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# ENVIRONMENTAL CONCEPT PLAN

# MAE PARSLEY PROPERTY

## LOTS 1 THRU 3 AND

## PRESERVATION PARCEL 'A'

### DESIGN NARRATIVE

#### INTRODUCTION:

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 FOR THE PROPERTY. THE GOAL OF CREATING HYDROLOGY SIMILAR TO THAT OF "WOODS IN GOOD CONDITION" WILL BE ACCOMPLISHED THROUGH THE USE OF MICRO BIO-RETENTION FACILITIES (2) AND UNDERDRAINS, AS SUGGESTED WITHIN CHAPTER 5 OF PREVIOUSLY MENTIONED MANUAL. THE ACHIEVEMENT OF THIS GOAL WILL REMOVE THE REQUIREMENT OF PROVIDING CHANNEL PROTECTION VOLUME.

#### GENERAL SITE CONDITIONS:

THE MAE PARSLEY PROPERTY IS ZONED RR-DEO AND LOCATED ON TAX MAP 22, PARCEL 124 OF THE HOWARD COUNTY, MARYLAND TAX MAP DATABASE SYSTEM. THIS PROPERTY CONSISTS OF 13.72 ACRES.

#### I. NATURAL RESOURCE PROTECTION:

TO ENSURE THE PROTECTION OF NATURAL RESOURCES LOCATED ON THIS SITE, ALL BUFFERS WILL BE HONORED AND ALL IMPROVEMENTS WILL BE LOCATED OUTSIDE OF ENVIRONMENTALLY SENSITIVE AREAS. ALL SPECIMEN TREES ON THIS PROPERTY ARE LOCATED OUTSIDE THE LIMIT OF DISTURBANCE.

#### II. MAINTENANCE OF NATURAL FLOW PATTERNS:

THE PROPOSED DEVELOPMENT IS DESIGNED WITH THE INTENT OF CREATING DRAINAGE DIVIDES SIMILAR TO THOSE OF THE NATURAL FLOW PATTERNS IN THE PROJECT AREA.

#### III. REDUCTION OF IMPERVIOUS AREAS THROUGH BETTER SITE DESIGN, ALTERNATIVE SURFACES AND NONSTRUCTURAL PRACTICES:

THIS SITE PROPOSES THE MINIMUM IMPERVIOUS AREAS NECESSARY TO PROVIDE ADEQUATE ACCESS TO THE PROPOSED BUILDINGS. MOST PROPOSED IMPERVIOUS SURFACES ARE RECEIVING TREATMENT THROUGH THE USE OF ESO STORMWATER MANAGEMENT FACILITIES. WE ARE PROVIDING FOR 20 M-5 DRYWELLS TO TREAT THE ROOF AND TWELVE (12) N-2 DISCONNECTION OF NON-ROOFTOP RUNOFF AREAS TO TREAT PROPOSED DRIVEWAY.

#### IV. INTEGRATION OF EROSION AND SEDIMENT CONTROLS INTO STORMWATER STRATEGY:

THIS SUBMISSION ONLY PROPOSES ON-LOT SEDIMENT CONTROLS SUCH AS SUPER SILT FENCE, A STOCKPILE AND A STABILIZED CONSTRUCTION ENTRANCE.

#### V. IMPLEMENTATION OF ESO PLANNING TECHNIQUES AND PRACTICES TO THE MAXIMUM EXTENT PRACTICABLE (MEP):

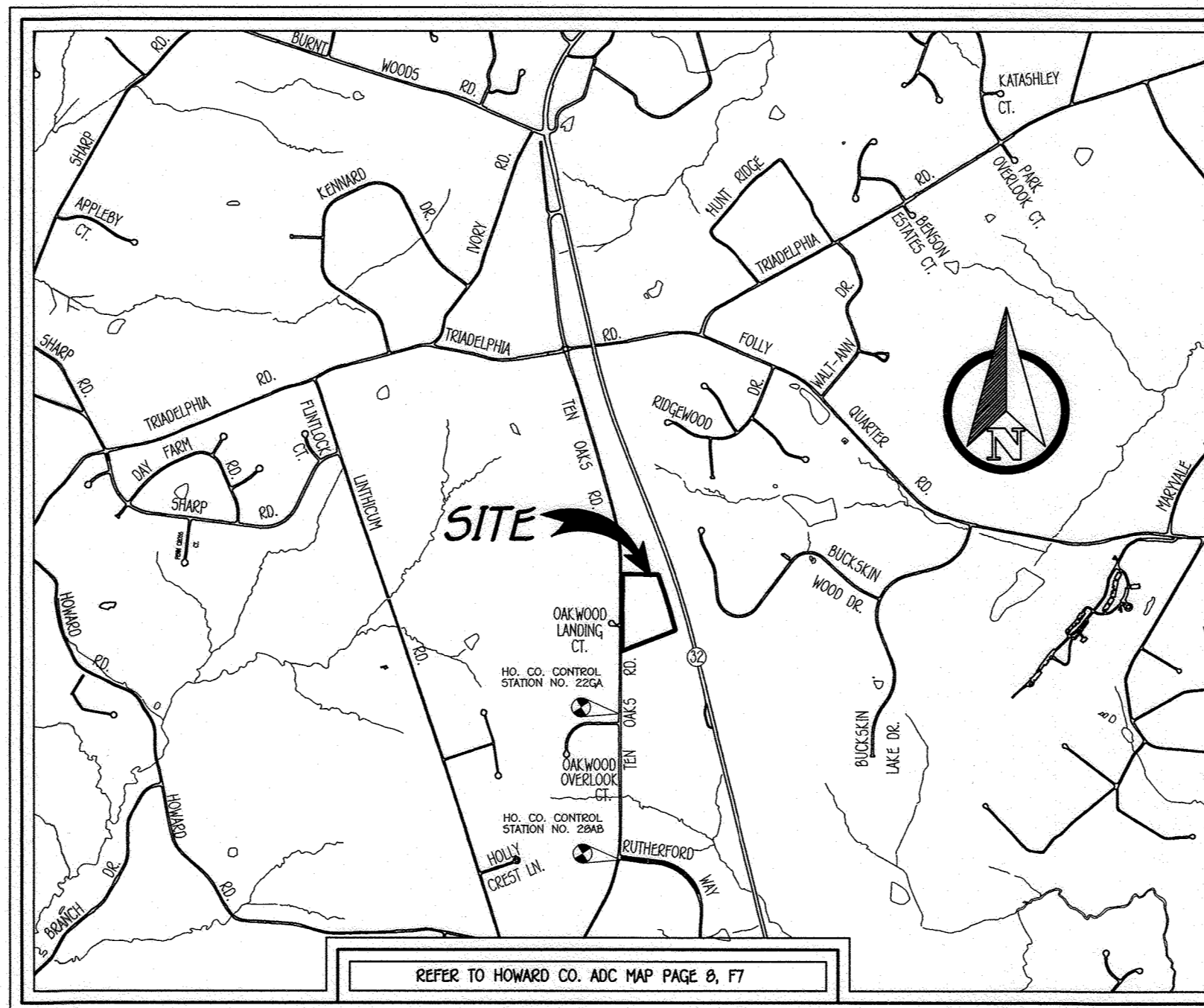
THIS SUBMISSION PROPOSES 20 DRYWELLS (M-5) AND TWELVE (12) DISCONNECTION OF NON-ROOFTOP RUNOFF (N-2) AREAS TO MEET AND EXCEED ENVIRONMENTAL SITE DESIGN TO THE MAXIMUM EXTENT PRACTICABLE (ESO TO THE MEP). THE EXISTING SITE CONTAINS LESS THAN 40% OF IMPERVIOUS COVER QUALIFYING AS NEW DEVELOPMENT. MEETING THE TARGET Pe WILL REPLICATE WOODS IN GOOD CONDITION.

#### VI. REQUEST FOR DESIGN MANUAL WAIVER:

NO WAIVERS ARE EXPECTED TO BE REQUESTED ON THIS PROJECT RELATING TO SWM REQUIREMENTS.

### GENERAL NOTES

- THE SUBJECT PROPERTY IS ZONED RR-DEO (PER 10/06/04 COMPREHENSIVE ZONING PLAN).
- EXISTING TOPOGRAPHY SHOWN IS FROM A FIELD RUN SURVEY PERFORMED BY FISHER, COLLINS AND CARTER, INC. AND DATED DECEMBER 2022.
- 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. 23CA AND 24AC WERE USED FOR THIS PROJECT.  
22CA N 576,646.790, E 1,319,983.527, ELEV. 589.231  
23AA N 574,608.782, E 1,317,022.128, ELEV. 578.795
- STORM WATER MANAGEMENT IS IN ACCORDANCE WITH THE M.D.E. STORM WATER DESIGN MANUAL, VOLUMES I & II, REVISED 2009 TO MEET THE RE-DEVELOPMENT CRITERIA, PROVIDED STORMWATER MANAGEMENT INCLUDES THE USE OF TWENTY (20) M-5 DRYWELLS AND TWELVE (12) N-2 DISCONNECTION OF NON-ROOFTOP RUNOFF.
- THIS PROPERTY IS NOT LOCATED WITHIN THE METROPOLITAN DISTRICT. PRIVATE WELL AND SEPTIC WILL BE UTILIZED FOR THIS PROJECT.
- NO GRADING, REMOVAL OF VEGETATIVE COVER OR TREES, PAVING AND NEW STRUCTURES SHALL BE PERMITTED WITHIN THE REQUIRED WETLANDS, STREAM(S) OR THEIR BUFFERS, FOREST CONSERVATION EASEMENT AREAS AND 100 YEAR FLOODPLAIN.
- LANDSCAPING WILL BE PROVIDED AT THE SUPPLEMENTAL PLAN STAGE OF THIS PROJECT.
- FOREST CONSERVATION WILL BE ADDRESSED AT THE SUPPLEMENTAL PLAN STAGE OF THIS PROJECT. THE REQUIREMENT IS EXPECTED TO BE MET WITH RETENTION AND AFFORESTATION ON-SITE AND ANY ADDITIONAL REQUIREMENT BEING MET WITH AN OFF-SITE FOREST BANK.
- 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 SUPPLEMENTAL PLAN STAGES. THEREFORE, THE APPLICANT AND CONSULTANT SHOULD EXPECT ADDITIONAL AND MORE DETAILED COMMENTS (INCLUDING THOSE THAT MAY ALTER OVERALL SITE DESIGN) AS THIS PROJECT PROGRESSES.
- APPROVAL OF THIS KEP DOES NOT CONSTITUTE APPROVAL OF SUBSEQUENT OR ASSOCIATED SUBDIVISION OR SITE DEVELOPMENT PLANS OR RE-DESIGN REVISIONS. 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, SITE DEVELOPMENT PLAN, OR RE-DESIGN REVISIONS. THE APPLICANT AND CONSULTANT SHOULD EXPECT ADDITIONAL AND MORE DETAILED REVIEW COMMENTS (INCLUDING COMMENTS THAT MAY ALTER THE OVERALL SITE DESIGN) AS THE PROJECT PROGRESSES THROUGH THE PLAN REVIEW PROCESS.
- THERE ARE NO WETLAND AREAS ON THIS PROJECT.
- THERE ARE NO 100-YEAR FLOODPLAIN AREAS ON THIS PROJECT.
- NO CEMETERIES EXIST ON THIS SITE BASED ON A VISUAL SITE VISIT AND AN EXAMINATION OF THE HOWARD COUNTY CEMETERY INVENTORY MAP.
- A COMMUNITY INPUT MEETING WILL BE HELD PRIOR TO THE SUPPLEMENTAL PLAN SUBMISSION.
- THE FOREST CONSERVATION PLAN AND ASSOCIATED FOREST STAND DELINEATION WILL BE REVIEWED FOR COMPLIANCE WITH THE FOREST CONSERVATION ACT AT THE SUBDIVISION PLAN, SITE DEVELOPMENT PLAN OR GRADING PERMIT STAGES. UNDER COUNTY LAW ONLY A MD LICENSED FORESTER, MD LICENSED LANDSCAPE ARCHITECT OR AN ISA CERTIFIED ARBORIST WHO IS ALSO A STATE QUALIFIED PROFESSIONAL MAY PREPARE FOREST STAND DELINEATIONS, FOREST CONSERVATION PLANS OR OTHER REQUIRED COUNTY FOREST CONSERVATION PROGRAM DOCUMENTS.
- THIS ENVIRONMENTAL CONCEPT PLAN IS SUBJECT TO IMPORTING DESIGN PER SECTION 106.0.e.1.b.1 OF THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS.



VICINITY MAP

SCALE: 1" = 2,000'

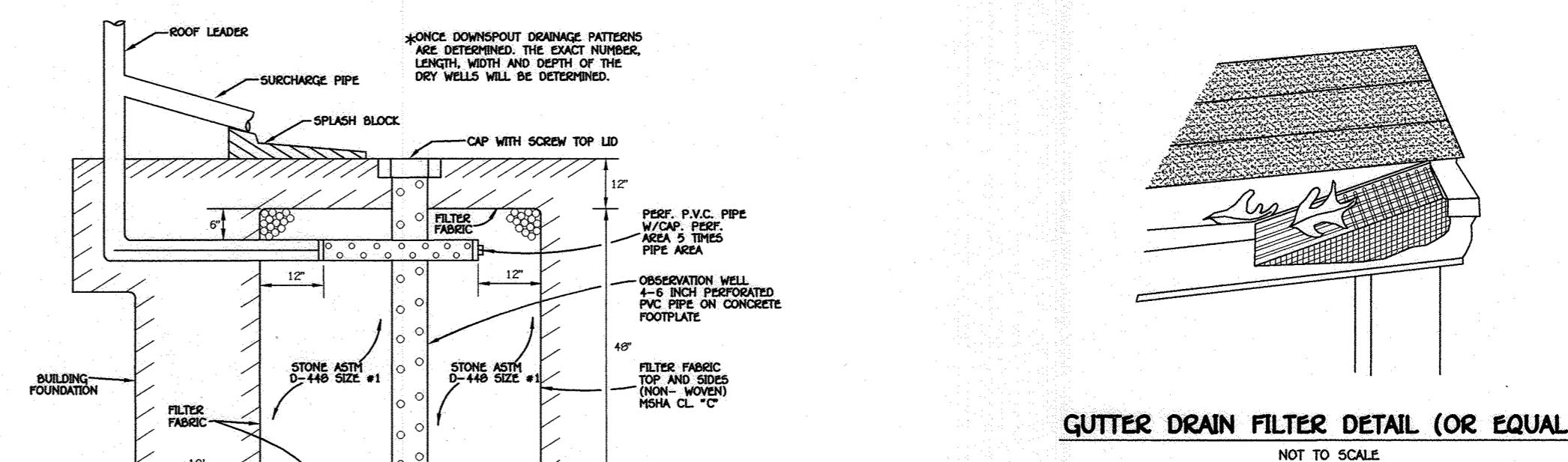
### SITE ANALYSIS DATA CHART

- TOTAL AREA OF PROPERTY = 597,633 SF (13.72) AC.±
- LIMIT OF DISTURBED AREA (SITE) = 5.86 AC.±
- PRESENT ZONING DESIGNATION = RR-DEO
- PROPOSED USE: RESIDENTIAL
- PREVIOUS HOWARD COUNTY FILES:
- TOTAL AREA OF FLOODPLAIN LOCATED ON-SITE = 0.00 AC
- TOTAL AREA OF SLOPES IN EXCESS OF 15% = 0.03 AC
- TOTAL AREA OF WETLANDS (INCLUDING BUFFER) = 0.00 AC
- TOTAL AREA OF STREAM (INCLUDING BUFFER) = 0.00 AC
- TOTAL AREA OF EXISTING FOREST = 11.77 AC
- TOTAL GREEN OPEN AREA = 561,498 SQ.FT OR 12.89 AC±
- TOTAL PROPOSED IMPERVIOUS AREA = 36,135 SQ.FT. OR 0.83 AC±
- TOTAL PROPOSED IMPERVIOUS PAVING AREA = 19,335 SQ.FT. OR 0.44 AC±
- TOTAL PROPOSED IMPERVIOUS ROOF AREA = 16,800 SQ.FT. OR 0.39 AC±
- TOTAL AREA OF ERODIBLE SOILS = 7.84 AC
- DENSITY CALCULATIONS: ONE CLUSTER LOT IS PERMITTED PER 4.25 GROSS ACRES (13.72/4.25 = 3.22 OR 3 LOTS)

LEGEND			
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
---#92---	EXISTING 2' CONTOURS	---466---	PROPOSED CONTOUR
---#90---	EXISTING 10' CONTOURS	+362.5	SPOT ELEVATION
---	SOILS LINES AND TYPE	LOD	LIMITS OF DISTURBANCE
---	EXISTING TREELINE	---	PROPOSED TREELINE
---	15% TO 24.9% STEEP SLOPES	---	EXISTING & PROPOSED PAVING
---	25% AND GREATER STEEP SLOPES	---SF---	SILT FENCE
---	100 YEAR PUBLIC FLOODPLAIN, DRAINAGE AND UTILITY EASEMENT	---ECM---	EROSION CONTROL MATTING
---	WETLAND AREA	---SSP---	SUPER SILT FENCE
---WB---	25' WETLAND BUFFER	---	STABILIZES CONSTRUCTION ENTRANCE
---SB---	STREAM BANK BUFFER	---ST1---	SPECIMEN TREE
---	100 YEAR FLOODPLAIN LINE	---TP---	TREE PROTECTION
---	PRIVATE SEPTIC DISPOSAL AREA	---	N-2 NON-ROOFTOP DISCONNECTION
---	PROPOSED WELL & WELL BOX	---	

AREA ID	STORMWATER MANAGEMENT PRACTICES							
	PERMEABLE PAVING A-2 (Y/N)	DISCONNECTION OF ROOFTOP RUNOFF N-1 (Y/N)	DISCONNECTION OF NON-ROOFTOP RUNOFF N-2 (Y/N)	FILTERED INLETS F-6 (Y/N)	MICRO-BIORETENTION M-6 (Y/N)	BIO-RETENTION F-6 (Y/N)	SUBMERGED GRAVEL WETLAND M-2	DRYWELL M-5
LOT 1	NO	NO	YES	NO	NO	NO	NO	YES
LOT 2	NO	NO	YES	NO	NO	NO	NO	YES
LOT 3	NO	NO	YES	NO	NO	NO	NO	YES
Parcel 'A'	NO	NO	YES	NO	NO	NO	NO	YES

ESDV REQUIRED = 3,937 Cu.Ft.  
ESDV PROVIDED = 4,421 Cu.Ft.  
WEIGHTED Pe REQUIRED = 1.0'  
Pe PROVIDED = 1.12'



GUTTER DRAIN FILTER DETAIL (OR EQUAL)

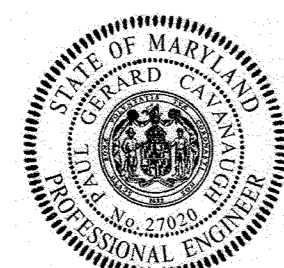
NOT TO SCALE

### OPERATION AND MAINTENANCE SCHEDULE FOR DRYWELLS (M-5)

- THE OWNER SHALL INSPECT THE MONITORING WELLS AND STRUCTURES ON A QUARTERLY BASIS AND AFTER EVERY HEAVY STORM EVENT.
- 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.
- THE OWNER SHALL MAINTAIN A LOG BOOK TO DETERMINE THE RATE AT WHICH THE FACILITY DRAINS.
- WHEN THE FACILITY BECOMES CLOGGED SO THAT IT DOES NOT DRAIN DOWN WITHIN A SEVENTY TWO (72) HOUR TIME PERIOD, CORRECTIVE ACTION SHALL BE TAKEN.
- THE MAINTENANCE LOG BOOK SHALL BE AVAILABLE TO HOWARD COUNTY FOR INSPECTION TO INSURE COMPLIANCE WITH OPERATION AND MAINTENANCE CRITERIA.
- 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.

DRYWELL CHART					
LOT NO.	AREA OF ROOF PER DOWN SPOUT	VOLUME CREDITED	NO. OF DRYWELLS	W	L
LOT 1	840 Sq.Ft.	865 C.F.	5	5' x 10' x 10'	
LOT 2	840 Sq.Ft.	865 C.F.	5	5' x 10' x 10'	
LOT 3	840 Sq.Ft.	865 C.F.	5	5' x 10' x 10'	
PRES. PARC.	840 Sq.Ft.	865 C.F.	5	5' x 10' x 10'	

FISHER, COLLINS & CARTER, INC.  
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
CENTRAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE  
ELICOTT CITY, MARYLAND 21042  
(410) 461-3999



"PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY 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. 27020, EXPIRATION DATE: 01/25/24."

PAUL GERARD CAVANAUGH  
DATE: Nov 7, 2023

APPROVED: DEPARTMENT OF PLANNING AND ZONING

CHIEF, DIVISION OF LAND DEVELOPMENT  
DATE: 10/19/23  
CHIEF, DEVELOPMENT ENGINEERING DIVISION  
DATE: 11/20/23

### OWNER/DEVELOPER

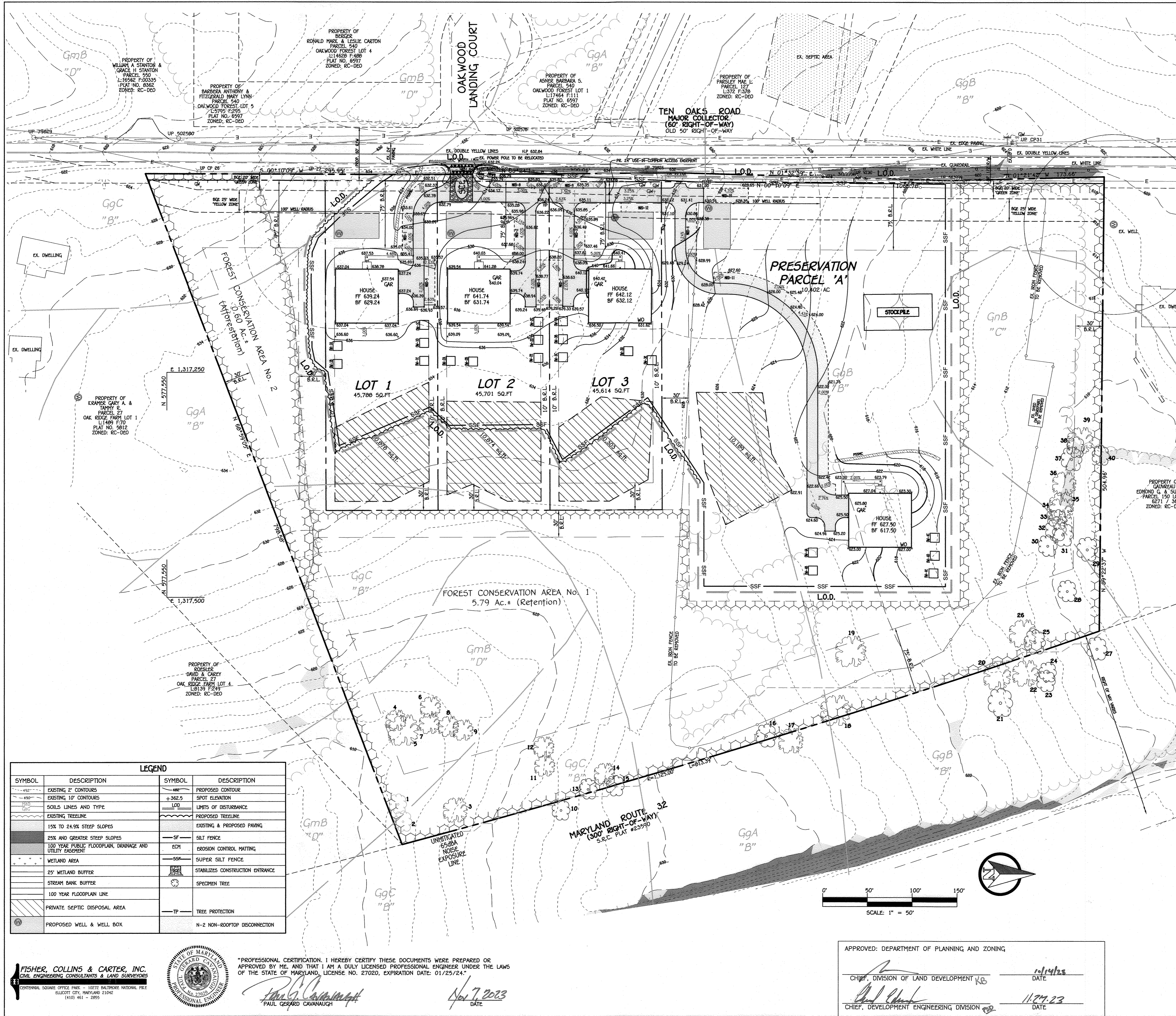
10 OAKS LLC  
4507 GOLIATHHILL ROAD  
ELICOTT CITY, MARYLAND 21043  
301-343-9602

### TITLE SHEET

### MAE PARSLEY PROPERTY

LOTS 1 THRU 3 AND PRESERVATION PARCEL 'A'

ZONED: RR-DEO  
TAX MAP: 22 GRID: 20 PARCEL: 124  
FIFTH ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND  
DATE: NOVEMBER, 2023  
SHEET 1 OF 2



### SPECIMEN/SIGNIFICANT TREE CHART

TREE	SPECIES	SIZE (in. DBH)	CRZ (ft Radius)	STATE CHAMPION (DBH)	GOOD (UNLESS OTHERWISE NOTED)
1	TULIP POPLAR	24	36	101.27	FAIR CONDITION, TWISTED TRUNK NEAR GROUND
2	TULIP POPLAR	25	37.5	101.27	
3	WHITE OAK	32	48.0	80.85	
4	TULIP POPLAR	33	49.5	101.27	POOR, MOSTLY DEAD
5	TULIP POPLAR	36	66.0	101.27	FAIR, LIGHTNING DAMAGE/SCAR
6	TULIP POPLAR	36.5	54.75	101.27	POOR, STORM DAMAGE AND CAVITY IN TRUNK
7	TULIP POPLAR	36.5	54.75	101.27	POOR, STORM DAMAGE AND CAVITY IN TRUNK
8	TULIP POPLAR	32.5	48.75	101.27	POOR, STORM DAMAGE AND CAVITY IN TRUNK
9	TULIP POPLAR	38	57.0	101.27	
10	WHITE OAK	24	36.0	80.85	
11	WHITE OAK	32	48.0	80.85	
12	TULIP POPLAR	35	52.5	101.27	
13	WHITE OAK	26	39	80.85	FAIR, CAVITY AT 10'
14	WHITE OAK	35	52.5	80.85	
15	WHITE OAK	25	37.5	80.85	
16	RED MAPLE	28	42	86.94	FAIR, SOME DIEBACK
17	TULIP POPLAR	32	48	101.27	
18	WHITE OAK	39.5	59.25	80.85	
19	WHITE OAK	39	58.5	80.85	
20	BLACK OAK	38	57	80.85	FAIR, SOME DIEBACK, MUSHROOM ON TRUNK
21	TULIP POPLAR	26	39	101.27	FAIR, CO-DOMINANT STEM WITH STORM DAMAGE
22	TULIP POPLAR	33	49.5	101.27	FAIR, TRUNK SCAR AT BASE
23	TULIP POPLAR	26	39	101.27	
24	TULIP POPLAR	24	36	101.27	
25	TULIP POPLAR	29.5	44.25	101.27	FAIR, TRUNK SCARRED AT BASE
26	TULIP POPLAR	34.5	51.75	101.27	
27	TULIP POPLAR	28	42	101.27	
28	BLACK OAK	26	39	81.85	FAIR, HEALED LIGHTNING STRIKE
29	TULIP POPLAR	29.5	44.25	101.27	
30	BLACK OAK	26	39	81.85	POOR, LARGE DEADWOOD PRESENT
31	TULIP POPLAR	29	43.5	101.27	
32	TULIP POPLAR	29	43.5	101.27	
33	TULIP POPLAR	24	36	101.27	
34	TULIP POPLAR	33	49.5	101.27	FAIR, VINE PRESSURE
35	TULIP POPLAR	33.5	50.25	101.27	
36	TULIP POPLAR	32	48	101.27	
37	TULIP POPLAR	26	39	101.27	FAIR, DEAD TWIN STEM
38	TULIP POPLAR	25	37.5	101.27	
39	TULIP POPLAR	34	51	101.27	FAIR, MULTI-STEM, SOME STORM DAMAGE
40	TULIP POPLAR	25	37.5	101.27	

### LEGEND

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	EXISTING 2' CONTOURS		PROPOSED CONTOUR
	EXISTING 10' CONTOURS		SPOT ELEVATION
	SOILS LINES AND TYPE		LIMITS OF DISTURBANCE
	EXISTING TREELINE		PROPOSED TREELINE
	15% TO 24.9% STEEP SLOPES		EXISTING & PROPOSED PAVING
	25% AND GREATER STEEP SLOPES		SILT FENCE
	100 YEAR PUBLIC FLOODPLAIN, DRAINAGE AND UTILITY EASEMENT		EROSION CONTROL MATTING
	WETLAND AREA		SUPER SILT FENCE
	25' WETLAND BUFFER		STABILIZES CONSTRUCTION ENTRANCE
	STREAM BANK BUFFER		SPECIMEN TREE
	100 YEAR FLOODPLAIN LINE		TREE PROTECTION
	PRIVATE SEPTIC DISPOSAL AREA		N-2 NON-ROOFTOP DISCONNECTION
	PROPOSED WELL & WELL BOX		

### SOILS LEGEND

SOIL	NAME	CLASS	K' VALUE
GgA	Glenelg loam, 0 to 3 percent slopes	B	.37
GgB	Glenelg loam, 3 to 8 percent slopes	B	.37
GgC	Glenelg loam, 8 to 15 percent slopes	B	.43
GmB	Glenville silt loam, 3 to 8 percent slopes	D	.55
GnB	Glenville-Baile silt loams, 0 to 8 percent slopes	C	.49

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 CHIEF, DIVISION OF LAND DEVELOPMENT  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION  
 DATE: 11/24/23

**ENVIRONMENTAL CONCEPT PLAN**  
**MAE PARSLEY PROPERTY**  
 LOTS 1 THRU 3 AND PRESERVATION PARCEL 'A'  
 ZONED: RR-DEO  
 TAX MAP: 22 GRID: 20 PARCEL: 124  
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