

**GENERAL NOTES**

- THE PROJECT IS IN CONFORMANCE WITH THE LATEST HOWARD COUNTY STANDARDS UNLESS WAIVERS HAVE BEEN APPROVED.
- THE EXISTING ON-SITE TOPOGRAPHY IS BASED ON A TOPOGRAPHIC SURVEY BY MCKENZIE-SNYDER DATED APRIL, 2011. OFF-SITE AREAS HAVE BEEN SUPPLEMENTED WITH HO CO GIS TOPOGRAPHICAL INFORMATION. EXISTING CONTOURS ASSUME PROPOSED GRADES FROM F-19-038 AND SDP-21-039 HAVE BEEN ESTABLISHED.
- BOUNDARY INFORMATION IS FROM BOUNDARY SURVEYS BY GUTSCHICK, LITTLE, AND WEBER, P.A., DATED MAY 2013.
- 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. 171C AND 171B WERE USED FOR THIS PROJECT.
- THE SUBJECT PROPERTY IS ZONED "R-20" IN ACCORDANCE WITH THE 10/6/2013 COMPREHENSIVE ZONING PLAN AND IS SUBJECT TO THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS EFFECTIVE 10/2/03 PER COUNCIL BILL 75-2003.
- NO GRADING, REMOVAL OF VEGETATIVE COVER OR TREES, PAVING AND NEW STRUCTURES SHALL BE PERMITTED WITHIN THE FOREST CONSERVATION EASEMENT AREAS.
- THIS PROPERTY IS WITHIN THE METROPOLITAN DISTRICT.
- WATER SERVICE CONNECTIONS (W/S) FOR THIS PROJECT ARE FROM PUBLIC CONTRACT NO. 14-4879-D. SEWER SERVICE CONNECTIONS (S/S) FOR THIS PROJECT ARE FROM PUBLIC CONTRACT NO. 14-4879-D.
- THERE ARE NO FLOODPLAIN ON THE PROPERTY.
- THERE ARE NO STEEP SLOPES OVER 20,000 CONTIGUOUS SQUARE FEET ON THE PROPERTY.
- THIS PROPERTY IS LESS THAN 40,000 SF. FOREST CONSERVATION IS NOT REQUIRED FOR THIS PROPERTY.
- THERE ARE NO WETLANDS, STREAMS OR BUFFERS PRESENT ON THE SITE.
- A TECHNICAL REPORT FOR THIS PROJECT WAS PREPARED BY GTA, DATED JUNE 4, 2014, AND WAS APPROVED AS PART OF F-19-038 PLAN.
- SUNELL LANE IS PUBLIC ACCESS STREET.
- TO THE BEST OF THE OWNERS KNOWLEDGE, THERE ARE NO BURIAL GROUNDS OR CEMETERIES ON THIS PROPERTY. THERE IS HISTORIC STRUCTURE ON THIS LOT THAT DATES BACK TO 1900. THE STRUCTURE HAS DETERIORATED BEYOND SALVAGING AND WILL BE DEMOLISHED. THE COUNTY'S ARCHITECTURAL HISTORIAN HAS REVIEWED THE STRUCTURE FOR DEMOLITION.
- STORMWATER MANAGEMENT FOR THIS PROJECT IS PROVIDED BY THE USE OF MICRO-SCALE PRACTICES IN ACCORDANCE WITH ENVIRONMENTAL SITE DESIGN CRITERIA SYSTEM. THE MICRO-SCALE PRACTICES USED ARE 3 DRYWELLS (M-5), AND NON STRUCTURAL METHOD, DISCONNECTION OF NON-ROOFTOP RUNOFF (N-1) AND DISCONNECTION OF ROOFTOP RUNOFF (N-1). THESE FACILITIES SHALL BE PRIVATELY OWNED AND MAINTAINED.
- APPROVAL OF THIS ENVIRONMENTAL CONCEPT PLAN (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 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.
- APPROVAL OF THIS ENVIRONMENTAL CONCEPT PLAN (ECP) BY THE HOWARD COUNTY CONSERVATION DISTRICT DOES NOT GRANT APPROVAL OF THE PROPOSED SEDIMENT CONTROL SCHEME. THE FINAL PLAN SHALL INCLUDE A SEQUENCE OF CONSTRUCTION WHICH SHALL DETAIL SEDIMENT & EROSION CONTROLS AND PHASING AND ADDRESS THE PROJECT TEMPORARY STORMWATER MANAGEMENT REQUIREMENTS.
- NO WAIVER PETITIONS FOR ENVIRONMENTAL DISTURBANCE OR ENCROACHMENTS ARE REQUIRED. A WAIVER FOR REMOVAL OF SPECIMEN TREE SHALL BE SUBMITTED WITH THE FUTURE SITE DEVELOPMENT PLAN.

# ENVIRONMENTAL CONCEPT PLAN

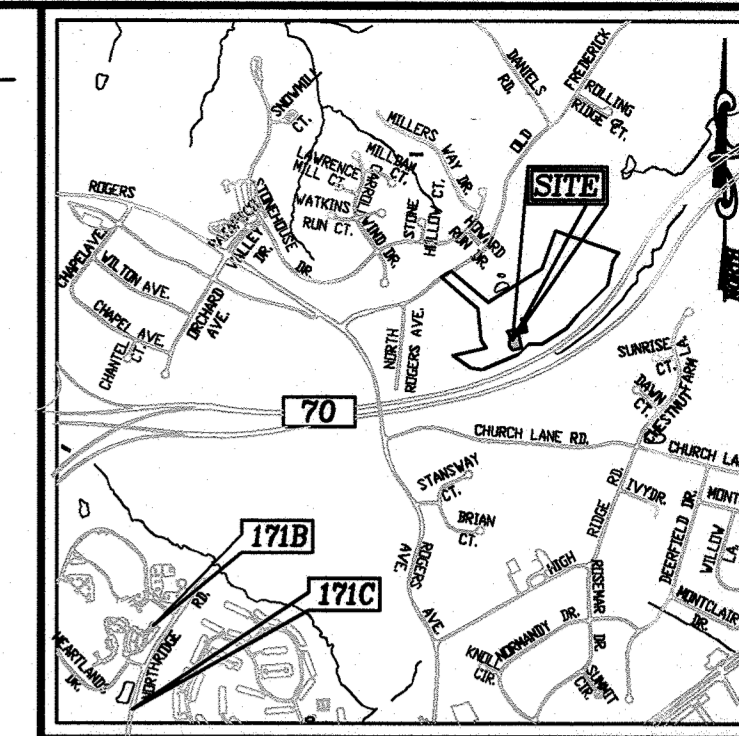
## PATAPSCO CROSSING

### LOT 34

#### 8524 SUNELL LANE

#### HOWARD COUNTY, MD

**BENCHMARKS**  
 HOWARD COUNTY BENCHMARK 171B  
 N 592,199.767 E 1,364,004.914 ELEV.: 376.282  
 HOWARD COUNTY BENCHMARK 171C  
 N 591,056.916 E 1,363,154.631 ELEV.: 415.413



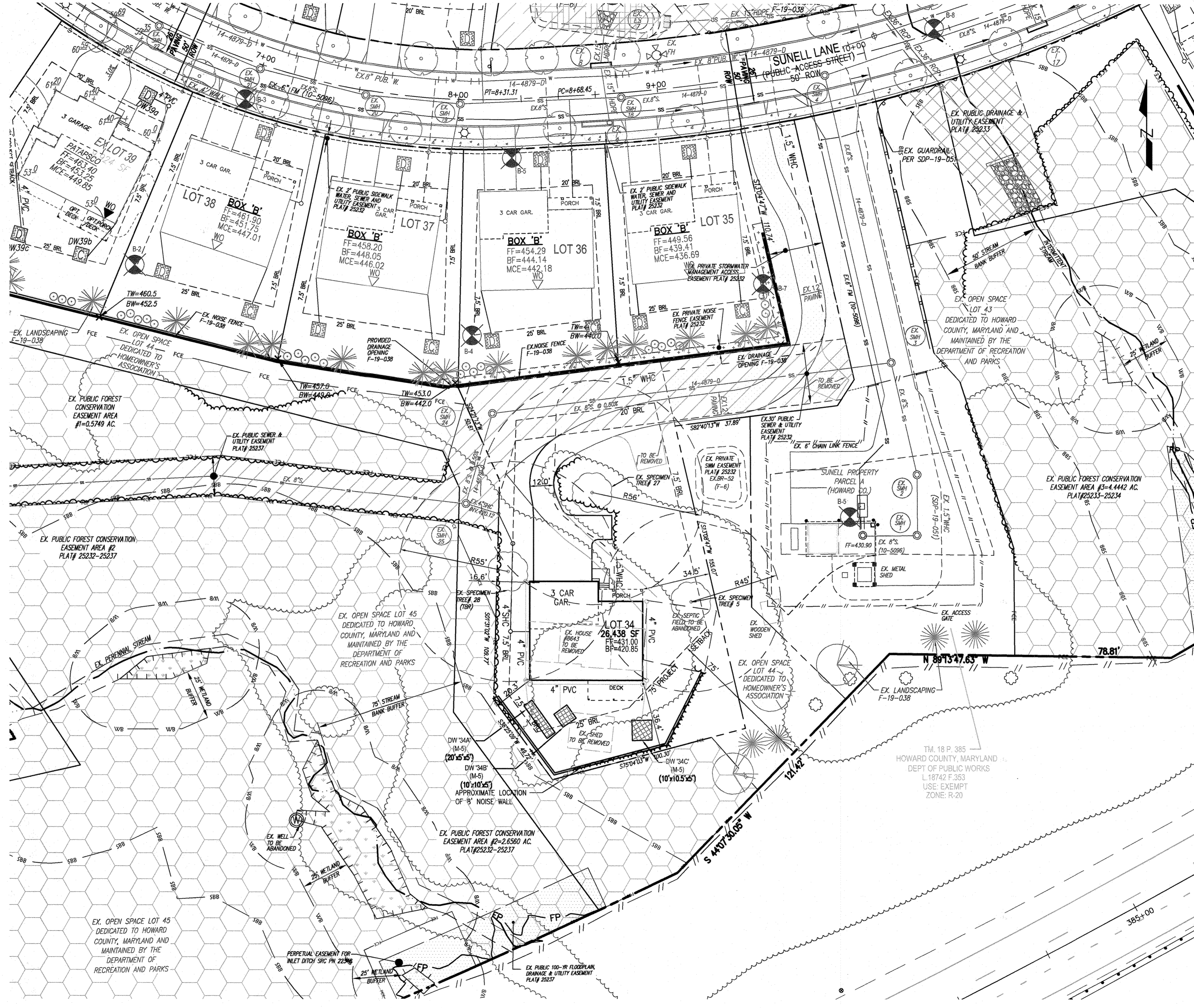
**VICINITY MAP**  
 SCALE: 1" = 2000'  
 ADC MAP COORDINATE: 21 - B4

**LEGEND:**

—	PROPERTY LINE	—	EXISTING WETLAND
—	RIGHT-OF-WAY LINE	—	EXISTING PUBLIC DRAINAGE AND UTILITY EASEMENT PLAT #25232
—	ADJACENT PROPERTY LINE	—	EXISTING PUBLIC SEWER AND UTILITY EASEMENT PLAT #25232
—	CENTELINE OF EXISTING STREAM	—	EXISTING PRIVATE NOISE FENCE EASEMENT PLAT #25232
—	STREAM BANK BUFFER	—	EXISTING PRIVATE STORMWATER MANAGEMENT ACCESS EASEMENT PLAT #25232
—	EXISTING TREE LINE	—	EXISTING SPECIMEN TREE F-19-038
—	EXISTING CURB AND GUTTER	—	EXISTING FOREST CONSERVATION AREA EASEMENT PLAT #25232-25237
—	EXISTING UTILITY POLE	—	MICRO BIO-RETENTION F-19-038
—	EXISTING LIGHT POLE	—	EXISTING SIDEWALK F-19-038
—	EXISTING SIGN	—	DRY WELL (M-5)
—	EXISTING SANITARY MANHOLE	—	
—	EXISTING SANITARY LINE	—	
—	EXISTING CLEANDIT	—	
—	EXISTING FIRE HYDRANT	—	
—	EXISTING WATER LINE	—	
—	EXISTING STORM DRAIN	—	
—	EXISTING LANDSCAPING F-19-038	—	
—	EXISTING STREET TREES F-19-038	—	

**ENVIRONMENTAL SITE DESIGN NARRATIVE:**

- THE PROPERTY IS A GENERALLY LEVEL LOT. THERE IS NO WETLAND, STREAM, AND THEIR BUFFERS ON THE SITE. THERE IS APPROXIMATELY 0.13 AC. OF FOREST ON SITE.
- THE SITE NATURALLY SLOPES FROM NORTH TO SOUTH. THE SITE HAS BEEN DESIGNED TO MAINTAIN THE NATURAL DRAINAGE PATTERNS, WITH NO DRAMATIC CHANGES TO THE NATURAL DRAINAGE.
- THE CONCEPTUAL REDUCTION IN IMPERVIOUS AREA THROUGH BETTER SITE DESIGN IS ACHIEVED THROUGH THE ENVIRONMENTAL SITE DESIGN (ESD) FOR THE PROJECT TO THE MAXIMUM EXTENT PRACTICABLE (MEP). THE RESULTS OF THE ENVIRONMENTAL SITE DESIGN FOR THIS PROJECT WILL REFLECT "WOODS IN GOOD CONDITION". THE ESD CONCEPT INCLUDES THE USE OF DRYWELLS (M-5), ROOFTOP DISCONNECTION (N-1) AND NON-ROOFTOP DISCONNECTS (N-2).
- SEDIMENT CONTROL FOR THIS SPECIFIC SITE PLAN WILL BE PROVIDED THROUGH THE USE OF SUPER SILT FENCE PERIMETER CONTROLS. SEDIMENT CONTROL SHALL BE IN ACCORDANCE WITH CURRENT REQUIREMENTS AND SHALL BE APPROVED BY THE HOWARD COUNTY CONSERVATION DISTRICT DURING THE FUTURE SITE DEVELOPMENT PLAN PHASE OF THE PROJECT.
- STORMWATER MANAGEMENT FOR THE PROJECT SHALL BE MET THROUGH THE MICRO-SCALE PRACTICE OF DRYWELLS (M-5), AND NON STRUCTURAL METHOD, DISCONNECTION OF ROOFTOP (N-1) AND NON-ROOFTOP DISCONNECTS (N-2). THE PROPOSED PRACTICES HAVE BEEN MAXIMIZED TO THE EXTENT PRACTICAL. THE CALCULATED RAINFALL TARGET (PE) FOR THIS PROJECT IS 1.8", AND THE TOTAL RUNOFF VOLUME (ESDV) REQUIRED IS 897 CF.
- THERE ARE 3 SPECIMEN TREES ON LOT 34 WHICH HAVE BEEN DELINEATED BY THE ENVIRONMENTALIST (ECO-SCIENCE PROFESSIONALS). 1 SPECIMEN TREE WILL BE REQUIRED TO BE REMOVED. AN ALTERNATIVE COMPLIANCE WILL BE PROCESSED FOR THE REMOVAL OF SPECIMEN TREE NO. 28 DURING THE FUTURE SITE DEVELOPMENT PLAN PHASE OF THE PROJECT.



**ESDV CONCEPT PLAN**  
 SCALE: 1" = 30'

**SITE ANALYSIS DATA CHART**

TOTAL PROJECT AREA:	0.80 AC.
NET AREA OF PROJECT:	0.60 AC.
AREA OF WETLANDS AND WETLAND BUFFERS:	0.00 AC.
AREA OF FLOODPLAIN:	0.00 AC.
AREA OF FOREST:	0.13 AC.
AREA OF MODERATE SLOPES (15% TO 24.99%):	0.00 AC.
AREA OF STEEP SLOPES (25% OR GREATER):	0.00 AC.
ERODIBLE SOILS:	0.00 AC.
LIMIT OF DISTURBED AREA:	0.30 AC.
PROPOSED USES FOR SITE AND STRUCTURES:	RESIDENTIAL
GREEN OPEN AREA:	0.20 AC. (OPEN AND ENVIRONMENTAL)
PROPOSED IMPERVIOUS AREA:	0.10 AC.
PRESENT ZONING DESIGNATION:	R-20
DPZ FILE REFERENCES:	ECP-14-059, SP-15-022, F-19-038, SDP-21-022, SDP-21-039

**MAPPED SOILS TYPES - CLARKSVILLE SE MAP #23**

SYMBOL	NAME / DESCRIPTION	GROUP	HYDIC	PERCENT SAND	K FACTOR	PERCENT CLAY	PERCENT SILT
GgB	GLENELG LOAM, 3 TO 8 PERCENT SLOPES	B	NO	NO	0.20	NO	NO
GgB	GLENELG-BALE SILT LOAM, 0 TO 8 PERCENT SLOPES	C	PARTIALLY	PARTIALLY	0.37	NO	PARTIAL
MgC	MANOR LOAM, 8 TO 15 PERCENT SLOPES	B	NO	NO	0.24	YES	NO
MgD	MANOR LOAM, 15 TO 24 PERCENT SLOPES	B	NO	NO	0.24	YES	YES

TAKEN FROM: USDA, SCS-WEB SOIL SURVEY, HOWARD COUNTY

NOTE: HIGHLY ERODIBLE SOILS ARE THOSE SOILS WITH A SLOPE GREATER THAN 15 PERCENT OR THOSE SOILS WITH A SOIL ERODIBILITY FACTOR K GREATER THAN 0.35 AND WITH A SLOPE GREATER THAN 5 PERCENT

\*BALE COMPONENT OF GgB, ERODIBILITY FACTOR IS 0.32 AND IS CONSIDERED HYDIC

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

*[Signature]* 2.9.22  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

*[Signature]* 1/24/22  
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

**ON-LOT STORMWATER MANAGEMENT PRACTICES**

Lot Number	Address	M-5 Drywell	N-2 Non-Rooftop Disconnect	N-1 Rooftop Disconnect
Lot 34	8524 Sunell Lane	3	2	2

**SHEET INDEX**

DESCRIPTION	SHEET NO.
COVER SHEET AND ESDV CONCEPT PLAN	1 OF 2
STORMWATER MANAGEMENT DRAINAGE AREA MAP & DETAILS	2 OF 2

**OWNER**  
 PATAPSCO CROSSING, LLC.  
 24012 FREDERICK ROAD  
 CLARKSBURG, MD 20871  
 301-428-0800

**BUILDER**  
 MILLER AND SMITH  
 ATTN: STEVE B. AYLOR  
 1960 GALLOWAY ROAD, SUITE 200  
 VIENNA, VA 22182  
 703-821-2500

**DEVELOPER**  
 PLEASANTS DEVELOPMENT, LLC.  
 24012 FREDERICK ROAD  
 CLARKSBURG, MD 20871  
 301-428-0800

NO.	REVISION	DATE

ENVIRONMENTAL CONCEPT PLAN  
 COVER SHEET  
**PATAPSCO CROSSING**  
 LOT 34  
 8524 SUNELL LANE

TAX MAP 18 GRID 13  
 2ND ELECTION DISTRICT

PARCEL 25 - ZONED: R-20  
 HOWARD COUNTY, MARYLAND

**VOGEL ENGINEERING**

**TIMMONS GROUP**

3300 NORTH RIDGE ROAD, SUITE 110, ELLICOTT CITY, MD 21043  
 P: 410.461.7666 F: 410.461.8961 www.timmons.com

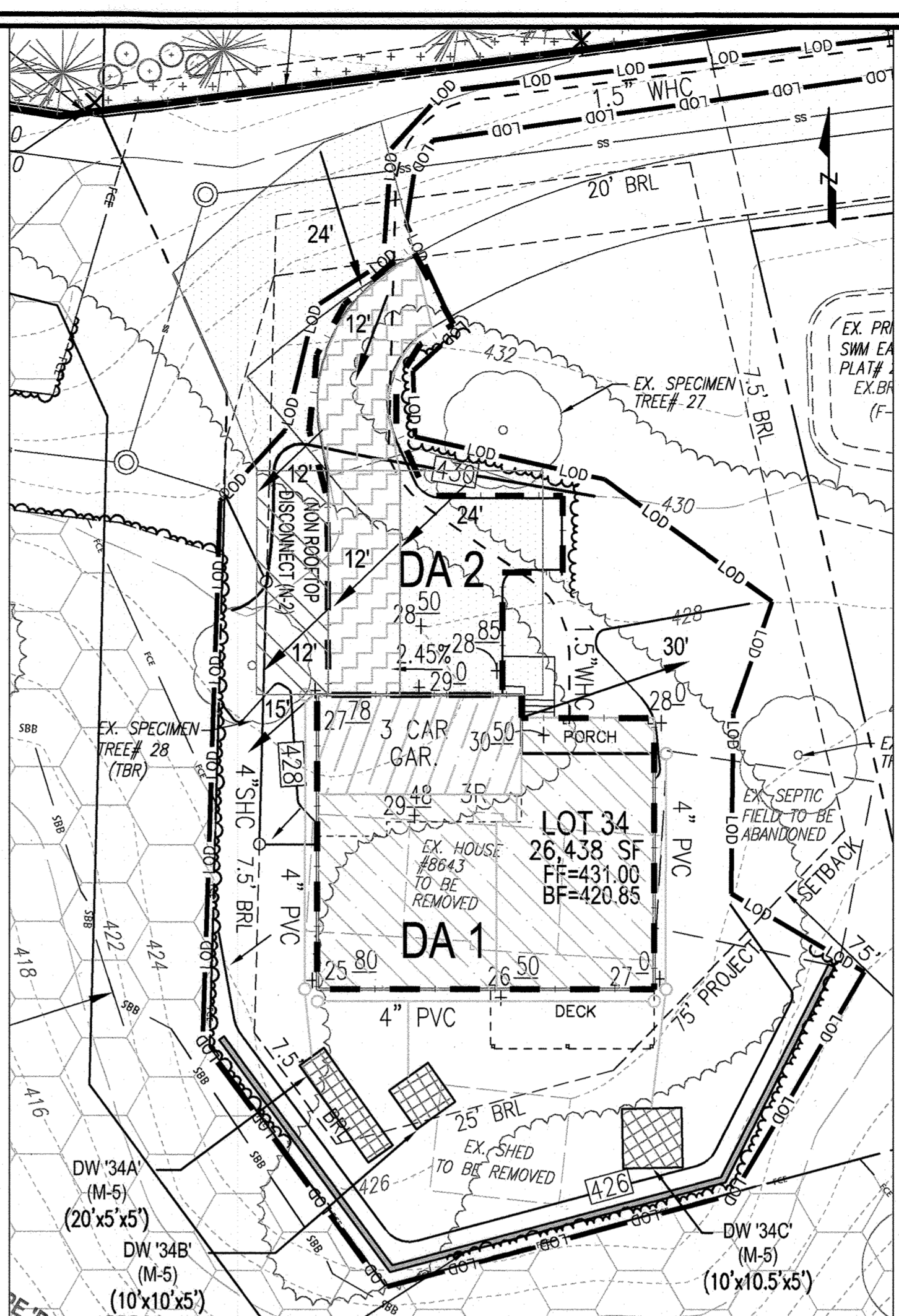
PROFESSIONAL CERTIFICATE

DESIGN BY: RHV  
 DRAWN BY: KG  
 CHECKED BY: RHV  
 DATE: JANUARY 2022  
 SCALE: AS SHOWN  
 W.O. NO.: 47411

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE PROFESSIONAL ENGINEERING ACT OF 1948, AS AMENDED BY THE PROFESSIONAL ENGINEERING ACT OF 1993.  
 EXPIRATION DATE: 06-27-2022

1 SHEET OF 2

ROBERT H. VOGEL, PE No. 16193



### LEGEND:

[Symbol]	PROPERTY LINE	[Symbol]	EXISTING WETLAND
[Symbol]	RIGHT-OF-WAY LINE	[Symbol]	EXISTING PUBLIC DRAINAGE AND UTILITY EASEMENT PLAT #25232
[Symbol]	ADJACENT PROPERTY LINE	[Symbol]	EXISTING PUBLIC SEWER AND UTILITY EASEMENT PLAT #25237
[Symbol]	CENTERLINE OF EXISTING STREAM	[Symbol]	EXISTING FOREST CONSERVATION AREA EASEMENT PLAT #25232-25237
[Symbol]	STREAM BANK BUFFER	[Symbol]	MICRO BIO-RETENTION F-19-038
[Symbol]	EXISTING TREELINE	[Symbol]	EXISTING SIDEWALK F-19-038
[Symbol]	EXISTING CURB AND GUTTER	[Symbol]	DRY WELL (M-5)
[Symbol]	EXISTING UTILITY POLE	[Symbol]	EXISTING CONTOUR
[Symbol]	EXISTING LIGHT POLE	[Symbol]	PROP. CONTOUR
[Symbol]	EXISTING SIGN	[Symbol]	SPOT ELEVATION
[Symbol]	EXISTING SANITARY MANHOLE	[Symbol]	SSP
[Symbol]	EXISTING SANITARY LINE	[Symbol]	SUPER SILT FENCE
[Symbol]	EXISTING CLEANOUT	[Symbol]	LIMIT OF DISTURBANCE
[Symbol]	EXISTING FIRE HYDRANT	[Symbol]	DRAINAGE AREA
[Symbol]	EXISTING WATER LINE	[Symbol]	STABILIZED CONSTRUCTION ENTRANCE
[Symbol]	EXISTING STORM DRAIN	[Symbol]	AREA OF IMPERVIOUS DRAINAGE TO NON-ROOFTOP DISCONNECT (N-2)
[Symbol]	EXISTING LANDSCAPING F-19-038	[Symbol]	AREA OF IMPERVIOUS DRAINAGE TO DRYWELL (M-5)
[Symbol]	EXISTING STREET TREES F-19-038	[Symbol]	AREA OF IMPERVIOUS DRAINAGE TO ROOFTOP DISCONNECT (N-1)
[Symbol]	SOILS	[Symbol]	AREA OF CONTRIBUTION DRAINAGE TO NON-ROOFTOP DISCONNECT (N-2)
[Symbol]	EXISTING PRIVATE NOISE FENCE EASEMENT PLAT #25232	[Symbol]	
[Symbol]	EXISTING PRIVATE STORMWATER MANAGEMENT ACCESS EASEMENT PLAT #25232	[Symbol]	
[Symbol]	OVERFLOW PATHWAY	[Symbol]	

**STORMWATER MANAGEMENT DRAINAGE AREA MAP**  
SCALE: 1"=20'

Tree No.	Common Name / Scientific Name	Size DBH (Inches)	Condition	Notes
5	Silver Maple <i>Acer Saccharum</i>	57	Fair	Roots: Armillaria fungal decay at old wound - possible lightning strike - on root collar, mushrooms, soil disturbance through 75% of CR2; Trunk: fungal decay under bark from root collar to four feet height, 6" wide. Canopy: 15% dead wood, (4") diameter branches on one codominant stem, (1) end of scaffold broken, (1) large scar on scaffold from branch failure. Light canopy.
27	Silver Maple <i>Acer Saccharum</i>	27	Fair to Good	Roots: 50% CR2 disturbed; Trunk: NAP; Canopy: light canopy with some dieback throughout, likely from drought and root disturbance. Good response wood on broken branches.
28	Silver Maple <i>Acer Saccharum</i>	(TO BE REMOVED)	Poor	Roots: 60% CR2 disturbed; Trunk: 4 codominant stems with two dead or dying and one broken, 40% canopy dead.

**OPERATION AND MAINTENANCE SCHEDULE FOR PRIVATELY OWNED AND MAINTAINED STORMWATER DRY WELLS (M-5)**

- THE MONITORING WELLS AND STRUCTURES SHALL BE INSPECTED QUARTERLY BASIS AND AFTER EVERY LARGE STORM EVENT.
- WATER LEVELS AND SEDIMENT BUILT UP IN THE MONITORING WELLS SHALL BE RECORDED OVER A PERIOD OF SEVERAL DAYS TO INSURE TRENCH DRAINAGE.
- A LOG BOOK SHALL BE MAINTAINED TO DETERMINE THE RATE AT WHICH THE FACILITY DRAINS.
- WHEN THE FACILITY BECOMES CLOGGED SO THAT IT DOES NOT DRAIN DOWN WITHIN THE 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.

**N-2. DISCONNECTION OF NON-ROOFTOP RUNOFF**

**CONSTRUCTION CRITERIA:**  
THE FOLLOWING SHOULD BE ADDRESSED DURING CONSTRUCTION OF PROJECTS WITH NON-ROOFTOP DISCONNECTIONS:  
- EROSION AND SEDIMENT CONTROL: EROSION AND SEDIMENT CONTROL PRACTICES (E.G. SEDIMENT TRAPS) SHALL NOT BE LOCATED IN AREAS DESIGNATED FOR NON-ROOFTOP DISCONNECTIONS.

- SITE DISTURBANCE: TO MINIMIZE DISTURBANCE AND COMPACTION, CONSTRUCTION VEHICLES AND EQUIPMENT SHOULD AVOID AREAS RECEIVING DISCONNECTED RUNOFF. SHOULD AREAS RECEIVING DISCONNECTED RUNOFF BECOME COMPACTED, SCARPING THE SURFACE OR ROTILLING THE SOIL TO A DEPTH OF FOUR TO SIX INCHES SHALL BE PERFORMED TO ENSURE PERMEABILITY. ADDITIONALLY, AMENDMENTS MAY BE NEEDED FOR TIGHT, CLAYEY SOILS.

**INSPECTION:**  
A FINAL INSPECTION SHALL BE CONDUCTED BEFORE USE AND OCCUPANCY APPROVAL TO ENSURE THAT ADEQUATE TREATMENT AREAS AND PERMANENT STABILIZATION HAS BEEN ESTABLISHED.

**MAINTENANCE CRITERIA:**  
MAINTENANCE OF AREAS RECEIVING DISCONNECTED RUNOFF IS GENERALLY NO DIFFERENT THAN THAT REQUIRED FOR OTHER LAWN OR LANDSCAPED AREAS. THE AREAS RECEIVING RUNOFF SHOULD BE PROTECTED FROM FUTURE COMPACTION (E.G. BY PLANTING TREES OR SHRUBS ALONG THE PERIMETER). IN COMMERCIAL AREAS, HIGH FOOT TRAFFIC SHOULD BE DISCOURAGED AS WELL.

**N-1. DISCONNECTION OF ROOFTOP RUNOFF**

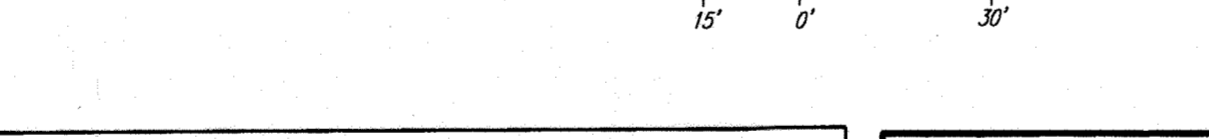
**CONSTRUCTION CRITERIA:**  
THE FOLLOWING ITEMS SHOULD BE ADDRESSED DURING THE CONSTRUCTION OF PROJECTS WITH PLANNED ROOFTOP DISCONNECTIONS:  
- EROSION AND SEDIMENT CONTROL: EROSION AND SEDIMENT CONTROL PRACTICES (E.G. SEDIMENT TRAPS) SHALL NOT BE LOCATED IN VEGETATED AREAS RECEIVING DISCONNECTED RUNOFF.

- SITE DISTURBANCE: CONSTRUCTION VEHICLES AND EQUIPMENT SHOULD AVOID AREAS RECEIVING DISCONNECTED RUNOFF TO MINIMIZE DISTURBANCE AND COMPACTION. SHOULD AREAS RECEIVING DISCONNECTED RUNOFF BECOME COMPACTED, SCARPING THE SURFACE OR ROTILLING THE SOIL TO A DEPTH OF FOUR TO SIX INCHES SHALL BE PERFORMED TO ENSURE PERMEABILITY. ADDITIONALLY, AMENDMENTS MAY BE NEEDED FOR TIGHT, CLAYEY SOILS.

**INSPECTION:**  
A FINAL INSPECTION SHALL BE CONDUCTED BEFORE USE AND OCCUPANCY APPROVAL TO ENSURE THAT SIZING FOR TREATMENT AREAS HAS BEEN MET AND PERMANENT STABILIZATION HAS BEEN ESTABLISHED.

**MAINTENANCE CRITERIA:**  
MAINTENANCE OF AREAS RECEIVING DISCONNECTED RUNOFF IS GENERALLY NO DIFFERENT THAN THAT REQUIRED FOR OTHER LAWN OR LANDSCAPED AREAS. THE AREAS RECEIVING RUNOFF SHOULD BE PROTECTED FROM FUTURE COMPACTION (E.G. BY PLANTING TREES OR SHRUBS ALONG THE PERIMETER). IN COMMERCIAL AREAS, FOOT TRAFFIC SHOULD BE DISCOURAGED AS WELL.

**SEDIMENT CONTROL PLAN**  
SCALE: 1"=30'

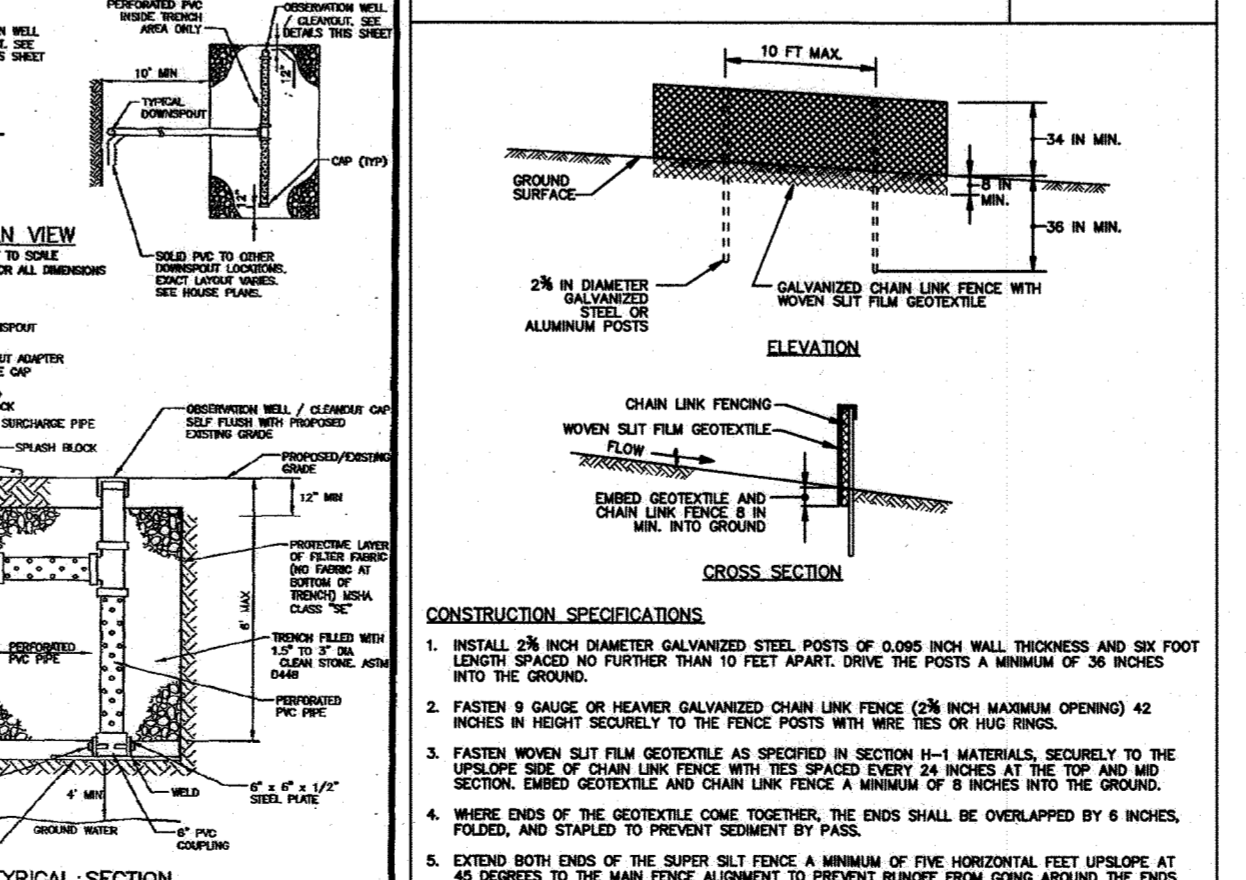
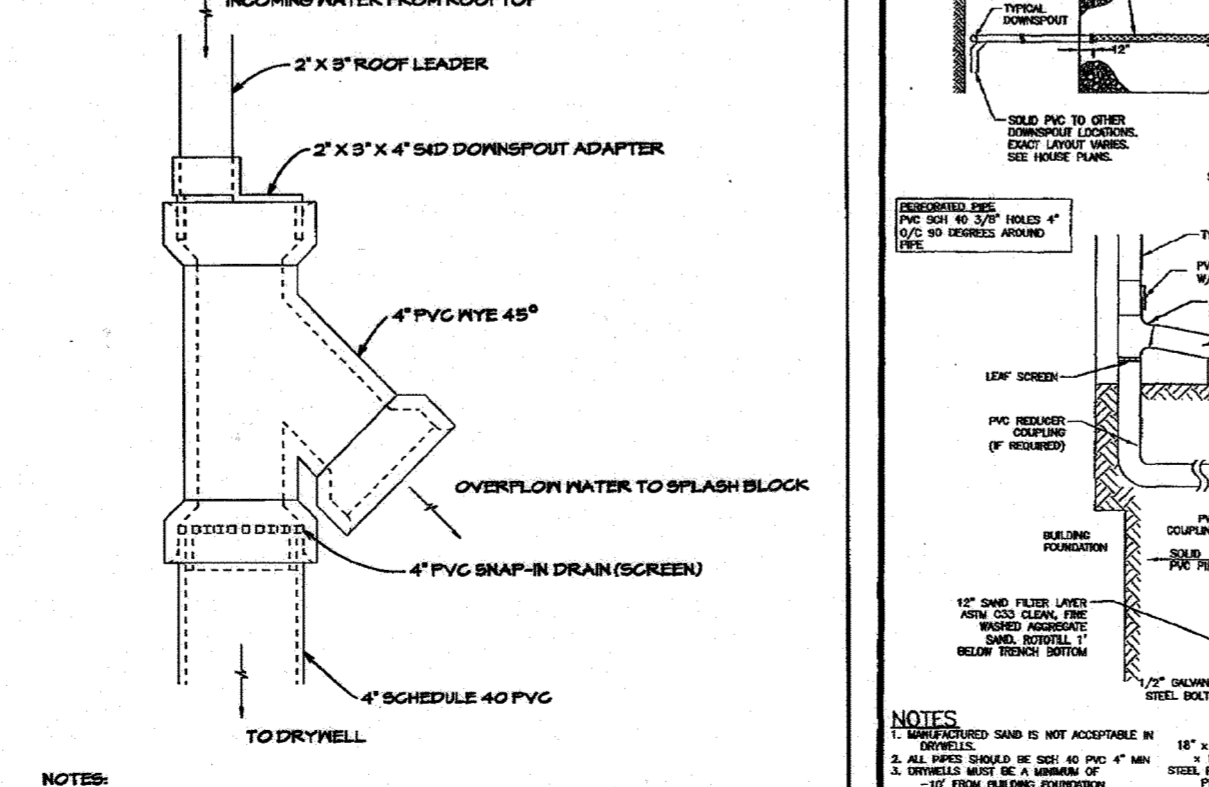


**ON-LOT DRYWELL - SIZING CHART**

ESD DA	LOT #	DW LOCATION	NUMBER OF DW'S	SURFACE SIZE FT x FT	STONE DEPTH (FT)	SAND DEPTH (FT)	OWNER	MAINTENANCE
1	34	R	1	20.00 X 5.00	4	1	PRIVATE	PRIVATE
1	34	R	1	10.00 X 10.00	4	1	PRIVATE	PRIVATE
1	34	R	1	10.00 X 10.50	4	1	PRIVATE	PRIVATE

R= REAR OF LOT F= FRONT OF LOT

**FIGURE 3 STANDARD DRYWELL DOWNPOUT FITTINGS**



**CONSTRUCTION SPECIFICATIONS:**

- INSTALL 24" DIAMETER GALVANIZED STEEL POSTS OF 0.065 INCH WALL THICKNESS AND SIX FOOT HIGHER THAN THE FINISHED SURFACE. DRIVE THE POSTS A MINIMUM OF 36 INCHES INTO THE GROUND.
- FASTEN 8 GAUGE OR HEAVIER GALVANIZED CHAIN LINK FENCE (ON INCH MAXIMUM OPENING) 42 INCHES IN FRONT OF THE FENCE POSTS WITH WIRE TIE OR HOOP RINGS.
- FASTEN WOVEN SLIT FILM GEOTEXTILE AS SPECIFIED IN SECTION N-1 MATERIALS, SECURELY TO THE UPRIGHT END OF THE SUPER SILT FENCE WITH WIRE TIE OR HOOP RINGS AT THE TOP AND 48 INCHES TO THE MAIN FENCE ALIGNMENT TO PREVENT RUNOFF FROM GOING UNDER THE ENDS OF THE SUPER SILT FENCE.
- WHERE ENDS OF THE GEOTEXTILE COME TOGETHER, THE ENDS SHALL BE OVERLAPPED BY 8 INCHES, FOLDED, AND STAPLED TO PREVENT SEEDS FROM PASSING.
- EXTEND BOTH ENDS OF THE SUPER SILT FENCE A MINIMUM OF FIVE HORIZONTAL FEET UPLOPE AT 45 DEGREES TO THE MAIN FENCE ALIGNMENT TO PREVENT RUNOFF FROM GOING UNDER THE ENDS OF THE SUPER SILT FENCE.
- PROVIDE MANUFACTURER CERTIFICATION TO THE INFILTRATION/PERMEABILITY AUTHORITY SHOWING THAT GEOTEXTILE USED MEETS THE REQUIREMENTS IN SECTION N-1 MATERIALS.
- REMOVE ACCUMULATED SEDIMENT AND DEBRIS WHICH DEVELOP IN AREAS BETWEEN SEDIMENT TRAPS AND SUPER SILT FENCES. REMOVE GEOTEXTILE IF FOUND TO UNDERMINING OR, REMOVE CHAIN LINK FENCING AND GEOTEXTILE.

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

**INDIVIDUAL PRACTICE ESDV DESIGN COMPUTATIONS**  
Project: Patapsco Crossing Lot 34  
Property Area: 0.300 Ac.  
Total Impervious: 34,100 sq. ft.  
Total Impervious Area: 12,360 sq. ft.  
Target ESDV Required: 867 c.f.  
ESDV Provided: 867 c.f.

PRACTICE	DA (SQ)	PRACTICE DA (SQ)	IMPERV (SQ)	IMPERV (SQ)	PERV (SQ)	PRACTICE PERV (SQ)	PRACTICE PERV (SQ)	PRACTICE 2.5" TARGET VOLUME	REV. REQUIRED	REV. PROVIDED	TOTAL VOLUME PROVIDED	REMARKS	
DA #1	999	0.02	999	0.02	0	0.00	100	0.95	79	205	NA	21	MICROSCALE DRYWELL (M-5) 20' X 5' X 5' X 0.4
DW '34B'	0.00	0.00	0.00	0.00	0	0.00	95	0.95	79	205	NA	21	MICROSCALE DRYWELL (M-5) 10' X 5' X 5' X 0.4
DW '34C'	1,158	0.03	1,158	0.03	0	0.00	100	0.95	90	234	NA	23	MICROSCALE DRYWELL (M-5) 10' X 10' X 5' X 0.4
Rooftop Disconnect	573	0.01	573	0.01	0	0.00	100	0.95	45	118	NA	12	NON-STRUCTURAL PRACTICE - ROOFTOP DISCONNECT 8' OF EACH 15' DISCONNECT 8' ESDV
DA #2	1,750	0.04	1,750	0.04	0	0.00	100	0.95	142	368	NA	37	NON-STRUCTURAL PRACTICE - NON-ROOFTOP DISCONNECT LENGTH WIDTH AREA 18' X 12' X 0.00 AC 12 ESDV
TOTALS	199	0.03	199	0.03	0	0.00	100	0.95	199	490	NA	50	

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING  
Date: 2/2/22  
Date: 2/2/22

**OWNER**  
PATAPSCO CROSSING, LLC.  
24012 FREDERICK ROAD  
CLARKSBURG, MD 20871  
301-428-0800

**BUILDER**  
MILLER AND SMITH  
ATTN: STEVE B. AYLOE  
1960 GALLOWAY ROAD, SUITE 200  
VIENNA, VA 22182  
703-821-2500

**DEVELOPER**  
PLEASANTS DEVELOPMENT, LLC.  
24012 FREDERICK ROAD  
CLARKSBURG, MD 20871  
301-428-0800

**ENVIRONMENTAL CONCEPT PLAN  
STORMWATER MANAGEMENT DRAINAGE  
AREA MAP & DETAILS  
PATAPSCO CROSSING  
LOT 34  
8524 SUNELL LANE**

TAX MAP 18 GRID 13  
2ND ELECTION DISTRICT

PARCEL 25 - ZONED: R-20  
HOWARD COUNTY, MARYLAND

**VOGEL ENGINEERING**

**TIMMONS GROUP**

3300 NORTH RIDGE ROAD, SUITE 110, ELLICOTT CITY, MD 21043  
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DESIGN BY: RHY  
DRAWN BY: KG  
CHECKED BY: RHY  
DATE: JANUARY 2022  
SCALE: AS SHOWN  
W.O. NO.: 47411

PROFESSIONAL CERTIFICATE  
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A FULLY LICENSED PROFESSIONAL ENGINEER UNDER THE ENGINEERING AND SURVEYING ACT OF 1949, EXPIRATION DATE 06-27-2022

ROBERT H. VOGEL, PE No. 16193

2 OF 2