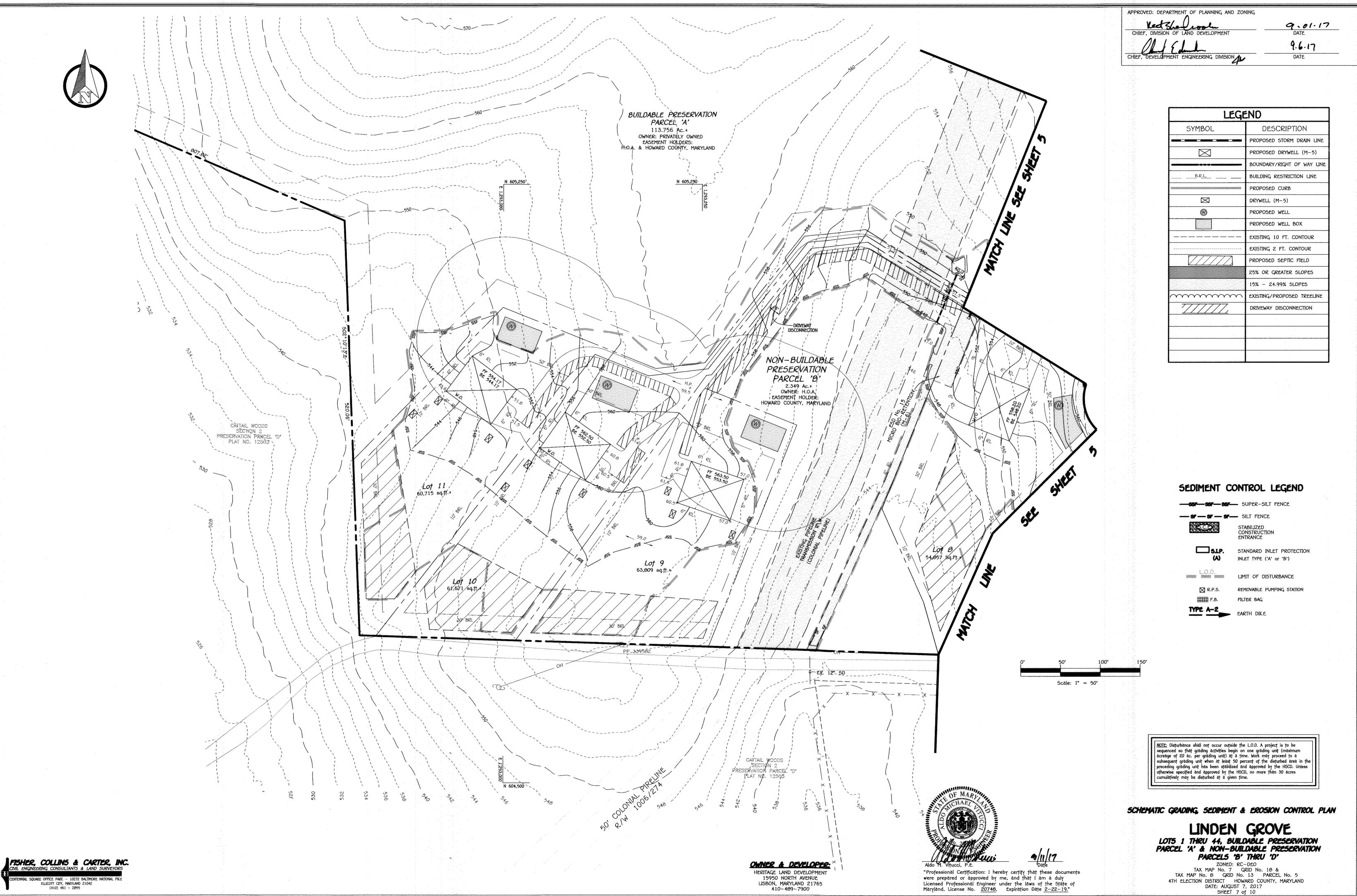
LINDEN GROVE LOTS 1 THRU 44, BUILDABLE PRESERVATION PARCEL 'A' & NON-BUILDABLE PRESERVATION

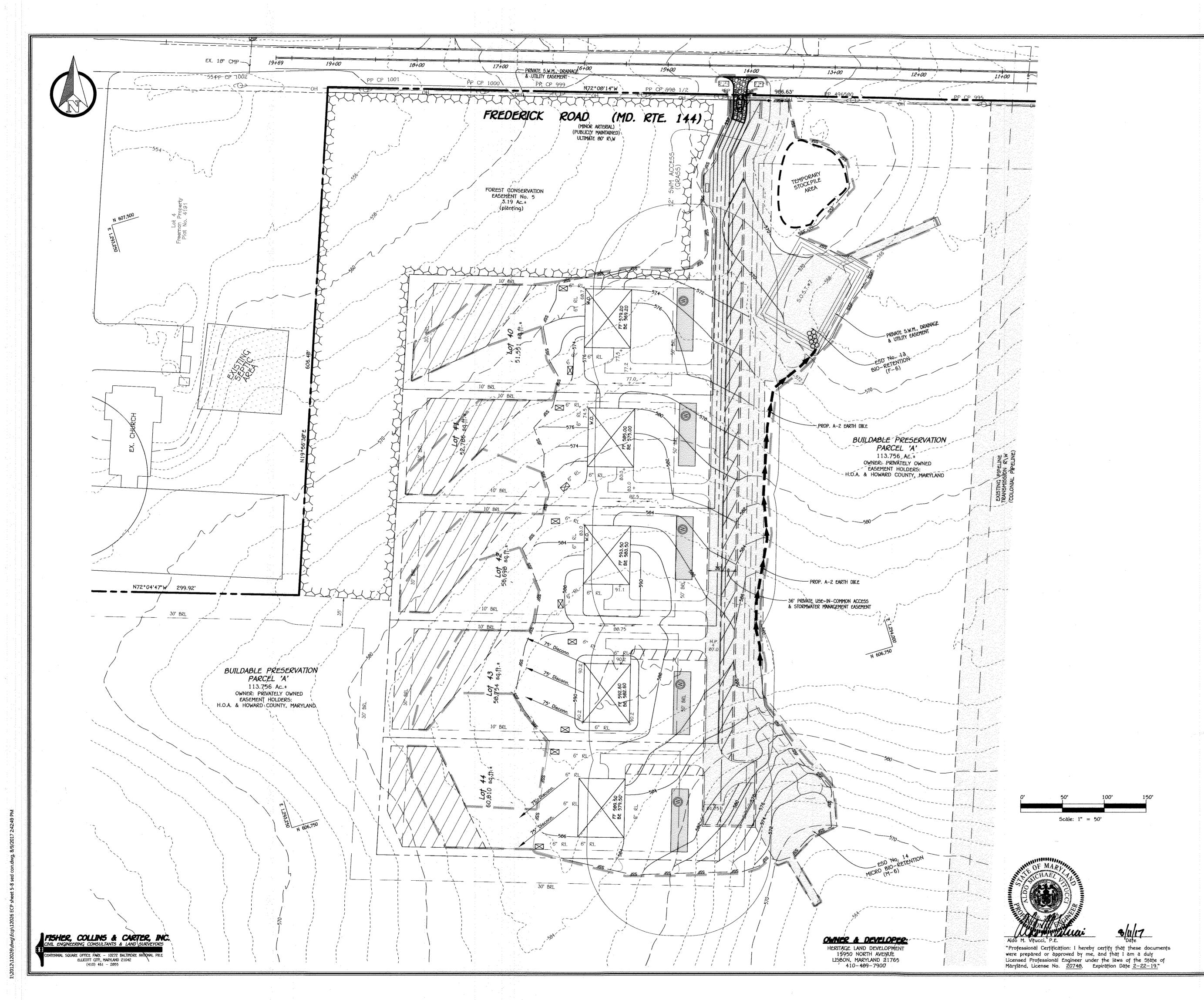
PARCELS 'B' THRU 'D' ZONED: RC-DEO TAX MAP No. 7 GRID No. 18 & TAX MAP No. 8 GRID No. 13 PARCEL No. 5

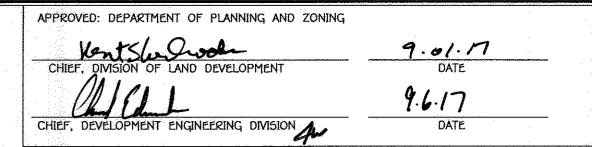
4TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND DATE: AUGUST 7, 2017 SHEET 4 of 10











LEGEND				
SYMBOL	DESCRIPTION			
	PROPOSED STORM DRAIN LINE			
\boxtimes	PROPOSED DRYWELL (M-5)			
	BOUNDARY/RIGHT OF WAY LINE			
B.R.L	BUILDING RESTRICTION LINE			
	PROPOSED CURB			
\boxtimes	DRYWELL (M-5)			
(W)	PROPOSED WELL			
	PROPOSED WELL BOX			
	EXISTING 10 FT. CONTOUR			
	EXISTING 2 FT. CONTOUR			
	PROPOSED SEPTIC FIELD			
	25% OR GREATER SLOPES			
	15% - 24.99% 5LOPE5			
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	EXISTING/PROPOSED TREELINE			
	DRIVEWAY DISCONNECTION			
:				

### SEDIMENT CONTROL LEGEND

ST - ST - ST - SILT FENCE

STANDARD INLET PROTECTION INLET TYPE ('A' or 'B')

ENTRANCE

STABILIZED CONSTRUCTION

L.O.D.

LIMIT OF DISTURBANCE

TYPE A-2 EARTH DIK

NOTE: Disturbance shall not occur outside the L.O.D. A project is to be sequenced so that grading activities begin on one grading unit (maximum acreage of 20 ac. per grading unit) at a time. Work may proceed to a subsequent grading unit when at least 50 percent of the disturbed area in the preceding grading unit has been stabilized and approved by the HSCD. Unless otherwise specified and approved by the HSCD, no more than 30 acres cumulatively may be disturbed at a given time.

SCHEMATIC GRADING, SEDIMENT & EROSION CONTROL PLAN

## LINDEN GROVE

LOTS 1 THRU 44, BUILDABLE PRESERVATION
PARCEL 'A' & NON-BUILDABLE PRESERVATION
PARCELS 'B' THRU 'D'

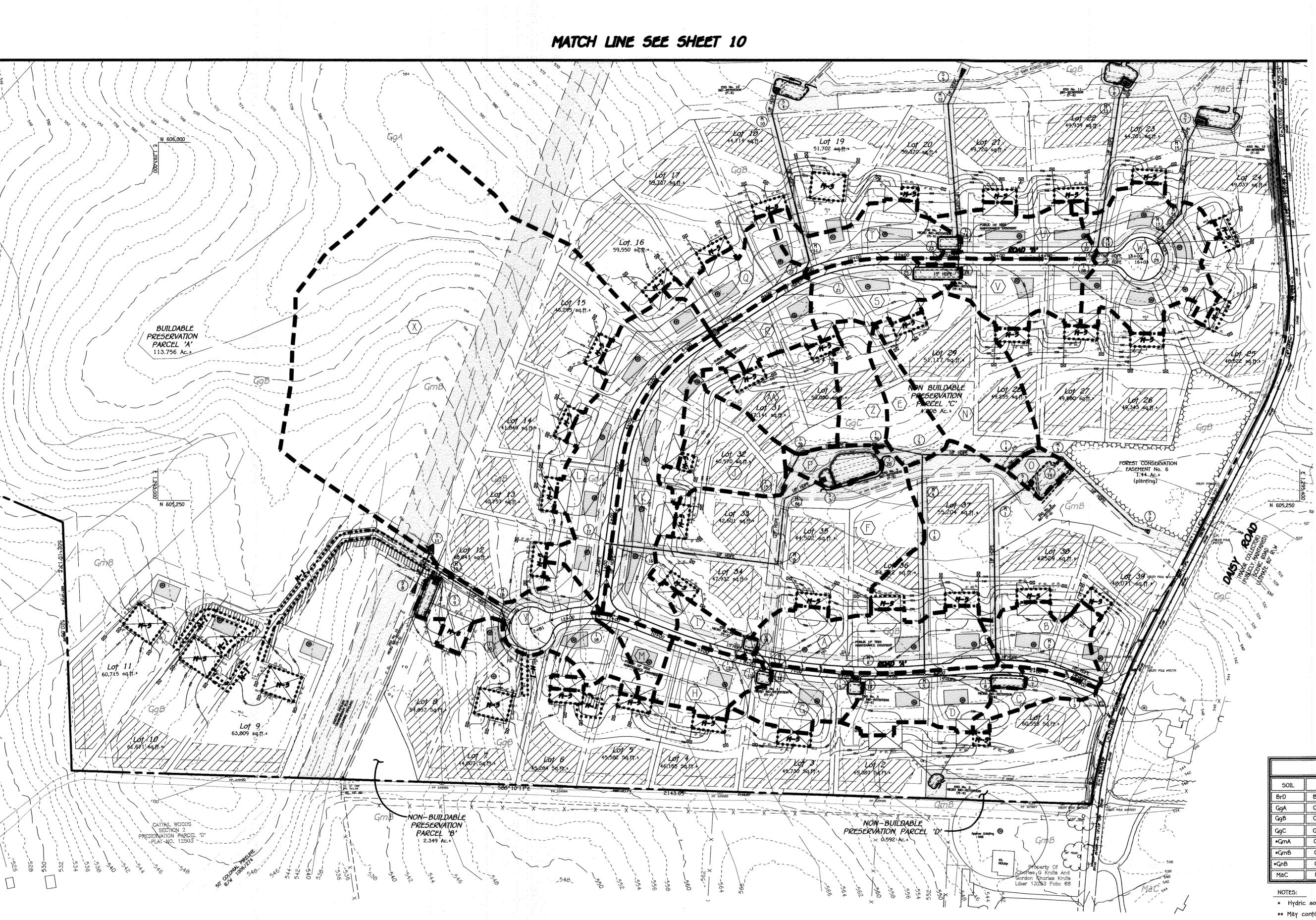
ZONED: RC-DEO

TAX MAP No. 7 GRID No. 18 &

TAX MAP No. 8 GRID No. 13 PARCEL No. 5

4TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
DATE: AUGUST 7, 2017

SHEET 8 of 10



FISHER, COLLINS & CARTER, INC.

APPROVED: DEPARTMENT OF PLANNING AND ZONING

VERTSCHULVOL

CHIEF, DIVISION OF LAND DEVELOPMENT

CHIEF, DEVELOPMENT ENGINEERING DIVISION

DATE

DATE

	1.	DRAIN	AGE AR	EA DA	TA		
STRUCTURE NO.	DRAINAGE AREA	AREA	ZONED	'C' FACTOR	TIME (Min.)	REMARK5	
I-1	A	1.35 AC.	RC-DEO	0.46	5.00	D-4.03	
I-2	В	0.67 AC.	RC-DEO	0.49	5.00	D-4.03	
1-3	С	0.30 AC.	RC-DEO	0.41	5.00	D-4.03	
I-7 & I-8	D	0.84 AC.	RC-DEO	0.45	5.00	D-4.22 & MD-374.68	
I-6	£	0.47 AC.	RC-DEO	0.25	5.00	D-4.10	
I-7	F	3.13 AC.	RC-DEO	0.25	5.00	D-4.10	
I-9 & I-10	G.	0.59 AC.	RC-DEO	0.42	5.00	D-4.22 & MD-374.68	
I-11 & I-12	Н	0.59 AC.	RC-DEO	0.52	5.00	D-4.22 & MD-374.68	
I-13 & I-14	I	0.26 AC.	RC-DEO	0.43	5.00	D-4.22 & MD-374.68	
I-15	J	0.93 AC.	RC-DEO	0.27	5.00	D-4.14	
I-16	K.	1.50 AC.	RC-DEO	0.48	5.00	0-4.03	
l-17	L _:	1.71 AC.	RC-DEO	0.47	5.00	D-4.03	
I-18	M	0.28 AC.	RC-DEO	0.39	5.00	D-4.03	
I-4	N	1.59 AC.	RC-DEO	0.45	5.00	D-4.10	
I- 19	0	0.18 AC.	RC-DEO	0.25	5.00	D-4.22	
I-20	Ρ	0.30 AC.	RC-DEO	0.30	5.00	D-4.22	
1-21	Q	0.71 AC.	RC-DEO	0.44	5.00	D-4.03	
I-22	R	0.53 AC.	RC-DEO	0.50	5.00	D-4.03	
I-25 & I-26	5	0.79 AC.	RC-DEO	0.44	5.00	D-4.22 & MD-374.68	
I-23 & I-24	Т	0.78 AC.	RC-DEO	0.41	5.00	D-4.22 & MD-374.68	
I-27	U	0.70 AC.	RC-DEO	0.47	5.00	D-4.03	
1-28	V	0.80 AC.	RC-DEO	0.47	5.00	D-4.03	
I-29	W _.	1.53 AC.	RC-DEO	0.49	5.00	0-4.03	
5-11	X	9.92 AC.	RC-DEO	0.64	5.00	CULVERT	
I-30	Υ	0.92 AC.	RC-DEO	0.64	5.00	D-4.03	
I5a	Z	0.52 AC.	RC-DEO	0.94	5.00	D-4.14	
I-5b	AA	0.97 AC.	RC-DEO	0.95	5.00	D-4.14	
E5D #13	ВВ	2.34 AC.	RC-DEO	0.89	5.00	BIO-RETENTION	
ESD #14	EE	0.99 AC.	RC-DEO	0.91	5.00	MICRO BIO-RETENTION	
E5D #15	CC	1.29 AC.	RC-DEO	0.64	5.00	MICRO BIO-RETENTION	

	50ILS LEGEND		
50IL	NAME	CLA55	Kw
₿rD	Brinklow channery loam, 15 to 25 percent slopes	В	.20
GgA	Glenelg loam, 0 to 3 percent slopes	В	.20
G98	Glenelg loam, 3 to 8 percent slopes	В	.20
GgC	Glenelg loam, 8 to 15 percent slopes	В	.20
*GmA	Glenville silt loam, 0 to 3 percent slopes	С	.37
∗GmB	Glenville silt loam, 3 to 8 percent slopes	С	*** .37
*GnB	Glenville-Baile silt loams, 0 to 8 percent slopes	С	*** .37
MaC	Manor loam, 8 to 15 percent slopes	В	.24

- * Hydric soils and/or contains hydric inclusions
- ** May contain hydric inclusions
- † Generally only within 100-year floodplain areas
- *** Denotes Erodible Soils

STORM DRAIN DRAINAGE AREA MAP

LINDEN GROVE

LOTS 1 THRU 44, BUILDABLE PRESERVATION
PARCEL 'A' & NON-BUILDABLE PRESERVATION

PARCELS 'B' THRU 'D'

ZONED: RC-DEO

TAX MAP No. 7 GRID No. 18 &

TAX MAP No. 8 GRID No. 13 PARCEL No. 5

4TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND DATE: AUGUST 7, 2017

SHEET 9 of 10

Aldo M. Vitucci, P.E. Dafe
"Professional 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. 20740, Expiration Date 2-22-19."

MATCH LINE SEE SHEET 9

0' 100' 150' 200 Scale: 1" = 100'

OWNER & DEVELOPMENT
15950 NORTH AVENUE
LISBON, MARYLAND 21765
410-489-7900



11/17

Aldo M. Vitucci, P.E.

"Professional 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. 20740, Expiration Date 2-22-19."

STORMWATER DRAINAGE AREA MAP

LINDEN GROVE
LOTS 1 THRU 44, BUILDABLE PRESERVATION
PARCEL 'A' & NON-BUILDABLE PRESERVATION

PARCELS 'B' THRU 'D'

ZONED: RC-DEO

TAX MAP No. 7 GRID No. 18 &

TAX MAP No. 8 GRID No. 13 PARCEL No. 5

4TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

DATE: AUGUST 7, 2017

SHEET 10 of 10

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS

CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
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