

JAMIE WHITEHOUSE, AICP
DIRECTOR OF PLANNING & ZONING
(302) 855-7878 T
(302) 854-5079 F
jamie.whitehouse@sussexcountyde.gov



Sussex County

DELAWARE
sussexcountyde.gov

PLEASE NOTE

This paperless packet is published on the County's website for convenience purposes, and only includes information received up to the close of business on the day before a public hearing. Documents received after this, or documents submitted during the public hearing are not uploaded to the Paperless Packet. The legal record is the paper record maintained in the Offices of the Planning & Zoning Department.



COUNTY ADMINISTRATIVE OFFICES
2 THE CIRCLE | PO BOX 417
GEORGETOWN, DELAWARE

PLANNING & ZONING COMMISSION

ROBERT C. WHEATLEY, CHAIRMAN
KIM HOEY STEVENSON, VICE-CHAIRMAN
R. KELLER HOPKINS
J. BRUCE MEARS
HOLLY J. WINGATE



Sussex County

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302-855-7878 T
JAMIE WHITEHOUSE, AICP, MRTPI
DIRECTOR

PLANNING AND ZONING AND COUNTY COUNCIL INFORMATION SHEET
Planning Commission Public Hearing Date: October 13th, 2022

Application: 2021-32 Riverwood

Applicant: SB Phillips, LLC
20184 Phillips Street
Rehoboth Beach, DE 19971

Owner: SB Phillips, LLC
20184 Phillips Street
Rehoboth Beach, DE 19971

Site Location: Northwest side of Phillips Branch Road (S.C.R. 302)

Current Zoning: Agricultural Residential (AR-1)

Proposed Use: 117 single family lots as a cluster subdivision

Comprehensive Land
Use Plan Reference: Low Density

Councilmanic
District: District 5 - Rieley

School District: Indian River School District

Fire District: Indian River Fire Company

Sewer: Artesian

Water: Artesian

TID: Not Applicable

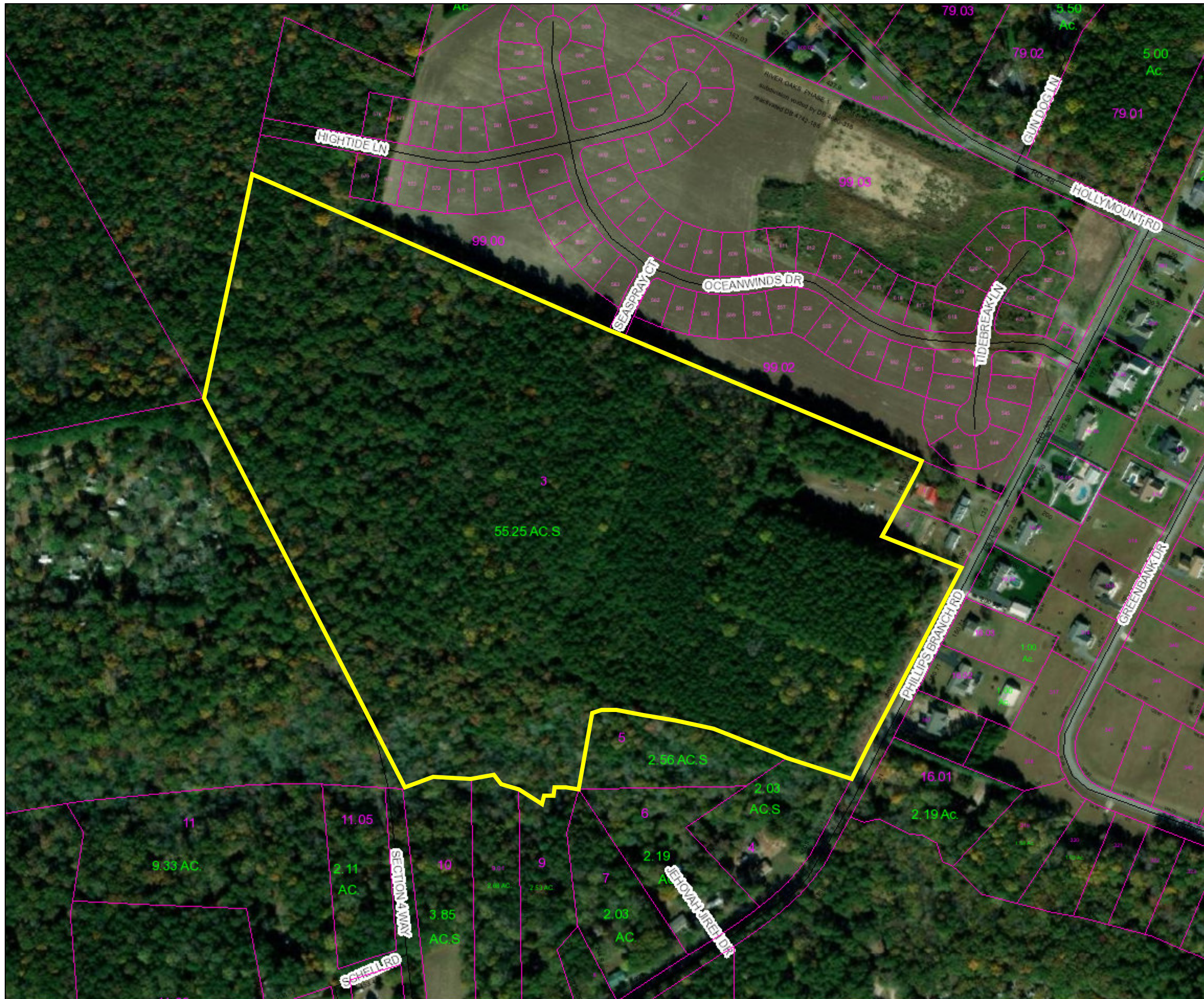
Site Area: 58.6 acres +/-

Tax Map ID: 234-17.00-3.00 & 234-17.00-5.00





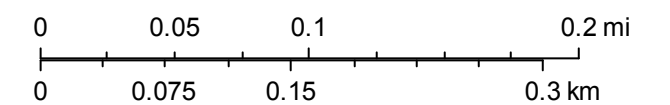
Sussex County



PIN:	234-17.00-3.00
Owner Name	RIVERWOOD DEVELOPMENT LLC
Book	5751
Mailing Address	30435 SOUTHAMPTON BR
City	SALISBURY
State	MD
Description	NW / PHILLIPS BRANCH RD
Description 2	RESIDUAL LANDS
Description 3	
Land Code	

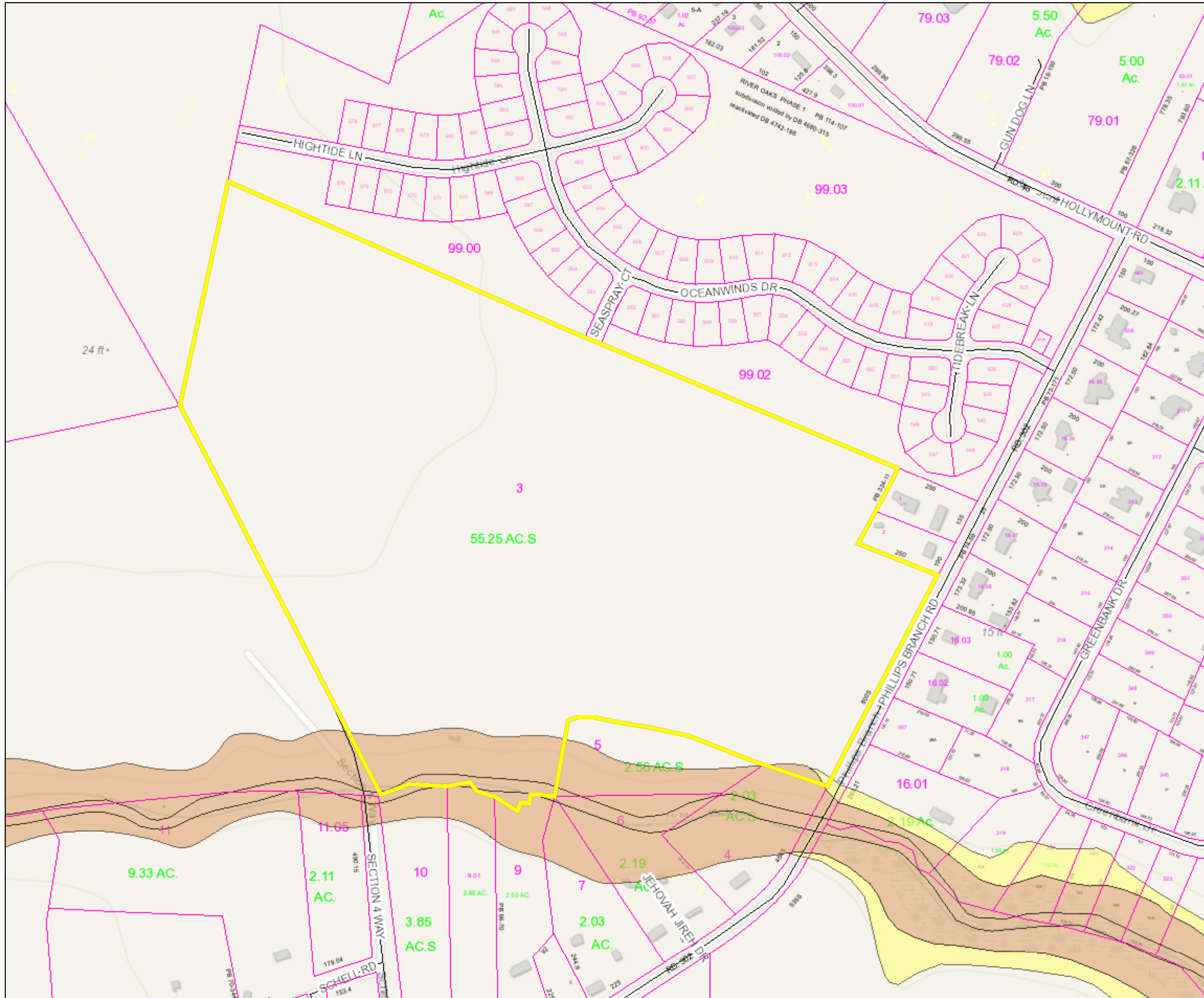
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- Override 1
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- Override 1
- Tax Parcels
- Streets
- County Boundaries

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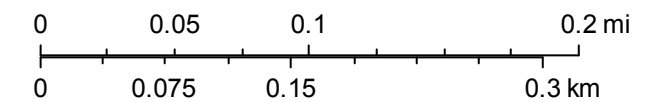
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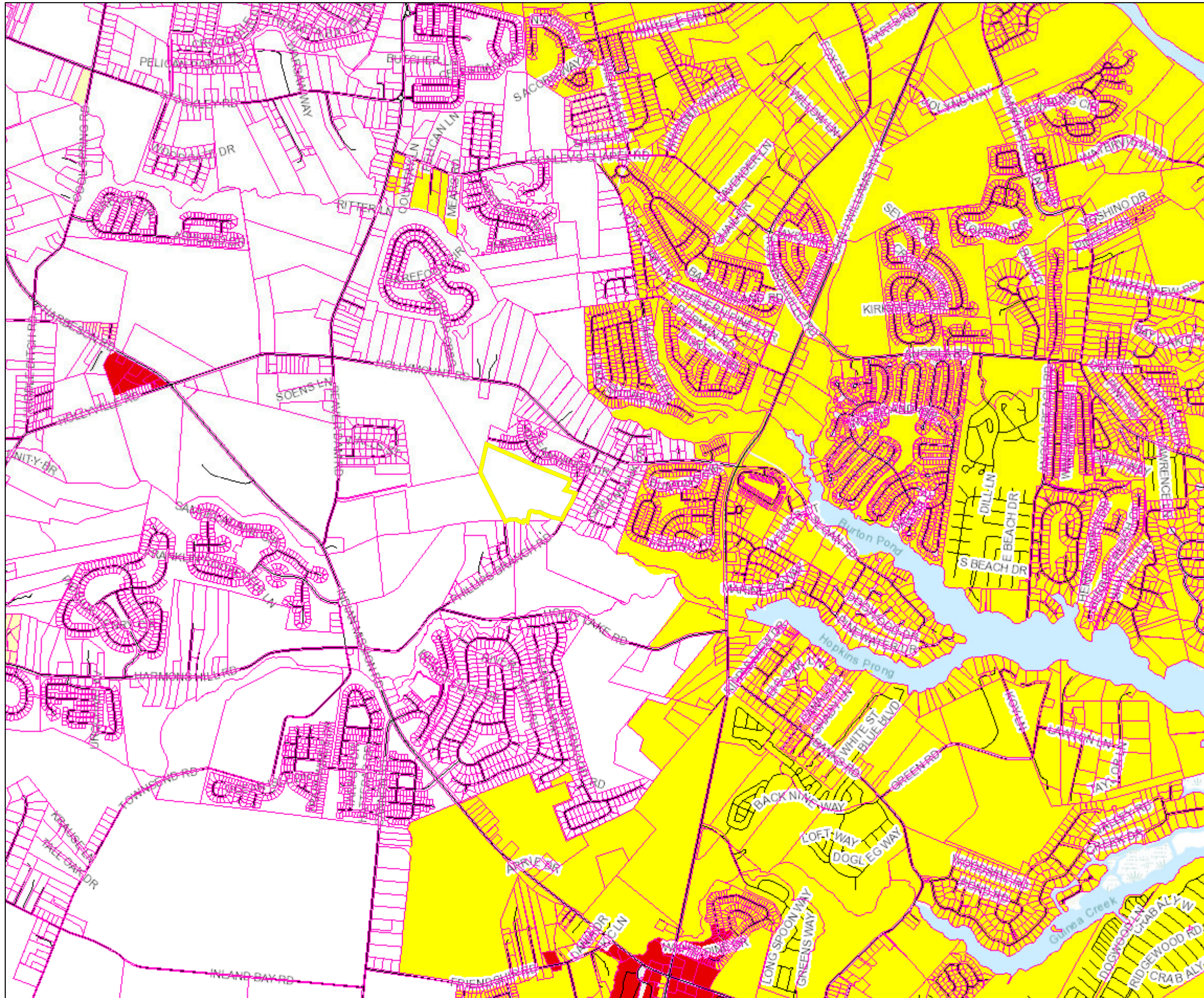
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- Override 1
- polygonLayer**
- Override 1
- Tax Parcels
- Streets
- County Boundaries
- Flood Zones 2018**
- 0.2 PCT ANNUAL CHANCE FLOOD HAZARD
- A
- AE
- AO
- OPEN WATER
- VE

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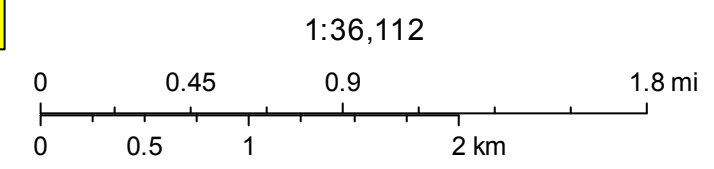


Sussex County



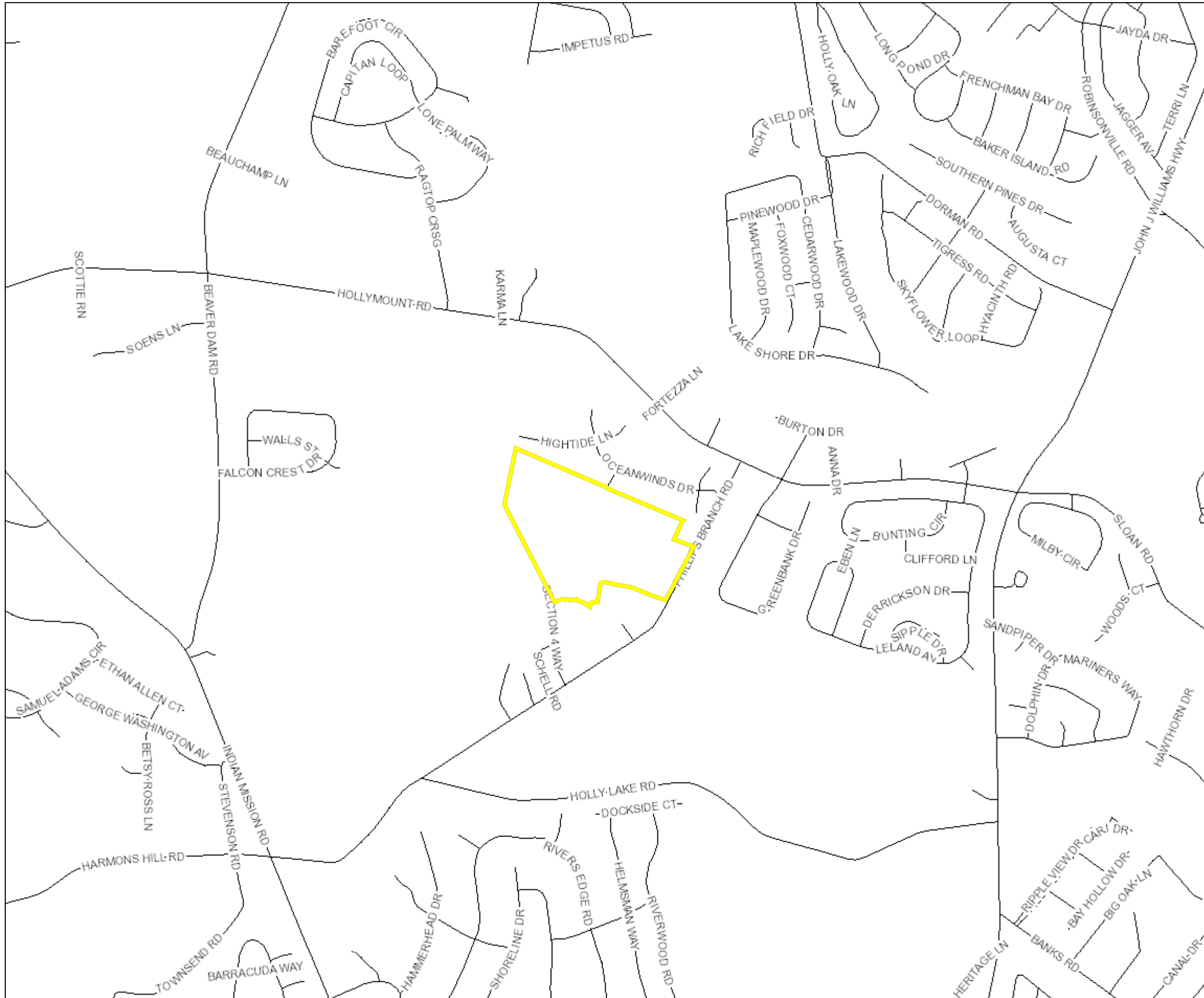
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- 2019 Future Land Use**
- Low Density
- Coastal Area
- Commercial
- Developing Area
- Existing Development Area
- Industrial
- Municipalities
- Town Center





Sussex County



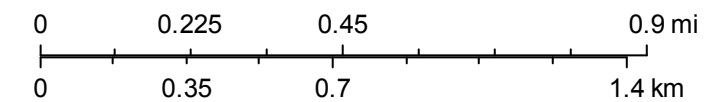
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 - Override 1
- polygonLayer**

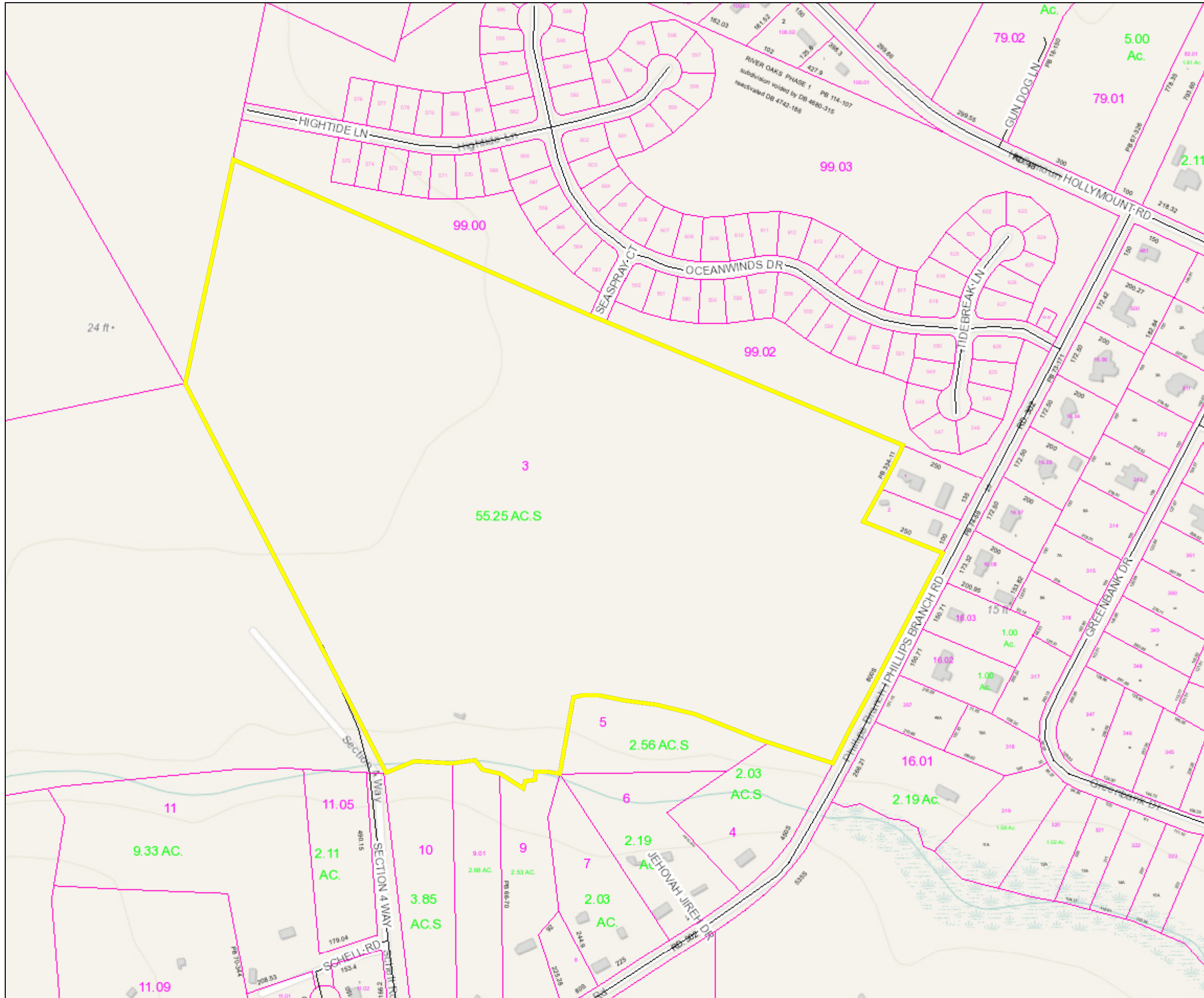
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- Streets
- County Boundaries

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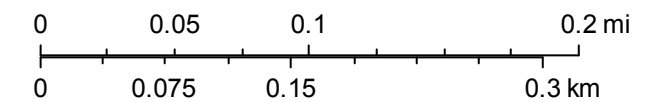
Sussex County



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- polygonLayer
Override 1
- polygonLayer
Override 1
- Tax Parcels
- Streets

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File #: 2021-32

Pre-App Date: _____

Sussex County Major Subdivision Application

~~2021~~
2021/6/10/20

Sussex County, Delaware

Sussex County Planning & Zoning Department
2 The Circle (P.O. Box 417) Georgetown, DE 19947
302-855-7878 ph. 302-854-5079 fax

Type of Application: (please check applicable)

Standard:

Cluster:

Coastal Area:

Location of Subdivision:

West side of Phillips Branch Road, north of Unity Branch

Proposed Name of Subdivision:

Riverwood

Tax Map #: 234-17-3 Total Acreage: 58.6

Zoning: AR-1 Density: 1.997 Minimum Lot Size: 7,500 Number of Lots: 117

Open Space Acres: 32 +/-

Water Provider: Artesian Sewer Provider: Artesian

Applicant Information

Applicant Name: Riverwood Development, LLC

Applicant Address: 30 East Pine Street

City: Georgetown State: DE Zip Code: 19947

Phone #: (302) 644-4442 E-mail: jaime@tunnellraysor.com

Owner Information

Owner Name: Riverwood Development, LLC

Owner Address: 30435 Southampton Bridge Road

City: Salisbury State: MD Zip Code: 21804

Phone #: _____ E-mail: _____

Agent/Attorney/Engineer Information

Agent/Attorney/Engineer Name: Baird Mandalas Brockstedt Federico & Cardea, LLC (Mackenzie Peet, Esq.)

Agent/Attorney/Engineer Address: 1413 Savannah Road, Suite 1

City: Lewes State: DE Zip Code: 19958

Phone #: (302) 645-2262 E-mail: mackenzie@bmbde.com



Check List for Sussex County Major Subdivision Applications


The following shall be submitted with the application

- ✓ Completed Application
- ✓ Provide ten (10) copies of the Site Plan or Survey of the property and a PDF (via e-mail)
 - Plan shall show the existing conditions, setbacks, roads, floodplain, wetlands, topography, proposed lots, landscape plan, etc. Per Subdivision Code 99-22, 99-23 & 99-24
 - Provide compliance with Section 99-9.
 - Deed or Legal description, copy of proposed deed restrictions, soil feasibility study
- ✓ Provide Fee \$500.00
- ___ Optional - Additional information for the Commission to consider (ex. photos, exhibit books, etc.) If provided submit seven (7) copies and they shall be submitted a minimum of ten (10) days prior to the Planning Commission meeting.
- ✓ Please be aware that Public Notice will be sent to property owners within 200 feet of the subject site and County staff will come out to the subject site, take photos and place a sign on the site stating the date and time of the Public Hearings for the application.
- ✓ PLUS Response Letter (if required) Environmental Assessment & Public Facility Evaluation Report (if within Coastal Area)
- ___ 51% of property owners consent if applicable

The undersigned hereby certifies that the forms, exhibits, and statements contained in any papers or plans submitted as a part of this application are true and correct.

I also certify that I or an agent on my behalf shall attend all public hearing before the Planning and Zoning Commission and any other hearing necessary for this application and that I will answer any questions to the best of my ability to respond to the present and future needs, the health, safety, morals, convenience, order, prosperity, and general welfare of the inhabitants of Sussex County, Delaware.

Signature of Applicant/Agent/Attorney



Date: 08/03/2022

Signature of Owner



Date: 8/3/22

For office use only:

Date Submitted: _____ Fee: \$500.00 Check #: _____

Staff accepting application: _____ Application & Case #: _____

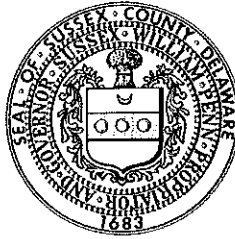
Location of property: _____

Date of PC Hearing: _____ Recommendation of PC Commission: _____

**COMMUNITY
DEVELOPMENT & HOUSING**

BRAD D. WHALEY
DIRECTOR

(302) 855-7777 T
(302) 854-5397 F



Sussex County

DELAWARE
sussexcountyde.gov

Affordable Housing Support Policy

I. Mission Statement

It is Sussex County's mission to promote non-discrimination and affirmatively further fair and equal housing opportunities for all, and further, to inform housing developers and the general public that the County supports the development of affordable housing opportunities in Sussex County.

II. Affordable Housing Subdivisions

Sussex County promotes racially/ethnically diverse, mixed income, affordable housing in all areas under its jurisdiction. Accordingly, Developers are encouraged to provide affordable housing opportunities to Sussex County residents in all new developments, affirmatively market those affordable housing units to diverse populations, and meet with the surrounding residents early in the development approval process.

III. Affordable Housing Defined

- a. **Homeownership:** Sussex County considers an affordable housing project to be a housing project in which any portion thereof is designed or intended to serve households earning less than 125 percent of the Area Median Income for Sussex County as calculated by the U.S. Department of Housing and Urban Development annually, and which is comprised of at least one of the following elements:
 - i. Seeking participation in Sussex County's Moderately Priced Housing Unit (MPHU) Program
 - ii. Applying for funding by the Delaware State Housing Authority's (DSHA) Housing Development Fund (HDF)
 - iii. Applying for HOME Investment Partnerships (HOME) funding through DSHA
 - iv. Applying for a Section 523 or 524 Rural Housing Site Loan through the U.S. Department of Agriculture (USDA) Rural Development
 - v. Sussex County Habitat for Humanity
 - vi. Milford Housing Development Corporation
 - vii. Community Land Trust
 - viii. Other elements which, in the County's discretion, meet the goals and objectives set forth in the Affordable Housing Support Policy Mission Statement.



- b. **Rental:** Sussex County considers an affordable rental housing project to be a rental housing project in which any portion thereof is designed or intended to serve households earning less than 80 percent of the Area Median Income for Sussex County as calculated by the U.S. Department of Housing and Urban Development annually, and which is comprised of at least one of the following elements:
- i. Seeking participation in the Sussex County Rental Program (SCRCP)
 - ii. Applying for funding by the Delaware State Housing Authority's (DSHA) Housing Development Fund (HDF)
 - iii. Applying for HOME Investment Partnerships (HOME) funding through DSHA
 - iv. Applying for funding by DSHA's Low Income Housing Tax Credits (LIHTC) program
 - v. Applying for Multi-Family Mortgage Revenue Bond Program (MFMRB) financing through DSHA
 - vi. Applying for a Rural Rental Housing Loan through USDA Rural Development
 - vii. Applying for a Guaranteed Rental Housing Loan through USDA Rural Development
 - viii. Community Land Trust
 - ix. Other elements which, in the County's discretion, meet the goals and objectives set forth in the Affordable Housing Support Policy Mission Statement.

IV. Affordable Housing Project Support

a. Letter of Support

Sussex County will provide conditional letters of support to developers of affordable housing projects seeking financing opportunities, provided that the project qualifies under the definitions above. Further, support letters for affordable rental housing projects will only be authorized if the project is proposed in an Area of Opportunity, as defined by DSHA in Exhibit A. For further information regarding impacted areas versus areas of opportunity, please contact Karen Horton with DSHA at (302) 739-4263. **Note:** Letters of support do not exempt the developer from the County's planning and zoning process, nor guarantee approval through that process.

b. Deferral of Fees

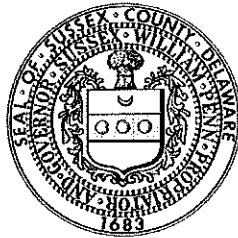
Sussex County desires to encourage the construction of affordable housing for low- and moderate-income households. The County finds that the up-front payment of sewer impact fees for affordable residential housing development creates a barrier to such development and desires to ease the barrier by deferring the time for payment of the fees.

Projects must qualify under Sussex County Code (§110-94) and Delaware State Code (Title 9, Chapter 81, Sections 8105, 8106, and 8110). Qualifying projects will not be assessed connection charges for County sewer. However, once the property is

transferred or sold to a non-qualifying buyer, those deferred charges will be immediately due and payable within 30 days.

It is incumbent upon the affordable housing developer to submit evidence of their qualifying status to the County's Assessment Department to ensure that they benefit from this affordable housing incentive.

Sussex



County

FAIR HOUSING POLICY

It is the policy of Sussex County to comply with the Fair Housing Act, as amended, (42 U.S.C. §§ 3601-3619) and the Delaware Fair Housing Act (6 Del. C. Ch. 46), by ensuring that its zoning and land use decisions do not discriminate against persons based on race, color, religion, national origin, handicap/disability, familial status, sex, creed, marital status, age, sexual orientation, or gender identity. This policy means that, among other things, the County and all its officials, agents and employees will not discriminate in any aspect of housing based on these protected characteristics, including by:

- (a) making unavailable or denying a dwelling to any person based on a protected characteristic;
- (b) discriminating against any person in the terms, conditions or privileges of a dwelling, or in the provision of services or facilities in connection therewith based on a protected characteristic;
- (c) Making, printing, or publishing, or causing to be made, printed, or published any notice, statement, or advertisement, with respect to a dwelling that indicates any preference, limitation, or discrimination based on a protected characteristic;
- (d) Representing to persons because of a protected characteristic that any dwelling is not available when such dwelling is in fact so available;
- (e) interfering with any person in the exercise or enjoyment of, or on account of his having exercised or enjoyed, or on account of his having aided or encouraged any other person in the exercise or enjoyment of, any right protected by the Fair Housing Act;
- (f) interfering with the funding, development, or construction of any affordable housing units because of a protected characteristic; and
- (g) discriminating on the basis of race or color in any aspect of the administration of its zoning, land use, or building ordinances, policies, practices, requirements, or processes relating to the use, construction, or occupancy of dwellings.

Any person who believes that any of the above policies have been violated by the County may contact:



COUNTY ADMINISTRATIVE OFFICES
2 THE CIRCLE | PO BOX 589
GEORGETOWN, DELAWARE 19947

- Sussex County's Fair Housing Compliance Officer, Brandy Nauman, at bnauman@sussexcountyde.gov or (302) 855-7777.
- the U.S. Department of Housing and Urban Development at 1-888-799-2085, or
- the U.S. Department of Justice at 1-800-896-7743 or (202) 514-4713.

It is also the policy of Sussex County to ensure that conduct at public hearings regarding land use and zoning adhere to the intentions of the Fair Housing Policy as outlined above. Legal counsel representing County Council, the Board of Adjustment, and the Planning & Zoning Commission will read the following statement prior to the start of all public hearings:

- "Sussex County, in its zoning and land use decisions, does not discriminate against persons based on race, color, religion, national origin, handicap/disability, familial status, sex, creed, marital status, age, sexual orientation, or gender identity. Public comments made on the basis of bias and stereotype concerning people within these protected classes will not be taken into consideration by the County in its deliberations."



STATE OF DELAWARE
DEPARTMENT OF TRANSPORTATION
800 BAY ROAD
P.O. BOX 778
DOVER, DELAWARE 19903

NICOLE MAJESKI
SECRETARY

MEMORANDUM

TO: Steve McCabe, Sussex County Review Coordinator

FROM: Claudy Joinville, Project Engineer *C.J.*

DATE: February 10, 2022

**SUBJECT: Phillips Branch
(Protocol Tax Parcel # 234-17.00-3.00)
Area Wide Study Fee (AWSF) and Off-site Improvements**

The subject development meets DelDOT's volume warrants to pay the Area Wide Study Fee in lieu of doing a Traffic Impact Study (TIS). This memorandum is to address the amount of that fee and the off-site improvements that should be required of the developer in the absence of a TIS. The fee and improvements presented below are an alternative to the developer doing a TIS and the improvements identified through DelDOT's review of that study.

1. The proposed development consists of 117 single-family detached houses. Per the 10th edition of the Institute of Transportation Engineers' (ITE) Trip Generation Manual, the proposed development would generate 1,201 average daily trips and 118 vehicle trips during the p.m. peak hour. The fee is calculated at ten dollars per daily trip. For the proposed development, the fee would be \$12,010.00.
2. The developer shall improve the State-maintained road(s) on which they front, within the limits of their frontage, to meet DelDOT's standards for their Functional Classification as found in Section 1.1 of the Development Coordination Manual and elsewhere therein. The improvements shall include both directions of travel, regardless of whether the developer's lands are on one or both sides of the road. Frontage is defined in Section 1 of the Development Coordination Manual, which states "This length includes the length of roadway perpendicular to lines created by the projection of the outside parcel corners to the roadway." Questions on or appeals of this requirement should be directed to the DelDOT Subdivision Review Coordinator in whose area the development is located.

Mr. Steve McCabe

February 10, 2022

Page 2 of 2

3. The developer shall improve the intersection of Hollymount Road (Sussex Road 48) and Phillips Branch Road (Sussex Road 302) to provide a 250-foot westbound left-turn lane, excluding taper, on Hollymount Road.
4. The developer shall enter into a traffic signal agreement for the intersection of Hollymount Road and Phillips Branch Road. The agreement should include pedestrian signals, crosswalks, interconnection, and ITS equipment such as CCTV cameras at DelDOT's discretion. The developer should coordinate with DelDOT's Traffic section on the details of this agreement.
5. The developer should provide an internal connection to the contiguous northern parcel, currently known as River Oaks Phase I (Tax Parcel 234-11.00-99.03). The developer should coordinate with DelDOT's Subdivision section on the details of this interconnection.

If you have any additional questions or comments, please let me know.

CJ:km

cc: Tim Green, Schell Brothers
Jason Palkewicz, Solutions IPeM
Michael Simmons, Chief of Project Development South, DOTS
Todd Sammons, Assistant Director, Development Coordination
Wendy Polasko, Subdivision Engineer, Development Coordination
T. William Brockenbrough, Jr., County Coordinator, Development Coordination
Chris Sylvester, Traffic Studies Manager, DelDOT Traffic, DOTS
Mark Galipo, Traffic Engineer, DelDOT Traffic, DOTS
James Argo, Sussex County Plan Reviewer, South District
Brian Yates, Subdivision Manager, Development Coordination
Annamaria Fumato, Project Engineer, Development Coordination

**SUSSEX COUNTY ENGINEERING DEPARTMENT
UTILITY PLANNING & DESIGN REVIEW DIVISION
C/U & C/Z COMMENTS**

TO: **Jamie Whitehouse**

REVIEWER: **Ken Briggs**

DATE: **9/30/2022**

APPLICATION: **2021-32 Riverwood**

APPLICANT: **SB Phillips, LLC**

FILE NO: **NCPA503**

TAX MAP &
PARCEL(S): **234-17.00-3.00 & 234-17.00-5.00**

LOCATION: **Northwest side of Phillips Branch Road (S.C.R. 302)
approximately .25 miles south of the intersection with
Hollymount Road (S.C.R. 48)**

NO. OF UNITS: **117**

GROSS
ACREAGE: **58.6**

SYSTEM DESIGN ASSUMPTION, MAXIMUM NO. OF UNITS/ACRE: **2**

SEWER:

- (1). Is the project in a County operated and maintained sanitary sewer and/or water district?
Yes No
- a. If yes, see question (2).
b. If no, see question (7).
- (2). Which County Tier Area is project in? **Tier 3**
- (3). Is wastewater capacity available for the project? **N/A** If not, what capacity is available? **N/A**.
- (4). Is a Construction Agreement required? **No** If yes, contact Utility Engineering at (302) 855-7717.
- (5). Are there any System Connection Charge (SCC) credits for the project? **No** If yes, how many? **N/A**. Is it likely that additional SCCs will be required? **No** If yes, the current System Connection Charge Rate is **Unified \$6,600.00** per EDU. Please contact **N/A** at **302-855-7719** for additional information on charges.

- (6). Is the project capable of being annexed into a Sussex County sanitary sewer district? **No**
- Attached is a copy of the Policy for Extending District Boundaries in a Sussex County Water and/or Sanitary Sewer District.
- (7). Is project adjacent to the Unified Sewer District? **No**
- (8). Comments: **CPCN with Artesian for sewer and water.**
- (9). Is a Sewer System Concept Evaluation required? **No**
- (10). Is a Use of Existing Infrastructure Agreement Required? **Not at this time**
- (11). **All residential roads must meet or exceed Sussex County minimum design standards.**

UTILITY PLANNING & DESIGN REVIEW APPROVAL:



John J. Ashman
Sr. Manager of Utility Planning & Design Review

Xc: Hans M. Medlarz, P.E.
Lisa Walls
No Permit Tech Assigned



United States Department of Agriculture

Natural Resources
Conservation Service

December 22, 2021

Georgetown
Service Center

Jamie Whitehouse, Director
Sussex County Planning & Zoning
Sussex County Courthouse
Georgetown, DE 19947

21315 Berlin Road
Unit 3
Georgetown, DE
19947

**RE: Riverwood
Indian River Hundred
117 single family lots**

Voice 302.856.3990
Fax 855.306.8272

Dear Mr. Whitehouse:

Soils within the delineated area on the enclosed map are:

FhA Fort Mott-Henlopen complex, 0 to 2 percent slopes
FhB Fort Mott-Henlopen complex, 2 to 5 percent slopes
FmA Fort Mott loamy sand, 0 to 2 percent slopes
LO Longmarsh and Indiantown soils, frequently flooded

Soil Interpretation Guide

Soil Limitation Class

Buildings

Map Symbol	Urbanizing Subclass	With Basement	Without Basement	Septic Filter Fields
FhA	G1	Not limited	Not limited	Somewhat limited/not limited
FhB	G1	Not limited	Not limited	Somewhat limited/not limited
FmA	G1	Not limited	Not limited	Somewhat limited
LO	R3	Very limited	Very limited	Very limited

Definition of soil limitation ratings classes:

Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect building site development.

"**Not limited**" indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected.

"**Somewhat limited**" indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected.

"**Very limited**" indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

G1:

These soils are on nearly level to strongly sloping (0-10% slopes), well drained, mostly permeable soils. As sites for large commercial, industrial, institutional, and residential developments, these soils have fewer limitations than any other soils in the state. Slopes are favorable, and grading can be done without difficulty. Foundation conditions are generally good. Grasses, trees, and do well. Principal soil limitations: No apparent soil limitations for conventional uses.

R3:

These soils are alluvial soils that have a history of flooding. The hazard of potential flood damage and seasonal or fluctuating high water tables severely limits these soils for building use. The soil limitations are 1) soil is highly susceptible to frost action, 2) excavations are likely to fill with water in late winter or early spring, 3) delayed construction in spring - slow to dry out, 4) wet foundations or basements probable, and 5) potential flood damage.

The soil interpretations above do not eliminate the need for detailed investigations at each proposed construction site. However, the interpretations can serve as a guide to planning more detailed investigations. No consideration was given in these interpretations regarding the size and shape of the soil area; nor to the pattern they form with other soils in the landscape. Also, because of the scale of the maps used, small areas of other kinds of soils may be included within some delineations of the soil map. Thus, an individual lot or building site could occupy a small area that would not fit the interpretations given for the soils symbol representing the entire delineation of the map. Interpretations apply to the soils in their natural state and not for areas that may have been altered through grading, compacting, and the like.

Sincerely,



Thelton D. Savage
District Conservationist
USDA, Natural Resources Conservation Service

TDS/bh

Elliott Young

From: Anthony, Mindy (DNREC) <Mindy.Anthony@delaware.gov>
Sent: Friday, December 10, 2021 9:18 AM
To: Elliott Young
Subject: RE: TAC Memo for Riverwood (2021-32)

CAUTION: This email originated from outside of the organization. Do not click links, open attachments, or reply unless you recognize the sender and know the content is safe. Contact the IT Helpdesk if you need assistance.

Happy Friday!

DNREC's Division of Waste and Hazardous Substances has no comments on this project.

Have a terrific weekend!

Mindy

RECEIVED

DEC 10 2021

SUSSEX COUNTY
PLANNING & ZONING



Mindy Anthony

Planner IV

Phone: 302-739-9466 • Mobile: 302-242-9780

Email: mindy.anthony@delaware.gov

89 Kings Highway, Dover, DE 19901

dnrec.delaware.gov



From: Elliott Young <elliott.young@sussexcountype.gov>

Sent: Wednesday, November 03, 2021 12:16 PM

To: Krumrine, Beth (DNREC) <Beth.Krumrine@delaware.gov>; Brad Hawkes <bhawkes@sussexcountype.gov>; Chris Calio <ccalio@sussexcountype.gov>; ddetrick@chpk.com; dholden@chpk.com; C. Daniel Parsons <dparsons@sussexcountype.gov>; Fox, Duane T. (FireMarshal) <Duane.Fox@delaware.gov>; Sullivan, James C. (DNREC) <James.Sullivan@delaware.gov>; jvandervort@chpk.com; Cinelli, Jennifer (DelDOT) <jennifer.cinelli@delaware.gov>; jessica.watson@sussexconservation.org; John J. Ashman <jashman@sussexcountype.gov>; John.Hayes@delaware.gov; john.kennel@delaware.gov; john.martin@delaware.gov; Jordan T. Dickerson <jordan.dickerson@sussexcountype.gov>; Kate.Flemming@delaware.gov; kgabbard@chpk.com; McCabe, R. Stephen (DelDOT) <Richard.McCabe@delaware.gov>; meghan.crystall@delaware.gov; Tholstrup, Michael S. (DNREC) <Michael.Tholstrup@delaware.gov>; Melendez, Milton (DDA) <milton.melendez@delaware.gov>; Anthony, Mindy (DNREC) <Mindy.Anthony@delaware.gov>; Subdivision (MailBox Resources) <Subdivision@delaware.gov>; Susan Isaacs <sisacs@sussexcountype.gov>; tdickerson@decoop.com; Terri Dukes <tdukes@sussexcountype.gov>; tgiroux@chpk.com; Vince Robertson <vrobertson@pgslegal.com>

Subject: TAC Memo for Riverwood (2021-32)

All,

Sussex County Planning Office has received an application that requires TAC review. Attached is a memo regarding the application and a PDF of the plans submitted.

Please provide comments on or before January 5th, 2022.

Please feel free to contact me with any questions.

Thanks,

Elliott Young, Planner I
Sussex County Planning and Zoning Department
2 The Circle
Georgetown, DE 19947
302-855-7878



DELAWARE DEPARTMENT OF
AGRICULTURE

2320 SOUTH DUPONT HIGHWAY
DOVER, DELAWARE 19901
AGRICULTURE.DELAWARE.GOV

TELEPHONE: (302) 698-4500
TOLL FREE: (800) 282-8685
FAX: (302) 697-6287

February 2, 2021

Elliott Young, Planner I
Planning & Zoning Commission
P.O. Box 417
Georgetown, Delaware 19947

Subject: **Preliminary Plans Riverwood**

Dear Mr. Young,

Thank you for providing preliminary plans for Riverwood submitted by Solutions Integrated Planning Engineering & Management, LLC to our section dated June 3, 2021.

The Delaware Forest Service recommends the plans clearly display easement footage of existing or planned forested buffers. The Delaware Forest Service recommends the plans reflect tree planting specifications and that the ISA ANSI A300 best management practices are followed for newly installed trees. DFS recommends planting a 70/30 mix of hardwood and evergreen tree species. There are several tree species that are not recommended for planting in the state due to their invasive nature or the susceptibility to pests and diseases. These species are listed on our department website. The Delaware Forest Service requests easement footage of existing or planned forested buffers to be added to the preliminary plans before being approved. Please resubmit the preliminary plans to Delaware Forest Service once the updates are completed.

The Delaware Forest Service will await resubmission of plans.

If you have any questions please feel free to contact me at taryn.davidson@delaware.gov.

Sincerely,

Taryn Davidson
Urban Forestry Program
Delaware Forest Service



United States Department of the Interior
U.S. Fish & Wildlife Service
Chesapeake Bay Field Office
177 Admiral Cochrane Drive
Annapolis, MD 21401
410/573 4575



Online Certification Letter

Today's date: 2/11/2022

Project: 2021-32 Riverwood

Dear Applicant for online certification:

Thank you for using the U.S. Fish and Wildlife Service (Service) Chesapeake Bay Field Office online project review process. By printing this letter in conjunction with your project review package, you are certifying that you have completed the online project review process for the referenced project in accordance with all instructions provided, using the best available information to reach your conclusions. This letter, and the enclosed project review package, completes the review of your project in accordance with the Endangered Species Act of 1973 (16 U.S.C. 1531-1544, 87 Stat. 884), as amended (ESA). This letter also provides information for your project review under the National Environmental Policy Act of 1969 (P.L. 91-190, 42 U.S.C. 4321-4347, 83 Stat. 852), as amended. A copy of this letter and the project review package must be submitted to this office for this certification to be valid. This letter and the project review package will be maintained in our records.

Based on this information and in accordance with section 7 of the Endangered Species Act (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.), we certify that except for occasional transient individuals, no federally proposed or listed endangered or threatened species are known to exist within the project area. Therefore, no Biological Assessment or further section 7 consultation with the U.S. Fish and Wildlife Service is required. Should project plans change, or if additional information on the distribution of listed or proposed species becomes available, this determination may be reconsidered.

This response relates only to federally protected threatened or endangered species under our jurisdiction. For additional information on threatened or endangered species in Maryland, you should contact the Maryland Wildlife and Heritage Division at (410) 260-8573. For information in Delaware you should contact the Delaware Division of Fish and Wildlife, Wildlife Species Conservation and Research Program at (302) 735-8658. For information in the District of Columbia, you should contact the National Park Service at (202) 339-8309.

The U.S. Fish and Wildlife Service also works with other Federal agencies and states to minimize loss of wetlands, reduce impacts to fish and migratory birds, including bald eagles, and restore habitat for wildlife. Information on these conservation issues and how development projects can avoid affecting these resources can be found on our website (www.fws.gov/chesapeakebay)

We appreciate the opportunity to provide information relative to fish and wildlife issues, and thank you for your interest in these resources. If you have any questions or need further assistance, please contact Chesapeake Bay Field Office Threatened and Endangered Species program at (410) 573-4527.

Sincerely,

Genevieve LaRouche
Field Supervisor

ENGINEERING DEPARTMENT

JOHN J. ASHMAN
SR. MANAGER OF UTILITY PLANNING
& DESIGN REVIEW

(302) 855-7370 T
(302) 854-5391 F
jashman@sussexcountyde.gov



Sussex County

DELAWARE
sussexcountyde.gov

RECEIVED

NOV 09 2021

SUSSEX COUNTY
PLANNING & ZONING

Date: **November 4, 2021**

REF: **T. A. C. COMMENTS**
RIVERWOOD
SUSSEX COUNTY ENGINEERING DEPARTMENT
SUSSEX COUNTY TAX MAP NUMBER
234-17.00-3.00
AGREEMENT NO.1188

The following comments are the result of the Sussex County Engineering Department's review of the preliminary site plan for the above referenced project:

DESIGN REVIEW COMMENTS

1. Proposed developments with private roads or projects required to meet or exceed the County street design requirements shall be regulated by and conform to Sussex County Code and the comments here listed.
2. This project **is not** located within the limits of a Ground Water Management Zone (GMZ). Projects located within a GMZ must be forwarded to the County Engineer for review and comment.
3. Project Construction Drawings shall show, in detail, the proposed improvements. The work required includes preparation and delivery of an AutoCAD 2012 digitized plan showing existing and proposed lines, grades, topography, and features in a given area, which was utilized in preparing plans for construction. The individual sheet types will be in a separate design to show plan views on sheets separate from profile views. In addition, each sheet of the plans shall be submitted in a PDF format.
4. All work shall be geo-referenced to the Delaware State Grid System NAD-83 (HARN) and provided in an AutoCAD 2012 format. North Arrow required to identify northern direction and viewport should be best fit for the project.
5. Topographic contours at one-foot intervals shall be shown and referenced to United States Geological Survey Mean Sea Level Datum NAVD 1988 Datum.
6. The plans shall be provided on 24" x 36" drawing sheets at a scale of 1" = 50' or less.

The plans shall show and address the following items at minimum:

7. The project requires professional land surveying services to accurately delineate, and show the following items but is not limited to the following: all property and right-of-



COUNTY ADMINISTRATIVE OFFICES
2 THE CIRCLE | PO BOX 589
GEORGETOWN, DELAWARE 19947

way lines, established at a minimum, survey monuments, easements, existing and proposed topographic contours at 1-foot vertical intervals and spot elevations as necessary to establish grades, the locations of all existing structures, highway and roadway pavements, shoulders, curbs, driveways, sidewalks, lighting structures, traffic control signs, and all public and private utilities, including, but not limited to, electric power and telephone lines, poles and boxes, underground electric, telephone, and communication lines, potable water lines, fire hydrants and valve boxes, gas lines, wells, sanitary sewers including septic systems, rim and invert elevations of manholes and cleanouts, and the rims and invert elevations and type of storm water structures, drainage ditches, ponds, streams and waterways, flood zones and flood zone boundaries and elevations, and State and Federal wetlands, trees, cemeteries and historic features, and the finished floor elevations of buildings.

8. Plans shall show the seal and signature of a registered Delaware land surveyor or registered Delaware professional engineer.
9. The plan requires a Certification Signature and/or a Certification Block for the following:
 - a. Delaware Professional Engineer or Delaware Land Surveyor.
 - b. Owner or Representative of the Owner.
 - c. Professional Wetlands Delineator.
10. The name, address, phone number and contact person's name of the Owner of Record, the Developer and the Engineer or Surveyor preparing the plan.
11. Indicate the location of all wetlands, both state and federal, in order to facilitate compliance with County, State and Federal requirements.
12. Define the courses and distances of the property perimeter and the approximate acreage contained therein. Establish and set in the field two (2) CONCRETE MONUMENT project benchmarks, preferably at property perimeter corners, geo-referenced to the Delaware State Plane Coordinate system NAD 83 and show the location including the North and East coordinates of the marks on the plans.
13. Indicate the development construction phases proposed showing the boundaries of each phase. Phasing boundaries shall include buildings, residential units, amenities, roads, storm water management facilities, wastewater systems and all other improvements and utilities required to service each phase and shall be recorded prior to being issued a notice to proceed.
14. Show the layout, width and names of all streets, alleys, crosswalks and easements proposed to be dedicated for private or public use. Street names shall not duplicate nor closely resemble existing street names in the same hundred or postal district, except for extensions of existing streets. Sussex County Mapping & Addressing will have final say on proposed street names.
15. Provide the limits and elevations of the 100-year flood. This may require the design engineer to complete an analysis and provide a report including the depiction of the subject watershed(s), calculations and other technical data necessary to determine the limits and elevations of the base flood.
16. False berms shall not be utilized to create roadside drainage swale back slopes.

17. For parking lots and drives, provide spot elevations at the edge of pavement, right-of-way, or travel way centerline, at changes in grade, and high points and low points, to the nearest drainage facilities. Show the limits of the various surface materials and provide construction sections.
18. Provide and show the locations and details of all ADA pedestrian connections.
19. If the site has a cemetery located on it the Developer shall contact the Delaware State Historic Preservation Office and satisfy the requirements of that Office prior to beginning any construction activity. This area shall not be disturbed by this project. Adequate access to the site and buffers to protect the site, shall be provided.
20. Private rights-of-way adjacent to and abutting parcels not part of the project shall be located and designed to provide adequate buffer so that construction activities do not encroach onto adjacent properties.
21. Provide statements explaining how and when the developer proposes to provide and install the required water supply, sewers or other means of sewage disposal, street pavement, drainage structures and any other required improvements.
22. Provide statements concerning any proposed deed restrictions to be imposed by the owner.
23. Where special physical conditions exist, which may act as constraints on normal development or may preclude development, the developer may be required to submit special technical data, studies or investigations. This information must be prepared by individuals technically qualified to perform such work. Additional information may include but is not limited to the following: on-site sanitary sewage disposal feasibility, water supply surveys, such as test well drilling, storm water runoff computations and identification of areas subject to periodic flooding.
24. If special conditions are found to exist, the Engineering Department may elect to withhold approval of a construction plan until it is determined that it is technically feasible to overcome such conditions. The Engineering Department may then require the developer to incorporate specific improvement design criteria into the plat as a condition to its approval.
25. When special studies or investigations pertain to a regulatory program of another public agency, the developer shall submit the results of these studies or investigations to said public agencies for technical review and approval. Approvals and/or written comments from these agencies shall be supplied to Sussex County by the developer.

SEWER SPECIFIC COMMENTS

LOCATION: **Phillips Branch Rd. South of Hollymount Rd.**

NO. OF UNITS: 117

GROSS ACREAGE: 58.6

- (1). Is the project in a County operated and maintained sanitary sewer and/or water district?
Yes No

- (2). Which County Tier Area is project in? Tier 3

- (3). Is wastewater capacity available for the project? N/A If not, what capacity is available? N/A.

- (4). Is a Construction Agreement required? No If yes, contact Utility Engineering at (302) 855-7370 / option 2.

- (5). Are there any System Connection Charge (SCC) credits for the project? No If yes, how many? N/A. Is it likely that additional SCCs will be required? **No**

If yes, the current System Connection Charge Rate is **Choose an item.** per EDU.
Please contact **N/A** at **302-855-7719** for additional information on charges.

- (6). Is the project capable of being annexed into a Sussex County sanitary sewer district? **N/A**

 Attached is a copy of the Policy for Extending District Boundaries in a Sussex County Water and/or Sanitary Sewer District.

- (7). Is project adjacent to the Unified Sewer District? **No**

- (8). Comments: **The proposed subdivision is not in an area where the Sussex County Engineering Department has a schedule to provide sanitary sewer service.**

- (9). Is a Sewer System Concept Evaluation required? **No**

- (10). Is a Use of Existing Infrastructure Agreement Required? **No**

If the above items, as applicable, are incorporated into the development plans, then preliminary approval is recommended. However, final plan approval should be withheld pending the approval of the construction plans by the Sussex County Engineering Department.

Sussex County, Delaware
Technical Advisory Committee

Comment Sheet



DATE OF REVIEW: November 3, 2021

REVIEWING AGENCY: Delaware State Fire Marshal's Office, Sussex Office

INDIVIDUAL REVIEWERS: Duane T. Fox, CFPS, CFPE, CFI, Asst. Chief Technical Services
Dennett E. Pridgeon, CFPS, CFPE, CFI, Sr. Fire Protection Specialist
Jefferson L. Cerri, CFI, Sr. Fire Protection Specialist
Desiree B. McCall, CFI, Sr. Fire Protection Specialist
John A. Colpo, Fire Protection Specialist

AGENCY PHONE NUMBERS: 302-856-5298, Fax: 302-856-5800

RE: RIVERWOOD (2021-32)

The reasons and conditions applied to this project and their sources are itemized below:

At the time of formal submittal, the applicant shall provide; completed application, fee, and three sets of plans depicting the following in accordance with the Delaware State Fire Prevention Regulation (DSFPR):

a. **Fire Protection Water Requirements:**

- Water distribution system capable of delivering at least 1000 gpm for 1-hour duration, at 20-psi residual pressure is required. Fire hydrants with 800 feet spacing on centers. (Assembly)
- Where a water distribution system is proposed for single-family dwellings it shall be capable of delivering at least 500 gpm for 1-hour duration, at 20-psi residual pressure. Fire hydrants with 1000 feet spacing on centers are required. (One & Two- Family Dwelling)
 - In September 2021 the DE State Fire Prevention Regulations are changing to require all fire hydrants to be on 800 ft centers and not more than 300 feet from a fire department connection. Measurements are as the fire apparatus drive.
- Where a water distribution system is proposed for the site, the infrastructure for fire protection water shall be provided, including the size of water mains for fire hydrants and sprinkler systems.

b. **Fire Protection Features:**

- All structures over 10,000 sqft aggregate will require automatic sprinkler protection installed.
- Buildings greater than 10,000 sqft, 3-stories or more, over 35 feet, or classified as High Hazard, are required to meet fire lane marking requirements.
- Show Fire Department Connection location (Must be within 300 feet of fire hydrant), and detail as shown in the DSFPR.
- Show Fire Lanes and Sign Detail as shown in DSFPR

c. **Accessibility**

- All premises, which the fire department may be called upon to protect in case of fire, and which are not readily accessible from public roads, shall be provided with suitable gates and access roads, and fire lanes so that all buildings on the premises are accessible to fire apparatus. This means that the access road to the subdivision from Phillips Branch Road must be constructed so fire department apparatus may negotiate it.
- Fire department access shall be provided in such a manner so that fire apparatus will be able to locate within 100 ft. of the front door.
- Any dead-end road more than 300 feet in length shall be provided with a turn-around or cul-de-sac arranged such that fire apparatus will be able to turn around by making not more than one backing maneuver. The minimum paved radius of the cul-de-sac shall be 38 feet. The dimensions of the cul-de-sac or turn-around shall be shown on the final plans. Also, please be advised that parking is prohibited in the cul-de-sac or turn around.
- The use of speed bumps or other methods of traffic speed reduction must be in accordance with Department of Transportation requirements.
- The local Fire Chief, prior to any submission to our Agency, shall approve in writing the use of gates that limit fire department access into and out of the development or property.

d. **Gas Piping and System Information:**

- Provide type of fuel proposed and show locations of bulk containers on plan.

e. **Required Notes:**

- Provide a note on the final plans submitted for review to read “All fire lanes, fire hydrants, and fire department connections shall be marked in accordance with the Delaware State Fire Prevention Regulations”
- Proposed Use
- Alpha or Numerical Labels for each building/unit for sites with multiple buildings/units
- Square footage of each structure (Total of all Floors) – Pool House
- National Fire Protection Association (NFPA) Construction Type
- Maximum Height of Buildings (including number of stories)
- Note indicating if building is to be sprinklered
- Name of Water Provider
- Letter from Water Provider approving the system layout
- Provide Lock Box Note (as detailed in DSFPR) if Building is to be sprinklered
- Provide Road Names, even for County Roads

Preliminary meetings with fire protection specialists are encouraged prior to formal submittal. Please call for appointment. Applications and brochures can be downloaded from our website:

www.statefiremarshal.delaware.gov, technical services link, plan review, applications or brochures.

THIS DOCUMENT IS INFORMATIONAL ONLY, AND DOES NOT CONSTITUTE ANY TYPE OF APPROVAL FROM THE DELAWARE STATE FIRE MARSHAL'S OFFICE

Elliott Young

From: Dickerson, Troy <TDickerson@delaware.coop>
Sent: Thursday, November 4, 2021 10:22 AM
To: Elliott Young
Subject: RE: TAC Memo for Riverwood (2021-32)

Follow Up Flag: Follow up
Flag Status: Flagged

CAUTION: This email originated from outside of the organization. Do not click links, open attachments, or reply unless you recognize the sender and know the content is safe. Contact the IT Helpdesk if you need assistance.

Elliott,

This development is located within DEC's service territory and we have facilities in the area to serve the proposed lots.

Thanks!

Troy W. Dickerson, P.E.
Vice President of Engineering
Voice: (302) 349-3125
Cell: (302) 535-9048
Fax: (302) 349-5891
tdickerson@delaware.coop



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From: Elliott Young <elliott.young@sussexcountyyde.gov>
Sent: Wednesday, November 3, 2021 12:16 PM
To: beth.krumrine@delaware.gov; Brad Hawkes <bhawkes@sussexcountyyde.gov>; Chris Calio <ccalio@sussexcountyyde.gov>; ddetrick@chpk.com; dholden@chpk.com; C. Daniel Parsons <dparsons@sussexcountyyde.gov>; Duane.Fox@delaware.gov; James.Sullivan@delaware.gov; jvandervort@chpk.com; jennifer.cinelli@delaware.gov; jessica.watson@sussexconservation.org; John J. Ashman <jashman@sussexcountyyde.gov>; John.Hayes@delaware.gov; john.kennel@delaware.gov; john.martin@delaware.gov; Jordan T. Dickerson <jordan.dickerson@sussexcountyyde.gov>; Kate.Flemming@delaware.gov; kgabbard@chpk.com; Richard.McCabe@delaware.gov; megan.crystall@delaware.gov; michael.tholstrup@delaware.gov; Milton.melendez@delaware.gov; mindy.anthony@delaware.gov; subdivision@delaware.gov; Susan Isaacs <sisaac@sussexcountyyde.gov>; Dickerson, Troy <TDickerson@delaware.coop>; Terri Dukes <tdukes@sussexcountyyde.gov>; tgiroux@chpk.com; Vince Robertson <vrobertson@pgslegal.com>
Subject: TAC Memo for Riverwood (2021-32)

All,



November 4, 2021

Mr. Elliott Young
Sussex County Planning & Zoning Commission
PO Box 417
Georgetown, DE 19947

Re: Sussex County Technical Advisory Committee

Dear Mr. Young:

The Division of Public Health Office of Engineering is in receipt of the following application:

1. **Application:** *2021-32 Riverwood*

This application indicates central water will be supplied by Artesian Water Company, Inc. *This project requires an Approval to Construct and an Approval to Operate from the Office of Engineering when constructing a new water system or altering an existing water system.* In order to obtain an Approval to Construct, plans and specifications must be prepared by a registered Delaware professional engineer. Plans for the system, including water mains or extensions thereto, storage facilities, treatment works, and all related appurtenances, must be approved by the Office of Engineering prior to construction. It is the owner's responsibility to ensure as-built drawings are maintained throughout all phases of construction.

Prior to receiving an Approval to Operate for this project, the Office of Engineering requires one set of as-built drawings, including profile markups, for all plans approved for construction. An Approval to Operate will be issued after all applicable requirements are met.

Please do not hesitate to contact me at 302-741-8646 with questions or comments.

Sincerely,

A handwritten signature in blue ink, appearing to read "William J. Milliken, Jr.", written over a faint, larger version of the same signature.

William J. Milliken, Jr.
Engineer III
Office of Engineering



STATE OF DELAWARE
DEPARTMENT OF NATURAL RESOURCES AND
ENVIRONMENTAL CONTROL
DIVISION OF WATERSHED STEWARDSHIP
21309 BERLIN RD
UNIT #6
GEORGETOWN, DE 19947

PHONE: (302) 855-1930
FAX: (302) 670-7059

DRAINAGE PROGRAM

November 10, 2021

Elliott Young
Sussex County
Planning and Zoning Office
2 The Circle
Georgetown, DE 19947

RE: Parcel # 234-17.00-3.00; Riverwood

The Delaware Department of Natural Resources and Environmental Control (DNREC), Drainage Program has reviewed the preliminary plans submitted by Solutions IPEM for the above noted property.

My office has no objection to the works of improvement to this parcel and offer the following comments:

- The proposed project site is not located near or within a Tax Ditch watershed.
- There are no reported drainage concerns near the proposed project site.
- All existing ditches on the property should be evaluated for function and cleaned, if needed, prior to the construction of the project.
- All precautions should be taken to ensure the project does not hinder any off-site drainage upstream of the project or create any off-site drainage problems downstream by the release of on-site storm water.
- Any area designated as a drainage/utility easement should be open space and not owned by the individual landowners.

- Any drainage/utility easement owned by an individual landowner should not possess structures such as decks, buildings, sheds, kennels, or fences within the drainage

If you have any questions or concerns, please contact the Drainage Program at (302) 855-1930.

Sincerely,

Jordan Watson

Jordan Watson

EPS Tech

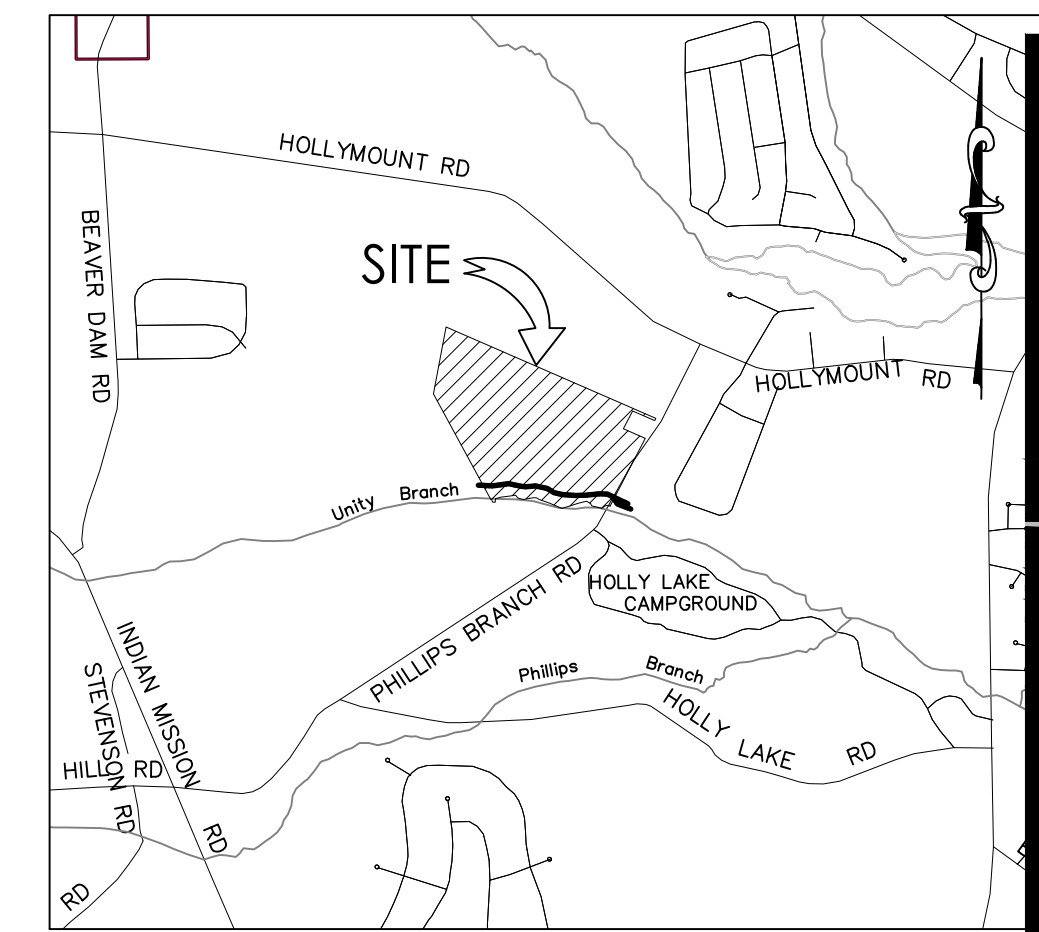
cc: Brittany L. Haywood, Tax Ditch Program Manager I

PRELIMINARY PLAT FOR RIVERWOOD

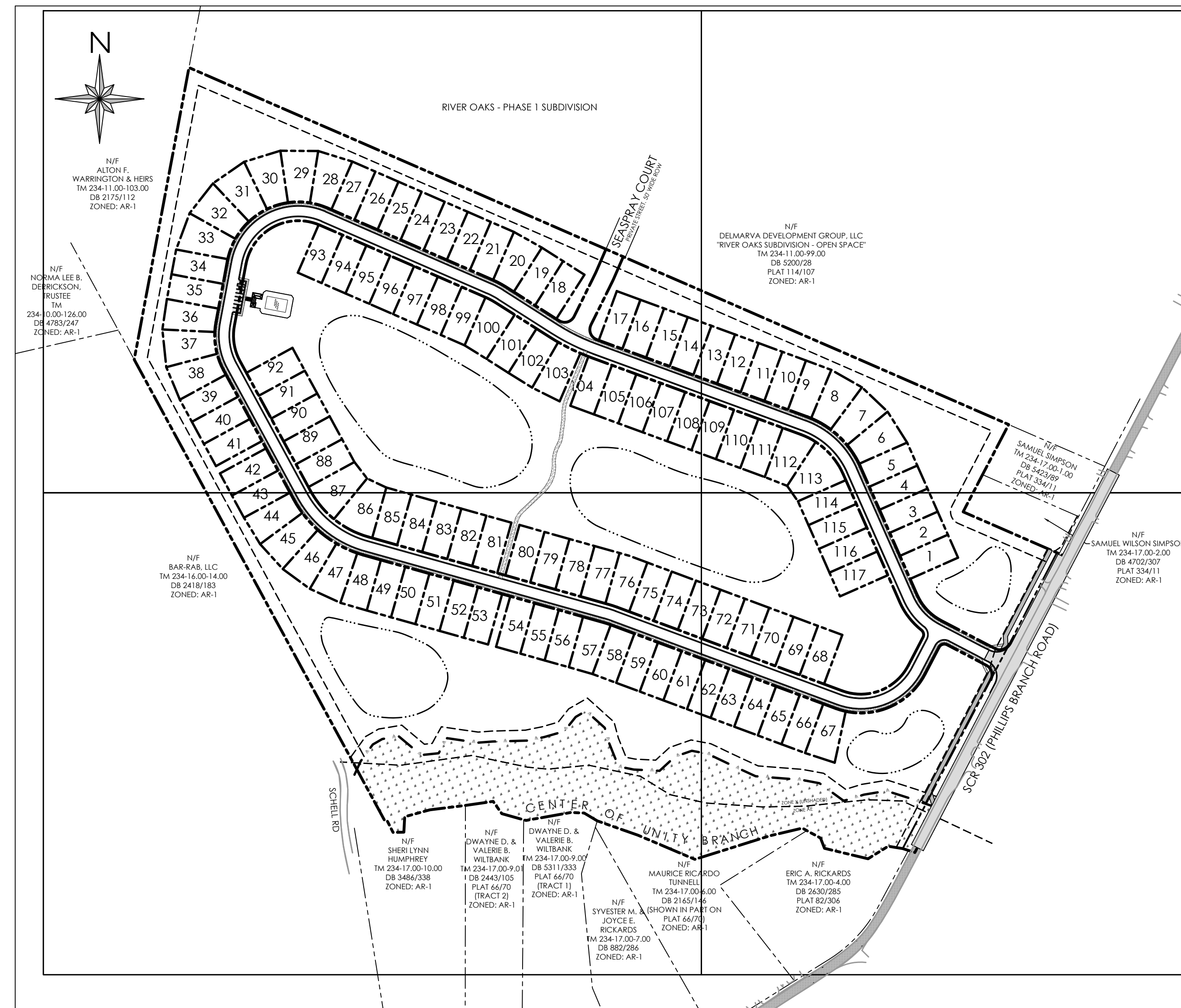
INDIAN RIVER HUNDRED
SUSSEX COUNTY, DELAWARE

LEGEND

EXISTING	PROPOSED
PROPERTY LINE	---
EASEMENT LINE	- + -
SETBACK LINE	N/A
R.O.W. LINE	---
CONTOUR	N/A
SPOT ELEVATION	N/A
ROAD CENTERLINE	---
EDGE OF CONCRETE	N/A
EDGE OF PAVEMENT	---
CURB	N/A
DELDOT PAVEMENT HATCH	---
GRAVEL HATCH	---
SIDEWALK	N/A
SIDEWALK HATCH	---
TRAIL	---
EDGE OF POND	N/A
EDGE OF WETLAND	N/A
WETLAND	---
FLOODPLAIN	---
CURB INLET	N/A
YARD INLET	N/A
STORM PIPE	N/A
SANITARY MANHOLE	N/A
SANITARY PIPE	N/A
WATER PIPE	N/A
TREE LINE	---



VICINITY MAP
SCALE: 1"=2000'



SITE
1" = 200'

SITE DATA:

OWNER: RIVERWOOD DEVELOPMENT, LLC
30435 SOUTHAMPTON BRIDGE ROAD
SALISBURY, MD 21804

DEVELOPER/APPLICANT: RIVERWOOD DEVELOPMENT, LLC
30 EAST PINE STREET
GEORGETOWN, DE 19947

**ENGINEER/
LAND PLANNER:** SOLUTIONS IPEM, LLC
303 NORTH BEDFORD STREET
GEORGETOWN, DE 19947
PHONE: 302.297.9215
CONTACT: JASON PALKEWICZ, PE

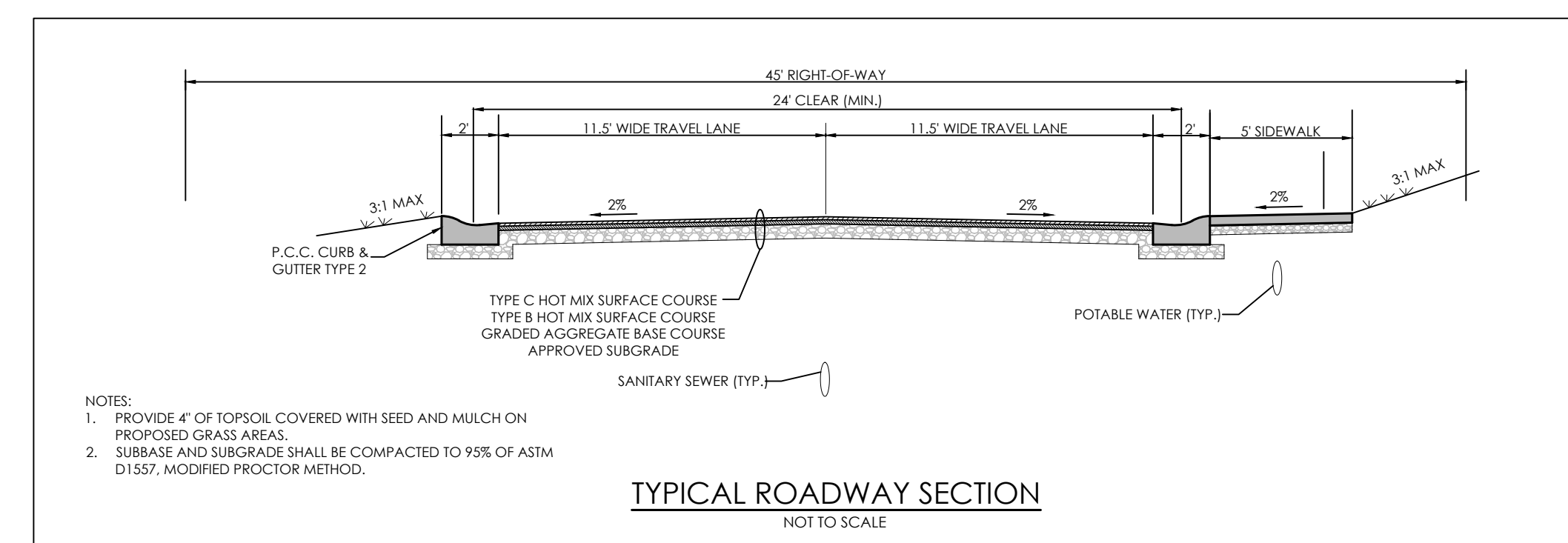
- TAX MAP: 234-17.00-3.00 & 5.00
- EXISTING ZONING: AR-1
- PROPOSED USE: AR-1 CLUSTER
 - SINGLE FAMILY LOTS = 117 LOTS
 - MIN. LOT AREA = 7,500 S.F.
 - MIN. LOT WIDTH = 60'
 - MAXIMUM BUILDING HEIGHT: 42'
 - FRONT YARD = 25' (15' ON CORNER)
 - SIDE YARD = 10'
 - REAR YARD = 10'
- BOUNDARY AND TOPOGRAPHY AS SHOWN HEREON ARE AS PROVIDED BY SOLUTIONS IPEM LLC
- FLOOD ZONE:
 - PROPERTY IS LOCATED IN ZONE AE - SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD. NO BASE ELEVATIONS DETERMINED AND ZONE X - AREAS DETERMINED TO OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN. PER FIRM MAP NUMBER 1000SC0340K MAP REVISED MARCH 16, 2015
- WATER SUPPLY: ARTESIAN WATER COMPANY
- SANITARY SEWER: ARTESIAN WATER COMPANY
- GROSS AREA = 58.6 AC.±
ALLOWABLE UNITS = 2.0 DU/AC * 58.6 AC.± = 117.2
PROPOSED UNITS = 117 (1.997 DU/AC.)
- AREAS:
 - NON-TIDAL WETLANDS AREA = 5.22 AC ±
 - DEDICATION TO DELDOT = 0.55 AC ±
- SOIL CLASSIFICATIONS
 - FmA & FhB: FORT MOTT-HENLOPEN COMPLEX - HYDROLOGIC SOIL GROUP A
 - FmC: FORT MOTT LOAMY SAND - HYDROLOGIC SOIL GROUP A
 - L0: LONGMARSH AND INDIANTOWN SOILS HYDROLOGIC SOIL GROUP B/D
- OPEN SPACE = 27 AC.± (46% OF DEVELOPED SITE AREA)
OPEN SPACE A = 4 AC.± (15% OF OPEN SPACE)
OPEN SPACE B = 13 AC.± (48% OF OPEN SPACE)
OPEN SPACE C = 10 AC.± (37% OF OPEN SPACE)
- EXISTING WOODLANDS = 56.81 AC.±
WOODLANDS TO REMAIN = 9.86 AC.± (17.3%)
- SITE IS LOCATED IN THE FAIR AND GOOD RECHARGE AREAS.
- SITE IS NOT LOCATED IN THE WELL HEAD PROTECTION AREA.

NOTES:

- ALL ON-SITE STREETS ARE PRIVATE AND SHALL BE MAINTAINED BY THE OWNER UNTIL DEDICATION TO THE HOMEOWNERS ASSOCIATION. THE PERPETUAL MAINTENANCE OF THE STREETS SHALL BE BY THE RESPECTIVE ORGANIZATION.
- STORMWATER MANAGEMENT AND STORM DRAINAGE SHALL BE IN ACCORDANCE WITH THE SUSSEX COUNTY CONSERVATION DISTRICT AND SUSSEX COUNTY ENGINEERING REQUIREMENTS. THE SITE IS TO BE TREATED BY MULTIPLE WET PONDS. MAINTENANCE OF THE ON-SITE STORMWATER MANAGEMENT FACILITIES AND STORM DRAINAGE SYSTEM SHALL BE BY THE OWNER UNTIL DEDICATION TO THE HOMEOWNERS ASSOCIATION. THE PERPETUAL MAINTENANCE OF THE ABOVE PROACTIVE SHALL BE BY THE RESPECTIVE ORGANIZATION.
- ALL OPEN SPACE, INCLUDING BUFFERS AND FOREST STRIPS, SHALL BE MAINTAINED BY THE HOMEOWNERS ASSOCIATION.
- FOR ANY NEW DEVELOPMENT LOCATED IN WHOLE OR IN PART WITH 50 FEET OF THE BOUNDARY OF LAND USED PRIMARILY FOR AGRICULTURAL PURPOSES. NO IMPROVEMENT REQUIRING AN OCCUPANCY APPROVAL FOR A RESIDENTIAL TYPE USE SHALL BE CONSTRUCTED WITHIN 50 FEET OF THE BOUNDARY OF THE LANDS USED PRIMARILY FOR AGRICULTURAL PURPOSES.
- POTABLE WATER, SANITARY SEWER, STORM DRAINAGE, STREET PAVEMENT SHALL BE CONSTRUCTED BY DEVELOPER. PHASING OF IMPROVEMENTS SHALL BE PER COUNTY AND CONSERVATION DISTRICT REQUIREMENTS.
- THIS PROPERTY IS LOCATED IN THE VICINITY OF LAND USED PRIMARILY FOR AGRICULTURAL PURPOSES ON WHICH NORMAL AGRICULTURAL PURPOSES AND ACTIVITIES HAVE BEEN AFFORDED THE HIGHEST PRIORITY USE STATUS. IT CAN BE ANTICIPATED THAT SUCH USES NOW OR IN THE FUTURE INVOLVE NOISE, DUST, MANURE AND OTHER ODORS. THE USE OF AGRICULTURAL CHEMICALS AND NIGHTTIME FARM OPERATIONS. THE USE AND ENJOYMENT OF THIS PROPERTY IS EXPRESSLY CONDITIONED ON ACCEPTANCE OF ANY ANNOYANCE OR INCONVENIENCE WHICH MAY RESULT FROM NORMAL AGRICULTURAL USES AND ACTIVITIES.
- THE PROPERTY IS NOT LOCATED WITHIN ANY TRANSPORTATION IMPROVEMENT DISTRICTS.
- ALL SUBDIVISION LOTS SHALL HAVE FIVE FOOT WIDE EASEMENTS ALONG ALL LOT LINES FOR A TOTAL EASEMENT WIDTH OF 10 FEET ALONG A LOT LINE COMMON TO TWO LOTS. EASEMENTS ALONG PERIMETER (RIGHT-OF-WAY AND OPEN SPACE) SHALL BE 10 FEET IN WIDTH.

PRELIMINARY PLAT

- COVER SHEET
- EXISTING CONDITIONS PLAN
- PRELIMINARY PLAT A
- PRELIMINARY PLAT B
- PRELIMINARY PLAT C
- PRELIMINARY PLAT D

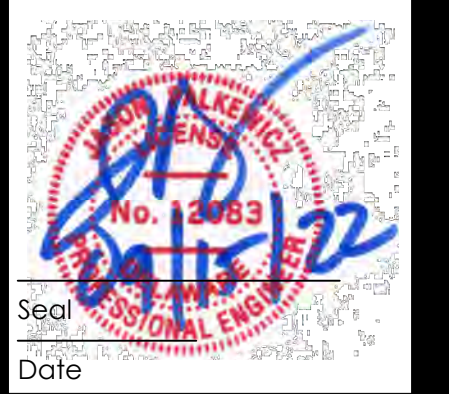


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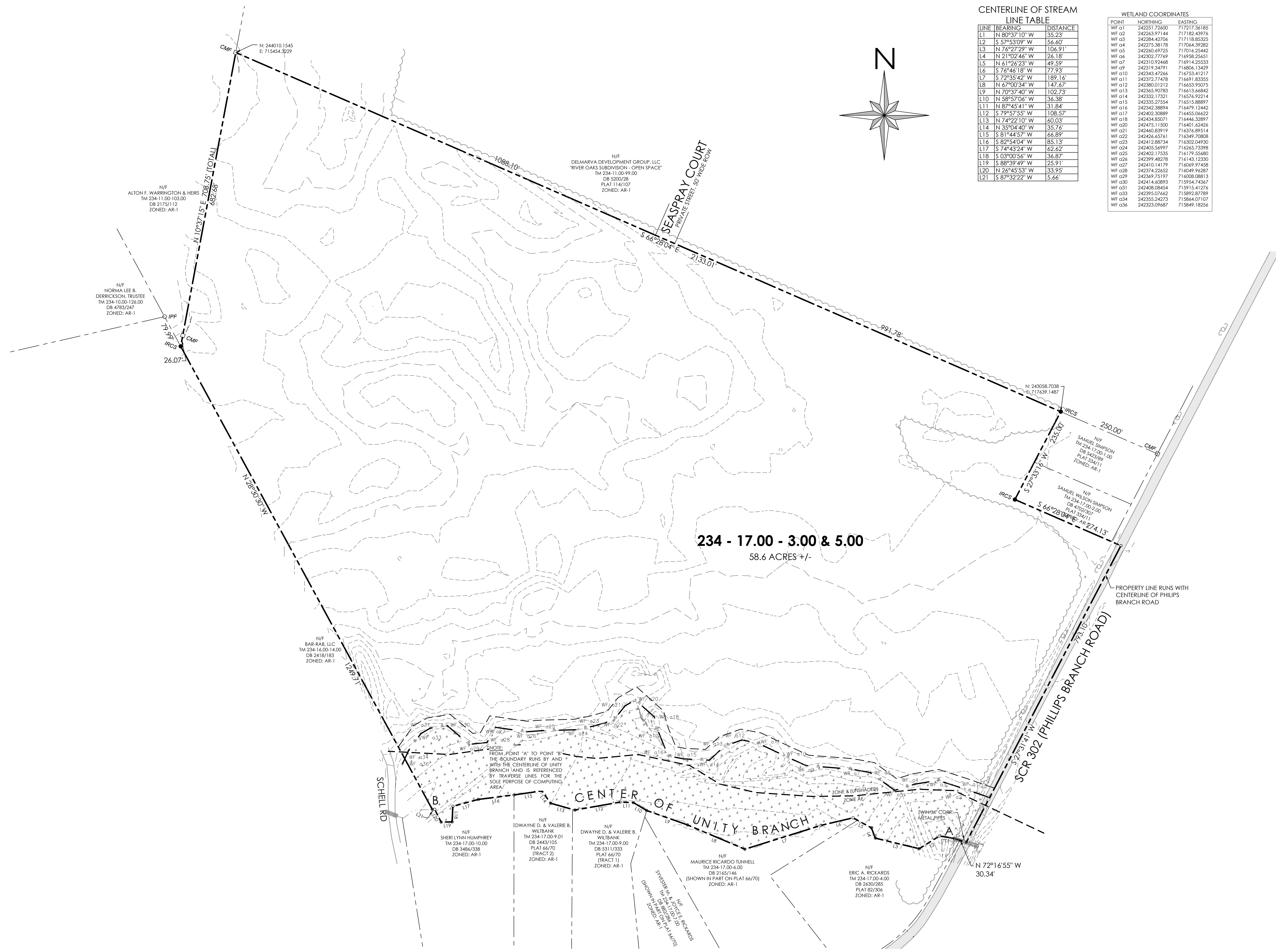
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3	4/27/22	UPDATED OWNER/DEVELOPER/APPLICANT INFORMATION
4	8/2/22	UPDATED OWNER/DEVELOPER/APPLICANT INFORMATION
5	9/16/22	UPDATED PROPERTY PARCELS

COVER SHEET
for
RIVERWOOD
INDIAN RIVER HUNDRED
SUSSEX COUNTY, DELAWARE

Date: 6/3/21
Job Number: 20098
Scale: AS SHOWN
Drawn By: ML
Designed By: JIP
Approved By: JIP

Sheet No.: 1

File Name: 20098-cover



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5	9/16/22	UPDATED PROPERTY PARCELS

EXISTING CONDITIONS

for

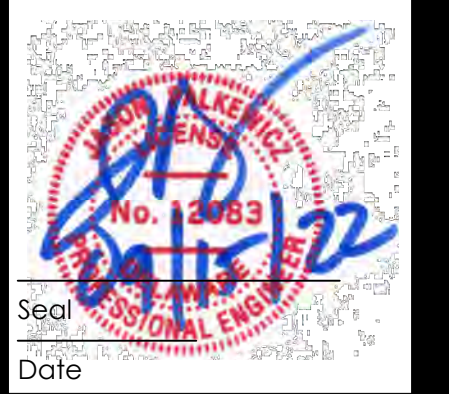
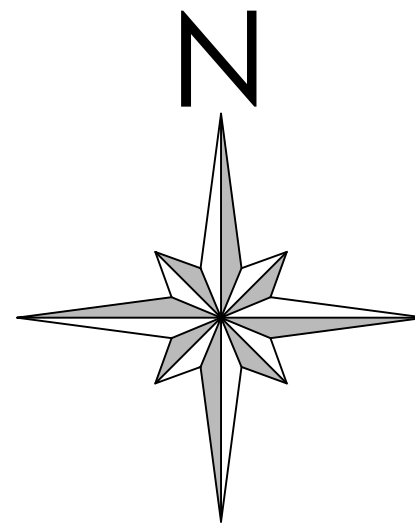
RIVERWOOD

INDIAN RIVER HUNDRED
SUSSEX COUNTY, DELAWARE

Date:	6/3/21
Job Number:	20098
Scale:	1" = 100'
Drawn By:	ML
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Approved By:	JIP

Sheet No.: **2**

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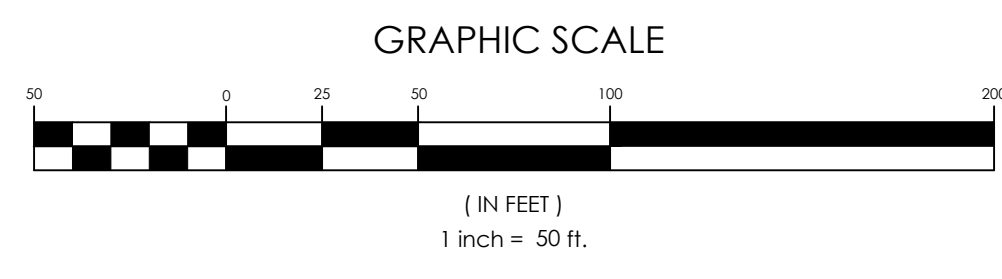


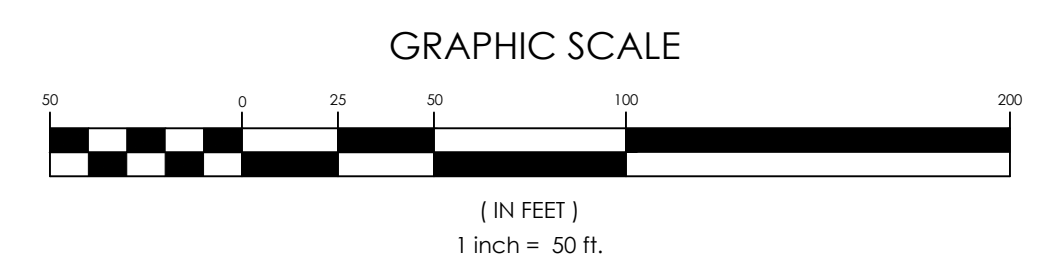
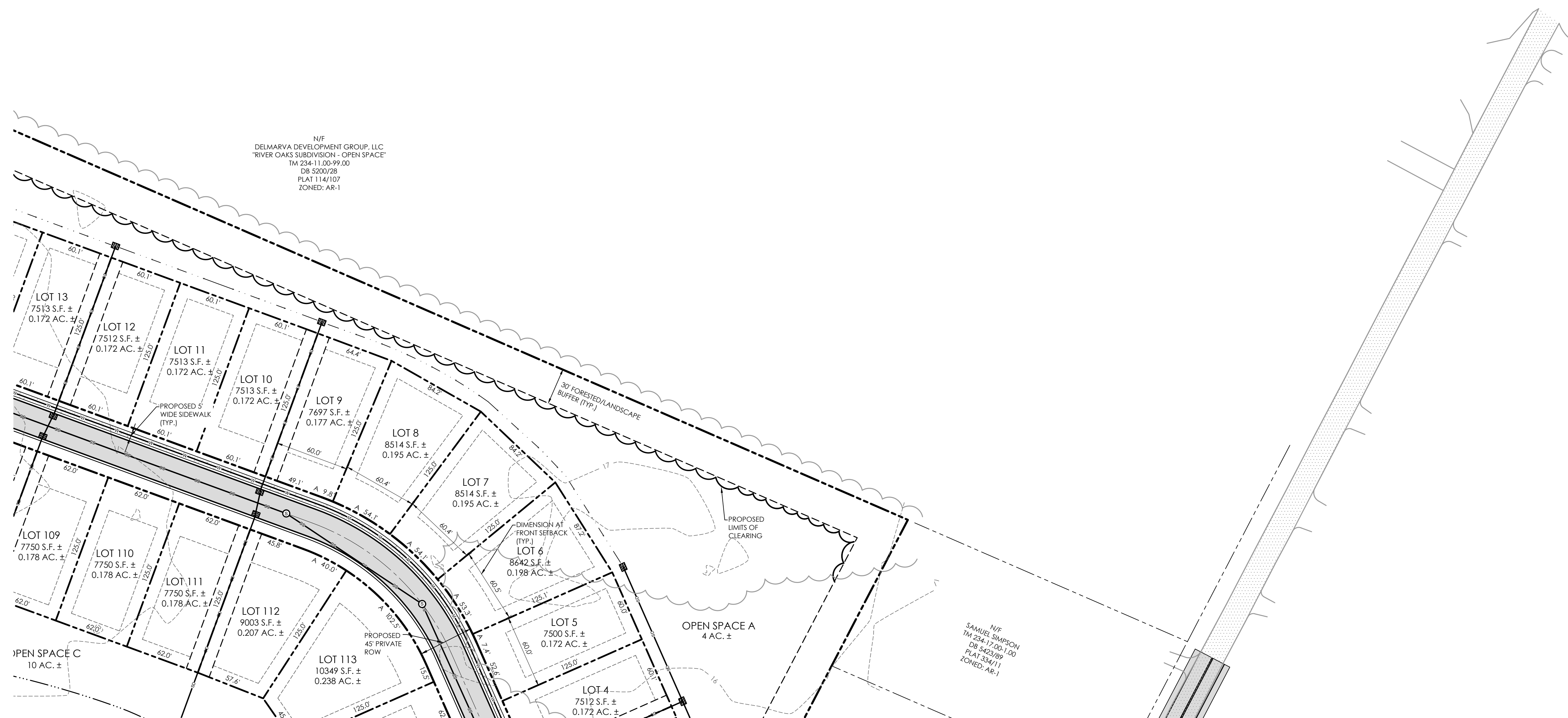
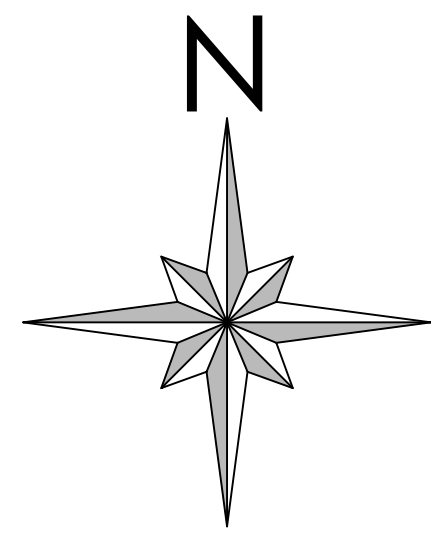
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PRELIMINARY PLAN - PLAN A
 for
RIVERWOOD
 INDIAN RIVER HUNDRED
 SUSSEX COUNTY, DELAWARE

Date:	6/3/21
Job Number:	20098
Scale:	1"=50'
Drawn By:	ML
Designed By:	JIP
Approved By:	JIP

Sheet No.: **3**
 File Name: 20098-prelim-plot

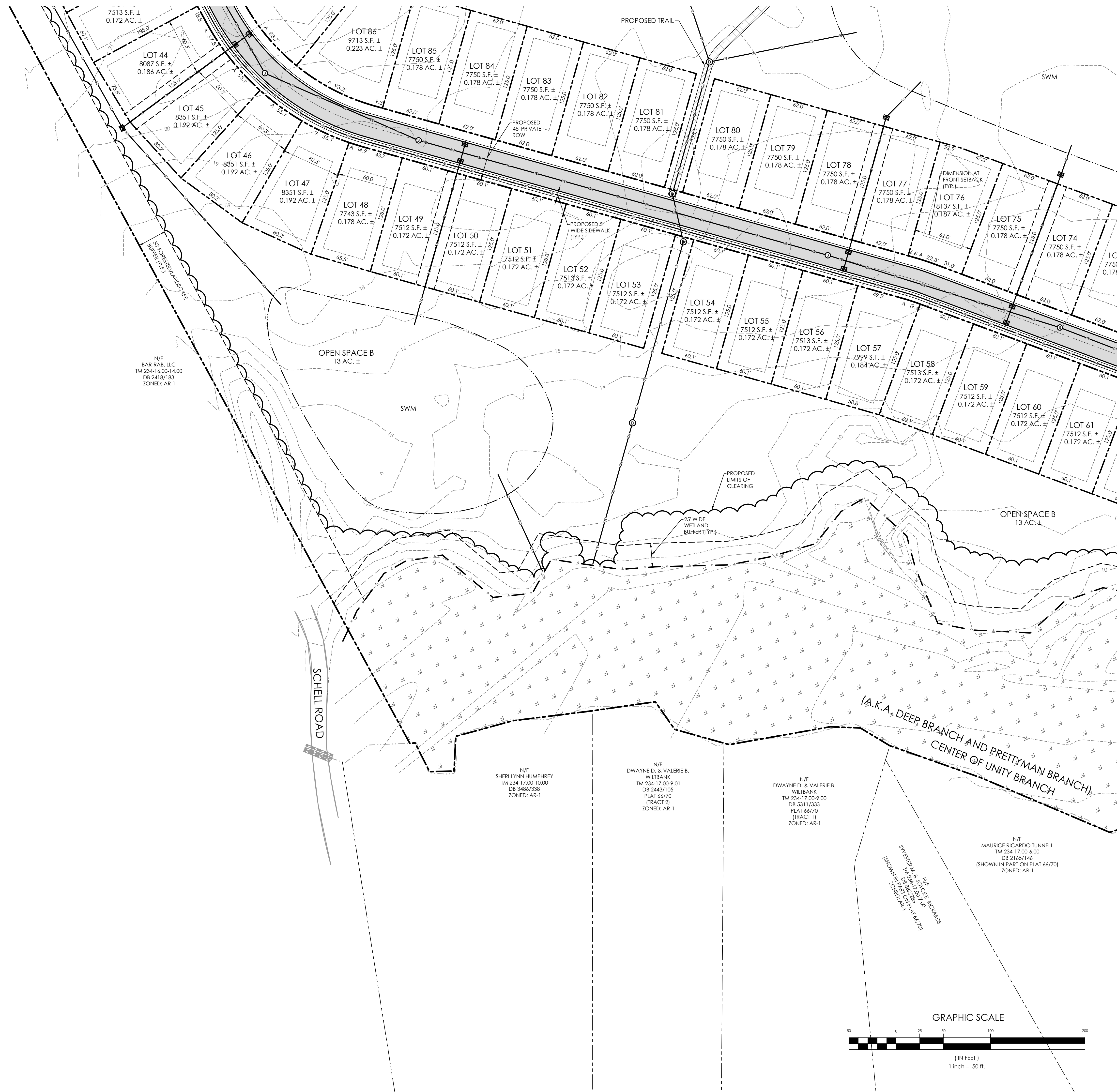
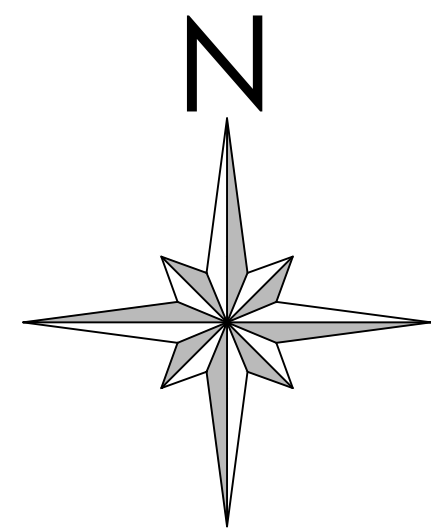




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5	9/16/22	UPDATED PROPERTY PARCELS

PRELIMINARY PLAT - PLAN B
for
RIVERWOOD
INDIAN RIVER HUNDRED
SUSSEX COUNTY, DELAWARE

Date:	6/3/21
Job Number:	20098
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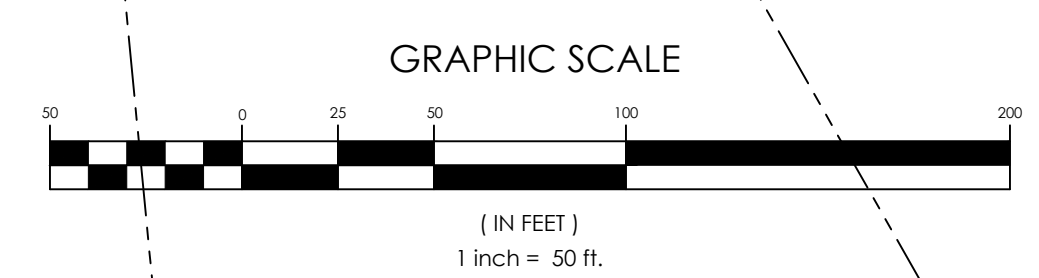


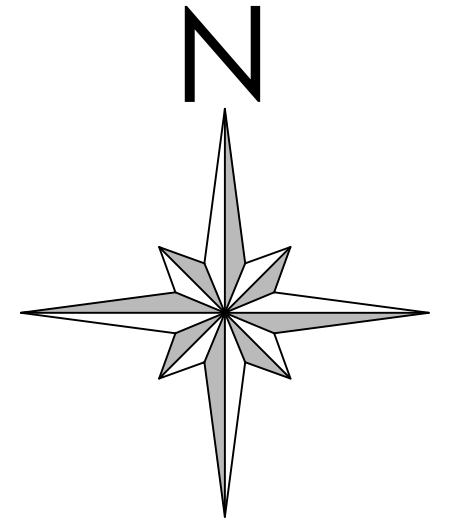
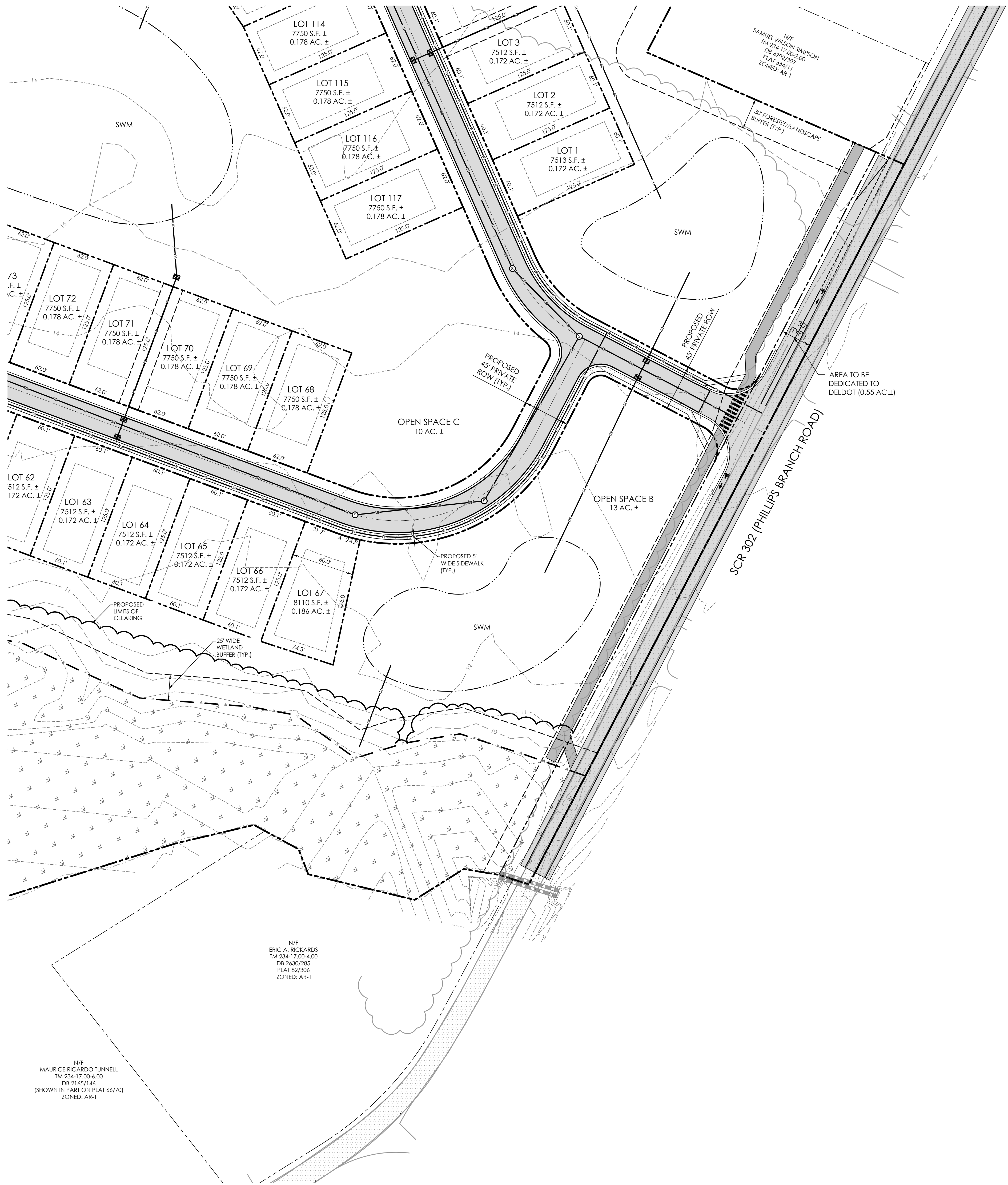
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PRELIMINARY PLAT - PLAN C
for
RIVERWOOD
INDIAN RIVER HUNDRED
SUSSEX COUNTY, DELAWARE

Date:	6/3/21
Job Number:	20098
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Approved By:	J.P.

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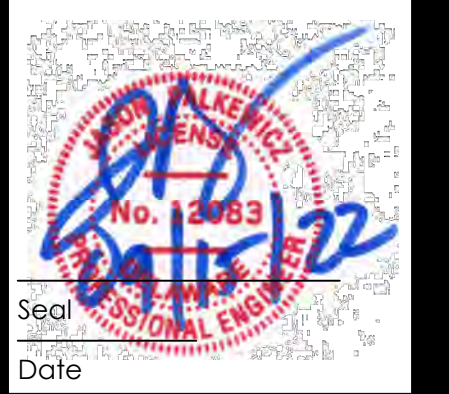


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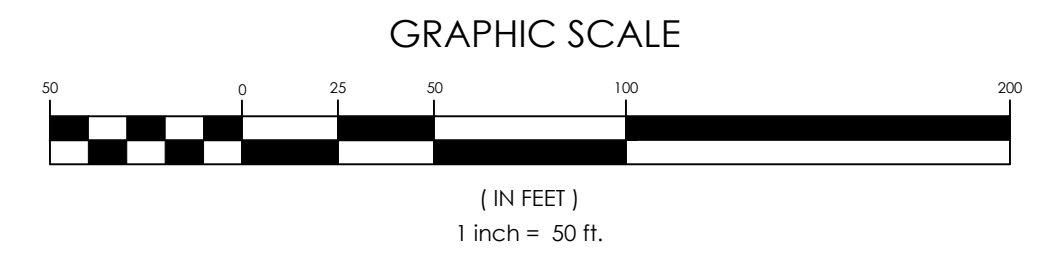
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PRELIMINARY PLAT - PLAN D
for
RIVERWOOD
INDIAN RIVER HUNDRED
SUSSEX COUNTY, DELAWARE

Date:	6/3/21
Job Number:	20098
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Drawn By:	ML
Designed By:	JIP
Approved By:	JIP

Sheet No.: **6**

File Name: 20098-prelim-plat



Riverwood


Project Reference Material AR-1 Cluster



August 2022



Project Team



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ENVIRONMENTAL

Environmental Resources, Inc

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Resumes:

Jason Palkewicz, PE

Riverwood



I. Executive Summary

Riverwood is a proposed 58.6 acre Cluster Subdivision composed of 117 single-family detached homes on individual lots. The site is located on the West side of Phillips Branch Road adjacent to the River Oaks residential community. The land is currently zoned AR-1.

Riverwood is located within Investment Level 4 of the State Strategies for Policies and Spending Map.

The proposed community provides 117 homes on roads within private rights-of-way with curb and gutter and sidewalk on one side of the streets, streetlights and preserved wooded areas. The project contains a total of 27 +/- acres (46%) of interconnected open space, subject to final engineering.

A centrally located recreation facility is provided which includes a pool and bathhouse. The sidewalk will connect to the proposed DeDOT multi-modal path. A school bus stop and central mail facility will also be provided.

Proposed Density and Calculations:

Project Area

58.6 acres

Allowable Homes Calculation (AR-1 Cluster):

2.0 homes/acre

$58.6 \times 2.0 = 117$ homes

Proposed Homes:

117 Homes

Actual Density:

$117 / 58.6 = 2.0$ homes/acre

In conclusion, the proposed community has been thoughtfully planned to achieve a superior living environment for future residents. This plan provides appealing amenities that will result in sustainable property values with neutral to positive impacts on property values in nearby neighborhoods while promoting the health, safety and welfare of the citizens of Sussex County.

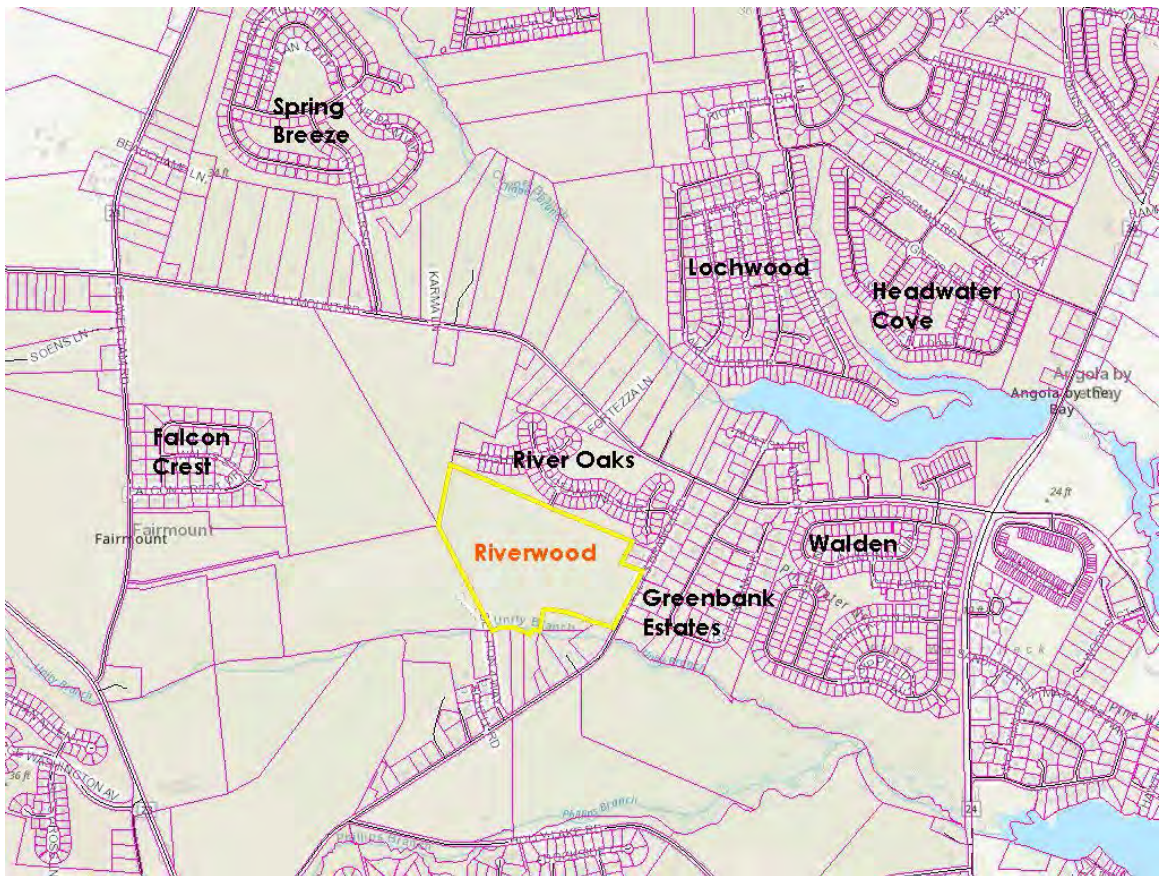
II. Project Overview

A. Boundary Plat, Topographic & Non-Tidal Wetlands Survey

A boundary topographic survey for the property was prepared by Solutions IPEM, LLC. The total area of the property is 58.6 +/- acres. The site contains approximately 5.2 acres of non-tidal wetlands.

B. Overview of Current Site Conditions

The property for the proposed Riverwood community is located West of Phillips Branch Road, adjacent to the River Oaks community. The proposed development is in the vicinity of the residential communities of Greenbank Estates, Walden, Lochwood, Headwater Cove, Falcon Crest, and Spring Breeze.



The property is located within flood Zone AE (special flood hazard areas subject to inundation by the 1% annual chance flood) and Zone X, (areas determined to be outside the 0.2% annual chance floodplain), per map number 10005C Panel 0340K, map revised March 15, 2015. The site is located within areas of good and fair groundwater recharge potential.

A soils report was prepared by GTA. The project contains Class A soils. The site is suitable for development including infrastructure, home construction and stormwater management.

C. Land Plan and Amenities

The land plan takes into account:

- Existing site conditions
 - Forest Land
 - Existing Grades
 - Wetlands
 - Flood Zones
- Stormwater outfalls
- Adjacent communities
- Existing roadways
- Current housing trends
- Recreational needs

The resultant plan has:

- A 30' landscaped buffer (partially existing woods).
- Proposed lots are more than 45' from the perimeter of the site.
- Sidewalks on one side of the road along with a connection to the proposed DeIDOT multi-modal path.
- Main recreation facility including:
 - Pool
 - Bathhouse
- Streetlights.
- Walking trail.
- Community mailbox cluster.
- School bus stop.
- An efficient stormwater management system that acts as an amenity.
- Large tracks of open space
 - Open Space Required (30%) = 17.58 acres
 - Open Space Proposed = 27 acres
 - Contiguous Open Space Required (30% of Required Open Space) = 5.3 acres
 - Contiguous Open Space Proposed = 23 acres

D. DeIDOT Improvements

A series of discussions were held with DeIDOT officials concerning area roadway improvements related to Phillips Branch Road specifically with regard to off-site transportation improvements and frontage improvements. Entrance improvements are anticipated to include right turn lane into the development.

E. Preliminary Land Use Service (PLUS)

A concept plan for Riverwood was presented to PLUS on June 23, 2021. A response letter was provided to PLUS which addressed their comments point by point.

F. Sanitary Sewer Planning Area

The Riverwood community is anticipated to be served by Artesian. The site is located within the Sussex County Tier 3 – Coordinated CPCN Area.

III. Compliance with Applicable Regulations

A. Compliance with AR-1 (Agricultural Residential District)

The project is located within the AR-1 zone. The site is being developed with residential lots within the AR-1 zone and will meet the requirements of the AR-1 Cluster as existed at the time of application's submission to the Department of Planning and Zoning.

The proposed land use is in conformity with the Zoning Ordinance which allows 2.0 dwelling units per acre based on the gross site area.

Purpose: Riverwood conforms with the purpose of the AR-1 code in as much as it is a low density residential community that protects water resources, watersheds, forest area and scenic views. Specific design elements include:

- Recreation facilities such as walking trail, pool and bathhouse are provided.
- Sidewalks and a connection to the multi modal path are provided.
- No lots are proposed in the wetland areas.
- There are no wellhead protection areas on the property.

Permitted Uses: The AR-1 allows the proposed single-family cluster development.

Permitted Accessory Uses: The zoning allows outdoor amenities for use of occupants and their guests.

Conditional Uses: Riverwood is not applying for any conditional uses.

Special Use Exceptions: Riverwood is not applying for any special use exceptions.

Permitted Signs: All proposed development signage will conform to the regulations provided in 115-159.2.

Height, Area and Bulk Requirements: The height, area and bulk requirements are set forth in the AR-1 zoning article. The following is a summary of the lot dimensions and setbacks for Riverwood, all of which are in conformity with County requirements:

Single Family Lots -

- Minimum Lot Area = 7,500 S.F.
- Minimum Lot Width = 60'
- Front Yard = 25' (15' Corner Lot)
- Side Yard = 10'
- Rear Yard = 10'
- Maximum Building Height = 42'

B. Statement of Compliance with Chapter 115-25, E. Design Requirements for Cluster Development

(1) All development shall be in accordance with the latest amendment to the community design standards. The proposed cluster subdivision is in compliance with the Community Design section of the County's comprehensive plan.

(2) Housing types in the low-density area, as shown on the Sussex County Comprehensive Plan, are limited to single-family detached dwellings and manufactured homes where permitted by ordinance. Only single-family detached home types are proposed within the cluster subdivision.

(3) A forested buffer area with a minimum width of 30 feet shall be provided for lots abutting an agricultural area. A 30' buffer is provided to the adjacent properties.

(4) Dwellings located within 50 feet of an existing residential development shall provide adequate transition in density or shall provide a thirty-foot buffer meeting the standards below and maintained by a designated entity. A 30' buffer is provided.

(5) No lots shall have direct access to any state-maintained roads. No proposed lots have access to state-maintained roads.

(6) All lots shall be configured to be contained completely outside of all wetlands. The proposed lots are not located within wetlands.

(7) Any development using the option in Subsection B(2) shall have central water and wastewater systems operated and maintained by companies authorized by the State of Delaware to perform such services. Wastewater collection and treatment systems must be designed in accordance with the requirements of Sussex County ordinances and conform to the requirements for a central sewer system as defined in § 115-194A of the Sussex County Zoning Ordinance. The proposed community will be served by both central water and wastewater systems.

C. Statement of Compliance with Chapter 115-25, F. (3) Planning and Zoning Requirements

(a) [1] The proposed lots and amenities are located within the environmentally suitable portions of the site. Specifically, wetlands and waterways are avoided. Clearing of the woods are limited to the amount required to develop the project.

(a) [3] The open space meets the requirements of the County Code. The required open space (30% of site) is 17.58 acres, 27 acres have been provided. Of the required open space (17.58 acres), 30% (5.3 acres) is required to be on one contiguous tract of land (separated by water and up to one street). The project provided 23 acres of contiguous open space. The sidewalk system is proposed to be connect to the DeIDOT multi-modal system.

(a) [4] Wetlands have been delineated. No lots are proposed within the wetland area.

(a) [5] Stormwater management shall be provided per DNREC and Sussex Conservation District. Recharge or structurally equivalent BMPs shall be provided. Soils testing and reports have been prepared by GTA showing the existing is suitable for development.

(a) [6] Tree removal shall be limited to what is necessary to construct the project.

(a) [7] Scenic views are preserved for the homeowners and passersby by limiting back-to-back lots and providing gaps between lots.

(a) [8] The land plan preserved natural facilities (woods) and includes sidewalks and connections to DelDOT's multi-modal path. Open space adjacent to natural features has been prioritized. Existing grades and drainage area are considered in the lot layout.

(a) [9] Sidewalks are provided on one side of each street.

(b) Natural and historic features are preserved as part of the land plan.

(c) Section 99-9C items are addressed herein.

(d) The cluster subdivision is not located within a designated growth area.

D. Statement of Compliance with Chapter 99, Sussex County Subdivision of Land

Chapter 99-9 (C)

The proposed development plan has taken into consideration all items listed within the Subdivision of Land – Chapter 99, Section C within the Sussex County Code and complies with it in the following manner:

1. *"Integration of the proposed subdivision into existing terrain and surrounding landscape."*

- a. The Developer has taken great effort to utilize the additional land as open space. The proposed location of storm water management facilities was also based on extensive soils borings and a soil report.
- b. The project is not adjacent to agricultural uses.
- c. A minimum 30' landscaped buffer has been provided adjacent to all surrounding property lines.
- d. The proposed lots within the community are a minimum of 45' from the outbounds of the property.

2. *"Minimal use of wetlands and floodplains."*

- a. The wetlands have been delineated and shown on the plan. Not lots are proposed within the wetland area.
- b. The proposed lots are located within flood Zone X (unshaded), areas determined to be outside the 0.2% annual chance floodplain.

3. *“Preservation of natural and historic features.”*

- a. There are no known historic sites.
 - i. A 40’ x 40’ area as referenced in the PLUS letter has been investigated by Edward Otter, PhD. The site was stripped and no graves or indication of graves was noted.
- b. The roadway system, stormwater features and lots were designed in such a way to minimize impacts/disturbance of steep slopes.

4. *“Preservation of open space and scenic views.”*

- a. Large tracts of open space are being persevered including wooded areas, buffers and flood zone.

5. *“Minimization of tree, vegetation, and soil removal and grade changes.”*

- a. Disturbance to the site will be limited to only those areas required for homes, roads, storm water management and utility installation. All undisturbed vegetation that is compatible with native vegetation shall remain.
- b. Grade changes to the site shall be limited to those necessary to provide positive drainage and proper cover over utilities.

6. *“Screening of objectionable features from neighboring properties and roadways.”*

- a. Screening of objectionable features on the site from adjacent properties and roadways shall be provided utilizing the required 30’ landscaped buffer around the perimeter of the site or existing forested areas and storm water management facilities where those exist.
- b. The proposed lots within the community are a minimum of 45’ from the outbounds of the property.

7. *“Provision for water supply.”*

- a. Artesian will provide potable water and fire protection for the development.

8. *“Provision for sewage disposal.”*

- a. The community wastewater service is intended to be provided by Artesian.

9. *“Provision for solid waste disposal.”*

- a. Arrangements will be made with a commercial trash hauler to provide trash collection for Riverwood.

10. *“Prevention of surface and groundwater pollution.”*

- a. All runoff from the Riverwood site will be directed via the closed road section and storm drain network into a storm water management system consisting of Best Management Practices (BMP) for treatment and discharge. The storm water management facilities will be designed in accordance with Delaware / Sussex County standards.
- b. Ultimately, through post-development design, runoff will receive better treatment than during pre-development conditions. The project will meet the current storm water management regulations as required by DNREC.

11. *“Minimization of erosion and sedimentation, minimization of changes in groundwater levels, minimization of increased rates of runoff, minimization of potential for flooding and design of drainage so that groundwater recharge is maximized.”*

- a. As stated above, stormwater management quality and quantity will be provided by a storm water management system consisting of Best Management Practices (BMP) for treatment and discharge. The BMP’s will be designed per Delaware / Sussex County standards. The stormwater collection/treatment system will be adequately sized to prevent flooding.
- b. Erosion and sediment control will be provided by methods approved by the Sussex Conservation District. An erosion and sediment control plan will be prepared and submitted for review.

12. *“Provision for safe vehicular and pedestrian movement within the site and to adjacent ways.”*

- a. Entrance to the site shall be designed per current DelDOT standards.
- b. To promote pedestrian traffic within the development, 5’ sidewalks are provided along one side of the road.
- c. All roads will be designed in accordance with Sussex County standards.
- d. A walking trail has been provided.

13. *“Effect on area property values.”*

- a. It is expected that the proposed Riverwood community will cause current property values to remain the same if not increase the value of the properties in the area. Great attention has been paid to the detail and aesthetic qualities of the plan, the livability of the community and amenities provided.

14. *“Preservation and conservation of farmland.”*

- a. The proposed subdivision will not adversely affect adjacent farmland due to landscaped buffers and other natural wooded areas that separate the community from farmland.

15. *“Effect on schools, public buildings, and community facilities.”*

- a. Based on Sussex County population trends, approximately 14% of the population is of K-12 school age. This would result in approximately 49 school age children within the community.
- b. Community amenities will include a pool and bathhouse. In addition, Riverwood includes several open space areas for other active and passive uses.

16. “Effect on area roadways and public transportation.”

- a. A series of discussions were held with DelDOT officials concerning area roadway improvements related to Riverwood specifically with regard to off-site transportation improvements and frontage improvements. Entrance improvements are anticipated to include a right turn lane into the property.

17. “Compatibility with Other Land Uses.”

- a. The project is relatively adjacent to other residential communities of River Oaks, Greenbank Estates, Walden, Lochwood, Headwater Cove, Falcon Crest, and Spring Breeze, thus being compatible in density, home style and land use.

18. “Effect on Area Waterways.”

- a. Runoff will be treated for water quality and quantity prior to discharge.

E. Statement of Conformity with Sussex County, Delaware, Comprehensive Plan Update, March 2019

Chapter 4 Future Land Use:

The site is located within the Low Density Area and complies as follows:

- The proposed land plan addresses environmental concerns.
 - o Greater than 20% of the site is set aside as open space.
 - o 30’ perimeter landscape buffer.
- Single-family homes are permitted.
- The proposed density of 2.0 du/ac is in compliance with the 2.0 du/ac as appropriate in this location.
- Central water and sewer will be available to the site.

Chapter 5 Conservation:

The proposed community complies with the Conservation section as follows:

- The site complies with surface water runoff requirements.
- There are no well head protection areas or excellent ground recharge areas within the proposed site.
- No lots are proposed in the wetland areas.
- The proposed lots are not located within flood zones.
- Central water and sewer will be available to the site.

Chapter 6 Recreation and Open Space:

The proposed community complies with the Recreation and Open Space section as follows:

- The site is located within Region 5 of the Delaware Statewide Comprehensive Outdoor Recreation Plan and provides the following:
 - o High Priorities:
 - Swimming pools
 - Walking/jogging paths (multi-modal)
 - Bike paths (multi-modal)
- In addition, the community provides:
 - o Sidewalks
 - o Walking trail

Chapter 7 Utilities:

The proposed community complies with the Utilities section as follows:

- Water will be provided by Artesian who has the CPCN for the project.
- The Riverwood community wastewater service will be provided by Artesian.
- Adequate areas are provided for stormwater management and stormwater drainage.
- It is anticipated that solid waste collection will be by a licensed commercial hauler.

Chapter 8 Housing:

The proposed community complies with the Housing section as follows:

- The community is located West of the Lewes / Rehoboth Beach region and will provide housing for retirees as well as those working in the County.

Chapter 9 Economic Development:

The proposed community complies with the Economic Development section as follows:

- This development project will directly provide employment/opportunities in:
 - o Construction
 - o Professional, Business and IT Services
 - o Finance, Insurance and Real Estate
 - o Utilities
- The development will also indirectly provide job opportunities in:
 - o Leisure and Hospitality
 - o Education and Healthcare

Chapter 10 Historic Preservation:

The proposed community complies with the Historic Preservation section as follows:

- There are no known historic sites located on the site.
 - o A 40' x 40' area as referenced in the PLUS letter has been investigated by Edward Otter, PhD. The site was stripped and no graves or indication of graves was noted.

Chapter 12 Community Design:

The proposed community complies with the Community Design section as follows:

- The proposed community is a cluster subdivision, which is widely used in AR-1 zoning.
- Street lighting will be provided.
- Sidewalks are proposed on one side of the roadways.

- The lot sizes within the cluster make rear garages impossible and side loads very unlikely.
- The narrower right-of-way allows for homes to be placed closer to the road.
- The proposed homes will be limited to 42' in height.
- No variances to the required setbacks are proposed.
- Although no direct connection of walking trails or bicycle paths to the existing adjacent communities is possible, the community will connect to multi-modal paths within DeIDOT's right-of-way.
- The entrance to the community will be landscaped.
- Cross walks will be provided.
- Landscape/forested buffers will be provided along the perimeter.
- Utilities are proposed to be underground.
- Street signage will be provided throughout the community.

Chapter 13 Mobility Element:

The proposed community complies with the Mobility Element section as follows:

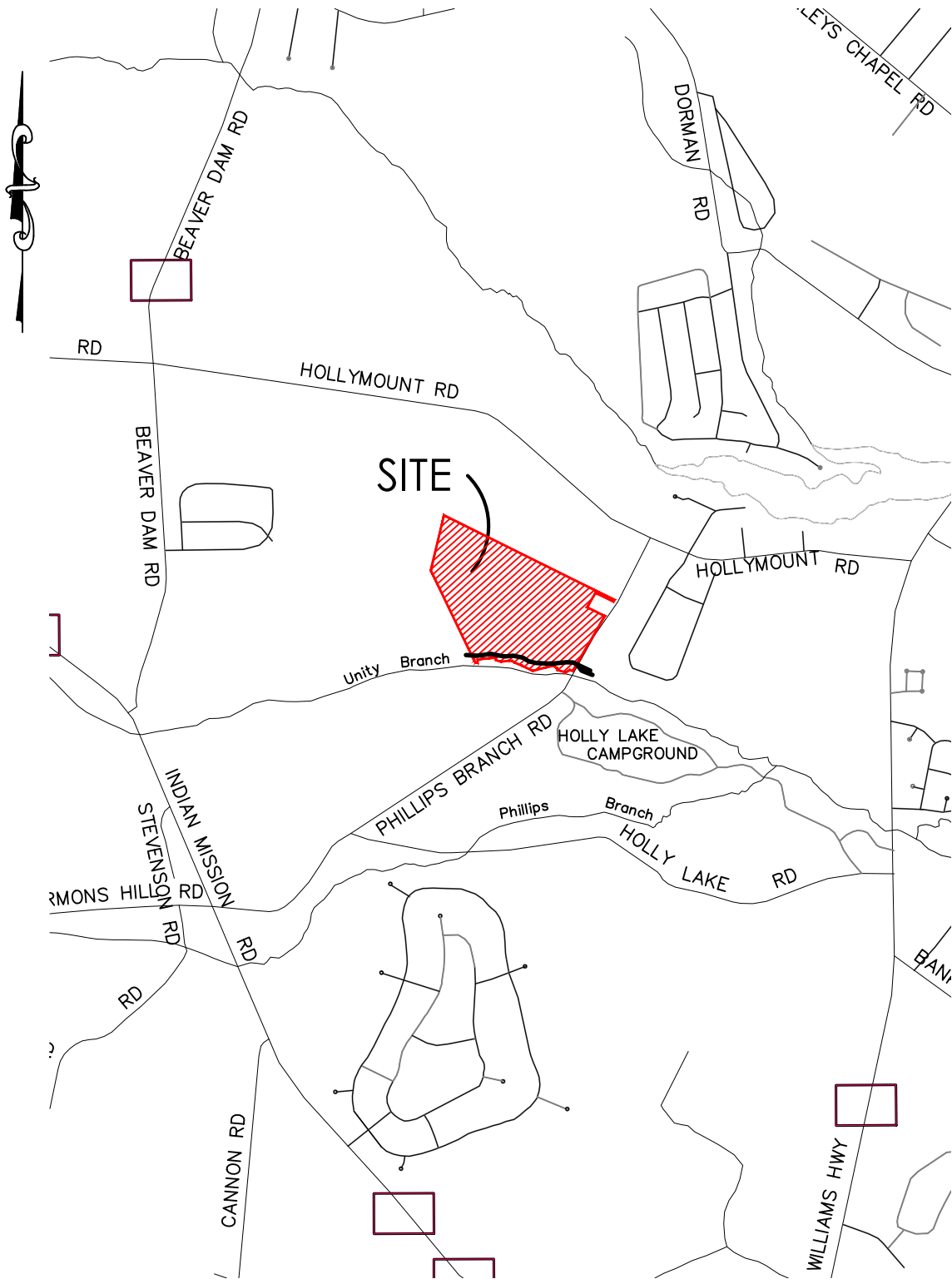
- Entrance, roadway and off-site improvements necessitated by DeIDOT will be designed and constructed per DeIDOT standards.

IV. Conclusion

The proposed community of Riverwood will enhance the area with a well-planned design, upscale homes, and amenities, and no negative impact on the land. The design preserves large amounts of open space while preserving attractive views within and into the community. The homes will have a neutral to positive impact on the value of the surrounding neighborhoods and will provide the County with additional tax revenue. Active amenities include pool, and bathhouse as well as dedicated open spaces for other activities. The design also preserves and enhances existing views through non-disturbance and accentuates certain features of the existing terrain.

The proposed Community of Riverwood meets the standards set forth by the County and State and will provide a superior living environment for future residents without placing a burden on the County, State or taxpayers to serve this community.

VICINITY MAP



RIVERWOOD





November 1, 2021

Mrs. Constance C. Holland, AICP, State Planning Director
Haslet Armory
122 Martin Luther King Jr. Blv. South
Dover, DE 19901

RE: PLUS review 2021-06-07; Phillips Branch

Dear Mrs. Holland;

Please allow this letter to serve as our response to the PLUS review of the Riverwood (FKA Phillips Branch) property. Answers to comments have been provided following each comment taken directly from your comment letter for ease of use. Our responses are in red and in different font for ease in review.

Thank you for meeting with State agency planners on June 23, 2021 to discuss the Philips Branch project. According to the information received you are seeking review of a proposed 117 unit subdivision on 58.6 acres along Phillips Branch Road in Sussex County.

Please note that changes to the plan, other than those suggested in this letter, could result in additional comments from the State. Additionally, these comments reflect only issues that are the responsibility of the agencies represented at the meeting. **The developers will also need to comply with any Federal, State, and local regulations regarding this property. We also note that as Sussex County is the governing authority over this land, the developers will need to comply with any and all regulations/restrictions set forth by the County.**

Response: The developer will comply with all Federal, State, and local regulations regarding the development of this property. The developer will comply with all regulations / restrictions set forth by Sussex County.

Strategies for State Policies and Spending

This project represents a major land development that will result in approximately 117 residential units in an Investment Level 4 area according to the *2020 Strategies for State Policies and Spending*. This project is also located outside a development district. Investment Level 4 indicates where State investments will support agricultural preservation, natural resource protection, and the continuation of the rural nature of these areas. New development activities and suburban development are not supported in Investment Level 4. These areas are comprised

of prime agricultural lands and environmentally sensitive wetlands and wildlife habitats, which should be, and in many cases have been preserved.

From a fiscal responsibility perspective, development of this site is likewise inappropriate. The cost of providing services to development in rural areas is an inefficient and wasteful use of the State's fiscal resources. Over the longer term, the unseen negative ramifications of this development will become even more evident as the community matures and the cost of maintaining infrastructure and providing services increases.

In addition, the development of this site may be environmentally inappropriate due to the following:

- **Old Growth Forest/Forest Removal** - The preliminary plan proposes the elimination of 47.5 of the 56.8 acres of forest on the site. An analysis of historical data indicates that the forest area located on the western portion of the site has likely maintained some degree of forest cover since 1937 and could be considered mature forest. Mature forests possess the potential for rare, threatened, or endangered species that rely on this type of habitat.
- The majority of the parcel, with the exception of the northeast corner, lies within lands designated within the Delaware Ecological Network. The vast majority of the forest located within this area is proposed for removal. This network is made up of interconnecting natural areas of significant ecological value. Forest disturbances on this site will jeopardize habitat on the parcel and possibly beyond the parcel's boundary.
- **Natural Areas/Nature Preserves** - The forested area that currently exists on the site is connected to a much larger contiguous forest complex extending into land designated as Herring Creek Natural Area. Natural Areas contain lands of statewide significance identified by the Natural Areas Advisory Council as the highest quality and most important natural lands remaining in Delaware
- **Sea Level Rise** - The southern portion of this site is vulnerable to permanent inundation from sea level rise. It is noted that at this time, no structures are proposed on land subject to inundation levels between 1 and 5 feet. By 2050, mean sea levels are projected to rise by 0.7 – 1.9 feet; by end of century sea levels are projected to increase by 1.7 – 5.0 feet. In addition to permanent inundation, as mean sea levels rise, the frequency and severity of tidal flooding events is expected to increase.
- The proposed project is adjacent to a property protected through the State's Agricultural Lands Preservation Program (Mrs. Grace Shorts Caulk District)

Because the development is inconsistent with the Strategies for State Policies and Spending, the Office of State Planning is opposed to this proposed subdivision

Response: It is understood that the proposed residential subdivision is located within Investment Level 4. However, based on Sussex County Code and Sussex County Comprehensive Plan low-density single-family residential is permitted. Furthermore, the amount of forest removed will be based on the actual amount of land disturbance to safely construct and

maintain the proposed subdivision based on Sussex County Code as well as design regulations from Sussex County Engineering and Sussex Conservation District. The southern portion of the site is located in wetlands and flood plain - the proposed homes are not located within either the wetlands or the flood plain.

With that said, the comments in this letter are technical, and are not intended to suggest that the State supports this development. This letter does not in any way suggest or imply that you may receive or may be entitled to permits or other approvals necessary to build on this property.

Department of Transportation – Contact Bill Brockenbrough 760-2109

- The site access on Phillips Branch Road (Sussex Road 302 must be designed in accordance with DelDOT's Development Coordination Manual, which is available at <http://www.deldot.gov/Business/subdivisions/index.shtml?dc=changes>.
- Pursuant to Section 1.3 of the Manual, a Pre-Submittal Meeting is required before plans are submitted for review. The form needed to request the meeting and guidance on what will be covered there and how to prepare for it is located at https://www.deldot.gov/Business/subdivisions/pdfs/Meeting_Request_Form.pdf?08022017.
- Section 1.7 of the Manual addresses fees that are assessed for the review of development proposals. DelDOT anticipates collecting the Initial Stage Fee when the record plan is submitted for review and the Construction Stage Fee when construction plans are submitted for review.
- Per Section 2.2.2.1 of the Manual, Traffic Impact Studies (TIS) are warranted for developments generating more than 500 vehicle trip ends per day or 50 vehicle trip ends per hour in any hour of the day. From the PLUS application, the total daily trips are estimated at 1,134 vehicle trip ends per day. Using the 10th edition of the Institute of Transportation Engineers' Trip Generation Manual, DelDOT calculates a value of 1,201 for this number and estimates the weekday morning and evening peak hour trip ends at 88 and 118, respectively. Therefore, a TIS would normally be required.

Section 2.2.2.2 of the Development Coordination Manual provides that for developments generating less than 2,000 vehicle trip ends per day and less than 200 vehicle trip ends per hour in any hour of the day, DelDOT may accept an Area Wide Study (AWS) Fee in lieu of the TIS if the local government does not require a TIS. The AWS Fee is calculated as \$10 per daily trip or, in this case, \$12,010. AWS Fees are used to fund traffic studies, not to build improvements.

DelDOT anticipates requiring the developer to make road improvements, yet to be determined. In planning for the Henlopen Transportation Improvement District, DelDOT developed conceptual plans for the improvement of Hollymount Road (Sussex Road 48)

and those plans included right turn and left turn lanes at the intersection of Hollymount Road and Phillips Branch Road. These turning lanes may be required.

More definitely, DelDOT anticipates requiring the developer to improve Phillips Branch Road, within the limits of their projected frontage, to meet DelDOT's Local Road standards, which include 11-foot lanes and 5-foot shoulders. Per the definition in Section 1.8 of the Manual, those limits are from a point about 1,000 feet southwest of their actual frontage to a point about 240 feet northeast of their actual frontage.

DelDOT may require a Traffic Operational Analysis, in accordance with Section 2.3.2 of the Manual if they find it necessary in determining the specific improvements needed either at the intersection or on the frontage.

Questions regarding the site's trip generation and Traffic Operational Analyses should be directed to the County Coordinator, Mr. T. William Brockenbrough. Mr. Brockenbrough may be reached at Thomas.Brockenbrough@delaware.gov or (302) 760-2109. Questions regarding the requirement to improve the site frontage should be directed to the Sussex County Review Coordinator, Mr. R. Stephen McCabe. Mr. McCabe may be reached at Richard.McCabe@delaware.gov or (302) 760-2276.

- As necessary, in accordance with Section 3.2.5 and Figure 3.2.5-a of the Manual, DelDOT will require dedication of right-of-way along the site's frontage on Phillips Branch Road. By this regulation, this dedication is to provide a minimum of 30 feet of right-of-way from the physical centerline. The following right-of-way dedication note is required, "**An X-foot wide right-of-way is hereby dedicated to the State of Delaware, as per this plat.**"
- In accordance with Section 3.2.5.1.2 of the Manual, DelDOT will require the establishment of a 15-foot wide permanent easement across the property frontage on Phillips Branch Road. The location of the easement shall be outside the limits of the ultimate right-of-way. The easement area can be used as part of the open space calculation for the site. The following note is required, "**A 15-foot wide permanent easement is hereby established for the State of Delaware, as per this plat.**"
- Referring to Section 3.4.2.1 of the Manual, the following items, among other things, are required on the Record Plan:
 - A Traffic Generation Diagram. See Figure 3.4.2-a for the required format and content.
 - Depiction of all existing entrances within 450 feet of the entrance on Phillips Branch Road.
 - Notes identifying the type of off-site improvements, agreements (signal, letter) contributions and when the off-site improvements are warranted.

- Section 3.5 of the Manual provides DelDOT's requirements with regard to connectivity. The requirements in Sections 3.5.1 through 3.5.3 shall be followed for all development projects having access to state roads or proposing DelDOT-maintained public streets for subdivisions. DelDOT anticipates recommending that the County require a connection to Seaspray Court, a stub street in the adjoining River Oaks subdivision and consider requiring stub streets for future connections to the adjoining Warrington and Bar-Rab, LLC parcels, respectively (Tax Parcel Nos. 234-11.00-103.00 and 234-16.00-14.00).
- Section 3.5.4.2 of the Manual addresses requirements for Shared Use Paths (SUP) and sidewalks. For projects in Level 3 and 4 Investment Areas, installation of paths or sidewalks along the frontage on State-maintained roads is required where there is an existing path with which to connect. DelDOT anticipates requiring an SUP along this development's road frontage.
- In accordance with Section 3.8 of the Manual, storm water facilities, excluding filter strips and bioswales, shall be located a minimum of 20 feet from the ultimate State right-of-way along Phillips Branch Road.
- In accordance with Section 5.2.9 of the Manual, the Auxiliary Lane Worksheet should be used to determine whether auxiliary lanes are warranted at the site entrances and how long those lanes should be. The worksheet can be found at <http://www.deldot.gov/Business/subdivisions/index.shtml>.
- In accordance with Section 5.14 of the Manual, all existing utilities must be shown on the plan and a utility relocation plan will be required for any utilities that need to be relocated.

Response: The developer will work with DelDOT to further refine the entrance and roadway improvements.

Department of Natural Resources and Environmental Control – Beth Krumrine 735-3480
Concerns Identified Within the Development Footprint

Wetlands

Maps from the Statewide Wetlands Mapping Project indicate the presence of non-tidal wetlands on the southern portion of the site surrounding Unity Branch. The application indicates that wetlands have been delineated. Preliminary plans do not propose disturbances to wetland areas.

- If the site design changes and dredge or fill of wetlands or subaqueous lands becomes necessary, permitting and/or authorization requirements may apply.

Federal Wetland Contact: U.S. Army Corps of Engineers (Dover Office) at (267) 240-5278. Website: <https://www.nap.usace.army.mil/Missions/Regulatory/Contacts/>

State Wetland Contact: DNREC Wetlands and Subaqueous Lands Section at (302) 739-9943. Website: <https://dnrec.alpha.delaware.gov/water/wetlands-subaqueous/>

Vegetated Buffer Zones

Site plans show lots proposed approximately 50 feet from federally-regulated non-tidal wetlands. Vegetated buffer zones placed adjacent to waterways and wetlands help improve water quality by reducing sediment and pollutants loads. They also provide valuable habitat and can help prevent encroachment of human activities into ecologically sensitive areas. Vegetated buffers are not equivalent to setbacks, as residential lots, walkways, and stormwater management facilities should not be contained within the vegetated buffer zone.

- The applicant must comply with minimum vegetated buffer widths as identified within county and municipal codes.

Special Flood Hazard Area

According to the newest Flood Insurance Rate Maps (FIRM), the southern portion of this parcel is situated within a Special Flood Hazard Area, specifically within the mapped 100-year floodplain (1% annual chance of flooding). The Special Flood Hazard Area identified on the site lies within zone AE. In lands contained within the 100-year floodplain, the National Flood Insurance Program's floodplain management regulations must be enforced through the local floodplain ordinance, which can have higher standards. Homeowners with mortgages may be required to purchase flood insurance.

- The applicant must comply with the local floodplain ordinance and regulations applicable to development or construction within the 100-year floodplain. In determining the boundary of the floodplain, use the most recent FIRM maps available, which can be found at <https://floodplanning.dnrec.delaware.gov/>

Contact: DNREC Shoreline and Waterway Management Section at (302) 739-9921.

Website: <https://dnrec.alpha.delaware.gov/watershed-stewardship/waterways/floodplains/>

Stormwater Management

This application proposes greater than 5000 square feet of land disturbing activities, therefore, this project will be subject to Delaware's *Sediment and Stormwater Regulations*.

- A Sediment and Stormwater Plan must be developed, then approved by the appropriate plan review agency prior to any land disturbing activity taking place on the site. For this project, the plan review agency is Sussex Conservation District.
- Additionally, to address federal requirements, construction activities that exceed 1.0 acre of land disturbance require Construction General Permit coverage through submittal of an

electronic Notice of Intent for Stormwater Discharges Associated with Construction Activity. This form must be submitted electronically (<https://apps.dnrec.delaware.gov/enoi/>, select Construction Stormwater General Permit) to the DNREC Division of Watershed Stewardship, along with the \$195 fee.

- Schedule a project application meeting with the appropriate plan review agency prior to moving forward with the stormwater and site design. As part of this process, you must submit a Stormwater Assessment Study.

Plan Review Agency Contact: Sussex Conservation District at (302) 856-2105 or (302) 856-7219. Website: <https://www.sussexconservation.org/>

General Stormwater Management Contact: DNREC Sediment and Stormwater Program at (302) 739-9921. E-mail: DNREC.Stormwater@delaware.gov.
Website: <https://dnrec.alpha.delaware.gov/watershed-stewardship/sediment-stormwater/>

Response: The wetlands on-site have been delineated. No disturbance is currently anticipated. However, should disturbance become necessary, the appropriate permits will be obtained. The site will be designed per Sussex Conservation District including SAS and NOI.

Hydrologic Soils Group

Hydrologic Soil Group B/D soils have been identified on the site. These soil types are typically not conducive to utilizing infiltration stormwater Best Management Practices such as bioretention and infiltration basins, which must meet minimum infiltration requirements.

- Any stormwater Best Management Practices that propose the use of infiltration or natural recharge shall include a soils investigation. Consult with the proper plan review agency (Sussex Conservation District) or the DNREC Sediment and Stormwater Program for more information.

Response: The site contains primarily Soil Group A, with some B/D. The B/D soils are located primarily within the wetlands and are not proposed to be developed.

Water Quality (Pollution Control Strategies)

This site lies within the Rehoboth Bay Watershed. Surface water quality in this watershed does not meet State Water Quality Standards and a Pollution Control Strategy is in place for this watershed.

- Consult with the appropriate plan review agency (Sussex Conservation District) to determine if stricter stormwater management standards may apply for development projects due to the Pollution Control Strategy.

Response: The site will be designed in compliance with Sussex Conservation District standards.

Wildlife Displacement

Development of this site is anticipated to displace local wildlife. Wildlife displaced by encroaching development may become a nuisance for homeowners.

- Future residents are not permitted to discharge firearms within 100 yards (300 feet) of any occupied dwelling or building to hunt or remove nuisance wildlife. Contact the DNREC Division of Fish and Wildlife for more information.

Contact: DNREC Division of Fish and Wildlife at (302) 739-9912.

Website: <https://dnrec.alpha.delaware.gov/fish-wildlife/wildlife/>

Response: Understood.

Wastewater permits – Large Systems

Artesian holds existing permits with the DNREC Groundwater Discharges Section's Large Systems Branch for wastewater disposal.

- If additional flows to Artesian's system will require capacity updates, it is the responsibility of the permittee (Artesian) to notify the Large Systems Branch.

Wastewater Permits (Large Systems) Contact: DNREC Large Systems Branch at (302) 739-9948. Website: <https://dnrec.alpha.delaware.gov/water/groundwater/>

Response: Understood.

Nutrient Management Plan

This project proposes open space of 27 acres.

- A nutrient management plan is required by the Delaware Department of Agriculture for all persons or entities who apply nutrients to lands or areas of open space of 10 acres or more.

Contact: Delaware Department of Agriculture's Nutrient Management Program at (302) 698-4558. Website: <https://agriculture.delaware.gov/nutrient-management/>

Response: Understood.

State Historic Preservation Office – Contact Carlton Hall 736-7400

- There are no known archaeological sites or known National Register-Listed or eligible properties on the parcel.
- Prehistoric archaeological potential is high in the southern half of the parcel. Almost the entire parcel is well-drained soils (except next to Unity Branch), and the entire south half is within favorable distance to Unity Branch. The highest potential will be the top of bluff overlooking the stream. There are also prehistoric sites along Unity Branch on similar topography east of this parcel. The State Historic Preservation Office is recommending a Phase I archaeological survey.
- Historic archaeological potential is low throughout the parcel. There is no indication that there was a structure on the parcel. Though there was a historic farmstead just off the parcel where there are more modern houses now. There also appears to be something noted on the 1937, 1954, 1961, and 1968 aerials that looks like a 40-foot x 40-foot square approximately 150 feet southwest of the ag farmstead, which is common distance from homesteads to family cemeteries. It is sort of noticeable even in modern aerials, but it is not overgrown and wooded.
- The Delaware SHPO highly recommends checking out that area prior to any disturbance occurring and remind the developer of the Unmarked Human Burials and Human Skeletal Remains Act (Title 7, Ch. 54).
- If there is federal involvement, in the form of licenses, permits, or funds, the federal agency, often through its client, is responsible for complying with Section 106 of the National Historic Preservation Act (36 CFR 800) and must consider their project's effects on any known or potential cultural or historic resources. For further information on the Section 106 process please review the Advisory Council on Historic Preservation's website at: www.achp.gov

Response: The developer hired Edward Otter, PhD to investigate the 40 x 40 square referenced above. The site was stripped and no graves or indication of graves was noted.

Delaware State Fire Marshall's Office – Contact John Rudd 323-5365

- Fire hydrants shall be provided in accordance with Regulation 702, Chapter 6.
- If water for fire protection is not available, the site shall comply with Regulation 702, Chapter 6, Fire Flow Table 1.
- Emergency Service Access shall be provided in accordance with Regulation 705, Chapter 5.

Response: The site will be designed per Fire Marshal requirements.

Department of Agriculture – Contact: Milton Melendez 698-4534

- The proposed project is adjacent to a property protected through the State's Agricultural Lands Preservation Program (Mrs. Grace Shorts Caulk District K-92-11-007 parcels 1-00-02800-01-0100, 1-00-02800-01-2900). Therefore, the activities conducted on this preserved property are protected by the agricultural use protections outlined in Title 3, Del. C., Chapter 9. These protections effect adjoining developing properties. The 300 foot notification requirement affects all new deeds in a subdivision located in whole or part within 300 feet of an Agricultural District/Easement. Please take note of these restrictions as follows:

§ 910. Agricultural use protections.

(a) Normal agricultural uses and activities conducted in a lawful manner are preferred and priority uses and activities in Agricultural Preservation Districts. In order to establish and maintain a preference and priority for such normal agricultural uses and activities and avert and negate complaints arising from normal noise, dust, manure and other odors, the use of agricultural chemicals and nighttime farm operations, land use adjacent to Agricultural Preservation Districts shall be subject to the following restrictions:

(1) For any new subdivision development located in whole or in part within 300 feet of the boundary of an Agricultural Preservation District, the owner of the development shall provide in the deed restrictions and any leases or agreements of sale for any residential lot or dwelling unit the following notice:

This property is located in the vicinity of an established Agricultural Preservation District in which normal agricultural uses and activities have been afforded the highest priority use status. It can be anticipated that such agricultural uses and activities may now or in the future involve noise, dust, manure and other odors, the use of agricultural chemicals and nighttime farm operations. The use and enjoyment of this property is expressly conditioned on acceptance of any annoyance or inconvenience which may result from such normal agricultural uses and activities."

(2) For any new subdivision development located in whole or in part within 50 feet of the boundary of an Agricultural Preservation District, no improvement requiring an occupancy approval shall be constructed within 50 feet of the boundary of the Agricultural Preservation District.

(b) Normal agricultural uses and activities conducted in accordance with good husbandry and best management practices in Agricultural Preservation Districts shall be deemed protected actions and not subject to any claim or complaint of nuisance, including any such claims under any existing or future county or municipal code or ordinance. In the event a formal complaint alleging nuisance related to normal agricultural uses and activities is filed against an owner of lands located in an Agricultural Preservation District, such owner, upon prevailing in

any such action, shall be entitled to recover reasonably incurred costs and expenses related to the defense of any such action, including reasonable attorney's fees (68 Del. Laws, c. 118, § 2.).

- In addition, if any wells are to be installed, Section 4.01(A)(2) of the Delaware Regulations Governing the Construction and Use of Wells will apply. This regulation states:

(2) For any parcel, lot, or subdivision created or recorded within fifty (50) feet of, or within the boundaries of, an Agricultural Lands Preservation District (as defined in Title 3, Del. C., Chapter 9); all wells constructed on such parcels shall be located a minimum of fifty (50) feet from any boundary of the Agricultural Lands Preservation District. This requirement does not apply to parcels recorded prior to the implementation date of these Regulations. However, it is recommended that all wells be placed the maximum distance possible from lands which are or have been used for the production of crops which have been subjected to the application of land applied federally regulated chemicals.

Response: Appropriate setbacks and notes will be included on the subdivision plat regarding agricultural uses as required by Sussex County.

Sussex County Housing – Contact: Brandy Nauman 855-7779

- Sussex County endeavors to promote non-discrimination and affordable housing whenever possible throughout the County. In this regard, the developer and associated financial institutions are encouraged to provide and finance affordable housing opportunities to Sussex County residents in all new developments, and affirmatively market those affordable housing units to diverse populations.
- For questions about opportunities available for affordable housing projects within Sussex County, please consult Sussex County's "Affordable Housing Support Policy". The policy along with other resources are available on the County's Affordable & Fair Housing Resource Center website: www.sussexcountyde.gov/affordable-and-fair-housing-resource-center. The County's Community Development & Housing Department can advise about existing affordable housing opportunities in Sussex County and the appropriate County Department to contact regarding specific development issues concerning future affordable housing projects within Sussex County.
- The Community Development & Housing Department can also explain and assist with any financial support or incentives that may be available to a project from federal, state and county sources, as well as private funding sources that also promote affordable housing in Sussex County.
- Please understand that all residential projects, including Affordable Housing Projects are subject to the applicable provisions of the Sussex County Subdivision and Zoning Codes, and the approval processes set forth in those Codes.

Response: Understood.

Following receipt of this letter and upon filing of an application with the local jurisdiction, the applicant shall provide to the local jurisdiction and the Office of State Planning Coordination a written response to comments received as a result of the pre-application process, noting whether comments were incorporated into the project design or not and the reason therefore.

This concludes our response. If you have any questions, please contact us at your convenience.

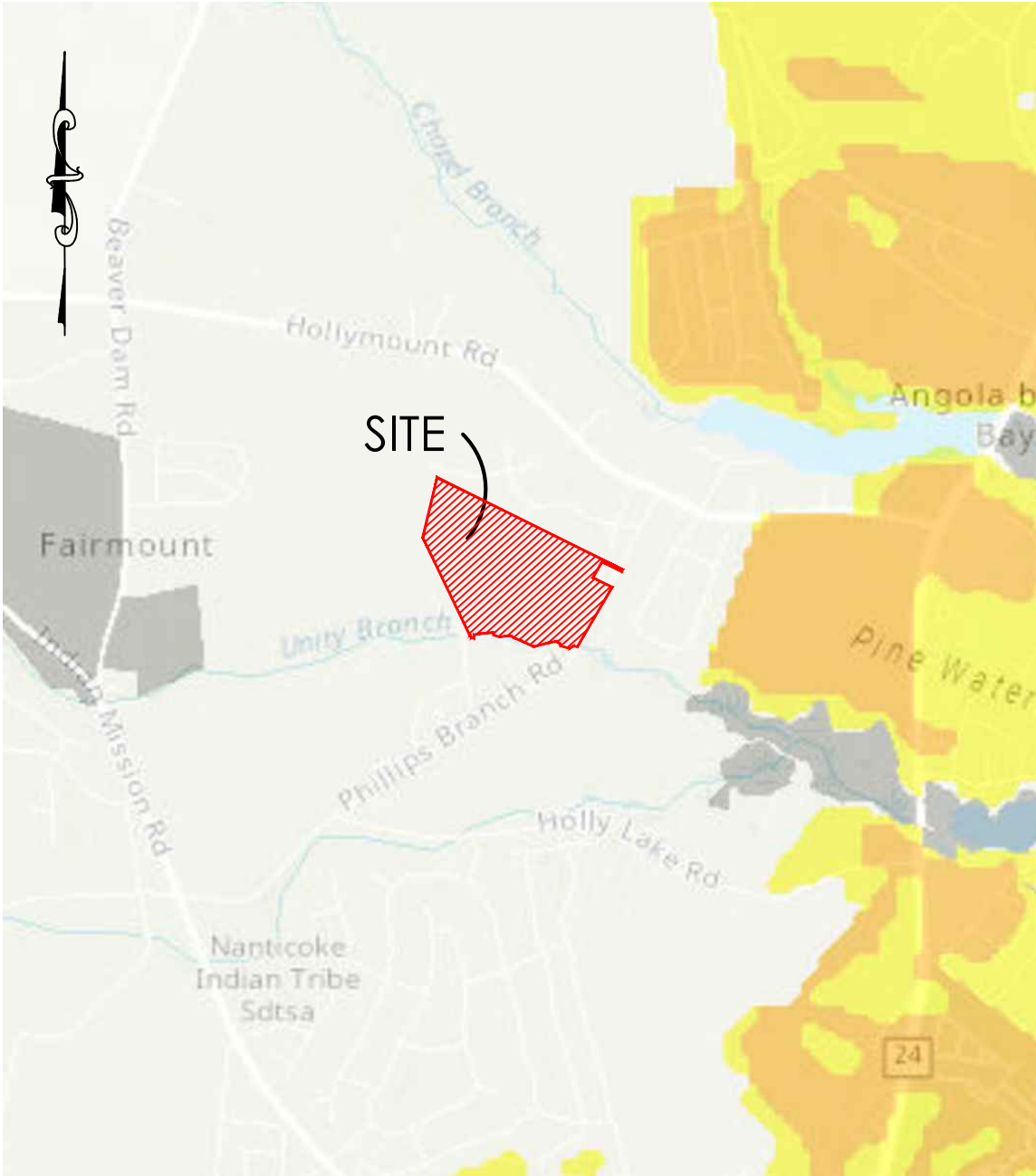
Sincerely,

Solutions, IPEM

A handwritten signature in blue ink, appearing to be 'JP', with a long horizontal stroke extending to the right.

Jason Palkewicz, PE

STATE SPENDING STRATEGIES



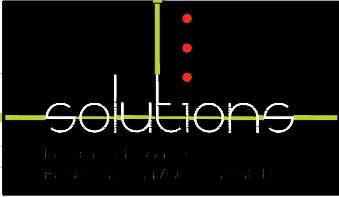
OUT OF PLAY

INVESTMENT LEVEL 2

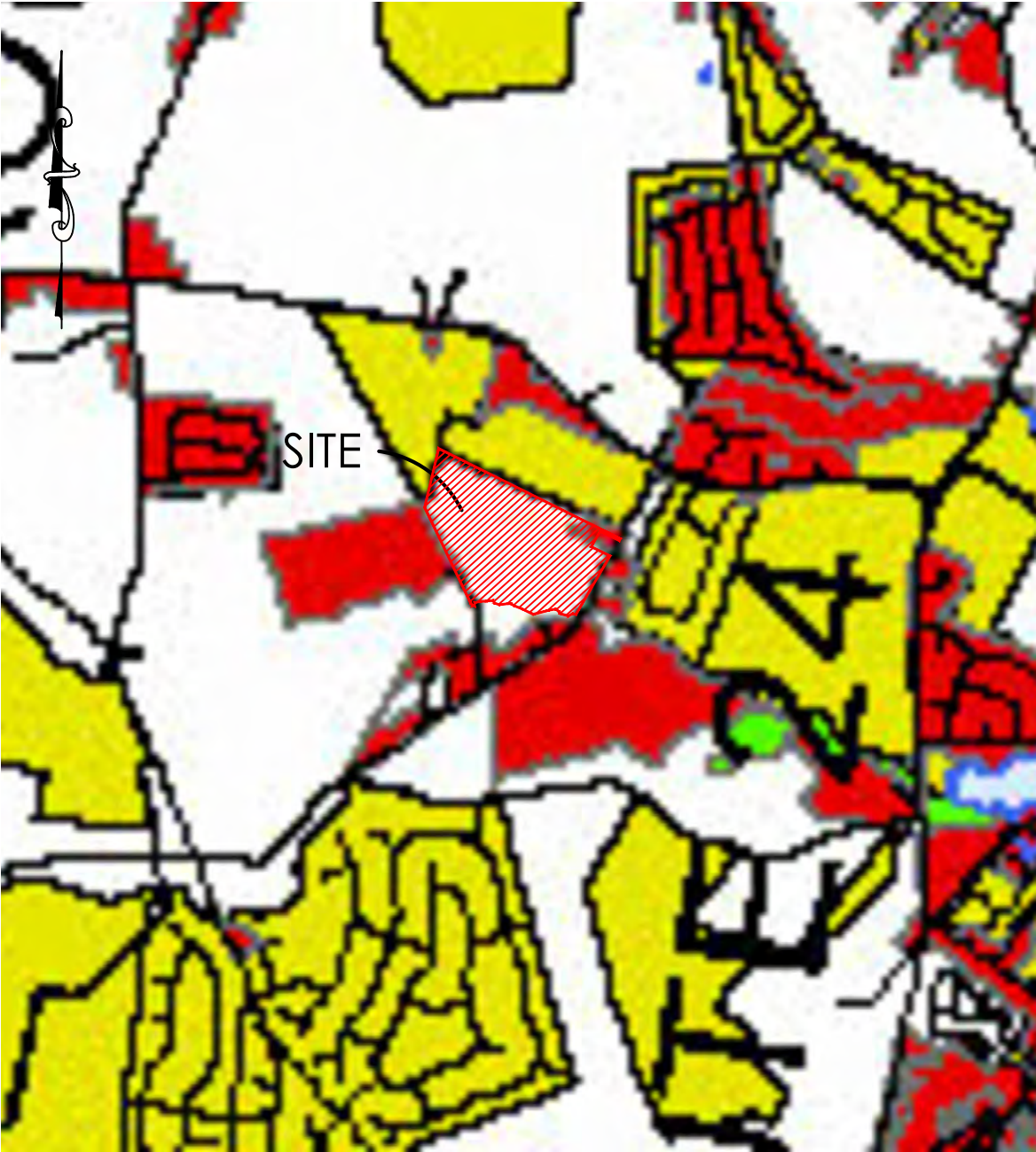
INVESTMENT LEVEL 3




INVESTMENT LEVEL 4

RIVERWOOD



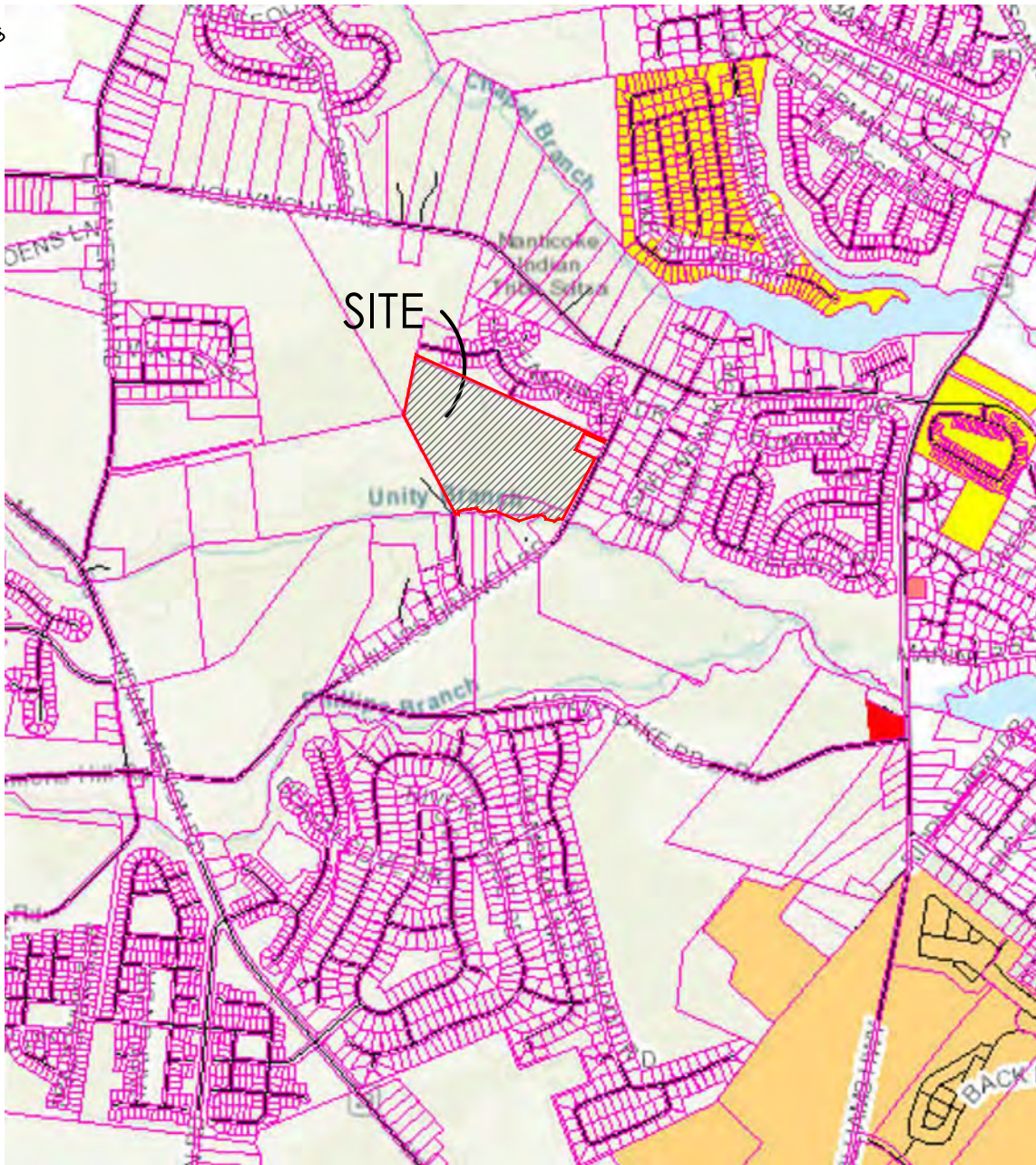
DEVELOPED AND PROTECTED LANDS







-  DEVELOPED LANDS
-  MAJOR PROPOSED DEVELOPMENTS
-  PROTECTED LANDS

RIVERWOOD

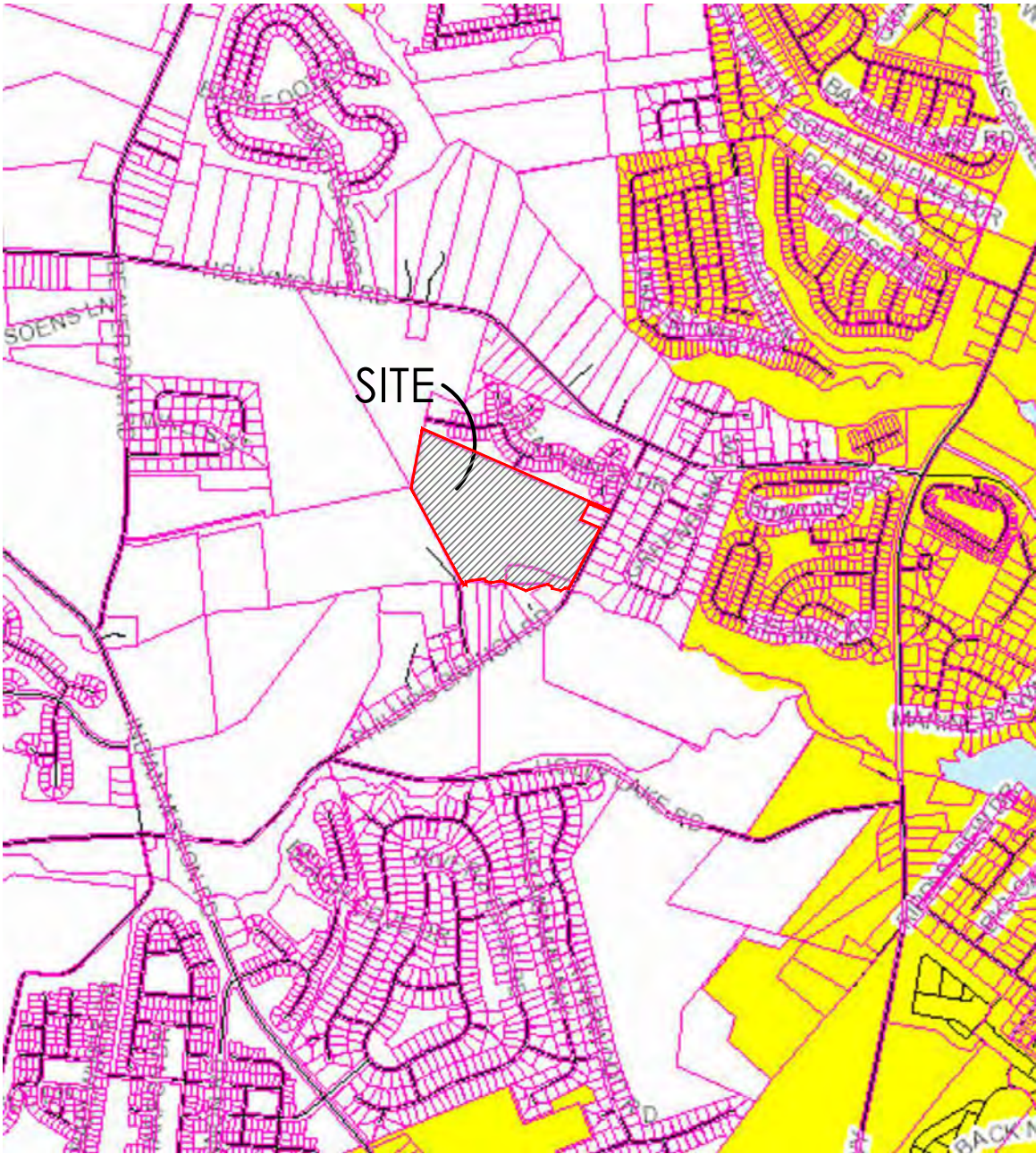




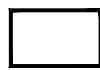
-  AGRICULTURAL RESIDENTIAL- AR-1
-  MEDIUM RESIDENTIAL - MR
-  HIGH DENSITY RESIDENTIAL - HR-1
-  GENERAL COMMERCIAL - C-1

RIVERWOOD





COASTAL AREA



LOW DENSITY AREA

FUTURE LAND USE PLAN

RIVERWOOD

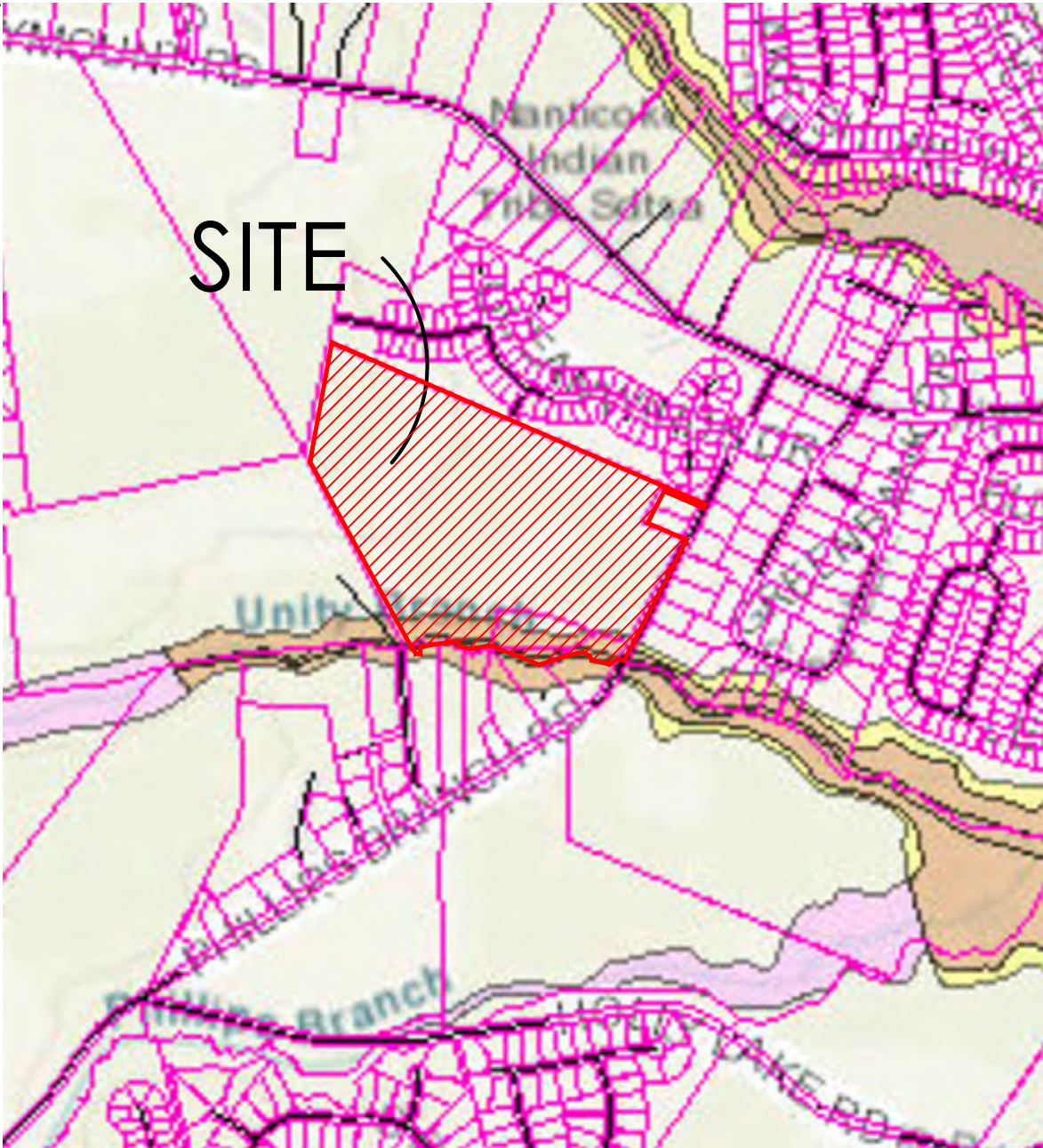




AERIAL

RIVERWOOD



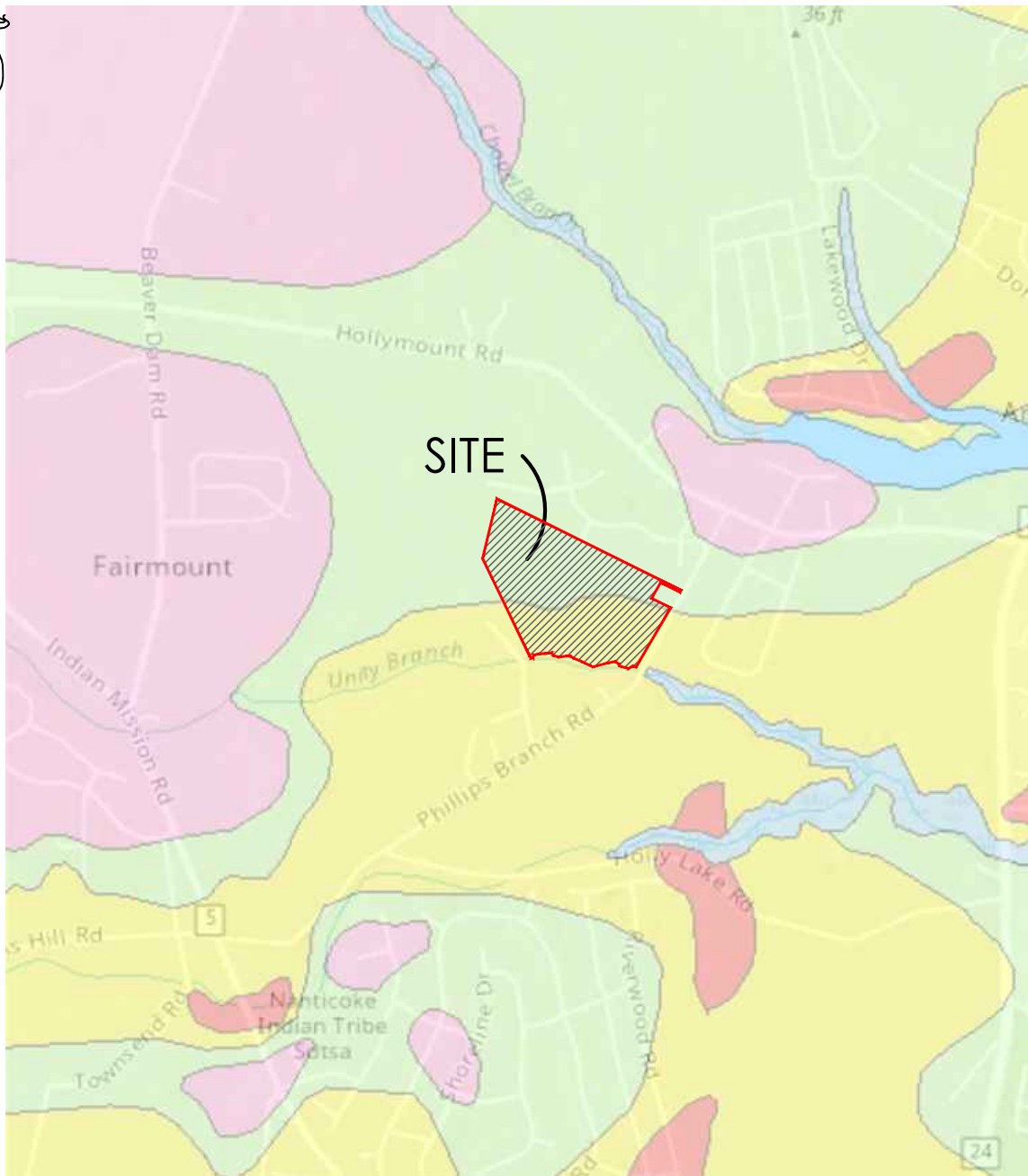






FLOOD MAP

PROPERTY IS LOCATED IN FLOOD ZONE A - SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD (NO BASE FLOOR ELEVATION DETERMINED) AND ZONE X (UNSHADED) - AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN, PER FIRM MAP 10005C0340K, MAP REVISED MARCH 16, 2015.

RIVERWOOD





-  EXCELLENT GROUNDWATER RECHARGE
-  GOOD GROUNDWATER RECHARGE
-  FAIR GROUNDWATER RECHARGE
-  POOR GROUNDWATER RECHARGE

RIVERWOOD

GROUNDWATER RECHARGE PLAN





OVER 100 YEARS OF SUPERIOR SERVICE

Artesian Water Company



Artesian Wastewater Management



Artesian Utility Development



Artesian Water Pennsylvania



Artesian Water Maryland



Artesian Wastewater Maryland

July 14, 2022

Jason Palkewicz
Solutions IPEM
303 N Bedford Street
Georgetown, DE 19947

RE: Riverwood Ability to Serve Letter, Tax Parcel 234-17.00-3.00

With reference to your request concerning Water and Wastewater Service (collectively, "Service") for the proposed Riverwood Subdivision project consisting of approximately 117 single family homes and an amenities area, located on Phillips Branch Road in Indian River Hundred, Sussex County, Delaware known as Tax Parcel Number 234-17.00-3.00 (the "Property"), please be advised as follows:

Subject to the following conditions, Artesian Water Company, Inc. and Artesian Wastewater Management, Inc. (collectively, "Artesian") is willing and able to provide Service to the Property that meets all applicable State of Delaware, Delaware Department of Natural Resources and Environmental Control, and Sussex County standards. Artesian has existing water and wastewater Certificates of Public Convenience and Necessity ("CPCNs") from the Delaware Public Service Commission.

Based on current conditions and subject to the development entity and Artesian entering Water and Wastewater Service Agreements (collectively, "Agreements") that addresses the financial terms of the provision of Service for the Property, in accordance with Artesian's tariff as approved by the Delaware Public Service Commission, Artesian is willing and able to provide the required Service for this Property.

This letter shall expire if Agreements are not executed within one year of the date of this letter

Yours very truly,

ARTESIAN WATER COMPANY, INC.

Adam Gould
Manager of Systems Planning and Design

GEO-TECHNOLOGY ASSOCIATES, INC.

GEOTECHNICAL AND
ENVIRONMENTAL CONSULTANTS

A Practicing Geoprofessional Business Association Member Firm



August 20, 2021

Schell Brothers, LLC
20184 Phillips Street
Rehoboth Beach, Delaware 19971

Attn: Mr. Tim Green

Re: Report of SWM Subsurface Exploration
Phillips Branch Property
Harbeson, Delaware

Ladies & Gentlemen:

In accordance with our agreement dated April 5, 2021, Geo-Technology Associates, Inc. (GTA) has performed subsurface exploration for stormwater management (SWM) area. The purpose of the subsurface exploration was to evaluate the estimated normal and seasonal high groundwater elevation; and present our recommendations with respect to SWM pond construction and pump station construction. Untitled concept plans depicting the proposed lots and SWM facilities, prepared by Solutions IPEM were referenced for this report. A report regarding building and roadway construction will be submitted separately. The results of our SWM subsurface exploration are summarized below.

Referring to the attached Site Location Plan and Exploration Location Plan, the project site consists of an irregularly shaped parcel located on the west side of Phillips Branch Road approximately ¼-mile south of Hollymount Road in the Harbeson area of Sussex County, Delaware. The site consists of mature woods and topographically, the site gently slopes downward in a southeasterly direction towards Unity Branch with the ground surface ranging from approximate Elevation 23 to 12 Mean Sea Level (MSL) at the boring locations.

According to the Geologic Map of the Fairmount and Rehoboth Beach Quadrangles, Delaware (2011), published by the Delaware Geological Survey, the project area is underlain by sediments of the Coastal Plain Physiographic Province. Coastal Plain sediments below the surficial deposits exposed in the site area were generally deposited in commonly estuarine environments of the Tertiary and Quaternary geologic ages. The Late Pliocene deposits, located in the eastern portion of the site, are predominately designated as the Beaverdam formation. These deposits are characterized by "...very coarse sand with pebbles to silty clay...silty to clayey, fine to coarse sand." The Late Pleistocene deposits, located in the western portion of the site, are

21133 Sterling Avenue, Suite 7, Georgetown, DE 19947 (302) 855-9761

◆ Abingdon, MD ◆ Baltimore, MD ◆ Laurel, MD ◆ Frederick, MD ◆ Waldorf, MD ◆ New Castle, DE ◆ Georgetown, DE
◆ Somerset, NJ ◆ NYC Metro ◆ Pittsburgh Metro ◆ Quakertown, PA ◆ Scranton/Wilkes-Barre, PA ◆ York, PA
◆ Northeastern, OH ◆ Sterling, VA ◆ Nashville, TN ◆ Charlotte, NC ◆ Raleigh, NC ◆ Orlando, FL

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predominately designated as the Lynch Height Formation. These deposits are characterized by “...silty, clayey, very coarse to fine sand...gravelly sand to sandy gravel.” Please review the referenced publication for further details regarding this geologic unit.

From review of the USDA Soil Survey, the soils predominately conform to Fort Mott-Henlopen complex (0 to 5 percent slopes). Site soils also conform to Fort Mott loamy sand (0 to 2 percent slopes) and Longmarsh and Indian town soils (Frequently flooded). The soils map information is attached.

From review of the attached Monthly Groundwater Depth for Pe54-51, Columbia Aquifer, taken from the Delaware Geological Survey website, the groundwater depth at Well Pe54-51 (west of Millsboro, Delaware), was above the normal seasonal high at the start of August 2021.

GTA performed 61 Standard Penetration Test (SPT) borings, designated as SWM-1 through SWM-32 and PS-1, to depths of 10 to 40 feet below the ground surface. Longer-term water readings were taken one to three days after completion and the holes were backfilled after the longer-term water readings were taken. The exploration locations were selected and staked with ground surface elevations determined by Solutions IPEM. Relative locations are shown on the attached Exploration Location Plan. The exploration locations indicated on the plan should be considered approximate. The exploration logs are attached.

The soils were visually classified in accordance with the Unified Soil Classification System (USCS) and the United States Department of Agriculture (USDA) classification system. Beneath an approximately 2 to 7-inch-thick surface topsoil layer, the explorations generally encountered native subsoils visually classified as predominately consisting of Silty SAND (USCS: SM; USDA: Sandy Loam), Clayey SANDs (SC; Sandy Clay Loam), Poorly-graded SANDs with Silt (SP-SM; Loamy Sand), and Poorly-graded SANDs (SP; Sand). The relative densities of the granular soils were very loose to medium dense based on SPT N-values of WOH (Weight of Hammer) to 28 blows per foot (bpf). Interspersed layers of fine-grained soils were encountered at several locations. These soils were visually classified as Sandy Lean CLAY (CL; Loam) and SILT (ML; Silt Loam). The consistencies of the fine-grained soils were soft to very stiff based on SPT N-values of 2 to 17 bpf.

GTA’s estimate of the seasonal high groundwater level is based upon soil coloring, mottling and/or saturation. The results of the groundwater level readings and GTA’s opinion of the estimated seasonal high groundwater depth are summarized as follows:

GROUNDWATER DATA SUMMARY

Exploration No.	Existing Ground Surface Elevation (MSL)	Depth Below Existing Ground Surface (ft.)/ Elevation (MSL) to Groundwater at Completion	Depth Below Existing Ground Surface (ft.)/ Elevation (MSL) to Groundwater At One to Three Days After Completion	*Depth Below Existing Ground Surface (ft.)/ Elevation (MSL) to Estimated Seasonal High Groundwater	*Depth Below Existing Ground Surface (ft.)/ Elevation (MSL) to Estimated Normal Groundwater
PS-1	EL 21.0	12.8 / EL 8.2	9.2 / EL 11.8	9 / EL 12	11 / EL 10
SWM-1	EL 14.9	7.8 / EL 7.1	7.5 / EL 7.4	8 / EL 7	10 / EL 5
SWM-2	EL 14.5	8.7 / EL 5.8	8.2 / EL 6.3	8 / EL 6	10 / EL 4
SWM-3	EL 14.1	8.2 / EL 5.9	7.5 / EL 6.6	8 / EL 7	10 / EL 5

Exploration No.	Existing Ground Surface Elevation (MSL)	Depth Below Existing Ground Surface (ft.) / Elevation (MSL) to Groundwater at Completion	Depth Below Existing Ground Surface (ft.) / Elevation (MSL) to Groundwater At One to Three Days After Completion	*Depth Below Existing Ground Surface (ft.) / Elevation (MSL) to Estimated Seasonal High Groundwater	*Depth Below Existing Ground Surface (ft.) / Elevation (MSL) to Estimated Normal Groundwater
SWM-4	EL 14.3	8.0 / EL 6.3	7.5 / EL 6.8	8 / EL 7	10 / EL 5
SWM-5	EL 12.6	Dry to 10.0 / Dry to EL 2.6	Dry to 10.0 / Dry to EL 2.6	9 / EL 4	8 / EL 2
SWM-6	EL 12.6	9.2 / EL 3.4	8.8 / EL 3.8	9 / EL 4	7 / EL 2
SWM-7	EL 12.0	Dry to 10.0 / Dry to EL 2.0	Dry to 10.0 / Dry to EL 2.0	8 / EL 4	8 / EL 2
SWM-8	EL 12.2	8.4 / EL 3.8	7.5 / EL 4.7	8 / EL 4	6 / EL 2
SWM-9	EL 22.7	12.7 / EL 10.0	11.8 / EL 10.9	11 / EL 12	3 / EL 10
SWM-10	EL 20.7	12.5 / EL 8.2	12.5 / EL 8.2	11 / EL 10	5 / EL 8
SWM-11	EL 22.5	11.5 / EL 11.0	10.8 / EL 11.7	11 / EL 12	13 / EL 10
SWM-12	EL 18.1	8.3 / EL 9.8	9.6 / EL 8.5	8 / EL 10	10 / EL 8
SWM-13	EL 19.9	12.8 / EL 7.1	12.3 / EL 7.6	12 / EL 8	14 / EL 6
SWM-14	EL 19.7	11.5 / EL 8.2	11.1 / EL 8.6	11 / EL 9	13 / EL 7
SWM-15	EL 21.3	12.8 / EL 8.5	12.4 / EL 8.9	12 / EL 9	14 / EL 7
SWM-16	EL 20.1	12.5 / EL 7.6	12.2 / EL 7.9	12 / EL 8	14 / EL 6
SWM-17	EL 19.6	12.5 / EL 7.1	11.7 / EL 7.9	12 / EL 8	14 / EL 6
SWM-18	EL 17.7	11.2 / EL 6.5	10.8 / EL 6.9	11 / EL 7	13 / EL 5
SWM-19	EL 16.6	9.6 / EL 7.0	9.2 / EL 7.4	9 / EL 7	11 / EL 5
SWM-20	EL 15.8	8.0 / EL 7.8	7.8 / EL 8.0	8 / EL 8	10 / EL 6
SWM-21	EL 16.0	11.3 / EL 4.7	11.1 / EL 4.9	11 / EL 5	13 / EL 3
SWM-22	EL 17.8	9.5 / EL 8.3	9.3 / EL 8.5	9 / EL 9	11 / EL 7
SWM-23	EL 16.2	8.7 / EL 7.5	8.1 / EL 8.1	8 / EL 8	10 / EL 6
SWM-24	EL 14.8	8.7 / EL 6.1	8.4 / EL 6.4	8 / EL 6	10 / EL 4
SWM-25	EL 15.4	8.5 / EL 6.9	8.1 / EL 7.3	8 / EL 7	10 / EL 5
SWM-26	EL 17.5	8.3 / EL 9.2	7.4 / EL 10.1	7 / EL 10	9 / EL 8
SWM-27	EL 15.5	8.1 / EL 7.4	7.5 / EL 8.0	8 / EL 8	10 / EL 6
SWM-28	EL 16.8	8.5 / EL 8.3	8.0 / EL 8.8	8 / EL 9	10 / EL 7
SWM-29	EL 15.8	7.0 / EL 8.8	6.5 / EL 9.3	7 / EL 9	9 / EL 7
SWM-30	EL 13.5	7.3 / EL 6.2	7.0 / EL 6.5	7 / EL 7	9 / EL 5
SWM-31	EL 15.3	7.0 / EL 8.3	6.5 / EL 8.8	7 / EL 9	9 / EL 7

*Seasonal high groundwater estimate based upon observed soil mottling, color and/or saturation and should be considered approximate.

The groundwater levels can be expected to fluctuate with seasonal changes, precipitation, and other factors such as development activity. Please refer to the exploration logs and an idealized subsurface profile provided in the attachments for further information.

Selected samples obtained from the borings were tested for grain-size analysis, Atterberg Limits and natural moisture contents. The grain-size analysis and Atterberg Limits testing were performed to determine the Unified Soil Classification System (USCS) designation for the soil. The results of testing are as follows:

SUMMARY OF LABORATORY TESTING

EXPLORATION NO.	DEPTH (FT.)	USCS CLASSIFICATION	LL (%)	PI (%)	NMC %
SWM-4	1 – 4	Silty SAND (SM)	NP	NP	8.4
SWM-6	4 – 6	Silty SAND (SM)	NP	NP	15.1
SWM-9	4 – 6	Silty SAND (SM)	NP	NP	13.0
SWM-17	1 – 4	Silty SAND (SM)	NP	NP	11.0
Composite: SWM-4 & SWM-17	1 – 4	Silty SAND (SM)	NP	NP	9.0

Note: LL=Liquid Limit PI=Plastic Index NP=Non-plastic NMC=Natural Moisture Content NT=Not Tested

The composite, near-surface sample was also tested for moisture-density relationships in accordance with the Standard Proctor (ASTM D-698) method for use in evaluating the suitability of these soils for reuse as fill. Results of these tests are summarized in the following table.

**SUMMARY OF COMPACTION
(ASTM D 698, the Standard Proctor)**

EXPLORATION NO.	DEPTH (FT)	MAXIMUM DRY DENSITY (PCF)	OPTIMUM MOISTURE (%)	NATURAL MOISTURE (%)
Composite: SWM-4 & SWM-14	1 – 4	118.1	9.9	9.0

Please refer to the laboratory test results included within Appendix C for additional information.

Estimated average groundwater levels within the proposed pond facilities are summarized in the following table:

POND SUMMARY

Pond Number	Boring Locations	Average Estimated Seasonal High Groundwater Level (MSL)	Average Estimated Normal Groundwater Level (MSL)
Pond 1	SWM-1 through SWM-4	EL 7	EL 5
Pond 2	SWM-5 through SWM-8	EL 4	EL 2
Pond 3	SWM-9 through SWM-17	EL 10	EL 8
Pond 4	SWM-18 through SWM-25	EL 7	EL 5
Pond 5	SWM-26 through SWM-31	EL 9	EL 7

Based upon the boring data, it is GTA's opinion that pond liners will be necessary to facilitate a wet pond condition during dry periods, unless the pond bottoms are sufficiently deepened (e.g. at least 6 feet below the average estimated seasonal high groundwater level). However, normal seasonal groundwater variation may result in several feet of pool level fluctuation with changing seasons. An artificial water source (e.g., agricultural well) may be considered to maintain the permanent pool during extended dry periods. At the remaining ponds.

A sufficient quantity of USCS SC and CL materials does not appear to be available on site for a pond liner. GTA recommends a Geosynthetic Clay Liner (GCL; Bentonite matrix) or an appropriate PVC liner with relief valves may be used. Both types of liners will need to be provided with a 1-foot-thick granular soil cover. The GCL or PVC liners should be installed in accordance with manufacturer's recommendations. On-site granular soils, similar to the bulk sample tested, are considered suitable for use as a pond liner cover material if they are dried to near optimum. Pond liner cover materials should meet AASHTO classification designation A-2-4 or more granular and be approved by GTA.

Pond structural fill should be constructed in maximum 8-inch loose lifts and compacted to 95 percent of the maximum dry density as determined by ASTM D-698 (AASHTO T-99). If practical, GTA recommends reinforced concrete pipe be used as the principal spillway pipe. Also, a concrete cradle and anti-seep collar should be provided for the spillway pipe.

For wet pond construction, groundwater levels will be above the pond bottom level during construction. The contractor should be prepared to stabilize and dewater pond excavations. Subgrades excavated below the water table will be prone to instability and softening. All SWM pond construction should conform to *Delaware Conservation Practice Standard Pond Code 378* and *Code 521*, latest editions and *Delaware Sediment and Stormwater Regulations*, latest edition, as applicable.

The proposed pump stations at Boring PS-1 may be supported on a mat slab type foundation. The foundation may be proportioned for a maximum net allowable soil bearing pressure of 2,000 pounds per square foot (psf). Disturbed, very loose layers should be excavated to a stable stratum. Proposed subgrade should be reestablished with AASHTO No. 57 crushed stone or in accordance with GTA's recommendations in the field at the time of construction. Use of a mud mat or crushed stone layer may be required to stabilize and protect the foundation subgrade.

Referring to log PS-1, the on-site soils beneath the topsoil that conform to USCS ML and CL are not suitable for reuse as structural backfill material for the pump station. Excavated materials conforming to SM, SP-SM, or SP classifications will be suitable for reuse as structural fill, however, materials excavated near or below groundwater are anticipated to require substantial drying prior to reuse as structural backfill (compacted to 95 percent of ASTM D1557).

Based on the proposed depth of the excavation required for the pump station, groundwater will impact the construction of the proposed pump station. Well points will be required to dewater the excavation during construction. The foundation/floor slab of the proposed pump station will likely be subjected to permanent uplift pressures. GTA recommends that the pump station bottom slab be designed to resist these uplift forces and should be watertight. Use of a relatively thick mat slab may be required to balance the uplift forces. The structure will also be subjected to hydrostatic and unbalanced earth pressures and must be

designed to resist such lateral pressures. GTA recommends that the following soil design parameters be used for the pump station construction:

Friction Angle	$\phi = 30$ degrees
Active Pressure Coefficient*	$K_a = 0.3$
At Rest Pressure Coefficient*	$K_o = 0.5$
Passive Pressure Coefficient*	$K_p = 3.0$
Moist Unit Weight of Soil	125 pcf
Saturated Unit Weight of Soil	130 pcf
Submerged Unit Weight of Soil	68 pcf
Design Groundwater Elevation	10 MSL

**Level backfill condition*

Limitations

This report, including all supporting exploration logs, field data, field notes, estimates, and other documents prepared by GTA in connection with this project, has been prepared for the exclusive use of Schell Brothers, LLC pursuant to the agreement between GTA and Schell Brothers, LLC dated April 5, 2021, and in accordance with generally accepted engineering practice. All terms and conditions set forth in the Agreement are incorporated herein by reference. No warranty, express or implied, is given herein. Use and reproduction of this report by any other person without the expressed written permission of Schell Brothers, LLC is unauthorized and such use is at the sole risk of the user.

The analysis and recommendations contained in this report are based on the data obtained from limited observation and testing of the encountered materials. Explorations indicate soil and groundwater conditions only at specific locations and times and only to the depths penetrated. They do not necessarily reflect strata variations that may exist between the exploration locations. Consequently, the analysis and recommendations must be considered preliminary until the subsurface conditions can be verified by direct observation at the time of construction. If variations in subsurface conditions from those described are noted during construction, recommendations in this report may need to be re-evaluated.

In the event that any changes in the nature, design, or location of the facilities are planned, the conclusions and recommendations contained in this report should not be considered valid unless the changes are reviewed, and conclusions of this report are verified in writing. Geo-Technology Associates, Inc. is not responsible for any claims, damages, or liability associated with interpretation of subsurface data or reuse of the subsurface data or engineering analysis without the expressed written authorization of Geo-Technology Associates, Inc.

The scope of our services for this geotechnical exploration did not include any environmental assessment or investigation for the presence or absence of wetlands, or hazardous

Schell Brothers, LLC

Re: ***Phillips Branch Property – Report of SWM Subsurface Exploration***

August 20, 2021

Page 7

or toxic materials in the soil, surface water, groundwater or air, on or below or around this site. Any statements in this report or on the logs regarding odors or unusual or suspicious items or conditions observed are strictly for the information of our Client. The subject matter of this report is limited to the facts and matters stated herein. Absence of a reference to any other conditions or subject matter shall not be constructed by the reader to imply approval by the writer.

We appreciate the opportunity to be of assistance on this project. Should you have any questions or require additional information, please contact our office at (302) 855-9761.

Sincerely,

GEO-TECHNOLOGY ASSOCIATES, INC.



Travis P. Caraway, EIT
Project Geotechnical Professional



Gregory R. Sauter, P.E
Vice President



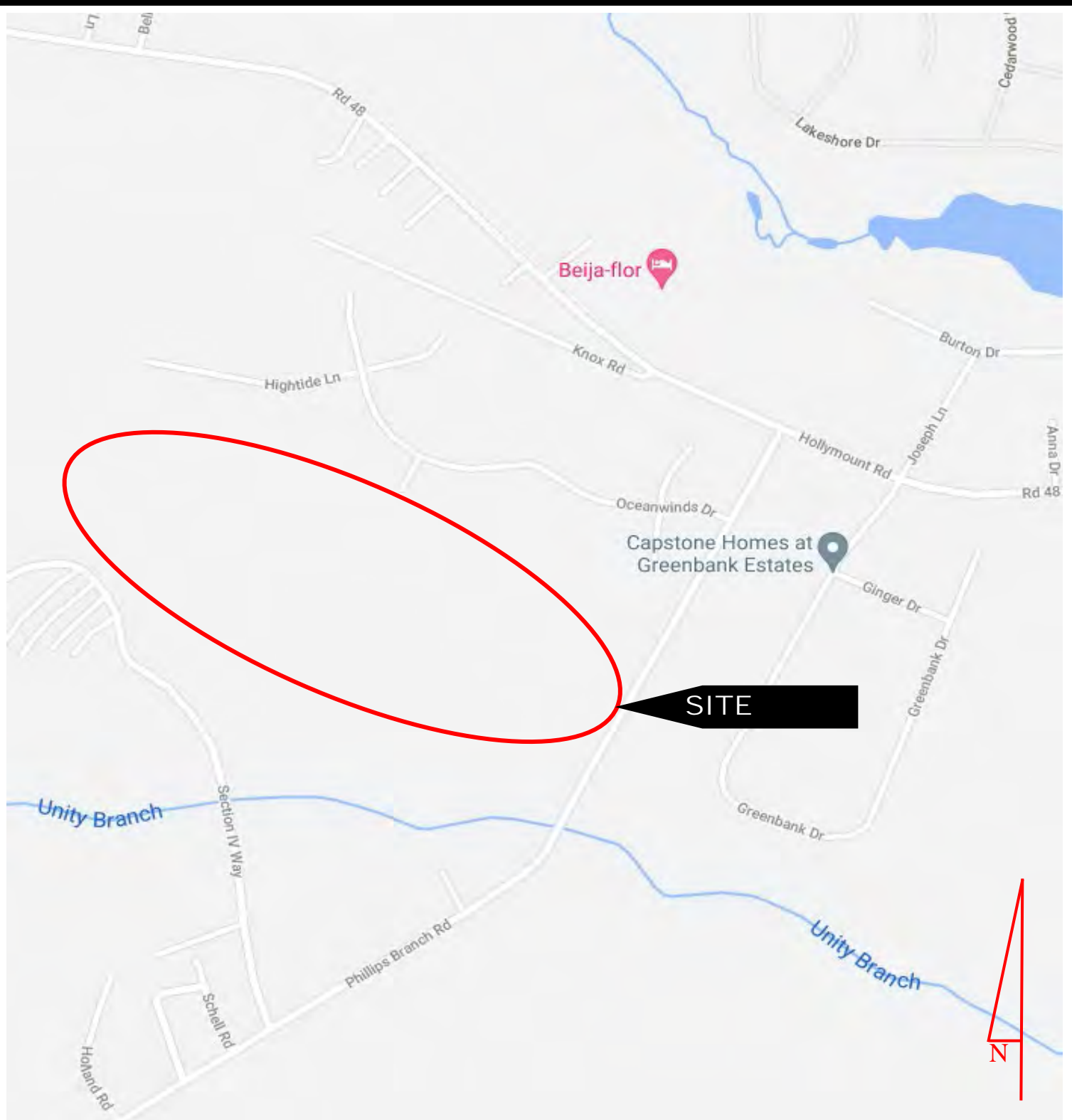
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31210838

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cc: Jason Palkewicz, P.E., Solutions IPEM

Attachments: Site Location Plan (1 page)
Exploration Location Plan (1 page)
USDA Soil Survey Map (3 pages)
Water Conditions Summary Page (1 page)
Notes for Exploration Logs (1 page)
Exploration Logs (32 pages)
Particle Size Distribution Report (5 pages)
Moisture Density Relationship Test Report (1 page)
GBA – Important Information about your Geotechnical Engineering Report (2 pages)



Site Location Plan taken from Google Maps




GEO-TECHNOLOGY ASSOCIATES, INC.
 GEOTECHNICAL AND ENVIRONMENTAL CONSULTANTS
 21133 Sterling Avenue, Suite 7
 Georgetown, Delaware 19947
 (302) 855-9761 Fax (302) 856-3388

Site Location Plan
Phillips Branch
Sussex County, Delaware

SCALE NTS	DATE August 2021	DRAWN BY GTA	DESIGN BY Google Maps	REVIEW BY GRS	JOB NO. 31210838
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Exploration Location Plan taken from Google Earth and a untitled plan by Solutions IPEM and undated.

 Exploration Location



GEO-TECHNOLOGY ASSOCIATES, INC.
 GEOTECHNICAL AND ENVIRONMENTAL CONSULTANTS
 21133 Sterling Avenue, Suite 7
 Georgetown, Delaware 19947
 (302) 855-9761 Fax (302) 856-3388

Exploration Location Plan
Phillips Branch
Sussex County, Delaware

SCALE 11X17

1" ~ 225'

DATE

June 2021

DRAWN BY

GTA

DESIGN BY

Solutions IPEM

REVIEW BY

GRS

JOB NO.

31210838

Figure

2

Edward Otter, Inc.
Archaeology
Cemetery Studies
Historical Research



1704 Camden Avenue
Salisbury, Maryland 21801
410 572 5993
443 880 2339
eotter20@comcast.net

Jason Palkewicz
Solutions IPEM
303 N. Bedford Street
Georgetown, De. 19947

November 5, 2021

RE: Phillips Branch Road, Parcel 234-17.00-3.00

Introduction

A residential development has been proposed on tax parcel 234-17.00-3.00. The tract is located on the northwest side of Phillips Branch Road about .2 miles southwest of Hollymount Road, Sussex County, Delaware (Figure 1). During the PLUS review process, the State Historic Preservation Office noted that historic aerial photography shows an approximately 40-feet by 40-feet area that remained un-plowed and that this may indicate a cemetery.

In an effort to determine if this area contains human graves, Edward Otter, Inc. was contracted to examine the area. The proposed process was to remove the top soil and visually inspect for graves. Edward Otter, Inc. has conducted a couple dozen similar studies across southern Delaware over the last 20 years. Archival research was not included in the agreement

Field Investigation

On October 19, 2021 Edward Otter, Inc, under the direct supervision of Edward Otter, Ph.d. and assisted by Jill Showell and John Potts, began the investigation. The suspected location of the cemetery had been identified by surveyors. Two large trees were flagged (Figure 2) and there were old fence posts in the area (Figure 3).

Excavation began at the south edge of the marked area. A mini-excavator with a smooth bladed bucket was used to remove top soil. Once top soil was removed down to intact subsoil the excavated areas were cleaned with shovels and trowels in order to look for grave shafts. Graves are typically seen as faint rectangular or hexagonal (coffin shaped) stains or areas of disturbance within otherwise intact subsoil.

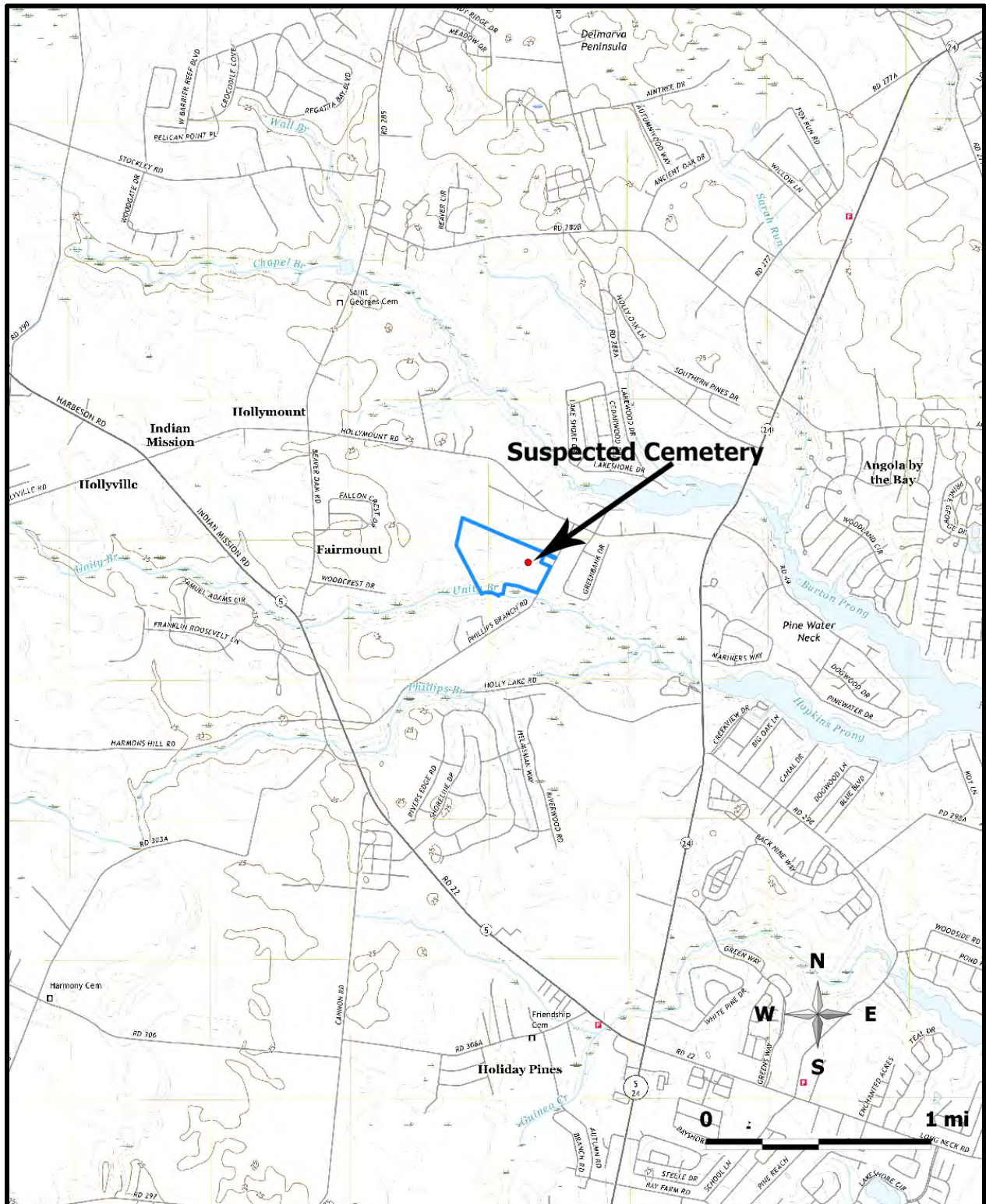


Figure 1. Parcel 234-17.00-3.00 Location.



Figure 2. Marked Tree



Figure 3. Existing Fence Post

Wooded areas present challenges for mechanical earth removal. There were some trees that could not be removed and those locations could not be tested. Also, the confined nature of the work area sometimes requires that portions of the excavation be backfilled before the entire area is exposed. A certain amount of space is required to swing the excavator bucket and to stockpile soil.

An area measuring approximately 40 feet by 30 feet was stripped except where trees prohibited (Figure 4). Throughout the course of the investigation, nothing resembling a grave was found. Root stains were evident and two potential post holes were found (Figure 5). These were sectioned in order to interpret their function. The conclusion is they are root stains.

In the end, there were no disturbances in the subsoil large enough to be a grave. We were open to the possibility of finding a buried animal (a horse had been suggested) but no such burial was found. Other than the mentioned "posts" nothing resembling a cultural feature was encountered. It is clear that the tested location does not contain a cemetery.

Conclusion

Using a combination of mechanical and hand excavation an area measuring 50 feet by 65 feet was stripped of topsoil in order to look for grave shafts. Excavation was complete except where large trees prevented excavation. Nothing resembling a grave shaft was identified during the course of the study and it is concluded that there is no cemetery in this location.

Signed



Edward Otter, Ph.D.
President, Edward Otter, Inc.

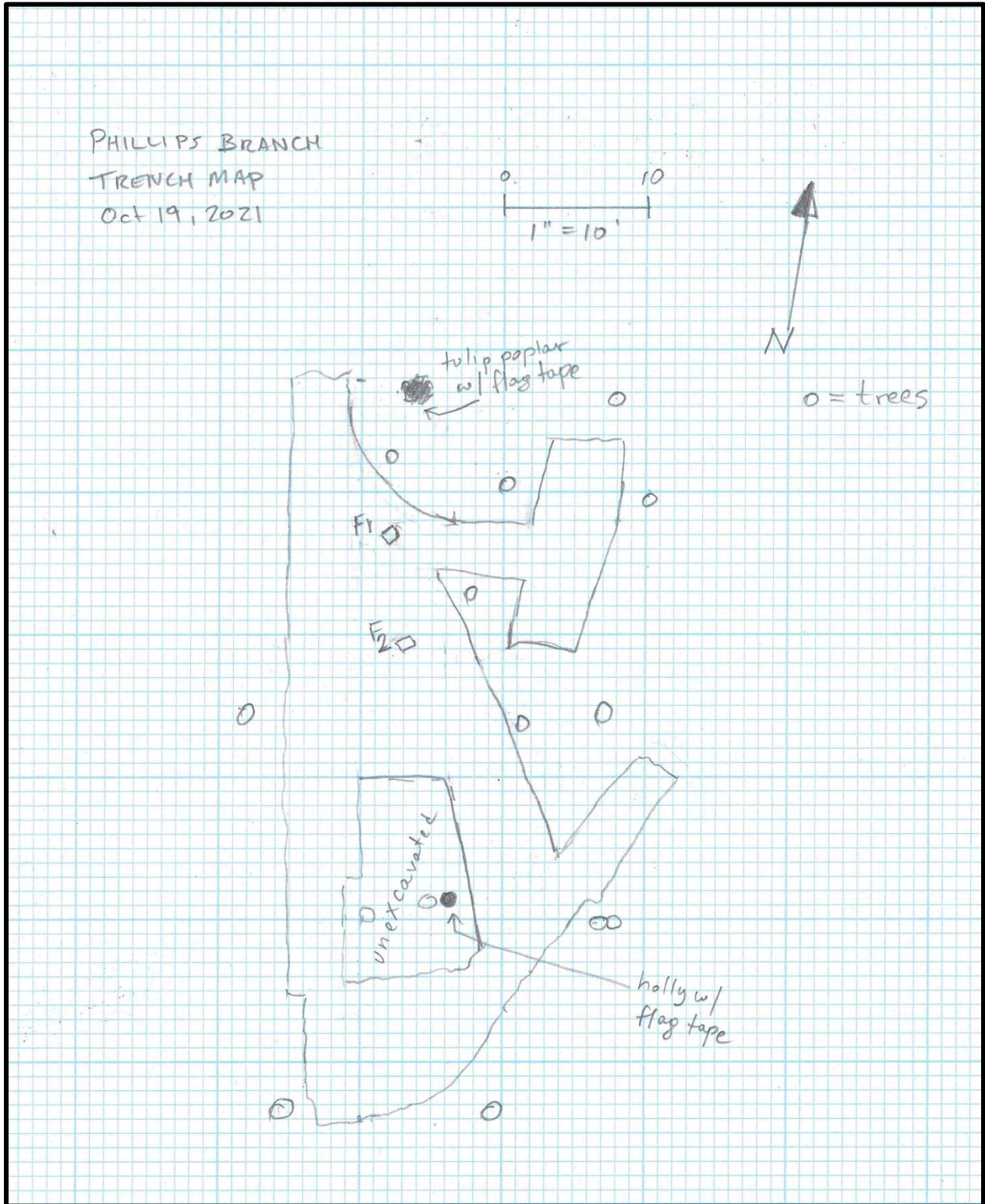


Figure 4. Map of Excavated Area



Figure 5. Suspected Post Hole

Jason Palkewicz, Professional Engineer

CEO

EDUCATION

BE, Environmental Eng., 1995
Hofstra University

MS, Civil Eng., 1999
University of Toledo

REGISTRATIONS

- Professional Engineer
MD # 25088
- Professional Engineer
DE # 12083
- Professional Engineer
VA # 035417

MEMBERSHIPS

- LEED, AP

PROFESSIONAL SUMMARY

Mr. Palkewicz is a Professional Engineer and Project Manager with licenses in Maryland, Virginia and Delaware, with over 25 years of experience successfully overseeing all phases of planning, engineering and survey projects for government and private-sector clients. He is a highly skilled team leader, detail oriented with the ability to solve problems with limited resources while never losing sight of the big picture.

SPECIAL PROJECT EXPERIENCE

- **Pot-Nets Bayside, Sussex County, DE** – Provided design and permitting drawings for the rehabilitation and replacement of approximately 10,000 lf of vinyl marina bulkhead including dozens of piers, hundreds of piles and two boat launching facilities.
- **Pelican Point, Sussex County, DE** – Prepared construction drawings and plats for a 379 unit residential along Rte 5 outside of Long Neck. Plans included roadway, grading, sediment and erosion control, potable water, gravity sanitary sewer and sanitary pump station
- **Chase Oaks, Sussex County, DE** – The civil engineer project manager for this 253 unit coastal area cluster subdivision located on Robinsonville Road. The project included planning, entitlement, roadway, grading, stormwater management, sanitary sewer, pump station and DelDOT entrance design.
- **Headwater Cove, Sussex County, DE** – Prepared construction drawings and plats for a 163 unit residential subdivision on Dorman Road. Plans included roadway, grading, sediment and erosion control, potable water, gravity sanitary sewer and sanitary pump station.

Proposed Conditions of Approval

- A. There shall be no more than 117 lots within the subdivision.
- B. The Final Site Plan shall confirm that 46%, more or less, of the site remains as Open Space subject to final engineering.
- C. All entrances, intersection, roadway, and multi-modal improvements shall be completed by the developer in accordance with all DeIDOT requirements.
- D. A homeowner's association shall be established that will be responsible for maintenance of streets, roads, buffers, stormwater management facilities and other common areas.
- E. The stormwater management system shall meet or exceed the requirements of the State and County. It shall be constructed and maintained using Best Management Practices.
- F. The Final Site Plan shall contain the approval of the Sussex Conservation District for the design and location of all stormwater management areas and erosion and sedimentation control facilities.
- G. A forested or landscaped buffer of at least 30 feet in depth shall be installed along the entire perimeter of the project. The Final Site Plan shall contain a landscaped plan for all these areas.
- H. The Final Site Plan shall indicate all forested areas that will be preserved.
- I. There shall be a minimum 25 feet buffer from all nontidal wetlands.
- J. The subdivision shall be served by a publicly regulated wastewater service to provide sanitary sewer.
- K. The subdivision shall be served by a publicly regulated central water system providing drinking water and fire protection.
- L. Interior Street design shall meet or exceed Sussex County standards.
- M. A street lighting system that provides lighting in a downward direction with minimal uplighting shall be provided.
- N. The developer shall complete all amenities prior to issuance of the 70th Building Permit.
- O. The Applicant shall coordinate and cooperate with the local school district's transportation manager to establish school bus areas.
- P. Road naming and addressing shall be subject to the review and approval of the Sussex County Mapping and Addressing Department.
- Q. A revised Preliminary Site either depicting or noting these conditions must be submitted to the Office of Planning and Zoning.
- R. The Final Site Plan shall be subject to the review and approval of the Planning and Zoning Commission.



STATE OF DELAWARE
EXECUTIVE DEPARTMENT
OFFICE OF STATE PLANNING COORDINATION

July 22, 2021

Jason Palkewicz, P.E.
Solutions IPEM, LLC
303 North Bedford Street
Georgetown, DE 19947

RE: PLUS review 2021-06-07; Philips Branch

Dear Mr. Palkewicz:

Thank you for meeting with State agency planners on June 23, 2021 to discuss the Philips Branch project. According to the information received you are seeking review of a proposed 117 unit subdivision on 58.6 acres along Phillips Branch Road in Sussex County.

Please note that changes to the plan, other than those suggested in this letter, could result in additional comments from the State. Additionally, these comments reflect only issues that are the responsibility of the agencies represented at the meeting. **The developers will also need to comply with any Federal, State, and local regulations regarding this property. We also note that as Sussex County is the governing authority over this land, the developers will need to comply with any and all regulations/restrictions set forth by the County.**

Strategies for State Policies and Spending

This project represents a major land development that will result in approximately 117 residential units in an Investment Level 4 area according to the *2020 Strategies for State Policies and Spending*. This project is also located outside a development district. Investment Level 4 indicates where State investments will support agricultural preservation, natural resource protection, and the continuation of the rural nature of these areas. New development activities and suburban development are not supported in Investment Level 4. These areas are comprised of prime agricultural lands and environmentally sensitive wetlands and wildlife habitats, which should be, and in many cases have been preserved.

From a fiscal responsibility perspective, development of this site is likewise inappropriate. The cost of providing services to development in rural areas is an inefficient and wasteful use of the State's fiscal resources. Over the longer term, the unseen negative ramifications of this

development will become even more evident as the community matures and the cost of maintaining infrastructure and providing services increases.

In addition, the development of this site may be environmentally inappropriate due to the following:

- **Old Growth Forest/Forest Removal** - The preliminary plan proposes the elimination of 47.5 of the 56.8 acres of forest on the site. An analysis of historical data indicates that the forest area located on the western portion of the site has likely maintained some degree of forest cover since 1937 and could be considered mature forest. Mature forests possess the potential for rare, threatened, or endangered species that rely on this type of habitat.
- The majority of the parcel, with the exception of the northeast corner, lies within lands designated within the Delaware Ecological Network. The vast majority of the forest located within this area is proposed for removal. This network is made up of interconnecting natural areas of significant ecological value. Forest disturbances on this site will jeopardize habitat on the parcel and possibly beyond the parcel's boundary.
- **Natural Areas/Nature Preserves** - The forested area that currently exists on the site is connected to a much larger contiguous forest complex extending into land designated as Herring Creek Natural Area. Natural Areas contain lands of statewide significance identified by the Natural Areas Advisory Council as the highest quality and most important natural lands remaining in Delaware
- **Sea Level Rise** - The southern portion of this site is vulnerable to permanent inundation from sea level rise. It is noted that at this time, no structures are proposed on land subject to inundation levels between 1 and 5 feet. By 2050, mean sea levels are projected to rise by 0.7 – 1.9 feet; by end of century sea levels are projected to increase by 1.7 – 5.0 feet. In addition to permanent inundation, as mean sea levels rise, the frequency and severity of tidal flooding events is expected to increase.
- The proposed project is adjacent to a property protected through the State's Agricultural Lands Preservation Program (Mrs. Grace Shorts Caulk District)

Because the development is inconsistent with the Strategies for State Policies and Spending, the Office of State Planning is opposed to this proposed subdivision

With that said, the comments in this letter are technical, and are not intended to suggest that the State supports this development. This letter does not in any way suggest or imply that you may receive or may be entitled to permits or other approvals necessary to build on this property.

Department of Transportation – Contact Bill Brockenbrough 760-2109

- The site access on Phillips Branch Road (Sussex Road 302 must be designed in accordance with DelDOT's Development Coordination Manual, which is available at <http://www.deldot.gov/Business/subdivisions/index.shtml?dc=changes>.
- Pursuant to Section 1.3 of the Manual, a Pre-Submittal Meeting is required before plans are submitted for review. The form needed to request the meeting and guidance on what will be covered there and how to prepare for it is located at https://www.deldot.gov/Business/subdivisions/pdfs/Meeting_Request_Form.pdf?08022017.
- Section 1.7 of the Manual addresses fees that are assessed for the review of development proposals. DelDOT anticipates collecting the Initial Stage Fee when the record plan is submitted for review and the Construction Stage Fee when construction plans are submitted for review.
- Per Section 2.2.2.1 of the Manual, Traffic Impact Studies (TIS) are warranted for developments generating more than 500 vehicle trip ends per day or 50 vehicle trip ends per hour in any hour of the day. From the PLUS application, the total daily trips are estimated at 1,134 vehicle trip ends per day. Using the 10th edition of the Institute of Transportation Engineers' Trip Generation Manual, DelDOT calculates a value of 1,201 for this number and estimates the weekday morning and evening peak hour trip ends at 88 and 118, respectively. Therefore, a TIS would normally be required.

Section 2.2.2.2 of the Development Coordination Manual provides that for developments generating less than 2,000 vehicle trip ends per day and less than 200 vehicle trip ends per hour in any hour of the day, DelDOT may accept an Area Wide Study (AWS) Fee in lieu of the TIS if the local government does not require a TIS. The AWS Fee is calculated as \$10 per daily trip or, in this case, \$12,010. AWS Fees are used to fund traffic studies, not to build improvements.

DelDOT anticipates requiring the developer to make road improvements, yet to be determined. In planning for the Henlopen Transportation Improvement District, DelDOT developed conceptual plans for the improvement of Hollymount Road (Sussex Road 48) and those plans included right turn and left turn lanes at the intersection of Hollymount Road and Phillips Branch Road. These turning lanes may be required.

More definitely, DelDOT anticipates requiring the developer to improve Phillips Branch Road, within the limits of their projected frontage, to meet DelDOT's Local Road standards, which include 11-foot lanes and 5-foot shoulders. Per the definition in Section 1.8 of the Manual, those limits are from a point about 1,000 feet southwest of their actual frontage to a point about 240 feet northeast of their actual frontage.

DelDOT may require a Traffic Operational Analysis, in accordance with Section 2.3.2 of the Manual if they find it necessary in determining the specific improvements needed either at the intersection or on the frontage.

Questions regarding the site's trip generation and Traffic Operational Analyses should be directed to the County Coordinator, Mr. T. William Brockenbrough. Mr. Brockenbrough may be reached at Thomas.Brockenbrough@delaware.gov or (302) 760-2109. Questions regarding the requirement to improve the site frontage should be directed to the Sussex County Review Coordinator, Mr. R. Stephen McCabe. Mr. McCabe may be reached at Richard.McCabe@delaware.gov or (302) 760-2276.

- As necessary, in accordance with Section 3.2.5 and Figure 3.2.5-a of the Manual, DelDOT will require dedication of right-of-way along the site's frontage on Phillips Branch Road. By this regulation, this dedication is to provide a minimum of 30 feet of right-of-way from the physical centerline. The following right-of-way dedication note is required, **“An X-foot wide right-of-way is hereby dedicated to the State of Delaware, as per this plat.”**
- In accordance with Section 3.2.5.1.2 of the Manual, DelDOT will require the establishment of a 15-foot wide permanent easement across the property frontage on Phillips Branch Road. The location of the easement shall be outside the limits of the ultimate right-of-way. The easement area can be used as part of the open space calculation for the site. The following note is required, **“A 15-foot wide permanent easement is hereby established for the State of Delaware, as per this plat.”**
- Referring to Section 3.4.2.1 of the Manual, the following items, among other things, are required on the Record Plan:
 - A Traffic Generation Diagram. See Figure 3.4.2-a for the required format and content.
 - Depiction of all existing entrances within 450 feet of the entrance on Phillips Branch Road.
 - Notes identifying the type of off-site improvements, agreements (signal, letter) contributions and when the off-site improvements are warranted.
- Section 3.5 of the Manual provides DelDOT's requirements with regard to connectivity. The requirements in Sections 3.5.1 through 3.5.3 shall be followed for all development projects having access to state roads or proposing DelDOT-maintained public streets for subdivisions. DelDOT anticipates recommending that the County require a connection to Seaspray Court, a stub street in the adjoining River Oaks subdivision and consider requiring stub streets for future connections to the adjoining Warrington and Bar-Rab, LLC parcels, respectively (Tax Parcel Nos. 234-11.00-103.00 and 234-16.00-14.00).

- Section 3.5.4.2 of the Manual addresses requirements for Shared Use Paths (SUP) and sidewalks. For projects in Level 3 and 4 Investment Areas, installation of paths or sidewalks along the frontage on State-maintained roads is required where there is an existing path with which to connect. DelDOT anticipates requiring an SUP along this development's road frontage.
- In accordance with Section 3.8 of the Manual, storm water facilities, excluding filter strips and bioswales, shall be located a minimum of 20 feet from the ultimate State right-of-way along Phillips Branch Road.
- In accordance with Section 5.2.9 of the Manual, the Auxiliary Lane Worksheet should be used to determine whether auxiliary lanes are warranted at the site entrances and how long those lanes should be. The worksheet can be found at <http://www.deldot.gov/Business/subdivisions/index.shtml>.
- In accordance with Section 5.14 of the Manual, all existing utilities must be shown on the plan and a utility relocation plan will be required for any utilities that need to be relocated.

Department of Natural Resources and Environmental Control – Beth Krumrine 735-3480
Concerns Identified Within the Development Footprint

Wetlands

Maps from the Statewide Wetlands Mapping Project indicate the presence of non-tidal wetlands on the southern portion of the site surrounding Unity Branch. The application indicates that wetlands have been delineated. Preliminary plans do not propose disturbances to wetland areas.

- If the site design changes and dredge or fill of wetlands or subaqueous lands becomes necessary, permitting and/or authorization requirements may apply.

Federal Wetland Contact: U.S. Army Corps of Engineers (Dover Office) at (267) 240-5278. Website: <https://www.nap.usace.army.mil/Missions/Regulatory/Contacts/>

State Wetland Contact: DNREC Wetlands and Subaqueous Lands Section at (302) 739-9943. Website: <https://dnrec.alpha.delaware.gov/water/wetlands-subaqueous/>

Vegetated Buffer Zones

Site plans show lots proposed approximately 50 feet from federally-regulated non-tidal wetlands. Vegetated buffer zones placed adjacent to waterways and wetlands help improve water quality by reducing sediment and pollutants loads. They also provide valuable habitat and can help

prevent encroachment of human activities into ecologically sensitive areas. Vegetated buffers are not equivalent to setbacks, as residential lots, walkways, and stormwater management facilities should not be contained within the vegetated buffer zone.

- The applicant must comply with minimum vegetated buffer widths as identified within county and municipal codes.

Special Flood Hazard Area

According to the newest Flood Insurance Rate Maps (FIRM), the southern portion of this parcel is situated within a Special Flood Hazard Area, specifically within the mapped 100-year floodplain (1% annual chance of flooding). The Special Flood Hazard Area identified on the site lies within zone AE. In lands contained within the 100-year floodplain, the National Flood Insurance Program's floodplain management regulations must be enforced through the local floodplain ordinance, which can have higher standards. Homeowners with mortgages may be required to purchase flood insurance.

- The applicant must comply with the local floodplain ordinance and regulations applicable to development or construction within the 100-year floodplain. In determining the boundary of the floodplain, use the most recent FIRM maps available, which can be found at <https://floodplanning.dnrec.delaware.gov/>

Contact: DNREC Shoreline and Waterway Management Section at (302) 739-9921.

Website: <https://dnrec.alpha.delaware.gov/watershed-stewardship/waterways/floodplains/>

Stormwater Management

This application proposes greater than 5000 square feet of land disturbing activities, therefore, this project will be subject to Delaware's *Sediment and Stormwater Regulations*.

- A Sediment and Stormwater Plan must be developed, then approved by the appropriate plan review agency prior to any land disturbing activity taking place on the site. For this project, the plan review agency is Sussex Conservation District.
- Additionally, to address federal requirements, construction activities that exceed 1.0 acre of land disturbance require Construction General Permit coverage through submittal of an electronic Notice of Intent for Stormwater Discharges Associated with Construction Activity. This form must be submitted electronically (<https://apps.dnrec.delaware.gov/enoi/>, select Construction Stormwater General Permit) to the DNREC Division of Watershed Stewardship, along with the \$195 fee.

- Schedule a project application meeting with the appropriate plan review agency prior to moving forward with the stormwater and site design. As part of this process, you must submit a Stormwater Assessment Study.

Plan Review Agency Contact: Sussex Conservation District at (302) 856-2105 or (302) 856-7219. Website: <https://www.sussexconservation.org/>

General Stormwater Management Contact: DNREC Sediment and Stormwater Program at (302) 739-9921. E-mail: DNREC.Stormwater@delaware.gov.
Website: <https://dnrec.alpha.delaware.gov/watershed-stewardship/sediment-stormwater/>

Hydrologic Soils Group

Hydrologic Soil Group B/D soils have been identified on the site. These soil types are typically not conducive to utilizing infiltration stormwater Best Management Practices such as bioretention and infiltration basins, which must meet minimum infiltration requirements.

- Any stormwater Best Management Practices that propose the use of infiltration or natural recharge shall include a soils investigation. Consult with the proper plan review agency (Sussex Conservation District) or the DNREC Sediment and Stormwater Program for more information.

Water Quality (Pollution Control Strategies)

This site lies within the Rehoboth Bay Watershed. Surface water quality in this watershed does not meet State Water Quality Standards and a Pollution Control Strategy is in place for this watershed.

- Consult with the appropriate plan review agency (Sussex Conservation District) to determine if stricter stormwater management standards may apply for development projects due to the Pollution Control Strategy.

Wildlife Displacement

Development of this site is anticipated to displace local wildlife. Wildlife displaced by encroaching development may become a nuisance for homeowners.

- Future residents are not permitted to discharge firearms within 100 yards (300 feet) of any occupied dwelling or building to hunt or remove nuisance wildlife. Contact the DNREC Division of Fish and Wildlife for more information.

Contact: DNREC Division of Fish and Wildlife at (302) 739-9912.

Website: <https://dnrec.alpha.delaware.gov/fish-wildlife/wildlife/>

Wastewater permits – Large Systems

Artesian holds existing permits with the DNREC Groundwater Discharges Section's Large Systems Branch for wastewater disposal.

- If additional flows to Artesian's system will require capacity updates, it is the responsibility of the permittee (Artesian) to notify the Large Systems Branch.

Wastewater Permits (Large Systems) Contact: DNREC Large Systems Branch at (302) 739-9948. Website: <https://dnrec.alpha.delaware.gov/water/groundwater/>

Nutrient Management Plan

This project proposes open space of 27 acres.

- A nutrient management plan is required by the Delaware Department of Agriculture for all persons or entities who apply nutrients to lands or areas of open space of 10 acres or more.

Contact: Delaware Department of Agriculture's Nutrient Management Program at (302) 698-4558. Website: <https://agriculture.delaware.gov/nutrient-management/>

State Historic Preservation Office – Contact Carlton Hall 736-7400

- There are no known archaeological sites or known National Register-Listed or eligible properties on the parcel.
- Prehistoric archaeological potential is high in the southern half of the parcel. Almost the entire parcel is well-drained soils (except next to Unity Branch), and the entire south half is within favorable distance to Unity Branch. The highest potential will be the top of bluff overlooking the stream. There are also prehistoric sites along Unity Branch on similar topography east of this parcel. The State Historic Preservation Office is recommending a Phase I archaeological survey.
- Historic archaeological potential is low throughout the parcel. There is no indication that there was a structure on the parcel. Though there was a historic farmstead just off the parcel where there are more modern houses now. There also appears to be something noted on the 1937, 1954, 1961, and 1968 aerials that looks like a 40-foot x 40-foot square approximately 150 feet southwest of the ag farmstead, which is common distance from homesteads to family cemeteries. It is sort of noticeable even in modern aerials, but it is not overgrown and wooded.

- The Delaware SHPO highly recommends checking out that area prior to any disturbance occurring and remind the developer of the Unmarked Human Burials and Human Skeletal Remains Act (Title 7, Ch. 54).
- If there is federal involvement, in the form of licenses, permits, or funds, the federal agency, often through its client, is responsible for complying with Section 106 of the National Historic Preservation Act (36 CFR 800) and must consider their project's effects on any known or potential cultural or historic resources. For further information on the Section 106 process please review the Advisory Council on Historic Preservation's website at: www.achp.gov

Delaware State Fire Marshall's Office – Contact John Rudd 323-5365

- Fire hydrants shall be provided in accordance with Regulation 702, Chapter 6.
- If water for fire protection is not available, the site shall comply with Regulation 702, Chapter 6, Fire Flow Table 1.
- Emergency Service Access shall be provided in accordance with Regulation 705, Chapter 5.

Department of Agriculture – Contact: Milton Melendez 698-4534

- The proposed project is adjacent to a property protected through the State's Agricultural Lands Preservation Program (Mrs. Grace Shorts Caulk District K-92-11-007 parcels 1-00-02800-01-0100, 1-00-02800-01-2900). Therefore, the activities conducted on this preserved property are protected by the agricultural use protections outlined in Title 3, Del. C., Chapter 9. These protections effect adjoining developing properties. The 300 foot notification requirement affects all new deeds in a subdivision located in whole or part within 300 feet of an Agricultural District/Easement. Please take note of these restrictions as follows:

§ 910. Agricultural use protections.

(a) Normal agricultural uses and activities conducted in a lawful manner are preferred and priority uses and activities in Agricultural Preservation Districts. In order to establish and maintain a preference and priority for such normal agricultural uses and activities and avert and negate complaints arising from normal noise, dust, manure and other odors, the use of agricultural chemicals and nighttime farm operations, land use adjacent to Agricultural Preservation Districts shall be subject to the following restrictions:

- (1) For any new subdivision development located in whole or in part within 300 feet of the boundary of an Agricultural Preservation District, the owner of the development shall provide in the deed restrictions and

any leases or agreements of sale for any residential lot or dwelling unit the following notice:

This property is located in the vicinity of an established Agricultural Preservation District in which normal agricultural uses and activities have been afforded the highest priority use status. It can be anticipated that such agricultural uses and activities may now or in the future involve noise, dust, manure and other odors, the use of agricultural chemicals and nighttime farm operations. The use and enjoyment of this property is expressly conditioned on acceptance of any annoyance or inconvenience which may result from such normal agricultural uses and activities."

(2) For any new subdivision development located in whole or in part within 50 feet of the boundary of an Agricultural Preservation District, no improvement requiring an occupancy approval shall be constructed within 50 feet of the boundary of the Agricultural Preservation District.

(b) Normal agricultural uses and activities conducted in accordance with good husbandry and best management practices in Agricultural Preservation Districts shall be deemed protected actions and not subject to any claim or complaint of nuisance, including any such claims under any existing or future county or municipal code or ordinance. In the event a formal complaint alleging nuisance related to normal agricultural uses and activities is filed against an owner of lands located in an Agricultural Preservation District, such owner, upon prevailing in any such action, shall be entitled to recover reasonably incurred costs and expenses related to the defense of any such action, including reasonable attorney's fees (68 Del. Laws, c. 118, § 2.).

- In addition, if any wells are to be installed, Section 4.01(A)(2) of the Delaware Regulations Governing the Construction and Use of Wells will apply. This regulation states:

(2) For any parcel, lot, or subdivision created or recorded within fifty (50) feet of, or within the boundaries of, an Agricultural Lands Preservation District (as defined in Title 3, Del. C., Chapter 9); all wells constructed on such parcels shall be located a minimum of fifty (50) feet from any boundary of the Agricultural Lands Preservation District. This requirement does not apply to parcels recorded prior to the implementation date of these Regulations. However, it is recommended that all wells be placed the maximum distance possible from lands which are or have been used for the production of crops which have been subjected to the application of land applied federally regulated chemicals.


Sussex County Housing – Contact: Brandy Nauman 855-7779

- Sussex County endeavors to promote non-discrimination and affordable housing whenever possible throughout the County. In this regard, the developer and associated financial institutions are encouraged to provide and finance affordable housing opportunities to Sussex County residents in all new developments, and affirmatively market those affordable housing units to diverse populations.
- For questions about opportunities available for affordable housing projects within Sussex County, please consult Sussex County’s “Affordable Housing Support Policy”. The policy along with other resources are available on the County’s Affordable & Fair Housing Resource Center website: www.sussexcountyde.gov/affordable-and-fair-housing-resource-center. The County’s Community Development & Housing Department can advise about existing affordable housing opportunities in Sussex County and the appropriate County Department to contact regarding specific development issues concerning future affordable housing projects within Sussex County.
- The Community Development & Housing Department can also explain and assist with any financial support or incentives that may be available to a project from federal, state and county sources, as well as private funding sources that also promote affordable housing in Sussex County.
- Please understand that all residential projects, including Affordable Housing Projects are subject to the applicable provisions of the Sussex County Subdivision and Zoning Codes, and the approval processes set forth in those Codes.

Following receipt of this letter and upon filing of an application with the local jurisdiction, the applicant shall provide to the local jurisdiction and the Office of State Planning Coordination a written response to comments received as a result of the pre-application process, noting whether comments were incorporated into the project design or not and the reason therefore.

Thank you for the opportunity to review this project. If you have any questions, please contact me at 302-739-3090.

Sincerely,



David L. Edgell, AICP
Director, Office of State Planning Coordination

CC: Sussex County



November 1, 2021

Mrs. Constance C. Holland, AICP, State Planning Director
Haslet Armory
122 Martin Luther King Jr. Blv. South
Dover, DE 19901

RECEIVED
NOV 01 2021
SUSSEX COUNTY
PLANNING & ZONING

RE: PLUS review 2021-06-07; Phillips Branch

Dear Mrs. Holland;

Please allow this letter to serve as our response to the PLUS review of the Riverwood (FKA Phillips Branch) property. Answers to comments have been provided following each comment taken directly from your comment letter for ease of use. Our responses are in red and in different font for ease in review.

Thank you for meeting with State agency planners on June 23, 2021 to discuss the Philips Branch project. According to the information received you are seeking review of a proposed 117 unit subdivision on 58.6 acres along Phillips Branch Road in Sussex County.

Please note that changes to the plan, other than those suggested in this letter, could result in additional comments from the State. Additionally, these comments reflect only issues that are the responsibility of the agencies represented at the meeting. **The developers will also need to comply with any Federal, State, and local regulations regarding this property. We also note that as Sussex County is the governing authority over this land, the developers will need to comply with any and all regulations/restrictions set forth by the County.**

Response: The developer will comply with all Federal, State, and local regulations regarding the development of this property. The developer will comply with all regulations / restrictions set forth by Sussex County.

Strategies for State Policies and Spending

This project represents a major land development that will result in approximately 117 residential units in an Investment Level 4 area according to the *2020 Strategies for State Policies and Spending*. This project is also located outside a development district. Investment Level 4 indicates where State investments will support agricultural preservation, natural resource protection, and the continuation of the rural nature of these areas. New development activities and suburban development are not supported in Investment Level 4. These areas are comprised

of prime agricultural lands and environmentally sensitive wetlands and wildlife habitats, which should be, and in many cases have been preserved.

From a fiscal responsibility perspective, development of this site is likewise inappropriate. The cost of providing services to development in rural areas is an inefficient and wasteful use of the State's fiscal resources. Over the longer term, the unseen negative ramifications of this development will become even more evident as the community matures and the cost of maintaining infrastructure and providing services increases.

In addition, the development of this site may be environmentally inappropriate due to the following:

- **Old Growth Forest/Forest Removal** - The preliminary plan proposes the elimination of 47.5 of the 56.8 acres of forest on the site. An analysis of historical data indicates that the forest area located on the western portion of the site has likely maintained some degree of forest cover since 1937 and could be considered mature forest. Mature forests possess the potential for rare, threatened, or endangered species that rely on this type of habitat.
- The majority of the parcel, with the exception of the northeast corner, lies within lands designated within the Delaware Ecological Network. The vast majority of the forest located within this area is proposed for removal. This network is made up of interconnecting natural areas of significant ecological value. Forest disturbances on this site will jeopardize habitat on the parcel and possibly beyond the parcel's boundary.
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- The proposed project is adjacent to a property protected through the State's Agricultural Lands Preservation Program (Mrs. Grace Shorts Caulk District)

Because the development is inconsistent with the Strategies for State Policies and Spending, the Office of State Planning is opposed to this proposed subdivision

Response: It is understood that the proposed residential subdivision is located within Investment Level 4. However, based on Sussex County Code and Sussex County Comprehensive Plan low-density single-family residential is permitted. Furthermore, the amount of forest removed will be based on the actual amount of land disturbance to safely construct and

maintain the proposed subdivision based on Sussex County Code as well as design regulations from Sussex County Engineering and Sussex Conservation District. The southern portion of the site is located in wetlands and flood plain - the proposed homes are not located within either the wetlands or the flood plain.

With that said, the comments in this letter are technical, and are not intended to suggest that the State supports this development. This letter does not in any way suggest or imply that you may receive or may be entitled to permits or other approvals necessary to build on this property.

Department of Transportation – Contact Bill Brockenbrough 760-2109

- The site access on Phillips Branch Road (Sussex Road 302 must be designed in accordance with DelDOT's Development Coordination Manual, which is available at <http://www.deldot.gov/Business/subdivisions/index.shtml?dc=changes>.
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and those plans included right turn and left turn lanes at the intersection of Hollymount Road and Phillips Branch Road. These turning lanes may be required.

More definitely, DelDOT anticipates requiring the developer to improve Phillips Branch Road, within the limits of their projected frontage, to meet DelDOT's Local Road standards, which include 11-foot lanes and 5-foot shoulders. Per the definition in Section 1.8 of the Manual, those limits are from a point about 1,000 feet southwest of their actual frontage to a point about 240 feet northeast of their actual frontage.

DelDOT may require a Traffic Operational Analysis, in accordance with Section 2.3.2 of the Manual if they find it necessary in determining the specific improvements needed either at the intersection or on the frontage.

Questions regarding the site's trip generation and Traffic Operational Analyses should be directed to the County Coordinator, Mr. T. William Brockenbrough. Mr. Brockenbrough may be reached at Thomas.Brockenbrough@delaware.gov or (302) 760-2109. Questions regarding the requirement to improve the site frontage should be directed to the Sussex County Review Coordinator, Mr. R. Stephen McCabe. Mr. McCabe may be reached at Richard.McCabe@delaware.gov or (302) 760-2276.

- As necessary, in accordance with Section 3.2.5 and Figure 3.2.5-a of the Manual, DelDOT will require dedication of right-of-way along the site's frontage on Phillips Branch Road. By this regulation, this dedication is to provide a minimum of 30 feet of right-of-way from the physical centerline. The following right-of-way dedication note is required, **"An X-foot wide right-of-way is hereby dedicated to the State of Delaware, as per this plat."**
- In accordance with Section 3.2.5.1.2 of the Manual, DelDOT will require the establishment of a 15-foot wide permanent easement across the property frontage on Phillips Branch Road. The location of the easement shall be outside the limits of the ultimate right-of-way. The easement area can be used as part of the open space calculation for the site. The following note is required, **"A 15-foot wide permanent easement is hereby established for the State of Delaware, as per this plat."**
- Referring to Section 3.4.2.1 of the Manual, the following items, among other things, are required on the Record Plan:
 - A Traffic Generation Diagram. See Figure 3.4.2-a for the required format and content.
 - Depiction of all existing entrances within 450 feet of the entrance on Phillips Branch Road.
 - Notes identifying the type of off-site improvements, agreements (signal, letter) contributions and when the off-site improvements are warranted.

- Section 3.5 of the Manual provides DeIDOT's requirements with regard to connectivity. The requirements in Sections 3.5.1 through 3.5.3 shall be followed for all development projects having access to state roads or proposing DeIDOT-maintained public streets for subdivisions. DeIDOT anticipates recommending that the County require a connection to Seaspray Court, a stub street in the adjoining River Oaks subdivision and consider requiring stub streets for future connections to the adjoining Warrington and Bar-Rab, LLC parcels, respectively (Tax Parcel Nos. 234-11.00-103.00 and 234-16.00-14.00).
- Section 3.5.4.2 of the Manual addresses requirements for Shared Use Paths (SUP) and sidewalks. For projects in Level 3 and 4 Investment Areas, installation of paths or sidewalks along the frontage on State-maintained roads is required where there is an existing path with which to connect. DeIDOT anticipates requiring an SUP along this development's road frontage.
- In accordance with Section 3.8 of the Manual, storm water facilities, excluding filter strips and bioswales, shall be located a minimum of 20 feet from the ultimate State right-of-way along Phillips Branch Road.
- In accordance with Section 5.2.9 of the Manual, the Auxiliary Lane Worksheet should be used to determine whether auxiliary lanes are warranted at the site entrances and how long those lanes should be. The worksheet can be found at <http://www.deldot.gov/Business/subdivisions/index.shtml>.
- In accordance with Section 5.14 of the Manual, all existing utilities must be shown on the plan and a utility relocation plan will be required for any utilities that need to be relocated.

Response: The developer will work with DeIDOT to further refine the entrance and roadway improvements.

Department of Natural Resources and Environmental Control – Beth Krumrine 735-3480
Concerns Identified Within the Development Footprint

Wetlands

Maps from the Statewide Wetlands Mapping Project indicate the presence of non-tidal wetlands on the southern portion of the site surrounding Unity Branch. The application indicates that wetlands have been delineated. Preliminary plans do not propose disturbances to wetland areas.

- If the site design changes and dredge or fill of wetlands or subaqueous lands becomes necessary, permitting and/or authorization requirements may apply.

Federal Wetland Contact: U.S. Army Corps of Engineers (Dover Office) at (267) 240-5278. Website: <https://www.nap.usace.army.mil/Missions/Regulatory/Contacts/>

State Wetland Contact: DNREC Wetlands and Subaqueous Lands Section at (302) 739-9943. Website: <https://dnrec.alpha.delaware.gov/water/wetlands-subaqueous/>

Vegetated Buffer Zones

Site plans show lots proposed approximately 50 feet from federally-regulated non-tidal wetlands. Vegetated buffer zones placed adjacent to waterways and wetlands help improve water quality by reducing sediment and pollutants loads. They also provide valuable habitat and can help prevent encroachment of human activities into ecologically sensitive areas. Vegetated buffers are not equivalent to setbacks, as residential lots, walkways, and stormwater management facilities should not be contained within the vegetated buffer zone.

- The applicant must comply with minimum vegetated buffer widths as identified within county and municipal codes.

Special Flood Hazard Area

According to the newest Flood Insurance Rate Maps (FIRM), the southern portion of this parcel is situated within a Special Flood Hazard Area, specifically within the mapped 100-year floodplain (1% annual chance of flooding). The Special Flood Hazard Area identified on the site lies within zone AE. In lands contained within the 100-year floodplain, the National Flood Insurance Program's floodplain management regulations must be enforced through the local floodplain ordinance, which can have higher standards. Homeowners with mortgages may be required to purchase flood insurance.

- The applicant must comply with the local floodplain ordinance and regulations applicable to development or construction within the 100-year floodplain. In determining the boundary of the floodplain, use the most recent FIRM maps available, which can be found at <https://floodplanning.dnrec.delaware.gov/>

Contact: DNREC Shoreline and Waterway Management Section at (302) 739-9921.
Website: <https://dnrec.alpha.delaware.gov/watershed-stewardship/waterways/floodplains/>

Stormwater Management

This application proposes greater than 5000 square feet of land disturbing activities, therefore, this project will be subject to Delaware's *Sediment and Stormwater Regulations*.

- A Sediment and Stormwater Plan must be developed, then approved by the appropriate plan review agency prior to any land disturbing activity taking place on the site. For this project, the plan review agency is Sussex Conservation District.
- Additionally, to address federal requirements, construction activities that exceed 1.0 acre of land disturbance require Construction General Permit coverage through submittal of an

electronic Notice of Intent for Stormwater Discharges Associated with Construction Activity. This form must be submitted electronically (<https://apps.dnrec.delaware.gov/enoi/>, select Construction Stormwater General Permit) to the DNREC Division of Watershed Stewardship, along with the \$195 fee.

- Schedule a project application meeting with the appropriate plan review agency prior to moving forward with the stormwater and site design. As part of this process, you must submit a Stormwater Assessment Study.

Plan Review Agency Contact: Sussex Conservation District at (302) 856-2105 or (302) 856-7219. Website: <https://www.sussexconservation.org/>

General Stormwater Management Contact: DNREC Sediment and Stormwater Program at (302) 739-9921. E-mail: DNREC.Stormwater@delaware.gov.
Website: <https://dnrec.alpha.delaware.gov/watershed-stewardship/sediment-stormwater/>

Response: The wetlands on-site have been delineated. No disturbance is currently anticipated. However, should disturbance become necessary, the appropriate permits will be obtained. The site will be designed per Sussex Conservation District including SAS and NOI.

Hydrologic Soils Group

Hydrologic Soil Group B/D soils have been identified on the site. These soil types are typically not conducive to utilizing infiltration stormwater Best Management Practices such as bioretention and infiltration basins, which must meet minimum infiltration requirements.

- Any stormwater Best Management Practices that propose the use of infiltration or natural recharge shall include a soils investigation. Consult with the proper plan review agency (Sussex Conservation District) or the DNREC Sediment and Stormwater Program for more information.

Response: The site contains primarily Soil Group A, with some B/D. The B/D soils are located primarily within the wetlands and are not proposed to be developed.

Water Quality (Pollution Control Strategies)

This site lies within the Rehoboth Bay Watershed. Surface water quality in this watershed does not meet State Water Quality Standards and a Pollution Control Strategy is in place for this watershed.

- Consult with the appropriate plan review agency (Sussex Conservation District) to determine if stricter stormwater management standards may apply for development projects due to the Pollution Control Strategy.

Response: The site will be designed in compliance with Sussex Conservation District standards.

Wildlife Displacement

Development of this site is anticipated to displace local wildlife. Wildlife displaced by encroaching development may become a nuisance for homeowners.

- Future residents are not permitted to discharge firearms within 100 yards (300 feet) of any occupied dwelling or building to hunt or remove nuisance wildlife. Contact the DNREC Division of Fish and Wildlife for more information.

Contact: DNREC Division of Fish and Wildlife at (302) 739-9912.

Website: <https://dnrec.alpha.delaware.gov/fish-wildlife/wildlife/>

Response: Understood.

Wastewater permits – Large Systems

Artesian holds existing permits with the DNREC Groundwater Discharges Section's Large Systems Branch for wastewater disposal.

- If additional flows to Artesian's system will require capacity updates, it is the responsibility of the permittee (Artesian) to notify the Large Systems Branch.

Wastewater Permits (Large Systems) Contact: DNREC Large Systems Branch at (302) 739-9948. Website: <https://dnrec.alpha.delaware.gov/water/groundwater/>

Response: Understood.

Nutrient Management Plan

This project proposes open space of 27 acres.

- A nutrient management plan is required by the Delaware Department of Agriculture for all persons or entities who apply nutrients to lands or areas of open space of 10 acres or more.

Contact: Delaware Department of Agriculture's Nutrient Management Program at (302) 698-4558. Website: <https://agriculture.delaware.gov/nutrient-management/>

Response: Understood.

State Historic Preservation Office – Contact Carlton Hall 736-7400

- There are no known archaeological sites or known National Register-Listed or eligible properties on the parcel.
- Prehistoric archaeological potential is high in the southern half of the parcel. Almost the entire parcel is well-drained soils (except next to Unity Branch), and the entire south half is within favorable distance to Unity Branch. The highest potential will be the top of bluff overlooking the stream. There are also prehistoric sites along Unity Branch on similar topography east of this parcel. The State Historic Preservation Office is recommending a Phase I archaeological survey.
- Historic archaeological potential is low throughout the parcel. There is no indication that there was a structure on the parcel. Though there was a historic farmstead just off the parcel where there are more modern houses now. There also appears to be something noted on the 1937, 1954, 1961, and 1968 aerials that looks like a 40-foot x 40-foot square approximately 150 feet southwest of the ag farmstead, which is common distance from homesteads to family cemeteries. It is sort of noticeable even in modern aerials, but it is not overgrown and wooded.
- The Delaware SHPO highly recommends checking out that area prior to any disturbance occurring and remind the developer of the Unmarked Human Burials and Human Skeletal Remains Act (Title 7, Ch. 54).
- If there is federal involvement, in the form of licenses, permits, or funds, the federal agency, often through its client, is responsible for complying with Section 106 of the National Historic Preservation Act (36 CFR 800) and must consider their project's effects on any known or potential cultural or historic resources. For further information on the Section 106 process please review the Advisory Council on Historic Preservation's website at: www.achp.gov

Response: The developer hired Edward Otter, PhD to investigate the 40 x 40 square referenced above. The site was stripped and no graves or indication of graves was noted.

Delaware State Fire Marshall's Office – Contact John Rudd 323-5365

- Fire hydrants shall be provided in accordance with Regulation 702, Chapter 6.
- If water for fire protection is not available, the site shall comply with Regulation 702, Chapter 6, Fire Flow Table 1.
- Emergency Service Access shall be provided in accordance with Regulation 705, Chapter 5.

Response: The site will be designed per Fire Marshal requirements.

Department of Agriculture – Contact: Milton Melendez 698-4534

- The proposed project is adjacent to a property protected through the State's Agricultural Lands Preservation Program (Mrs. Grace Shorts Caulk District K-92-11-007 parcels 1-00-02800-01-0100, 1-00-02800-01-2900). Therefore, the activities conducted on this preserved property are protected by the agricultural use protections outlined in Title 3, Del. C., Chapter 9. These protections effect adjoining developing properties. The 300 foot notification requirement affects all new deeds in a subdivision located in whole or part within 300 feet of an Agricultural District/Easement. Please take note of these restrictions as follows:

§ 910. Agricultural use protections.

(a) Normal agricultural uses and activities conducted in a lawful manner are preferred and priority uses and activities in Agricultural Preservation Districts. In order to establish and maintain a preference and priority for such normal agricultural uses and activities and avert and negate complaints arising from normal noise, dust, manure and other odors, the use of agricultural chemicals and nighttime farm operations, land use adjacent to Agricultural Preservation Districts shall be subject to the following restrictions:

(1) For any new subdivision development located in whole or in part within 300 feet of the boundary of an Agricultural Preservation District, the owner of the development shall provide in the deed restrictions and any leases or agreements of sale for any residential lot or dwelling unit the following notice:

This property is located in the vicinity of an established Agricultural Preservation District in which normal agricultural uses and activities have been afforded the highest priority use status. It can be anticipated that such agricultural uses and activities may now or in the future involve noise, dust, manure and other odors, the use of agricultural chemicals and nighttime farm operations. The use and enjoyment of this property is expressly conditioned on acceptance of any annoyance or inconvenience which may result from such normal agricultural uses and activities."

(2) For any new subdivision development located in whole or in part within 50 feet of the boundary of an Agricultural Preservation District, no improvement requiring an occupancy approval shall be constructed within 50 feet of the boundary of the Agricultural Preservation District.

(b) Normal agricultural uses and activities conducted in accordance with good husbandry and best management practices in Agricultural Preservation Districts shall be deemed protected actions and not subject to any claim or complaint of nuisance, including any such claims under any existing or future county or municipal code or ordinance. In the event a formal complaint alleging nuisance related to normal agricultural uses and activities is filed against an owner of lands located in an Agricultural Preservation District, such owner, upon prevailing in

any such action, shall be entitled to recover reasonably incurred costs and expenses related to the defense of any such action, including reasonable attorney's fees (68 Del. Laws, c. 118, § 2.).

- In addition, if any wells are to be installed, Section 4.01(A)(2) of the Delaware Regulations Governing the Construction and Use of Wells will apply. This regulation states:

(2) For any parcel, lot, or subdivision created or recorded within fifty (50) feet of, or within the boundaries of, an Agricultural Lands Preservation District (as defined in Title 3, Del. C., Chapter 9); all wells constructed on such parcels shall be located a minimum of fifty (50) feet from any boundary of the Agricultural Lands Preservation District. This requirement does not apply to parcels recorded prior to the implementation date of these Regulations. However, it is recommended that all wells be placed the maximum distance possible from lands which are or have been used for the production of crops which have been subjected to the application of land applied federally regulated chemicals.

Response: Appropriate setbacks and notes will be included on the subdivision plat regarding agricultural uses as required by Sussex County.

Sussex County Housing – Contact: Brandy Nauman 855-7779

- Sussex County endeavors to promote non-discrimination and affordable housing whenever possible throughout the County. In this regard, the developer and associated financial institutions are encouraged to provide and finance affordable housing opportunities to Sussex County residents in all new developments, and affirmatively market those affordable housing units to diverse populations.
- For questions about opportunities available for affordable housing projects within Sussex County, please consult Sussex County's "Affordable Housing Support Policy". The policy along with other resources are available on the County's Affordable & Fair Housing Resource Center website: www.sussexcountyde.gov/affordable-and-fair-housing-resource-center. The County's Community Development & Housing Department can advise about existing affordable housing opportunities in Sussex County and the appropriate County Department to contact regarding specific development issues concerning future affordable housing projects within Sussex County.
- The Community Development & Housing Department can also explain and assist with any financial support or incentives that may be available to a project from federal, state and county sources, as well as private funding sources that also promote affordable housing in Sussex County.
- Please understand that all residential projects, including Affordable Housing Projects are subject to the applicable provisions of the Sussex County Subdivision and Zoning Codes, and the approval processes set forth in those Codes.

Response: Understood.

Following receipt of this letter and upon filing of an application with the local jurisdiction, the applicant shall provide to the local jurisdiction and the Office of State Planning Coordination a written response to comments received as a result of the pre-application process, noting whether comments were incorporated into the project design or not and the reason therefore.

This concludes our response. If you have any questions, please contact us at your convenience.

Sincerely,

Solutions, IPEM

A handwritten signature in blue ink, appearing to read 'JP', is written over the typed name.

Jason Palkewicz, PE