BOYD & DOWGIALLO, P.A.
Engineers, Surveyors & Planners
Maryland Professional Engineering Firm License No. 47570

February 19, 2025

Anne Arundel County
Office of Planning and Zoning
2664 Riva Road
Annapolis, MD 21401

Re: 779 Snodgrass Road
Crownsville, MD 21032
Tax No.: 2413-0317-1620
Case #2024-0215-V

Attn: Mr. Robert Konowal

Dear Mr. Konowal,

We have received the recommendations/comments on the Variance for the above-referenced property, and on behalf of our client, Matthew Rhoderick, contract purchaser, we are submitting herewith a revised Variance application for development of the site.

The subject property is known as Lots 22 & 23, Block 36B, Section E, as shown on the record plat for Herald Harbor, recorded among the land records of Anne Arundel County in plat 4 at page 14. The property is part of Parcel 390 on Tax Map 31 in Block 23, and is located at 779 Snodgrass Road in Crownsville, MD 21032. The site is currently vacant and predominantly forested. The property is zoned R5 and is located within an area designated LDA on the Chesapeake Bay Critical Area Maps. The site contains 5,800 sqft. of land, the majority of which (5,754 sqft.) is identified as steep slopes; however, the site is not located in the Critical Area Buffer or the Expanded Buffer. No rare, threatened or endangered species were noted during field visits while preparing the Critical Area Report and the Variance Site Plan.

As shown on the revised Variance Site Plan, the footprint of the proposed dwelling has been further reduced from that which was shown on the Pre-File Plan (400 sqft. vs 512 sqft. or approximately 22%) and the location of the dwelling has been shifted towards Elm Trail to reduce the steep slope disturbance. In addition, the total proposed lot coverage on-site has been reduced from 1,172 sqft. to 916 sqft (excluding the portion of Snodgrass Road and the abutting driveway which encumber the property), which is well below the maximum allowable lot coverage of 1,950 sqft. per the Code. Stormwater management has been provided for the proposed improvements via an infiltration drywell, and lot clearing has also been further reduced from the Pre-File, consistent with ESD requirements. Through the aforementioned revisions and reductions in proposed improvements, the total steep slopes disturbance has been minimized to 3,573 sqft (excluding disturbance for the proposed water connection.) Lastly, the total proposed clearing on-site has been reduced to 3,521 sqft, well below the maximum allowable clearing of 5,194 sqft; and any reforestation requirements will be provided via off-site reforestation in an approved Critical Area Mitigation Bank.

As shown on the attached Variance Site Plan, the proposed development requires the following Variances:

1. A Variance to Article 17, Section 8-201 of the Code to allow the disturbance of 3,573 sqft. of 15%+ steep slopes on-site.
2. A Variance of 7' to the required 25' front setback noted in Article 18, Section 4-701 of the Code to allow a front setback of 18' to Elm Trail.
3. A Variance of 9' to the required 20' rear setback noted in Article 18, Section 4-701 of the Code to allow a rear setback of 11' to the abutting Lot 21.

In addition, in response to the comments and recommendations received from the prior Variance submittal as follows:

From the Memo dated 11/27/24 from Brian Chew with Environmental Health

The septic plan for the revised house and site improvements was approved on 2/4/25, as shown by the red-stamp septic plan submitted herewith.

From the comments dated 12/9/24 from Jean Janvier with I&P Engineering

1. The signed (updated) Variance request letter has been submitted to the County.
2. The draft Variance letter (without the specific areas identified) attached to the application is not applicable at this time.
3. The Code reference for the zoning setbacks has been updated; however, the requested relief is unaffected.
4. The hatching for lot coverage shown on the County topo map has been thawed.
5. With the reduction in the building footprint the downspouts along the eastern side are unnecessary and have been removed from the plan.
6. The address on the Variance application has been corrected to match the Site Plan.
7. As shown on the Site Plan, asphalt curb exists on both sides of Elm Trail.
8. The linetype for the existing water line has been shown in the Legend.
9. The limits of 15%+ slope are shown on the Variance Site Plan. The Environmental Health Department does not require setbacks to 15%+ slopes; therefore, only the 25%+ slopes are reflected on the Septic Plan.
10. Per Section 17-8-201(a) of the Code steep slope disturbance for utility connections do not require a Variance; therefore, the disturbance for utilities has not been included in the Variance request.
11. The reduced lot coverage has been coordinated in the SWM report, the site plan and this explanation letter.
12. The date of the GIS topography has been completed in general note #5, as requested.
13. The year of the SCS specifications has been updated to 2011.
14. The septic plan has been revised to reflect the reduced dwelling size and lot coverage.
15. The Project Notification accompanying the Critical Area Report has been updated to reflect the reduced project scope.
16. The reduced limits of disturbance have been coordinated in the SWM report, the site plan and this explanation letter.
17. The SWM report has been revised to reflect the reduced scope and all pages (re)numbered accordingly.
18. The duplicate Summary and Outfall Statements have been removed from the SWM report.
19. The SWM report has been revised to reflect the depth required to achieve ESD volume. Please note that the final size of the drywell is determined in the Overbank Flood Volume section of the SWM report.
20. The label for Overbank Flood Protection in the report has been labelled as IV.
21. The overbank flood protection volume (the volume required to maintain 10-year discharge from the site) has been used to compute the drywell size.
22. As noted in the critical area report, the site is currently forested by a mixture of hardwoods and evergreen trees. Given that the entire site is forested, and that no rare or unique trees requiring retention are present, individual trees have not been identified.
23. A list of all property owners within 300' was submitted with the Variance application; however, the plan has been revised to include a list of all abutting property owners.
24. For ease of presentation at the Variance hearing, the site plan has been reduced to one sheet. The remaining items noted in the SFD checklist not included in the Variance Plan will be provided on the grading plans submitted with the grading permit in the future.

25. The critical area report has been corrected to eliminate any references to permeable pavement.
26. No stormwater management is required for the existing lot coverage on-site (the driveway and road encroachment) which serve others.
27. The maximum lot coverage listed on the plans and in the reports has been coordinated to 1950 sqft, based on 25% of the site area + 500 sqft.
28. Please see response # 27 above.
29. Based on the results of the perc test on-site and for the abutting property to the north, the presence of suitable soils on-site is anticipated. However, upon approval of the Variance, a soil boring will be obtained to ensure the drywell design meets applicable standards.
30. We note that the SWM and utility design will be further reviewed with the grading permit in the future.
31. The driveway encroachment issue will be addressed with the grading permit in the future.
32. The grading plans submitted with the grading permit will include a profile of the infiltration drywell.
33. The SWM report submitted with the grading permit will include soil, vicinity and drainage area maps.
34. The plan has been revised to label the size of the water connection and existing mains abutting the site.
35. The approved red-stamped septic plan for the new/reduced dwelling has been submitted herewith.

In accordance with the Variance Instructions Checklist on-line, the following items are submitted herewith:

1. A signed Variance Application.
2. A copy of this explanation letter, including the statement of justification.
3. A copy of the Variance Site Plan, the architectural plans and one (1) copy of the Variance Submittal Requirements, and one copy of the approved (red-stamped) septic plan
4. The deed was included with the original Variance submittal.
5. A list of property owners within 300 feet was provided with the original Variance submittal.
6. A Filing Fee for the Variance fee and two signs was provided with the original Variance submittal.
7. a.) A copy of the revised Critical Area report, including the existing and developed plan views, one copy of the project notification application, one copy of the County topography map at 200 scale showing the property location.
   b.) The pre-file form was included with the original Variance submittal. Please note that the plan has been revised to show a further reduction in steep slope disturbance as noted above.
   c.) A copy of the completed single-family engineering checklist was included with the original Variance submittal. One copy of the updated/revised Stormwater Management Report.

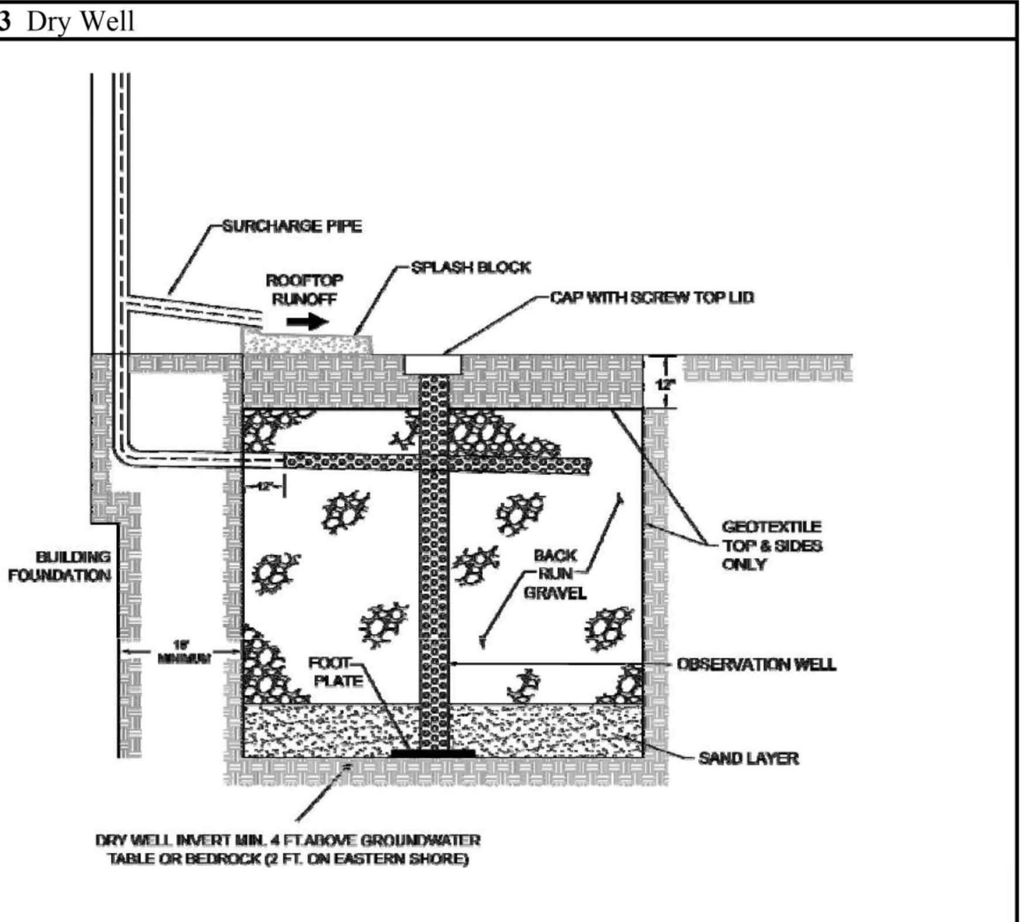
We appreciate your attention in this matter. If you have any questions or require any additional information regarding this request, please do not hesitate to contact our office.

Very truly yours,
Boyd & Dowgiallo, P.A.

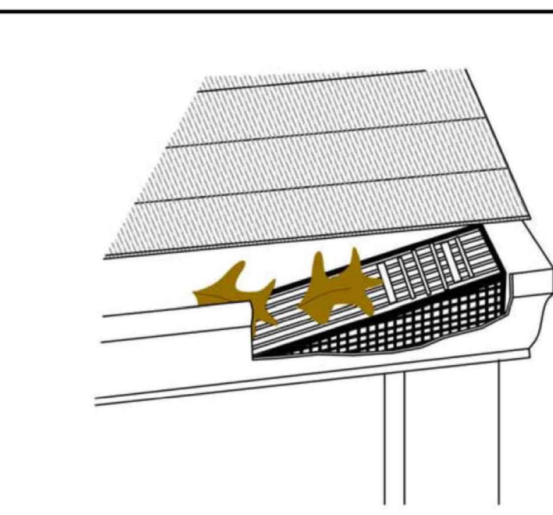
By: _____
Jerry Tolodziecki, P.E.

J.o.#20-257
cc: file
enclosures

Figure 5.13 Dry Well



Section



Gutter Drain Filter (Typical)

5.93 Supp.1

DRYWELL DETAIL

CRITICAL AREA TABULATION

Zoning	R5
Critical Area Classification	LDA
Total Site Area	5,800 Sq.Ft.± (0.13 Ac.±)
Total Critical Area	5,800 Sq.Ft.± (0.13 Ac.±)
Existing Forest (Within C.A.)	5,189 Sq.Ft.±
Maximum Clearing Allowed (Within C.A.)	N/A
Proposed Forest Clearing (Within C.A.)	3,521 Sq.Ft.±
Required Reforestation	3,521 Sq.Ft.± (to be provided by off–site mitigtion)
Ex Steep Slopes (15%+) On–Site	5,754 Sq.Ft.±
Steep Slope (15%+) Disturbance On–Site	3,573 Sq.Ft.±
Existing Lot Coverage	151 Sq.Ft.± (Includes a portion of Snodgrass Road and driveway from Lot 114)
Existing Lot Coverage To Be Removed	0 Sq.Ft.±
Maximum Lot Coverage (Within C.A.)	1,950 Sq.Ft.± (25% + 500 Sq.Ft.)
Proposed Lot Coverage (On–Site)	916 Sq.Ft.± (400 Sq.Ft. House + 288 Sq.Ft. D/W + 108 Sq.Ft. Screened Porch + 120 Sq.Ft. S/W)
Total Proposed Lot Coverage (Within C.A.)	1,067 Sq.Ft.± (400 Sq.Ft. House + 288 Sq.Ft. D/W + 108 Sq.Ft. Screened Porch + 120 Sq.Ft. Stairs + 151 Sq.Ft. Ex. Cover)

GENERAL NOTES

1. Notify the Anne Arundel County Department of Inspections & Permits, Inspection Division, (410)222–7784 (48) forty–eight hour before beginning the work shown on these plans.
2. The existing utilities and obstructions shown are from the best available records and shall be verified by the contractor prior to construction. Necessary precautions shall be taken by the contractor to protect existing services and mains, and any damage to them shall be repaired immediately at his own expense.
3. It shall be distinctly understood that failure to mention specifically any work which would normally be required to complete the project shall not relieve the contractor of his responsibility to complete such work.
4. Temporary sediment control measures shall be maintained until all contributing areas are graded and stabilized.
5. The property and topographic information shown hereon is based on field surveys performed by Atwell in April, 2024 and the A.A.Co. GIS Site dated 2020.
6. All disturbed areas shall be seeded or better as per plans.
7. The user is responsible to verify all information shown on this plan.
8. The contractor shall note that in case of a discrepancy between the scaled and the computed dimensions shown on these plans: the computed dimensions shall govern.
9. Pile dirt on the high side of the trench during utility construction.
10. The grading quantities shown hereon are for permit purposes only and should not be used for bidding purposes.
11. All construction shall be in conformance with the "2011 Maryland Standards and Specifications for Soil Erosion and Sediment controls."
12. For exact building dimensions, see Architectural Plans, by others.
13. All easements, irrespective of public or private disposition, are to be permanent unless otherwise labeled. All private easements have been labeled as such.
14. All roof drains shall be directed to the proposed SWM facilities as shown on this sheet.
15. This project is located within the Severn River Watershed.
16. For existing water, see A.A. County As–Built Drawing #15,653.
17. The boundary lines, bearings, and distances as shown hereon for all adjacent parcels, rights–of–way, etc. are taken from deed plotting's only. This drawing does not represent a field run survey of any parcel except Tax Map 31 Block 23 Parcel 390, Lots 22 & 23 as shown hereon.
18. The property shown hereon is not located within Flood Hazard Zone, as shown on the FIRM Flood Insurance Maps. See F.E.M.A. Flood Map 24003C0162F, dated February 18, 2015.
19. For title, see Deed Liber 17318 Folio 538.
20. The limits of developed woodlands shown here on are taken from aerial imagery shown on the Anne Arundel County G.I.S. Web Site.
19. For additional information regarding proposed septic system see PAT02051161 and perc test #T02014823.

I. ENVIRONMENTAL SITE DESIGN VOLUME

In Section 5.2.2 of the revised Chapter 5 of the 2000 M.D.E. Stormwater Design Manual, it is stated, "the criteria for sizing ESD practices are based on capturing and retaining enough rainfall so that the runoff leaving a site is reduced to a level equivalent to a wooded site in good condition as determined using U.S.D.A's Natural Resource Conservation Service methods…."the goal is to provide enough treatment using ESD practices to address Cp_v requirements by replicating an RCN for woods in good condition for the 1-year rainfall event. In accordance with the "Stormwater Management Act of 2007" and Table 5.3 of the revised Chapter 5 M.D.E. Manual, the environmentally sensitive runoff volume, ESD_v, is equal to,

$$ESD_v = P_E \times R_v \times A$$

Where, P_E = the rainfall target from Table 5.3
R_v = the volumetric runoff coefficient
A = site area

Site area = 5,800 sq. ft. (0.13 ac.)
Total Proposed Impervious Cover = 916 sq. ft.

%I =916/5,800 = 15.8%

$R_V = 0.05 + 0.009(15.8) = 0.192$
Existing soil types present = HSG "A"

From Table 5.3 of Chapter 5 of the M.D.E. Manual, the target rainfall based upon the impervious cover proposed and the soil types present is equal to 1.2".

and the ESD_v volume becomes,

ESD_v = (1.2")(0.192)(5,800)/12 = **111 cu. ft.**

This is the *total* ESDv volume required for the proposed improvements to return the site back to a state of "woods in good condition".

This volume will be provided on-site within ESD practices as described below.

5

MICRO-SCALE PRACTICES

Micro-scale Practices - Drywells - Section 5.4.3 M-5

Section 5.4.3 M-5 of Chapter 5 of the 2009 M.D.E. Stormwater Design Manual states that drywells may be used to treat runoff from small drainage areas such as a single rooftop or single downspout. When designed in accordance with the guidelines in Section 5.4.3 M-5, drywells will provide treatment for the required ESD_v and Re_v. A P_E value based on the ESD_v captured and treated shall be applied to the contributing drainage area.

A drywell will be utilized to capture and treat the runoff from the proposed roof area of the dwelling, deck and screened porch.

The proposed area of the dwelling, deck and screened porch equals approximately 508 s.f. Allowing for a maximum of 500 sq. ft. of roof area to a single downspout, and 1,000 sq. ft. to a drywell, the dwelling will require two downspouts. The Maximum ESD volume provided by one drywell can be found from the following equation:

$$ESD_v = \frac{(P_E)(\text{Roof Area})}{12} = ESD_v \text{ cu. ft.}$$

$$ESD_v = \frac{(2.7")(508 \text{ sqft.})}{12} = \mathbf{114 \text{ cu. ft.}}$$

Since the maximum ESD allowed exceeds the ESD volume required for the lot, the drywell can be sized to accommodate the entire ESD volume as follows:

Volume required = 111 cuft. using a void ratio of 0.40 increases the total required drywell storage volume to 111/0.40 = 278 cuft.

Use a circular drywell with a diameter of 5', yields a storage volume of 19.6 cu/ft, requiring a depth of 14 feet to provide the total storage of 278 cuft (ESD volume of 114 cuft) for the lot.

However, since the lot lacks an adequate outfall, the final sizes of the drywells will be provided below with the "Overbank Flood Protection Volume" of this Report.

SUMMARY OF ESD VOLUMES

Total Required ESD volume	***= 111 cu.ft.***
Microscale Practice – Drywell ESD volume prov'd.	= 114 cu. ft.
Total ESD volume prov'd.	= 114 cu.ft.
Total ESD volume required	**= 0 cu.ft.**

7

SWM COMPUTATIONS

STORMWATER MANAGEMENT SUMMARY TABLE

MINIMUM SIZING CRITERIA	SYMBOL	VOLUME REQUIRED (CUBIC–FEET)	SWM Practice	NOTES
ESDv Volume	(WQv)	111	M–5	Provided through the use of a microscale drywell practice
Recharge Volume	(Rev)	39	M–5	Provided through the use of a microscale drywell practice
Channel Protection Storage Volume	(CPv)	N/A	M–5	The channel protection volume for this lot is being provided through the use of environmental site design practices that provide the target rainfall value of 1.2", as specified in Table 5.3 of the revised M.D.E. Manual and return the site back to a "pre–development state of woods in good condition".
Overbank Flood Protection	(Qp10)	163	N/A	The Overbank Flood Protection Volume is being provided by the "Redcuced Curve Number Method", whereby a sufficient amount of ESDv volume is being retained on the site to reduce the 10–year post–development discharge rate to its pre–development rate.
Extreme Flood Protection	(Qf)	N/A	N/A	The extreme flood protection volume is not required since the site does not lie within a non–tidal 100–year floodplain and there are no properties downstream of the site that lie within a 100–yr. non–tidal floodplain.

STORMWATER MANAGEMENT NOTE

This grading permit #G0202_____ was reviewed under the 2010 regulations for stormwater management. Stormwater management practices will be provided for the proposed redevelopment shown hereon in accordance with Article 16, Section 4 and the final plan on file with the Office of Planning & Zoning. ESD to the MEP was achieved through the use of a microscale drywell practice, in accordance with Chapter 5, Section M–5, of the 2009 MDE Stormwater Design Manual.

SUMMARY OF ESD VOLUMES

Total Required ESD volume	= 111 cu. ft.
Total Drywell ESD volume prov'd.	= 163 cu. ft. (providing 10–yr. storm management)
Total ESD volume prov'd.	= 114 cu.ft.
ESD volume remaining	= 0 cu. ft.

OUTFALL STATEMENT

Runoff from the site flows in a pre–dominantly southerly direction to the right–of–way of Elm Trail, an existing 25–ft. public right–of–way, and crosses Elm Trail in a southwesterly direction and into a large wooded low–lying marsh area of Valentine Creek. The runoff joins Valentine Creek and meanders northwards into the Severn River. In accordance with the October, 2017 A. A. County Stormwater Management Practices & Procedures Manual, since the site is platted lot and the overbank flood protection volume is being provided on site, the site outfall and point–of–investigation (P.O.I.) are the point along the property's southern boundary line with Elm Trail.

The property was visited by an employee of Boyd & Dowgiallo, P.A. in September, 2024 to inspect the property and site outfall/ P.O.I. It was noted that the site outfall and the P.O.I. were found to be stabilized by lawns and woods and did not show any signs of erosion. Given that the overbank flood protection volume is being provided, there should not be an increase in runoff from the site or erosion downstream.

ADJOINING OWNERS

TAX MAP 31, BLOCK 23, PARCEL 390
HERALD HARBOR–LOTS 111 TO 114, BLOCK 36B
PLAT BOOK 4 PAGE 14
JEAN MIGUEL PAUKO L. LANDDICHO
MA ANNA CLAUDIA MENDOZA
410 ELM TRIAL
CROWNSVILLE, MD 21032
TAX # 02–413–01587625
ZONING R5
L 27956 / F 448

TAX MAP 31, BLOCK 23, PARCEL 390
HERALD HARBOR–LOTS 20 & 21, BLOCK 36B
PLAT BOOK 4 PAGE 14
VIOLETA SANJUAN CALZADO
777 SNODGRASS ROAD
CROWNSVILLE, MD 21032
TAX # 02–413–03259321
ZONING R5
L 39968 / F 40

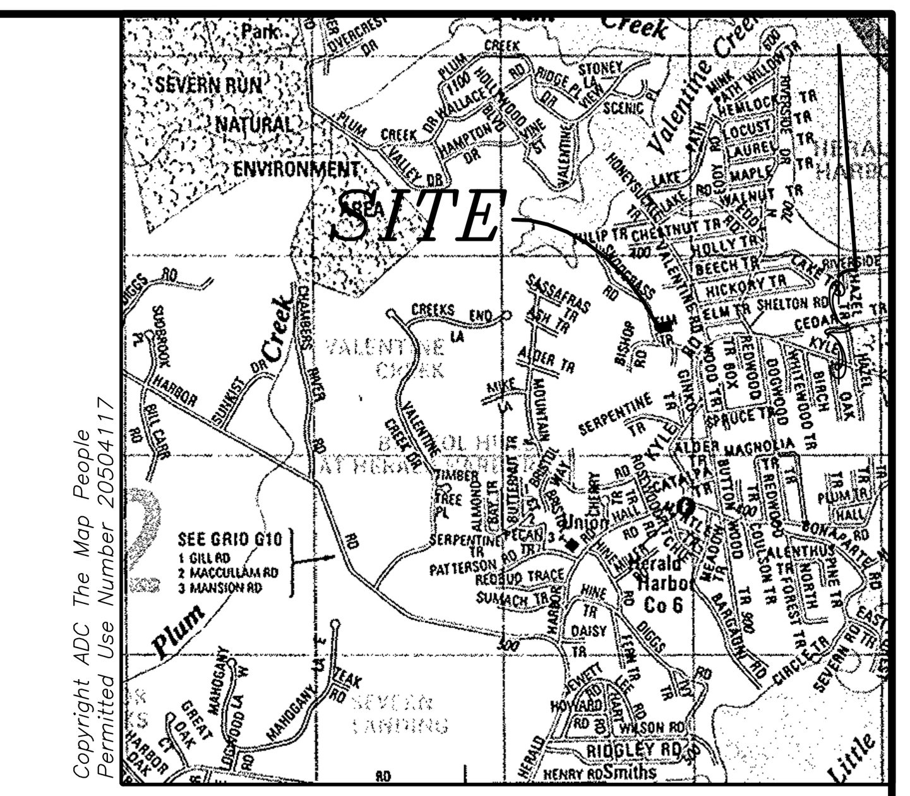
TAX MAP 31, BLOCK 23, PARCEL 390
HERALD HARBOR–LOT 24R BLOCK 36A
PLAT BOOK 5325 PAGE 241
CALVIN E. SEARS
BRENDA L. SEARS
789 SNODGRASS ROAD
CROWNSVILLE, MD 21032
TAX # 02–413–08402900
ZONING R5
L 7106/ F 227

VARIANCE NOTES:

1. In accordance with Article 17, Section 8–201 of the Anne Arundel County Code, a variance is required to allow the disturbance of 3,573 Sq.Ft. of 15%+ steep slopes within the Critical Area and allow the construction of a dwelling and driveway, in accordance with Variance Case # 2024–0215–V, dated ______, 2025.

2. In accordance with Article 18, Section 4–700 of the Anne Arundel County Code, a 7 foot variance to the required 25 foot front setback to allow a front setback of 18 feet was granted with Variance Case # 2024–0215–V, dated ______, 2025.

3. In accordance with Article 18, Section 4–700 of the Anne Arundel County Code, a 8 foot variance to the required 20 foot side setback to allow a rear setback of 12 feet was granted with Variance Case # 2024–0215–V, dated ______, 2025.



VICINITY MAP
SCALE: 1"=2000'

LEGEND

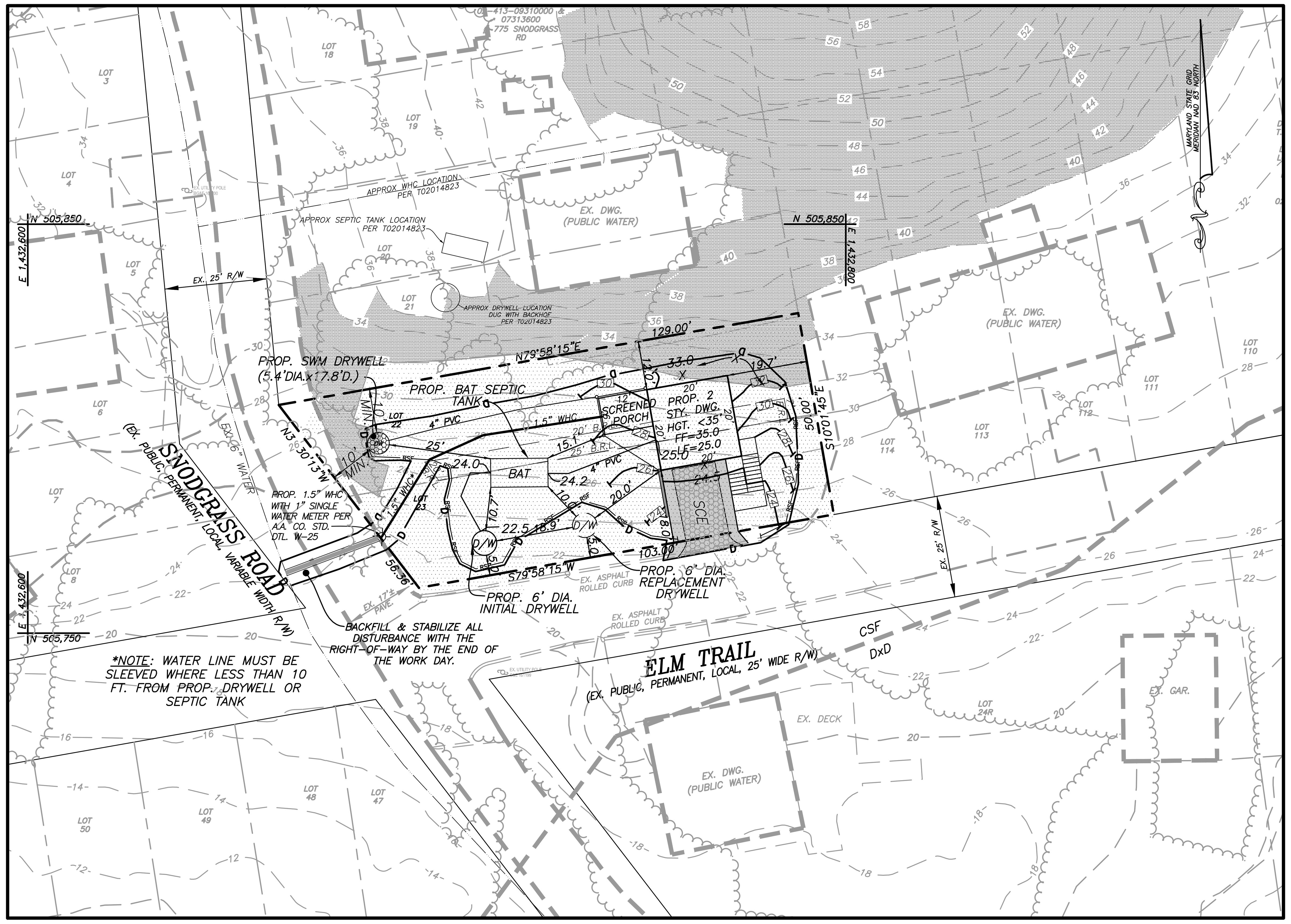
Existing Curb	
Existing Contour	51
Existing Wire Fence	
Existing Wood Fence	
Existing Woods line	
Proposed Contour	18
Proposed Super Silt Fence	SSF
Proposed Limit of Disturbance	D
Stabilized Construction Entrance	S.C.E.
Perc Test Location	
Prop. Septic Replacement Sytem #1	R1
Prop. Septic Replacement Sytem #2	R2
Prop. Stormwater Management Drywell	
BAT Septic Tank	BAT
Ex. 15% to 25% Slopes	
Ex. 25% Slopes	
Prop. Gravel/Paved Driveway	
25% Slope Buffer	
Prop. Downspout & Roof Leader	
Ex. Water Line	

SETBACKS (ZONED R5)

Front . . . . 25'
Rear . . . . 20'
Side . . . . 7'

SITE ANALYSIS

Zoning	R5
Critical Area Classification	LDA (Modified Buffer)
Total Site Area	5,800 Sq.Ft.± (0.13 Ac.±)
Total Disturbed Area	3,846 Sq.Ft.±
Vegetative Area	2,930 Sq.Ft.±
Predominant Soil Type	Collington, Wist, and Westphalia soils, CSF, 25 to 40% (HSG "A")
Existing Lot Coverage	151 Sq.Ft.± (Ex. cover w/in Snodgrass Rd.)
Existing Lot Coverage To be Removed	0 Sq.Ft.±
Proposed Lot Coverage	916 Sq.Ft.± or 15.8%
Grading Quantities	100 cu. yds. Cut
	50 cu. yds. Fill



PLAN VIEW
SCALE: 1"= 20'

NO.	DATE	BY	REVISION	APPROVED	DATE

OWNER
JUDE HOGAN
1 Whispering Surf Lane
Scarborough, ME 04074

Maryland Professional Engineering Firm License No. 47570
BOYD & DOWGIALLO, P.A.
ENGINEERS*SURVEYORS*PLANNERS
412 Headquarters Drive, Suite 5
Millersville, Maryland 21108
(410) 729–1234 (P)
(410) 729–1243 (F)
JERRYT@BNDPA.COM

STATE OF MARYLAND — JEROME EDWARD YOLOZIECKI — NO. 19577 — PROFESSIONAL ENGINEER

"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. 19577, EXPIRATION DATE: 3–16–2026."

VARIANCE/GRADING & SEDIMENT CONTROL PLAN

Job No.: 20–257
Sheet No.: 1 of 1
Checked By: JET
Date: FEBRUARY, 2025
Permit #G0202_____
Proj. No.

LOTS 22 & 23, BLOCK 36B, SECTION E, HERALD HARBOR

PLAT BOOK 4, PAGE 14
TAX MAP 31 BLOCK 23, PARCEL 390
ZONED R5

SECOND DISTRICT — ANNE ARUNDEL COUNTY, MD 21032

\\HAL\Land Projects 2020\3 Digit\20–257\DWG\20–257–BASE 9–3–24.dwg //VARIANCE PLAN–8–15–24

JOB# 20–257

McHALE
LANDSCAPE
DESIGN, INC.

Corporate Office
6212 Leapley Road
Upper Marlboro, MD 20772
(301) 599-8300

Annapolis Office
911 West Street
Annapolis, MD 21401
(410) 990-0894

Easton Office
29459 Pintail Drive
Easton, MD 21601
(410) 770-9449

Green Gardens Office
23023 Frederick Road
Clarksburg, MD 20871
(301) 972-9090

Virginia Office
6819 Tennyson Drive
McLean, VA 22101
(703) 760-8600

mchalelandscape.com
info@mchalelandscape.com

CRITICAL AREA REPORT NARRATIVE

Site Information:

- 779 Snodgrass Rd, Crownsville, MD 21032
- Owner – Jude Hogan
- Applicant – Matthew Rhoderick, McHale Landscape Design

Describe the proposed use of the subject property and include if the project is residential, commercial, industrial, or maritime.

- 779 Snodgrass Rd is a 5,800 SF residential unimproved infill corner lot with current water tap connection at the roadway. The property is wooded, with portions containing steep slopes and adjacent developed properties or roadway on all sides. The property is within the R5 residential zone and is in the LDA Critical area classification.

Describe the type of predominant trees and shrubs on the subject property. Include a statement addressing the square footage of the property that is vegetated with trees and shrubs, how much of the property will be disturbed by the proposed development, and how the disturbance will be mitigated.

- Predominant trees include Tulip Poplar, Walnut, Hickory, Maple, and Holly. Predominant shrubs include Yew, Laurel, Mahonia, but much of the wooded area is predominantly shade, evergreen, and understory trees with minimal shrubs. The total wooded area for the property is 5,189 SF. The total area to be disturbed is 3,846 SF, however the site area for the house and driveway is only 916 SF. Construction for this work estimates the removal of 3,521 SF of forested area to allow for grading and drainage, site utilities, and construction of the house and driveway. Any required mitigation for the disturbance will be provided by off-site mitigation in an approved Critical Area Mitigation Bank.

Describe the methods to minimize impacts on water quality and habitat from proposed construction (i.e. stormwater management, sediment control, and silt fence).

- A reinforced silt fence will be installed around the proposed disturbance. Machinery to be used in the construction process will enter through a construction entrance that is located at the proposed driveway entrance. All materials to be unloaded from the construction entrance and staged directly in project area or house during construction. Stormwater management to be addressed with the following Environment Site Design (ESD) elements:
    a. Permeable Pavement (A-2) – Paved areas of the driveway are to be constructed with permeable pavers on top of a geogrid and gravel base to allow for infiltration within an at-source practice.
    b. Conservation Landscaping – Disturbed areas to be restored with a mixture of native trees, shrubs and perennials to allow for the site to minimize runoff and stabilize soils.
    c. Micro-Scale Practices (Dry Wells) (M-5) – Roof area runoff to be captured directly into a dry well system as shown on the site plan, to meet ESDv and REv.

McHALE
LANDSCAPE
DESIGN, INC.

Corporate Office
6212 Leapley Road
Upper Marlboro, MD 20772
(301) 599-8300

Annapolis Office
911 West Street
Annapolis, MD 21401
(410) 990-0894

Easton Office
29459 Pintail Drive
Easton, MD 21601
(410) 770-9449

Green Gardens Office
23023 Frederick Road
Clarksburg, MD 20871
(301) 972-9090

Virginia Office
6819 Tennyson Drive
McLean, VA 22101
(703) 760-8600

mchalelandscape.com
info@mchalelandscape.com

Calculate the impervious surface before and after construction, including all structures, gravel areas, driveways, and concrete areas.

- The existing impervious surface (Lot Coverage) is 151 SF. The proposed impervious surface (Lot Coverage) is as follows: Proposed Dwelling – 400 SF, Proposed Driveway – 288 SF, Proposed Sidewalk and Steps – 120 SF and Proposed Porch – 108 SF. The total existing and proposed impervious area (Lot Coverage) = 1,067 SF. The allowable lot coverage per classification LDA is 25% of the parcel plus 500 SF, or 1,963 SF

If applicable, describe any habitat protection areas on the subject property including expanded buffers, steep slopes of 15% or greater, rare and endangered species, anadromous fish propagation waters, colonial waterbird nesting sites, historic waterfowl staging and concentration areas, riparian forests, natural heritage areas, and plant and wildlife habitats of local significance.

- The applicable habitat protection areas subject to this property are steep slopes of 15% or greater and the steep slope buffer. In siting the proposed structure, the health department requires all portions of the septic system to be located outside of the steep slopes and buffer. After locating this system, the only location for the proposed house is within the steep slope at the rear of the property, to meet setbacks from site facilities. Construction of the house foundation would facilitate stabilization of the steep slopes and fall into character of surrounding properties built into the slope.

Sincerely,

Applicant Information:

- McHale Landscape Design MHIC #29697
  - 911 West Street, Annapolis, MD 21401
  - (410)-990-0894
- Matthew Rhoderick – Registered Landscape Architect, #3731
  - (301)-512-8234
  - Mattr@mchalelandscape.com

STORMWATER MANAGEMENT COMPUTATIONS

For

LOTS 22 & 23
779 SNODGRASS ROAD
PLAT BOOK 4, P. 14
Tax Map 31, Block 23, Parcel 390
CROWNSVILLE, MD 21032

To accompany Variance Submittal
Case#2024-0215-V

February, 2025

"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. 19577, EXPIRATION DATE 3-16-2026"

by

Boyd & Dowgiallo, P.A.
412 Headquarters Drive
Suite 5
Millersville, MD 21108
410/729-1234

TABLE OF CONTENTS

STORMWATER MANAGEMENT STATEMENT

As stated in Article 16 of the Anne Arundel County Code, the purpose of Stormwater Management is "to protect and promote public health, safety and general welfare through the management of stormwater, to protect public and private property from damage, to reduce the effects of land use changes on stream channel erosion, to maintain and assist in the improvement of water quality, to preserve and enhance the environmental quality of streams and stream valleys, and to minimize adverse impacts on water quality and conserve plant, fish, and wildlife habitat."

In accordance with the General Performance Standards, outlined in the 2010 Anne Arundel County Stormwater Practices and Procedures Manual, the use of Environmental Site Design Practices (ESD) shall be provided as necessary to address the required performance standards, to prevent adverse impacts from stormwater runoff.

As defined, in Chapter 6, Section 6.1.5, the MEP standard is met when:

I. channel stability is maintained and
II. predevelopment groundwater recharge is replicated and
III. non-point source pollution is maintained and
IV. regenerative step pool conveyance systems are employed wherever practicable on all public stormwater systems.

INTRODUCTION

The subject site is known as Lots 22 & 23, Block 36B Section E of Herald Harbor, as shown on the plat of "Herald Harbor", recorded among the Land Records of Anne Arundel County in plat book 4, at page 14, and is located at 779 Snodgrass Road in Crownsville, Maryland 21032. The site contains approximately 5,800 sq. ft. (0.13 ac.) of land zoned R5 and is located on the north side of the intersection of Snodgrass Road and Elm Trail. It its current condition, the property is vacant and is predominantly covered by existing woodlands. Ground slopes on the site vary between 14 and 30% and the site drains in a southwesterly direction to the right of way of Elm Trail. The lots are located within a Limited Development Area of the Chesapeake Bay Critical Area due to its proximity to the Severn River and are shown on F.E.M.A. flood map 24003C0162F, but are not impacted by a tidal flood zone.

The property is not known to contain any rare, threatened or endangered species of plants, animals, and no wildlife habitat areas have been identified. The site is not known to contain any historical or archaeological artifacts or other items of historical or archaeological interest.

Planned development of the site includes the construction of a single-family residential dwelling, driveway, sidewalk, public water connection, private septic system, and stormwater management practices. The proposed improvements will result in the disturbance of approximately 3,846 sq. ft. and result in a new impervious cover of 916 sq. ft.

CONSIDERATION OF SWM PRACTICES & ALTERNATIVES

Stormwater design for the proposed improvements was provided in accordance with Chapter 5 of the 2009 M.D.E. where three general types of stormwater methods are used to provide the required ESD volume at a site:

1. *Alternative Surfaces*
   Listed under Section 5.3, these surfaces include green roofs, permeable pavements and reinforced turf. A green roof practice was considered, but the heavier structural design required for the roof and the limited style options available are discouraging to homeowners. Therefore, this practice was not selected. The second alternative, permeable or porous pavement, is a stormwater management practice that was considered for the driveway area but could not be utilized due to the existing ground slopes. Therefore, this practice was not considered either. Reinforced turf was considered but declined due to the ground slopes present. Therefore, for this project, no alternative surfaces were chosen as an ESD practice.

2. *Non-structural Practices*
   Listed under Section 5.4.2 of the 2009 M.D.E. Manual, these practices include disconnection of rooftop runoff, disconnection of non-rooftop runoff, and sheetflow to conservation area. A disconnection of rooftop runoff practice was not selected due to the ground slopes present on the lot. A disconnection of non-rooftop runoff practice was not selected either due to ground slopes. A sheetflow to conservation area practice was not utilized due to the lack of any wooded conservation areas on or adjacent to the subject site. Therefore, no non-structural disconnection of non-rooftop runoff practices were utilized for the proposed development.

3. *Micro-scale Practices*
   Listed under Section 5.4.3 of the 2009 M.D.E. Manual, these practices include small water quality treatment devices to capture runoff from small, discrete areas. Out of the nine options listed under this category, those that provided the most effective treatment were the use of a drywell practice. This practice was utilized to capture and treat runoff from the proposed rooftop area of the dwelling.

PROTECTION OF NATURAL RESOURCES

Through the use of minimal grading techniques, the disturbed area will remain small and the amount of natural resources affected will be small. Through modern, environmentally friendly stormwater management techniques, rainwater will be captured by using practices that make use of micro-scale practices. These help to reduce the amount of disturbance to any existing natural resources also.

RETENTION OF NATURAL FLOW PATTERNS

Through the use of proposed grades that will mimic the existing site grades, no disturbance to existing flow patterns will occur and the direction of rainwater runoff will remain largely unaffected.

REDUCTION OF IMPERVIOUS SURFACES

The amount of impervious cover proposed is within the acceptable amount allowed under zoning and Critical Area laws.

POLLUTANT REDUCTION & REMOVAL

Given that the site is *not* located within a Chesapeake Bay IDA critical area, it is *not* mandatory that the proposed stormwater management techniques address the "Critical Area Guidance Manual" and provide for 10% pollutant removal reduction. However, the proposed microscale practice will provide pollutant removal to some extent and help reduce the amount of phosphorus and other chemicals to downstream receiving storm drains and waters.

IMPLEMENTATION OF SEDIMENT & EROSION CONTROL

The only sediment control measures being used are those provided to capture sediment laden runoff from leaving the site.

SOIL & FACILITY INVESTIGATION

The Anne Arundel County Soil Survey indicates that the entire site is underlain by soils of the Collington-Wist & Westphalia soils, (CSF), 25 to 40% slopes. These soil types have a hydrologic rating of "A" and are considered to be very conducive to infiltration practices - overall. The stormwater management practice chosen to provide treatment of runoff from impervious areas on the site are based on the results of perc tests taken by a Sanitarian with the Health Department under perc test PAT02051161 and T02014823. Based on the results of the perc tests, the use of infiltration as a means of providing stormwater management on site is a feasible alternative.

SUMMARY OF CONCLUSIONS

In accordance with the 2009 Maryland Department of the Environment (M.D.E.) Stormwater Design Manual and the 2017 Anne Arundel County Storm Water Management Practices and Procedures Manual, the water quality, recharge, channel protection, overbank flood protection, and extreme flood protection volumes were considered in the overall stormwater management design for this site.

ESDv is required in the amount of in the amount of 116 cu. ft. and is being provided by a microscale drywell practice. The recharge volume is required in the amount of 41 cu. ft. and is automatically being provided through the use of the ESD practices being utilized on-site. The channel protection volume is being provided since the environmental site design target rainfall amount is being met through the use of ESD practices, in accordance with the 2009 M.D.E. Manual. The overbank flood protection volume is being provided by the "Reduced Curve Number Method", whereby a sufficient amount of ESDv volume is being provided on-site to reduce the post-development 10-year discharge to its 10-year pre-development discharge rate. The extreme flood protection volume is not required since the site does not lie within a non-tidal 100-year floodplain and there are no properties downstream of the site that lie within a 100-yr. non-tidal floodplain.

OUTFALL STATEMENT

Runoff from the site flows in a pre-dominantly southerly direction to the right-of-way of Elm Trail, an existing 25-ft. public right-of-way, and crosses Elm Trail in a southwesterly direction and into a large wooded low-lying marsh area of Valentine Creek. The runoff joins Valentine Creek and meanders northwards into the Severn River. In accordance with the October, 2017 A. A. County Stormwater Management Practices & Procedures Manual, since the site is platted lot and the overbank flood protection volume is being provided on site, the site outfall and point-of-investigation (P.O.I.) are the point along the property's southern boundary line with Elm Trail.

The property was visited by an employee of Boyd & Dowgiallo, P.A. in September, 2024 to inspect the property and site outfall/ P.O.I. It was noted that the site outfall and the P.O.I. were found to be stabilized by lawns and woods and did not show any signs of erosion. Given that the overbank flood protection volume is being provided, there should not be an increase in runoff from the site or erosion downstream.

STORMWATER MANAGEMENT
COMPUTATIONS

I. ENVIRONMENTAL SITE DESIGN VOLUME

In Section 5.2.2 of the revised Chapter 5 of the 2000 M.D.E. Stormwater Design Manual, it is stated, "the criteria for sizing ESD practices are based on capturing and retaining enough rainfall so that the runoff leaving a site is reduced to a level equivalent to a wooded site in good condition as determined using U.S.D.A's Natural Resource Conservation Service methods…."the goal is to provide enough treatment using ESD practices to address Cp_v requirements by replicating an RCN for woods in good condition for the 1-year rainfall event. In accordance with the "Stormwater Management Act of 2007" and Table 5.3 of the revised Chapter 5 M.D.E. Manual, the environmentally sensitive runoff volume, ESD_v, is equal to,

$$ESD_v = P_E \times R_v \times A$$

Where, P_E = the rainfall target from Table 5.3
R_v = the volumetric runoff coefficient
A = site area

Site area = 5,800 sq. ft. (0.13 ac.)
Total Proposed Impervious Cover = 916 sq. ft.

%I =916/5,800 = 15.8%

$R_V = 0.05 + 0.009(15.8) = 0.192$
Existing soil types present = HSG "A"

From Table 5.3 of Chapter 5 of the M.D.E. Manual, the target rainfall based upon the impervious cover proposed and the soil types present is equal to 1.2".

and the ESD_v volume becomes,

$$ESD_v = (1.2")(0.192)(5,800)/12 = \mathbf{111\ cu.\ ft.}$$

This is the *total* ESDv volume required for the proposed improvements to return the site back to a state of "woods in good condition".

This volume will be provided on-site within ESD practices as described below.

STORMWATER
MANAGEMENT DESIGN
With
ESD_v PRACTICES

MICRO-SCALE PRACTICES

Micro-scale Practices - Drywells - Section 5.4.3 M-5

Section 5.4.3 M-5 of Chapter 5 of the 2009 M.D.E. Stormwater Design Manual states that drywells may be used to treat runoff from small drainage areas such as a single rooftop or single downspout. When designed in accordance with the guidelines in Section 5.4.3 M-5, drywells will provide treatment for the required ESD_v and Re_v. A P_E value based on the ESD_v captured and treated shall be applied to the contributing drainage area.

A drywell will be utilized to capture and treat the runoff from the proposed roof area of the dwelling, deck and screened porch.

The proposed area of the dwelling, deck and screened porch equals approximately 508 s.f. Allowing for a maximum of 500 sq. ft. of roof area to a single downspout, and 1,000 sq. ft. to a drywell, the dwelling will require two downspouts. The Maximum ESD volume provided by one drywell can be found from the following equation:

$$ESD_v = \frac{(P_E)(\text{Roof Area})}{12} = ESD_v \text{ cu. ft.}$$

$$ESD_v = \frac{(2.7")(508 \text{ sqft.})}{12} = \mathbf{114 \text{ cu. ft.}}$$

Since the maximum ESD allowed exceeds the ESD volume required for the lot, the drywell can be sized to accommodate the entire ESD volume as follows:

Volume required = 111 cuft. using a void ratio of 0.40 increases the total required drywell storage volume to 111/0.40 = 278 cuft.

Use a circular drywell with a diameter of 5', yields a storage volume of 19.6 cu/ft, requiring a depth of 14 feet to provide the total storage of 278 cuft (ESD volume of 114 cuft) for the lot.

However, since the lot lacks an adequate outfall, the final sizes of the drywells will be provided below with the "Overbank Flood Protection Volume" of this Report.

SUMMARY OF ESD VOLUMES

Total Required ESD volume	***= 111 cu.ft.***
Microscale Practice – Drywell	
ESD volume prov'd.	= 114 cu. ft.
Total ESD volume prov'd.	= 114 cu.ft.
Total ESD volume required	**= 0 cu.ft.**

II. RECHARGE VOLUME

The required recharge volume (Re_V) for the proposed development is determined in accordance with the following equation, as stated in Section 2.2 of the MDE Stormwater Design Manual:

$$Re_V = \frac{(S)(R_V)(A)}{12}$$ ac-ft, where A and R_V are as defined above, and

S = soil specific recharge factor;
= 0.42 for type "A" soil.

The required volume is calculated as follows:

Rev = (0.42)(0.192)(5,800 sq. ft.)/12 = **39 cu. ft.**

This is the required recharge volume required for the proposed improvements. The recharge volume will be provided through the use of environmental site design practices, as described below.

III. CHANNEL PROTECTION VOLUME

The channel protection volume for this lot is being provided through the use of environmental site design practices that provide the target rainfall value of 1.2", as specified in Table 5.3 of the revised M.D.E. Manual and return the site back to a "pre-development state of woods in good condition".

V. OVERBANK FLOOD PROTECTION VOLUME

The overbank flood protection volume is required in the amount of 163 cu. ft. and was determined through the Reduced Curve Number Method. This volume will be provided within the proposed stormwater drywell on-site serving the dwelling as sized above for the ESDv volume, as follows:

$V_{const.}$ = 163 cu. ft./0.40 = 408 cu. ft. (where 0.40 equals the porosity of #2 stone)

Based on required setbacks, the maximum drywell diameter for the proposed layout is 5.4 feet. Using a diameter of 5.4', the total storage volume from the drywell is 22.9 cuft/ft, requiring a drywell depth of 17.8 feet to provide the required volume.

Therefore, provide a drywell on-site with the dimensions of 5.4' Dia x 17.8'D to provide the overbank flood protection volume in the amount of 163 cu. ft.

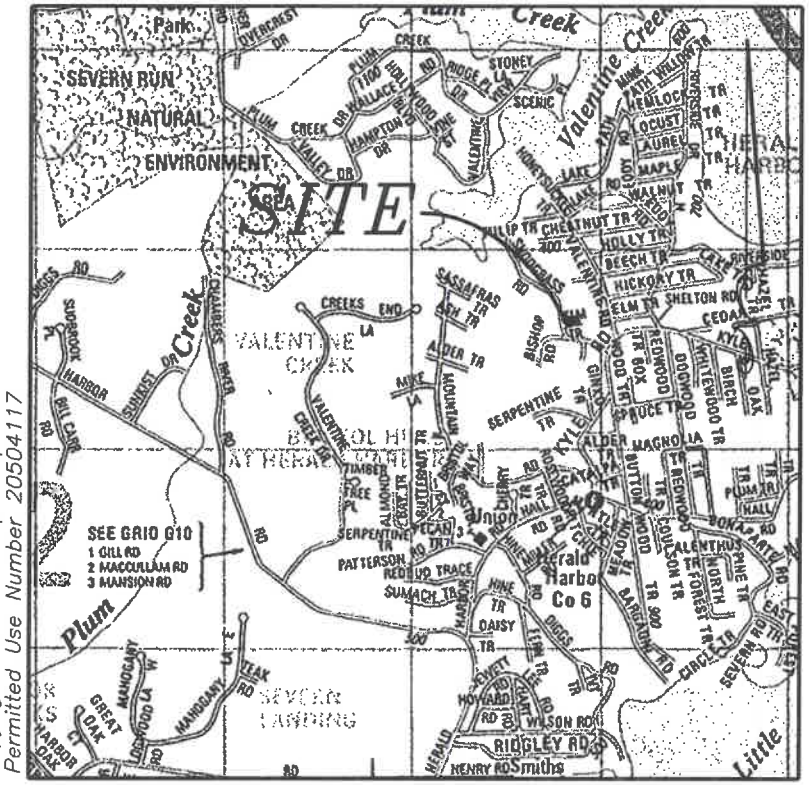
The overbank flood protection volume is being provided by the "Reduced Curve Number Method", whereby a sufficient amount of ESDv volume is being provided on-site to reduce the post-development 10-year discharge to its 10-year pre-development discharge rate.

V. EXTREME FLOOD PROTECTION

The extreme flood protection volume is not required since the site does not lie within a non-tidal 100-year floodplain and there are no properties downstream of the site that lie within a 100-yr. non-tidal floodplain.

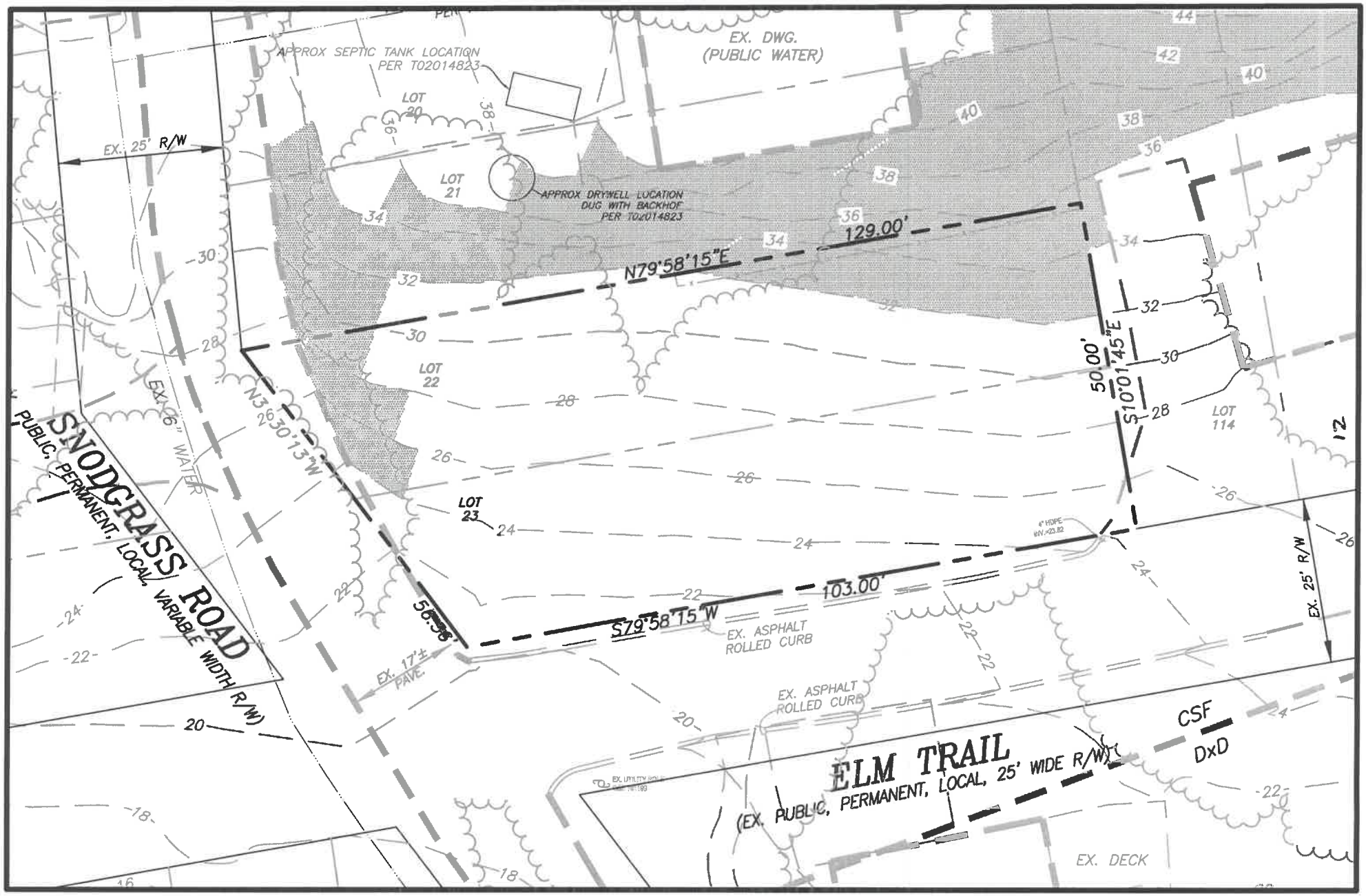
SOILS & VICINITY MAPS

(See GSC Plans for Maps)



VICINITY MAP

SCALE: 1"=2000'



SOILS MAP

SCALE: 1"= 20'

SOILS LEGEND

CSF: Collington, wist, and westphalia soils, 25 to 40 percent slopes (A)

TR-55 COMPUTATIONS

(site only)

CHANGE IN CURVE NUMBER METHOD for 10-yr. Storm

(per 10-2017 A. A. County SWM Practices & Procedures Manual)

779 Snodgrass Road
Crownsville, MD 21032
10 - YEAR

By: JET
8/19/2024

$CN = 200 / [(P + 2Q + 2) - \sqrt{(5PQ + 4Q^2}]$

Q_{stored}, in.	=	0.35
P (design rainfall depth), in.	=	5.2
$Q_{dev.}$, in.	=	0.78
Q ($Q_{dev.}$ - Q_{stored}), in.	=	0.43

CN = 43.4

RCN = 50

Q_{stored} = ESDv c.f.x 12 / (43,560 x Site Ac.) = **X"**

Qstored= 163 cu.ft. or 0.35
Qdev= 0.78 in.
Site = 0.13 ac.

WinTR-55 Current Data Description

--- Identification Data ---

User: TFJ
Project: 779 SNODGRASS RD
SubTitle: 10 YR
State: Maryland
County: ANNE ARUNDEL
Filename: C:\TR55\20-257 10yr.w55

Date: 9/25/2024
Units: English
Areal Units: Acres

--- Sub-Area Data ---

Name	Description	Reach	Area(ac)	RCN	Tc
PRE		Outlet	0.13	30	0.1
POST		Outlet	0.13	50	0.1
REDUCED		Outlet	0.13	43	0.104

Total area: .39 (ac)

--- Storm Data --

Rainfall Depth by Rainfall Return Period

2-Yr (in)	5-Yr (in)	10-Yr (in)	25-Yr (in)	50-Yr (in)	100-Yr (in)	1-Yr (in)
3.3	.0	5.2	.0	.0	7.4	.0

Storm Data Source: User-provided custom storm data
Rainfall Distribution Type: Type II
Dimensionless Unit Hydrograph: <standard>

779 SNODGRASS RD
10 YR
ANNE ARUNDEL County, Maryland

Storm Data

Rainfall Depth by Rainfall Return Period

2-Yr (in)	5-Yr (in)	10-Yr (in)	25-Yr (in)	50-Yr (in)	100-Yr (in)	1-Yr (in)
3.3	.0	5.2	.0	.0	7.4	.0

Storm Data Source: User-provided custom storm data
Rainfall Distribution Type: Type II
Dimensionless Unit Hydrograph: <standard>

779 SNODGRASS RD
10 YR
ANNE ARUNDEL County, Maryland

Watershed Peak Table

Sub-Area or Reach Identifier	Peak Flow by Rainfall Return Period 10-Yr (cfs)
SUBAREAS	
PRE	.00
POST	0.13
REDUCED	.00
REACHES	
OUTLET	0.13

TFJ

779 SNODGRASS RD
10 YR
ANNE ARUNDEL County, Maryland

Hydrograph Peak/Peak Time Table

Sub-Area or Reach Identifier	Peak Flow and Peak Time (hr) by Rainfall Return Period 10-Yr (cfs) (hr)
SUBAREAS	
PRE	.00 n/a
POST	0.13 12.02
REDUCED	.00 n/a
REACHES	
OUTLET	0.13

TFJ

779 SNODGRASS RD
10 YR
ANNE ARUNDEL County, Maryland

Sub-Area Summary Table

Sub-Area Identifier	Drainage Area (ac)	Time of Concentration (hr)	Curve Number	Receiving Reach	Sub-Area Description
PRE	.13	0.100	30	Outlet	
POST	.13	0.100	50	Outlet	
REDUCED	.13	0.104	43	Outlet	

Total Area: .39 (ac)

779 SNODGRASS RD
10 YR
ANNE ARUNDEL County, Maryland

Sub-Area Time of Concentration Details

Sub-Area Identifier/	Flow Length (ft)	Slope (ft/ft)	Mannings's n	End Area (sq ft)	Wetted Perimeter (ft)	Velocity (ft/sec)	Travel Time (hr)
PRE							
SHEET	40	0.2400	0.400				0.063
					Time of Concentration		0.1
POST							
SHEET	50	0.2400	0.240				0.050
					Time of Concentration		0.1
REDUCED							
User-provided							0.104
					Time of Concentration		0.104

779 SNODGRASS RD
10 YR
ANNE ARUNDEL County, Maryland

Sub-Area Land Use and Curve Number Details

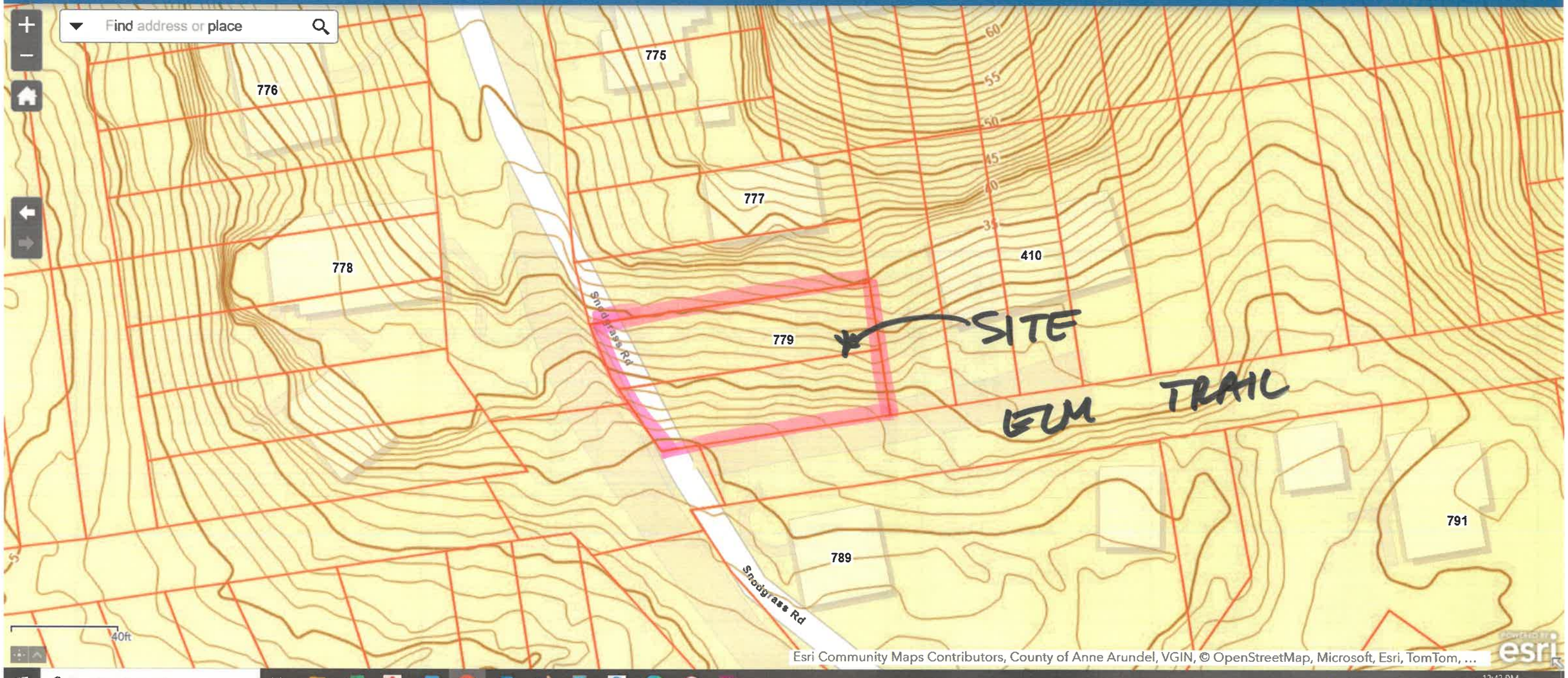
Sub-Area Identifier	Land Use		Hydrologic Soil Group	Sub-Area Area (ac)	Curve Number
PRE	Woods	(good)	A	.13	30
	Total Area / Weighted Curve Number			.13	30
				===	==
POST	Open space; grass cover > 75%	(good)	A	.087	39
	Paved parking lots, roofs, driveways		A	.026	98
	Woods	(good)	A	.017	30
	Total Area / Weighted Curve Number			.13	50
				===	==
REDUCED	CN directly entered by user		-	.13	43
	Total Area / Weighted Curve Number			.13	43
				===	==

Maps and Apps | Anne Arundel County Engineering

gis.aacounty.org/portal/apps/webappviewer/index.html?id=dfaf0eab572c40b6b709ae1567f1ed8b

Anne Arundel County Engineering Record Drawing and Monuments

Find address or place



Type here to search

25°F Cloudy 12:43 PM 2/19/2025

COUNTY TOPO MAP
779 SNODGRASS RD

December 12, 2024

Mr. Matt Rhoderick
McHale Landscape Design
6212 Leapley Road
Upper Marlboro, MD 20772

RE: Environmental Review for Variance for 779 Snodgrass Road, Crownsville, Anne Arundel County, Maryland.

Dear Mr. Rhoderick:

The Wildlife and Heritage Service has no official records for State or Federal listed, candidate, proposed, or rare plant or animal species within the project area shown on the map provided. As a result, we have no specific concerns regarding potential impacts to such species or recommendations for protection measures at this time. If the project changes in the future such that the limits of proposed disturbance or overall site boundaries are modified, please provide us with revised project maps and we will provide you with an updated evaluation.

Thank you for allowing us the opportunity to review this project. If you should have any further questions regarding this information, please contact me at lori.byrne@maryland.gov or at (410) 260-8573.

Sincerely,

Lori A. Byrne

Lori A. Byrne,
Environmental Review Coordinator
Wildlife and Heritage Service
MD Dept. of Natural Resources

ER# 2024.1982.aa
Cc: C. Jones, CAC

ANNE ARUNDEL COUNTY
MARYLAND

DEPARTMENT OF HEALTH
DIVISION OF COMMUNITY & ENVIRONMENTAL HEALTH
3 Harry S. Truman Parkway
Annapolis, Maryland 21401

APPROVAL TO CONSTRUCT AN ON-SITE SEWAGE DISPOSAL SYSTEM

Tax Account #: 2413031716 20 **Perc Number:** PAT02051161
Property Owner: JUDE HOGAN **Type of Construction:** New
Property Use: Residential

Building Address: 779 SNODGRASS CROWNSVILLE, 21032
Tax Map: 31 **Block:** 74 **Parcel:** 0390 **Sect:** **Block:**
Lot #: 4 **Subdivision:** HERALD HARBOR
LIVABLE SQUARE FOOTAGE: 749 **DATE RECEIVED:** 12/27/2023

SEWAGE DISPOSAL SYSTEM MINIMUM REQUIREMENTS
DRY WELL

SEPTIC TANK: BAT

DRY WELLS	Number of Pits	1
	Diameter	8
	Effective Depth	10
	Total Depth	12
	Effective Area	251
	Gravel From	12
	Gravel To	2

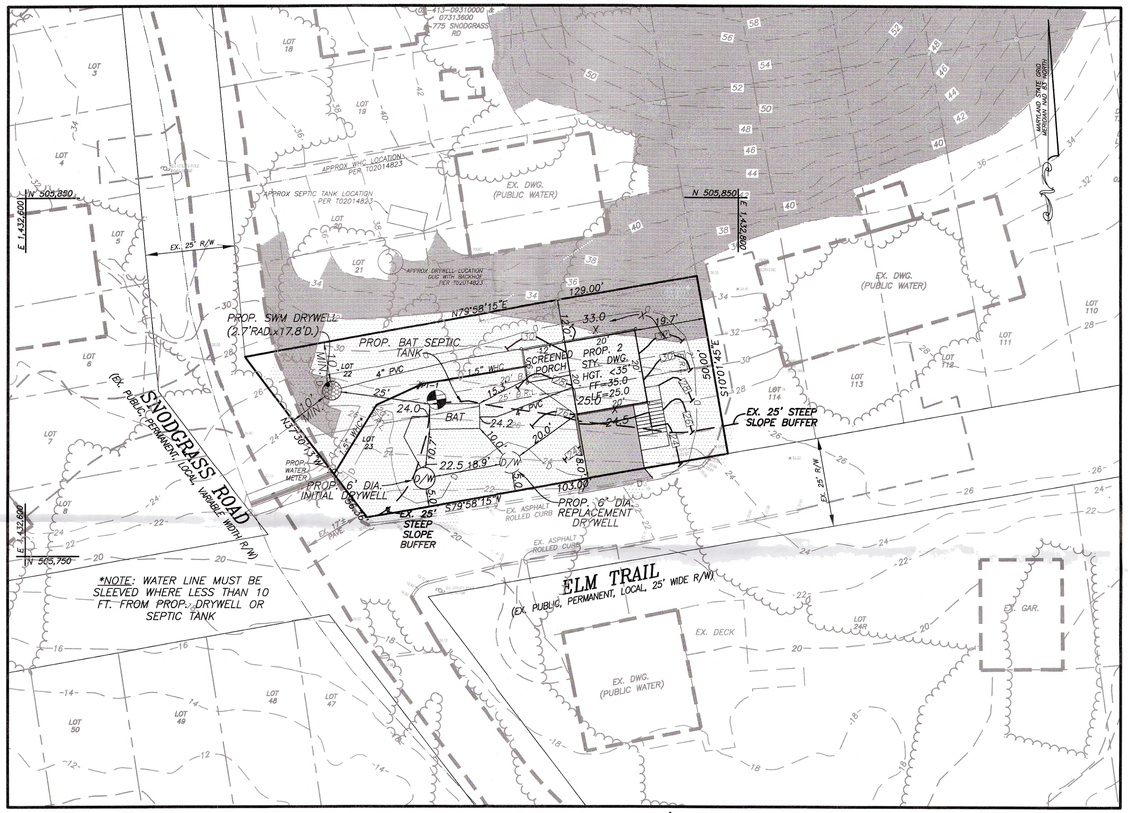
COMMENTS: INSTALL SYSTEM PER PLAN FOR NEW UP TO 749SQFT W/ 2 BEDS. PUBLIC WATER.

The house, well and septic system must be located as shown on the site plans submitted on 12/27/2023. Any deviations from the approved site plan must receive prior approval of the Health Department or the building permit may be revoked. Property lines must be adequately staked prior to the installation of the on-site sewage disposal system. If this approval includes the installation of a BAT (Best Available Technology for Removal of Nitrogen), it is the responsibility of the owner to ensure the BAT system is inspected and has necessary operation and maintenance performed at a minimum of once per year.

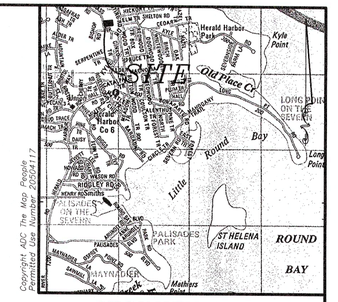
Program Supervisor	Thomas Scalley Approved By	03/13/2024 Date of Issuance
	Josh Smith Tested By	03/30/2016 Date Tested

Approval is valid for two (2) years from the date of issuance unless a building permit is obtained. A Licensed Disposal System Contractor or Master Plumber must secure a permit to install the sewage disposal system in accordance with the approved site plan and above requirements.

SEPTIC REQUIREMENT LETTER



PLAN VIEW
SCALE: 1"= 20'



VICINITY MAP
SCALE: 1"=2000'

LEGEND

- Existing Curb
- Existing Contour — 51 —
- Existing Wire Fence
- Existing Wood Fence
- Existing Woods line
- Existing Gas Line
- Existing Gas Valve
- Existing Stormdrain Inlet
- Existing Stormdrain Manhole
- Existing Sewer Manhole
- Existing Sewer Cleanout
- Existing Telephone Manhole
- Existing Utility Pole
- Existing Water Valve
- Existing Water Meter
- Proposed Contour — 52 —
- Proposed Paved Driveway
- Perc Test Location (PASS)
- Perc Test Location (FAIL)
- Initial Drywell (DW)
- Replacement Drywell (DW)
- 1,500 BAT Tank (BAT)
- 15%+ Slopes

THIS SITE PLAN HAS BEEN APPROVED BY THE ANNE ARUNDEL COUNTY HEALTH DEPT. ANY DEVIATIONS FROM THIS PLAN COULD RESULT IN THE REVOCATION OF THE BUILDING PERMIT. RA 02/04/25

SETBACKS (ZONED R5)

Front . . . . . 25'
Rear . . . . . 20'
Side . . . . . 7'

* Side yards must have at least 20' on abutting right-of-way.

SEPTIC SYSTEM REQUIREMENTS
FOR 2 BDRM. HOUSE LESS THAN 750 SQ.FT.

Initial Septic System
– BAT Septic Tank

1 Drywell
Diameter=6'
Depth=13'
Separation =18'

Replacement Septic Systems
(1 Required)

1 Drywell
Diameter=6'
Depth=13'
Separation =18'

BUILDING PERMIT SITE DATA

Lots	Area (Sq. Ft.)	Prop. Cover (Bldg)	Prop. Cover (Impervious)	Prop. Total (Bldg)	(Prop. Bldg Hgt.)
22,23	5,800 Sq.Ft.	400 Sq.Ft.±	908 Sq.Ft.±	See Arch Plans	See Arch Plans

PERC # PAT02051161

RECEIVED
FEB 03 2025
Sullivan Engineering

NO.	DATE	BY	REVISION	APPROVED	DATE
1	2-3-25	JET	REVISE PLAN TO SHOW NEW HOUSE FOOTPRINT.		
			NO CHANGES TO PREVIOUSLY APPROVED SEPTIC.		

DEVELOPER
MATT RHODERICK
778 Snodgrass Road
Crownsville, MD 21032
301-512-8234

Maryland Professional Engineering Firm License No. 47570
BOYD & DOWGIALLO, P.A.
ENGINEERS*SURVEYORS*PLANNERS
412 Headquarters Drive, Suite 5
Millersville, Maryland 21108
(410) 729-1234 (P)
(410) 729-1243 (F)
JERRYT@BNDPA.COM

Job No.: 20-257
Sheet No.: 1 of 1
Checked By: JET
Date: JANUARY, 2025
Permit #G0201____
Proj. No.

SEPTIC PLAN
LOTS 22 & 23 HERALD HARBOR
TAX MAP 31 BLOCK 23, PARCEL 390
ZONED R5

REVISED

SECOND DISTRICT ANNE ARUNDEL COUNTY, MD 21032

JOB# 20-257

\\HAL\Land Projects 2020\3 Digit\20-257\DWG\20-257-BASE 9-3-24.dwg //SEPTIC