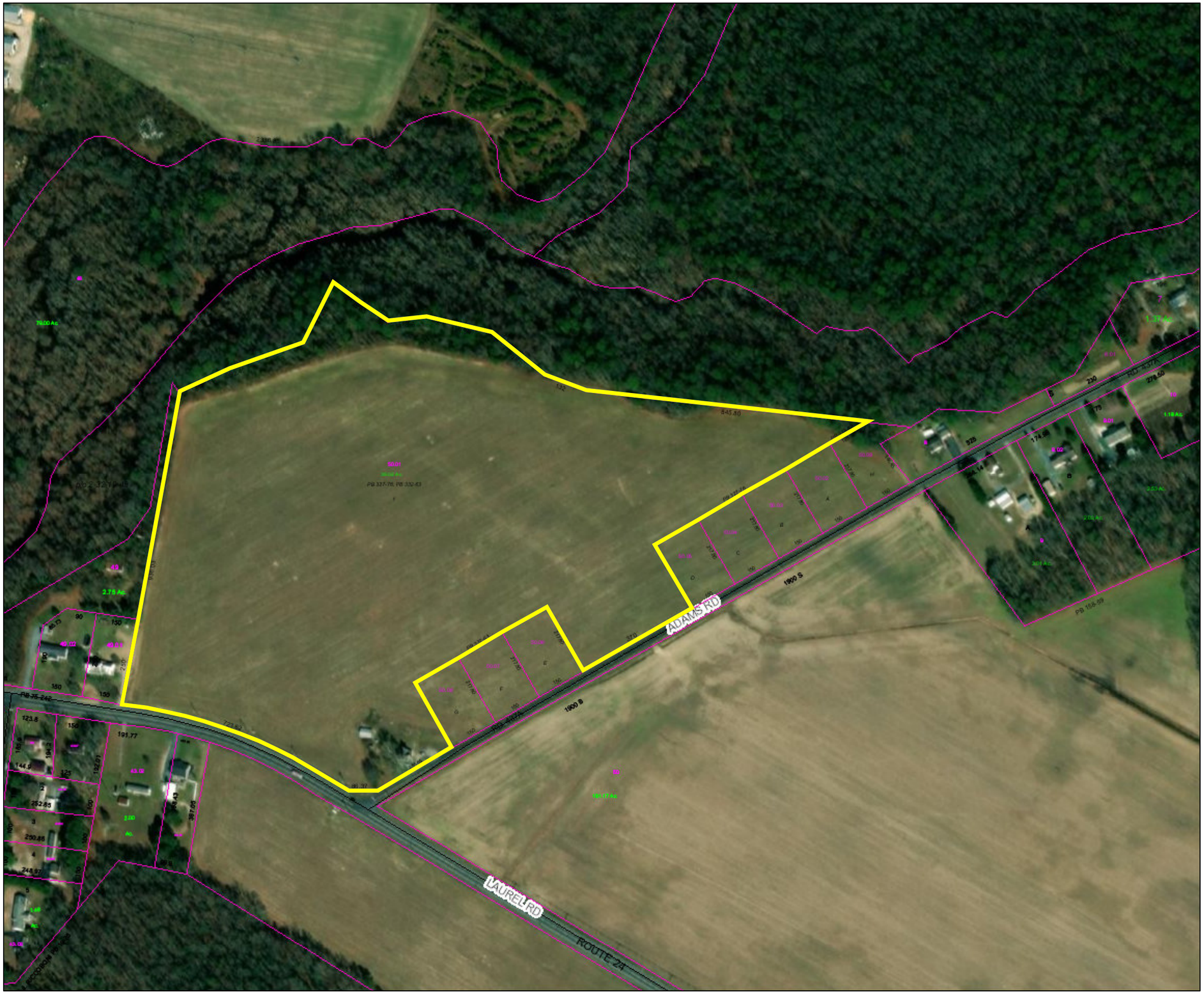
Sussex County
DELAWARE
sussexcountyde.gov
302-855-7878 T
302-854-5079 F
JAMIE WHITEHOUSE, AICP
DIRECTOR

PLANNING AND ZONING AND COUNTY COUNCIL INFORMATION SHEET
Planning Commission Public Hearing Date May 27th, 2021

Application:	The Crossings (FKA The Crossing at Trap Pond) (2020-10)
Applicant:	Sussex Ventures, Inc. 25051 Ward Farm Lane Millsboro, DE 19966
Owner:	Sussex Ventures, Inc. 25051 Ward Farm Lane Millsboro, DE 19966
Site Location:	North side of intersection of Laurel Road (Route 24) and Adams Road (S.C.R 437A)
Current Zoning:	Agricultural Residential (AR-1) Zoning District
Proposed Use:	39 Single Family Lots as an AR-1 Cluster Subdivision
Comprehensive Land Use Plan Reference:	Low Density Area
Councilmanic District:	Mr. Vincent
School District:	Laurel School District
Fire District:	Laurel Fire Company
Sewer:	On-Site Septic
Water:	Private Wells
Site Area:	39.02 +/- acres
Tax Map ID.:	232-19.00-50.01

Sussex County



PIN:	232-19.00-50.01
Owner Name	SUSSEX VENTURES INC
Book	5193
Mailing Address	25051 WARD FARM LN
City	MILLSBORO
State	DE
Description	NW/ADAMS RD
Description 2	NE/LAUREL RD
Description 3	N/A
Land Code	

polygonLayer

Override 1

polygonLayer

Override 1

Tax Parcels

Streets

County Boundaries

Municipal Boundaries

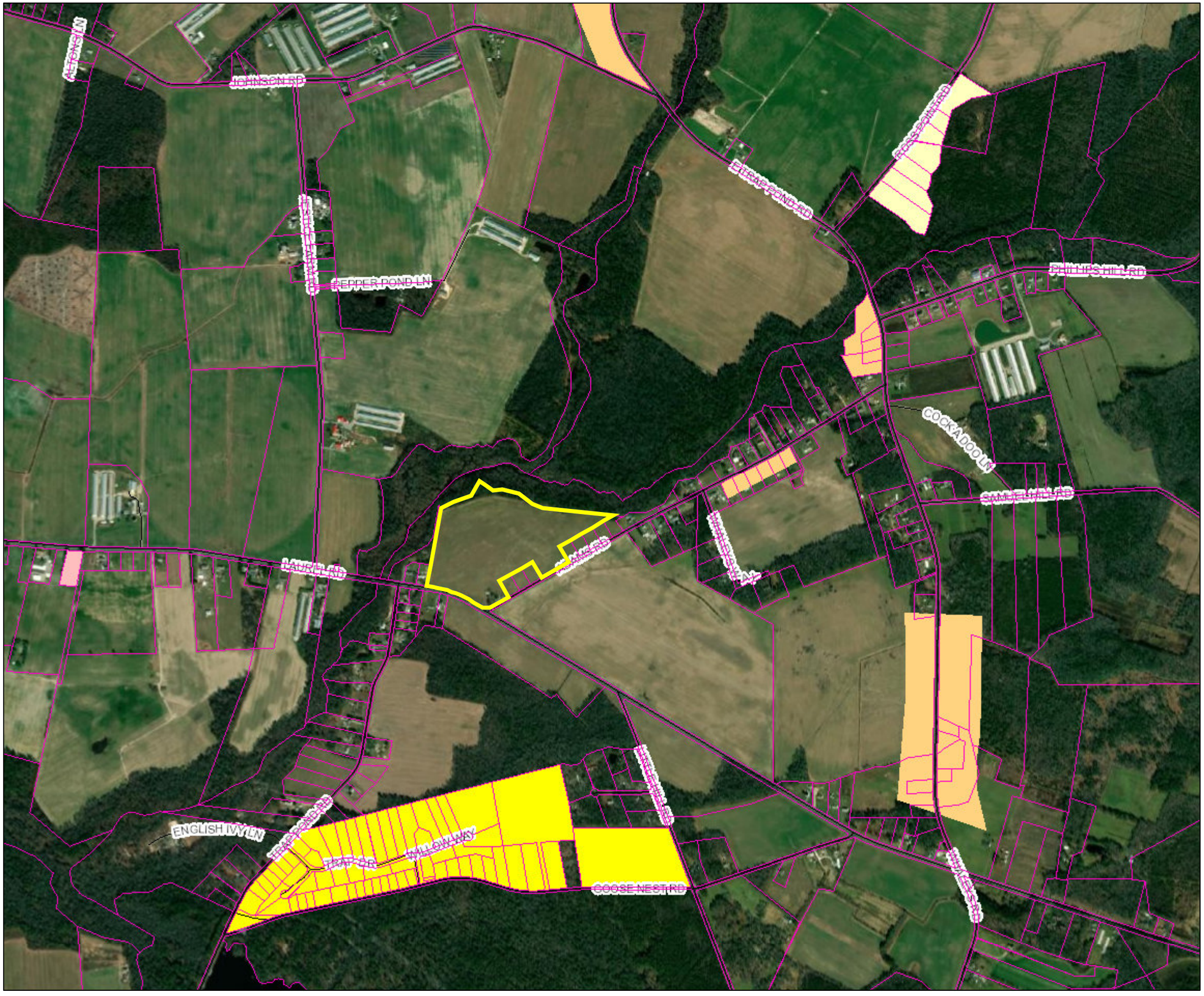
1:4,514

0 0.05 0.1 0.2 mi

0 0.075 0.15 0.3 km

May 4, 2021

Sussex County



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polygonLayer

Override 1

polygonLayer

Override 1

Tax Parcels

Streets

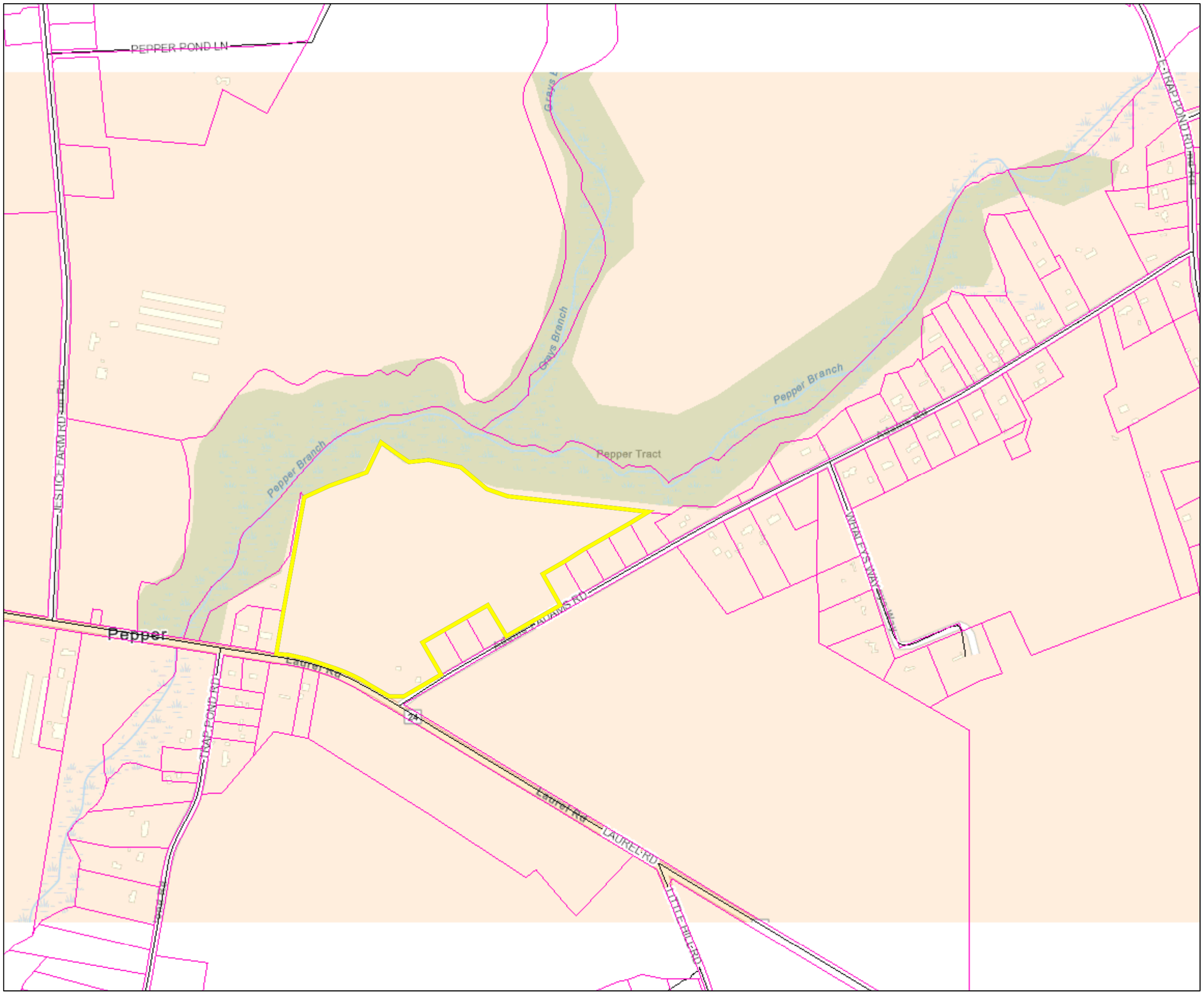
1:18,056

0 0.225 0.45 0.9 mi

0 0.35 0.7 1.4 km

May 4, 2021

Sussex County



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Description 3	N/A
Land Code	

polygonLayer
Override 1
polygonLayer
Override 1
Tax Parcels
Streets
County Boundaries
Municipal Boundaries

1:9,028

0 0.1 0.2 0.4 mi
0 0.175 0.35 0.7 km

May 4, 2021

File #: 2020-10
20200812 2

Sussex County Major Subdivision Application
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: ✓
ESDDOZ: ___

Location of Subdivision:

North Corner of SCR 437A (Adams Road) and Delaware Route 24 Intersection

Proposed Name of Subdivision:

The Crossings at Trap Pond

Tax Map #: 232-19.00-50.01 (P/O Total Acreage: 39.02 Ac.

Zoning: AR-1 **Density:** 1.0 **Minimum Lot Size:** 0.5 Ac **Number of Lots:** 39

Open Space Acres: 11.79 Ac.

Water Provider: Private Wells **Sewer Provider:** Private Septic

Applicant Information

Applicant Name: Sussex Ventures, Inc.
Applicant Address: 25051 Ward Farm Lane
City: Millsboro State: DE ZipCode: 19966
Phone #: 302.934.5687 E-mail: wards@mchsi.com

Owner Information

Owner Name: Sussex Ventures, Inc.
Owner Address: 25051 Ward Farm Lane
City: Millsboro State: DE Zip Code: 19966
Phone #: 302.934.5687 E-mail: wards@mchsi.com

Agent/Attorney/Engineer Information

Agent/Attorney/Engineer Name: The Kercher Group, Inc. (C/o John Murray)
Agent/Attorney/Engineer Address: 37385 Rehoboth Ave. Ext., Unit #11
City: Rehoboth Beach State: DE Zip Code: 19971
Phone #: 302.854.9063 E-mail: jom@kerchergroup.com
302-344-1055 (cell)

Check List for Sussex County Major Subdivision Applications

The following shall be submitted with the application

✓ **Completed Application**

✓ **Provide fifteen (15) 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)

___ **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 by 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: 7/15/20

Signature of Owner

_____ Date: 7/15/20

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: _____

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

RECEIVED
MAY 12 2021
SUSSEX COUNTY
PLANNING & ZONING

TO: **Jamie Whitehouse**

REVIEWER: **Chris Calio**

DATE: **5/7/2020**

APPLICATION: **2020-10 The Crossings (FKA The Crossing at Trap Pond**

APPLICANT: **Sussex Ventures, Inc.**

FILE NO: **WSPA-5.01**

TAX MAP & PARCEL(S): **232-19.00-50.01**

LOCATION: **North side of intersection of Laurel Road (Rt. 24) and Adams Road (SCR 437A)**

NO. OF UNITS: **39 single family lots**

GROSS ACREAGE: **39.02 +/-**

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 4**

(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 $6,360.00** 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: **Click or tap here to enter text.**

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

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

UTILITY PLANNING APPROVAL:

John J. Ashman
Director of Utility Planning

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

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

Sussex County
DELAWARE
sussexcountyde.gov

Memorandum

To: Sussex County Technical Advisory Committee From: Nick Torrance, Planner I
Date: July 27th, 2020
RE: Major Subdivision

The Sussex County Planning and Zoning Office has received an application for a major subdivision that requires review by the Sussex County Technical Advisory Committee. Please review the application and provide comments back to the Planning and Zoning Office on or before **September 28th, 2020.**

> **2020-10 – The Crossings at Trap Pond**- This is a Cluster subdivision. The Cluster subdivision is for the creation of thirty-nine (39) single family lots. The property is located on the northwest corner of the intersection of Laurel Rd. (Route 24) and Adams Rd (S.C.R. 437A). Tax Parcel: 232-19.00-50.01 (Part of). Zoning: AR-1 (Agricultural Residential District). Owner: Sussex Ventures, LLC.

Please feel free to send your comments via e-mail. Please feel free to contact me with any questions at (302) 855-7878 during normal business hours 8:30am-4:30pm Monday through Friday or e-mail me at nicholas.torrance@sussexcountyde.gov.

STATE OF DELAWARE
DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL
DIVISION OF WATER
21309 BERLIN ROAD, UNIT 2
GEORGETOWN, DELAWARE 19947

GROUNDWATER DISCHARGES

PHONE
(302) 856-4561

February 16, 2021

Sussex Ventures, Inc.
25051 Ward Farm Lane
Millsboro DE 19966

RE: Feasibility Study
Lands of Sussex Ventures, Inc., The Crossings at Trap Pond
Tax Map No.: 232-19.00-50.01, Proposed Lots 1 Through 39

Dear Sussex Ventures, Inc.:

The Department of Natural Resources and Environmental Control (the Department) received a submission from Scaled Engineering, Inc. (SEI) and AAA Environmental Services (AAAEA), on February 1, 2021, requesting a non-binding statement of feasibility for subdivision as required by the Regulations Governing the Design, Installation and Operation of On-Site Wastewater Treatment and Disposal Systems, dated January 4, 1985, last amended on January 11, 2014 (the Regulations).

The submission consists of a report titled "SOIL FEASIBILITY REPORT, THE CROSSINGS AT TRAP POND," prepared by SEI and AAAES, dated January 29, 2021, that summarizes the information collected. The report includes, but is not necessarily limited to, the following information:

- A summary of the study,
- a plan titled "Soil Feasibility Plan," prepared by SEI (hereafter referred to as the Plan),
- a plan titled "Preliminary Plan (Not To Be Recorded), RECORD PLAN, THE CROSSINGS AT TRAP POND," prepared by The Kercher Group, Inc., dated 6/9/20, showing the conceptual lot layout of the proposed subdivision, including number and area for each of the proposed lots (metes and bounds not provided),
- soil profile notes and the results of infiltration testing,
- various reference maps, and
- a Sussex County Property Information form as proof of ownership.

Information shown by the Plan includes, but is not limited to, topography at an apparent 1-foot contour, locations of soil borings, test pits and infiltration tests, locations of wells within 150 feet and map units delineated by SEI and AAAES as related to on-site wastewater treatment and disposal system (OWTDS) feasibility.

Background Information

The property is located north of the of the intersection of Adams Road (437-A) and Laurel Road (SCR 24). The owner/developer proposes to subdivide the 42± acre parcel into 39 single-family residential building lots ranging in size from 0.50± to 0.79± acres. The parcel will hereafter be referred to as the project site. Based on information provided by SEI and AAAEA most of the project site is farmland. A fringe of woods is located along the project site's northern boundaries.

Soils Investigations by SEI and AAAES and Discussion

Thirty soil borings (SB) and six test pits (TP) were reportedly performed, logged, and submitted by SEI as part of the study. Three mapping units were delineated by SEI and AAAEA including the Potential Gravity OWTDS (GR) map unit, the Potential Low Pressure Pipe OWTDS (LPP) map unit and the Potential Sand Mound OWTDS (SM) map unit. No development is being proposed in the SM map unit and therefore, it will not be discussed.

The GR map unit has estimated limiting zones of 48 to 68 inches below the soil surface and estimated percolation rates of from 35 to 55 minutes per inch (MPI). Falling-head single-ring infiltration tests were performed in the GR map unit resulting in a measured rate of approximately 9 MPI. Estimated limiting zones, estimated percolation rates and the results of in-the-field measured infiltration rates suggest that the GR map unit is feasible for OWTDS.

The LPP map unit has estimated limiting zones of 27 to 46 inches below the soil surface and estimated percolation rates of from 30 to 75 MPI. Falling-head single-ring infiltration tests were performed in the LPP map unit resulting in measured rates of from 7 to 13 MPI. Estimated limiting zones, estimated percolation rates and the results of in-the-field measured infiltration rates suggest that the LPP map unit is feasible for OWTDS.

Conclusions

- Based on information collected, analyzed and presented by SEI and AAAEA, it appears that proposed lots 1 through 39 as depicted by the Plan have sufficient area to accommodate at least an initial OWTDS as long as judicious and coordinated use of land is exercised and areas delineated as being feasible for OWTDS as depicted by the Plan are accurate.

Site Preparation

Removal, disturbance, or compaction of soils mapped as being feasible for OWTDS during any portion of the construction and building phase other than that necessary for system installation may result in the rescission of the site evaluation approval. Soil material from road cuts and other excavated sources should not be placed on any portion of areas proposed for OWTDS. It is best to keep all areas proposed for OWTDS free from any form of disturbance by methods such as staking, flagging, or fencing. The Department reserves the right to inspect the construction site at any time to ensure compliance with the above.

Future Requirements and Comments

Prior to obtaining individual OWTDS construction permits complete site evaluation reports will be required for all lots in accordance with the Regulations. The Department requires one copy of the **Record Plat** following final subdivision approval by the Planning and Zoning Commission of Sussex County prior to processing and approving any site evaluations.

Non-Binding Statement of Feasibility

Based on the information prepared, analyzed and presented by SEI and AAAEA, it is the opinion of the Department that the proposed subdivision as shown by the Plan would be feasible for at least an initial OWTDS in accordance with the Regulations Governing the Design, Installation and Operation of On-Site Wastewater Treatment and Disposal Systems, dated January 4, 1985, last amended on January 11, 2014, as long as judicious and coordinated use of land is exercised and areas delineated by AE as being feasible for OWTDS as depicted by the Plan are accurate.

The comments in this letter are technical and are not intended to suggest that the Department supports this development proposal. 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 construct the development you indicate or any subdivision thereof on these lands.

Sincerely,

J. Scott Kline

J. Scott Kline
Environmental Scientist

Cc: Josh Stallings – SEI
Mike Stallings - AAAEA
file

MAPPING & ADDRESSING

MEGAN NEHRBAS
MANAGER OF GEOGRAPHIC
INFORMATION SYSTEMS (GIS)
(302) 855-1176 T
(302) 853-5889 F

Sussex County
DELAWARE
sussexcountyde.gov

October 28, 2020

Sussex Ventures
Attn: Drew Ward

RE: **The Crossings**

I have received proposed street name(s) for the proposed subdivision, **The Crossings**, located in **Laurel**. In reviewing the proposed street name(s) the following have been **approved**:

Eagle Way		

Use only **approved** road names that you have written confirmation for or you will be required to rerecord. Each street name is to be used only once.

Upon final approval of **The Crossings** please forward a copy of the recorded site plan to my attention. Our office would appreciate a digital copy if at all possible, for the purpose of addressing. Should you have any questions, please contact the **Sussex County Addressing Department** at 302-855-1176.

Sincerely,

Terri L Dukes

Terri L. Dukes
Addressing Technician II

CC: Christin Headley
Planning & Zoning

MAPPING & ADDRESSING

MEGAN NEHRBAS
MANAGER OF GEOGRAPHIC
INFORMATION SYSTEMS (GIS)
(302) 855-1176 T
(302) 853-5889 F

Sussex County
DELAWARE
sussexcountyde.gov

October 28, 2020

Sussex Ventures
Attn: Don & Drew Ward

RE: Proposed Subdivision Name(s)

I have reviewed the name(s) submitted for your proposed subdivision which is located in Laurel (232-19.00-50.01). In reviewing the proposed name(s) the following has been approved for this subdivision:

The Crossings

Should you have any questions please contact the Sussex County Addressing Department at 302-853-5888 or 302-855-1176.

Sincerely,

Terri L Dukes

Terri L. Dukes
Addressing Technician II

CC: Christin Headley
Planning & Zoning

2020-10

ENGINEERING DEPARTMENT

ADMINISTRATION	(302) 855-7718
AIRPORT & INDUSTRIAL PARK	(302) 855-7774
ENVIRONMENTAL SERVICES	(302) 855-7730
PUBLIC WORKS	(302) 855-7703
RECORDS MANAGEMENT	(302) 854-5033
UTILITY ENGINEERING	(302) 855-7717
UTILITY PERMITS	(302) 855-7719
UTILITY PLANNING	(302) 855-1299
FAX	(302) 855-7799

Sussex County
DELAWARE
sussexcountyde.gov

HANS M. MEDLARZ, P.E.
COUNTY ENGINEER

MICHAEL E. BRADY
DIRECTOR OF PUBLIC WORKS

August 12, 2020

REF: **T. A. C. COMMENTS**
THE CROSSINGS AT TRAP POND
TIER 4
SUSSEX COUNTY ENGINEERING DEPARTMENT
SUSSEX COUNTY TAX MAP NUMBER
232-19.00 PARCEL 50.01
PROJECT CLASS-5
AGREEMENT NO. 1151

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

PUBLIC WORKS DIVISION COMMENTS

1. Proposed developments with private roads or projects required by the County to conform to or exceed the County street design requirements shall be regulated by and conform to Sussex County Code and the comments here listed.

2. The road pavement width shall meet current County code requirements at 24 feet width minimum; reference SCC 99-18, E. (1)(b).

3. Sidewalk placement shall conform to County Code 99-18, E. (9)(d).

4. 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.)

5. 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.

6. All work shall be geo-referenced to the Delaware State Grid System NAD-83 (HARN) and provided in an AutoCAD 2012 format. North will always be shown in an up direction on all plans.

7. Topographic contours at one-foot intervals shall be shown and referenced to United States Geological Survey Mean Sea Level Datum NAVD 1988 Datum.

8. The plans shall be provided on 24" x 36" drawing sheets at a scale of 1" = 50'.

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

9. 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-way lines, established at a minimum, two (2) horizontal and vertical control concrete project benchmarks, 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.

10. Plans shall show the seal and signature of a registered Delaware land surveyor or registered Delaware professional engineer.

11. The plan requires a Certification Signature and/or a Certification Block for the Delaware Professional Engineer or Delaware Land Surveyor.

12. The plan requires a Certification Signature and/or a Certification Block for the Owner or Representative of the Owner.

13. The plan requires a Certification Signature and/or a Certification Block for the Professional Wetlands Delineator.

14. 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.

15. Indicate the location of all wetlands (both state and federal), in order to facilitate compliance with County, State and Federal requirements.

16. 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.

17. 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.

18. 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.

19. When on site individual septic tank systems are to be used and the lot topography is to be modified by cuts and fills it is required that the Design Engineer contact the Delaware Department of Natural Resources and Environmental Control, Division of Groundwater Water Discharge Section, 20653 DuPont Boulevard, Unit 5, Georgetown, DE 19947, phone number 302-856-4561 subject to mass grading operations for documented approval.

20. Provide the limits and elevations of the onehundred (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 base flood. The design engineer must resolve discrepancies, if any, between surveyed topography and the FEMA Flood Insurance Rate Maps.

21. False berms shall not be utilized to create roadside drainage swale back slopes.

22. 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.

23. Provide and show the locations and details of all ADA compliant accessible walks and ramp features.

24. 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.

25. 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.

26. 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.

27. Provide statements concerning any proposed deed restrictions to be imposed by the owner.

28. 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.

29. 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

USDA

United States Department of Agriculture

Natural Resources
Conservation Service

Georgetown
Service Center

21315 Berlin Road
Unit 3
Georgetown, DE
19947

Voice 302.856.3990
Fax 855.306.8272

September 4, 2020

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

RE: The Crossing at Trap Pond
Broad Creek Hundred
39 single family lots

Dear Mr. Whitehouse:

Soils within the delineated area on the enclosed map are:

Pk	Puckum muck, frequently flooded
PpA	Pepperbox loamy sand, 0 to 2 percent slopes
RuA	Runclint loamy sand, 0 to 2 percent slopes
RuB	Runclint loamy sand, 2 to 5 percent slopes

Soil Interpretation Guide

Soil Limitation Class

Buildings

Map Symbol	Urbanizing Subclass	With Basement	Without Basement	Septic Filter Fields
Pk	R5	Very limited	Very limited	Very limited
PpA	Y2	Very limited	Somewhat limited	Very limited
RuA	Y2	Somewhat limited	Not limited	Very limited
RuB	Y2	Somewhat limited	Not 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.

R5:
Areas of tidal marsh, swamp, and shallow muck which remain extremely wet all or most of the year. Excavations are likely to fill with water in late winter or early spring. Delayed construction in the spring - slow to dry out. Wet basements or foundations probable. Hazard of temporary ponding of water in areas lacking outlets. Potential flood damage, or subject to wave and tidal action.

Y2:
The soils in this classification are nearly level or gently sloping, moderately well drained or well drained with ground water between four to six feet from the surface, and are subject to seasonal high water tables. Seasonal wetness and seepage around foundations moderately limits these soils for residential use. The principal soil limitations are: 1) lateral seepage in subsoil causes concentration of water around foundations, 2) soil is highly susceptible to frost action, 3) excavations are likely to fill with water in late winter or early spring, and 4) wet basements or foundations are probable.

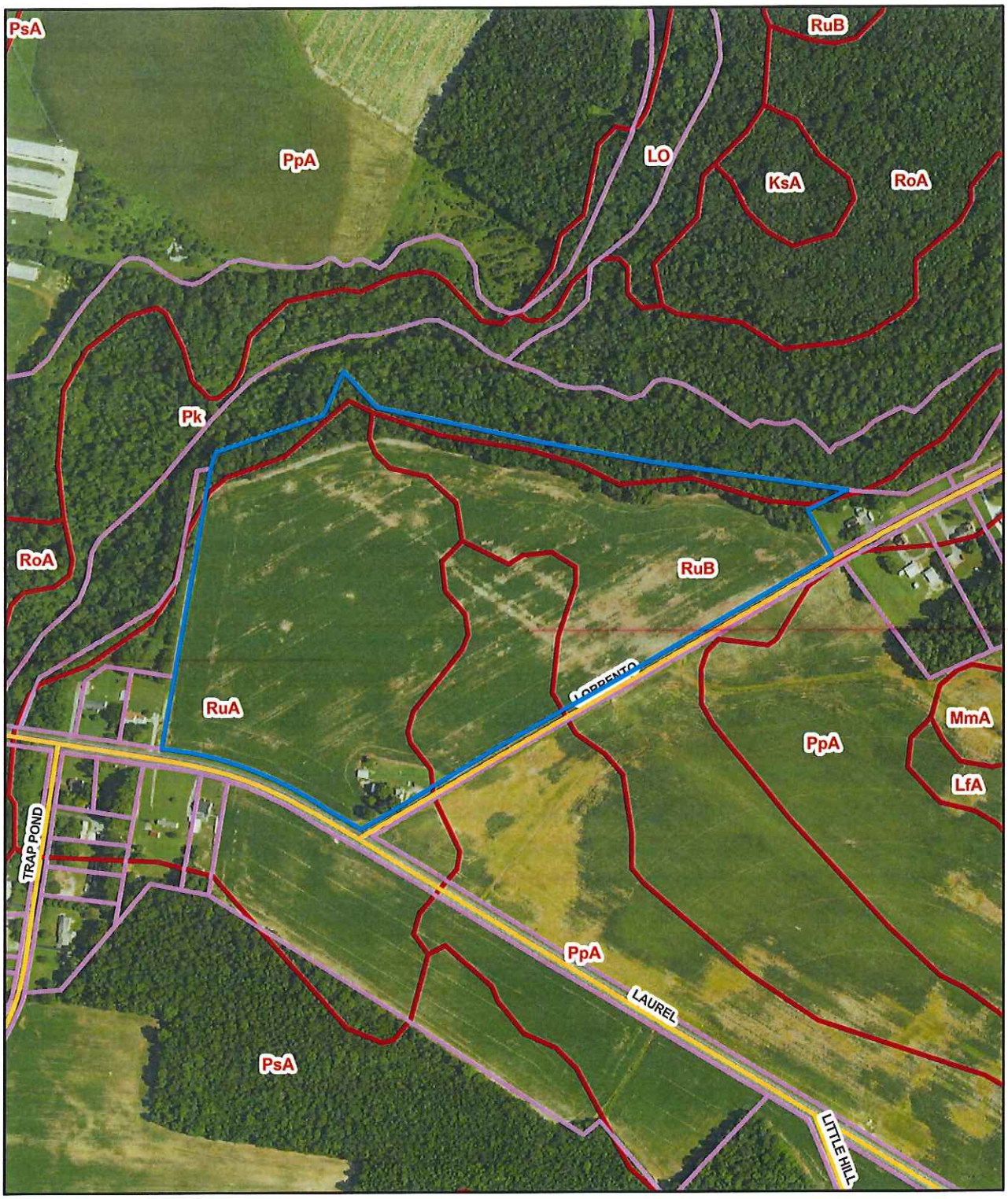
The soil interpretations above do not eliminate the need for detailed investigations at each proposed construction site. However, the interpretations can serve as a guide to planning more detailed investigations. No consideration was given in these interpretations regarding the size and shape of the 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

2020-10
TM #232-19.00-50.01
The Crossings at Trap Pond



2020-10
TM #232-19.00-50.01
The Crossings at Trap Pond

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

August 20, 2020

Nick Torrance, Planner I
Planning & Zoning Commission
P.O. Box 417
Georgetown, Delaware 19947

Subject: **Preliminary Plans for The Crossings at Trap Pond**

Dear Mr. Torrance,

Thank you for providing preliminary plans for The Crossings at Trap Pond subdivision submitted by The Kercher Group, Inc. The plans submitted to our section dated July 27, 2020 are sufficient to meet the Sussex County Planning and Zoning Forested Buffer Ordinance.

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 has no further comment to The Crossings at Trap Pond preliminary subdivision plans dated July 27, 2020 at this time.

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

Sincerely,

Taryn Davidson

Taryn Davidson
Urban Forestry Program
Delaware Forest Service

STATE OF DELAWARE

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

JENNIFER COHAN
SECRETARY

September 29, 2020

Nick Torrance
Planner I, Sussex County Planning & Zoning Department
Sussex County Administration Building
P.O. Box 417
Georgetown, DE 19947

SUBJECT: September T.A.C. MEETING

Dear Nick:

The Department has reviewed the information for the above referenced meeting and offers these comments on the following site:

1. Subd. #2020-10, The Crossings at Trap Pond
   Tax Map #232-19.00-50.01 Review Mgr.: Susanne Laws, See attachment

As always, should you have any questions, please feel free to give me a call.

Sincerely,

John Andrescavage
Sussex County Reviewer
302-760-2512

Attachment
Cc: Gemez W. Norwood, South District Public Works Manager
Robert Bragg, South District Subdivision Manager
Susanne Laws, Sussex County Review Coordinator

DelDOT

DEPARTMENT OF TRANSPORTATION
COMMENTS FOR
T.A.C. MEETING
OF September 2020

Lands of Sussex Ventures, LLC
Tax Map #232-19.00-50.01
SCR 24 (Laurel Road) & SCR 437A (Adams Road)
Sussex County

#2020-10, The Crossings at Trap Pond

1. Please refer to the "*Development Coordination Manual*" manual for the design of the subdivision streets and/or entrance. The website for the manual is the following;

   http://www.deldot.gov/Business/subdivisions/index.shtml?dc=changes

2. For all projects, any sub-station and/or wastewater facilities will be required to have access from the internal subdivision street with no direct access to the State maintained highway.

3. For all projects, a 20-foot wide buffer will be required from the edge of the stormwater management pond to the ultimate right-of-way of the County road. The ultimate right-of-way is based on the functional classification of the road.

4. Referring to the "*Development Coordination Manual",* Chapter 3 – Record Plan Design, Section 3.2.5.1.2: Frontage Easements, a 15-foot wide permanent easement will need to be established across the property frontage. The location of the easement shall be outside the limits of the ultimate right-of-way for this road. The following note is required, "**A 15-foot wide permanent easement is hereby established for the State of Delaware, as per this plat.**"

5. Referring to the "*Development Coordination Manual",* Chapter 3 – Record Plan Design, Section 3.2.5: Dedication of Right-Of-Way and Easements, Figure 3.2.5-a Minimum Standards for Total Roadway Right-Of-Way, the project shall be subject to dedicate right-of-way in accordance to the minimum standards.

6. Referring to the "*Development Coordination Manuals*", Chapter 3 – Record Plan Design, Section 3.2.4.1: Subdivision Street Right-Of-Way Monuments, right-of-way monuments are recommended to be furnished and placed along the private subdivision street.

7. Referring to the "*Development Coordination Manual*", Chapter 3 – Record Plan Design, Section 3.2.4.2; Frontage Road Right-of-Way Monumentation, concerning the right-of-way markers being placed to provide a permanent reference for re-establishing the right-of-way and property corners along frontage roads. Due to the right-of-way dedication,

show and note the property corners markers that will need to be installed.

8. Referring to the "*Development Coordination Manual*", Chapter 3 – Record Plan Design, Section 3.5.5: Transit Facilities, transit facilities requirements shall be followed as required by DTC or DelDOT.

9. Referring to the "*Development Coordination Manual*", under Chapter 3; Record Plan Design, Section 3.2.5.1.1 – Easements, if this development is proposing a neighborhood sign/structure, then a permanent easement shall be established at the entrance. The easement shall be located outside of any existing and/or proposed right-of-way. It will also need to be verified that the sign/structure does not pose a sight distance and/or safety hazard.

10. Metes and bounds and total areas need to be shown for any drainage easements. A minimum 20-foot wide drainage easement must be provided for storm drainage systems, open or closed, that fall outside the existing right-of-way or the drainage/utility easement. These easements shall be shown and noted on record plan. w

11. Referring to the "*Development Coordination Manual*", Chapter 3 – Record Plan Design, Section 3.5: Connectivity, connectivity requirements shall be followed for all development projects having access to state roads or proposing DelDOT maintained public road for subdivisions. Private or municipal streets should follow the local land use agency's requirements for connectivity.

12. Referring to the "*Development Coordination Manual*", Chapter 3 – Record Plan Design, Section 3.4.2.1: Record Plan Content, the traffic generation diagram is required. See Figure 3-4-2-a: Traffic Generation Diagram for what is required.

    a. Please refer to the attached site plan (first attachment) that shows the traffic generation diagram that was approved by DelDOT's Traffic Impact Studies Section.

13. Referring to the "*Development Coordination Manual*", Chapter 3 – Record Plan Design, Section 3.4.2: Record Plan Submittal Requirements, adjacent existing features are required to be shown in accordance with Figure 3.4.2-b.

14. It will need to be noted on the Record Plan the type of off-site improvements and when the off-site improvements are warranted for this project.

15. Referring to the "*Development Coordination Manual*", Chapter 2 – Traffic Analysis and Improvements, it will need to be determined if a Traffic Impact Study (T.I.S.), Area-Wide Study Fee or a Traffic Operational Analysis (T.O.A.) will be required.

16. As per the Delaware State Strategies for Policy and Spending Map, this project is located within Investment Level III or IV. Referring to the Departments Shared-Use Path/Sidewalk Policy a project an all Level III and Level IV areas are required to install a

path/sidewalk along the property frontage if the project abuts to an existing facility. If the project does not abut an existing facility, it will be at the Subdivision Engineer's discretion. No fee in lieu of construction will be required.

17. Referring to the "*Development Coordination Manual*" under Chapter 5; Design Elements, Section 5.2.5 – Subdivision and Commercial Entrance Design Guidelines – Intersection Corner Radii, a separate turning template plan shall be provided to verify vehicles can safely enter/exit the entrance. The entrance shall be designed for the largest vehicle using the entrance.

18. Please check to determine if any utilities will need to be relocated as part of this project.

19. Standard General Notes have been updated and posted to the DelDOT Website. Please begin using the new versions and look for the revision date of March 2019 and August 2020. The notes can be found at the following website under the *Guidance* tab;

    http://www.deldot.gov/Business/subdivisions/index.shtml

20. All PLUS/TAC comments shall be addressed prior to submitting the plans for review.

21. Referring to the "*Development Coordination Manual*", Chapter 6 – Construction Administration, Section 6.4.3: Commercial Entrances – Inspection and Acceptance, Figure 6.4.3-a: Construction Inspection Responsibilities, determine if the project is a Level 1 or Level 2 project and if an inspection agreement will be required.

22. The Auxiliary Lane Spreadsheet has been posted to the DelDOT website. Use this spreadsheet to determine if auxiliary lanes are warranted. The Auxiliary Lane Spreadsheet can be found at the following website under the *Forms* tab;

    http://www.deldot.gov/Business/subdivisions/index.shtml

23. Referring to the "*Development Coordination Manual*" under Chapter 5; Design Elements, Section 5.4 – Sight Distance, a sight distance triangle is required. A spreadsheet has been developed to assist with this task and can be found on the following website under the *Forms* tab;

    http://www.deldot.gov/Business/subdivisions/index.shtml

24. Please refer to the "*Development Coordination Manual*" Chapter 3; Record Plan Design, Section 3.4.1 Commercial or Major Residential Subdivisions – Record Plan Application Process, concerning if a pre-submittal meeting is required.

    a. A pre-submittal meeting was held on July 17, 2020 with The Kercher Group to discuss the proposed development. Please refer to the attached pre-submittal draft meeting minutes (the meeting minutes are not finalized) and the attached correspondence for additional information.

25. Effective August 1, 2015, all new and resubmittals shall be uploaded via the PDCA with

any fees paid online via credit card or electronic check (ACH). The design firm making the submittal must create the project in the PDCA and upload all the required items to allow DelDOT to start the review process. Our website offers more detailed information, including links to guidance about creating PDCA submittals. This information can be found at the following website under the PDCA section;

http://www.deldot.gov/Business/subdivisions/index.shtml

26. Referring to the "*Development Coordination Manual"*, Chapter 3 – Record Plan Design, Section 3.4.2: Record Plan Submittal Requirements, an Initial Stage review fee shall be assessed to this project.

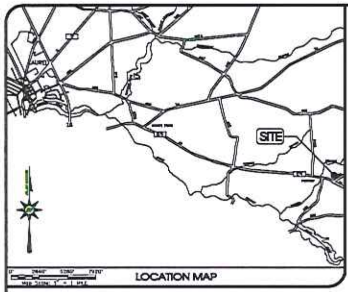
27. Referring to the "*Development Coordination Manual*", Chapter 3 – Record Plan Design, Section 3.4: Commercial or Major Residential Subdivisions, a record plan shall be prepared prior to issuing "Letter of No Objection". The Record plan submittal shall include the items listed on the Critical Items for Acceptance: Record Plan document that can be found at the following website under the *Guidance* tab;

    https://www.deldot.gov/Business/subdivisions/index.shtml

28. Referring to the "*Development Coordination Manual*", Chapter 4 – Construction Plans, Section 4.3: Subdivision Construction Plan Submittal Requirements, the Construction Stage review fee shall be assessed to this project.

29. Referring to the "*Development Coordination Manual*", Chapter 4 – Construction Plans, a subdivision/entrance plan shall be prepared prior to issuing subdivision/entrance approval. The Entrance/Construction/Subdivision plan submittal shall include the items listed on the Critical Items for Acceptance: Entrance/Construction/Subdivision Set Plans document that can be found at the following website under the *Guidance* tab;

    https://www.deldot.gov/Business/subdivisions/index.shtml



LEGEND

- EXISTING PROPERTY BOUNDARY
- EXISTING ADJACENT LOT LINES
- EXISTING EDGE OF PAVEMENT
- EXISTING CENTERLINE OF ROAD
- EXISTING TREE LINE
- EXISTING WETLANDS LIMITS
- EXISTING BUILDING
- BUILDING RESTRICTION LINE
- PROPOSED EDGE OF PAVEMENT
- PROPOSED LOT LINES
- PROPOSED RIGHT-OF-WAY BOUNDARY
- PROPOSED CENTERLINE OF ROAD
- PROPOSED EASEMENT
- SUPPLEMENTAL CONTOUR (1' INTERVAL)
- INDEX CONTOUR (5' INTERVAL)
- EXISTING STRIPING
- EXISTING UTILITY POLE
- EXISTING SIGN
- IRON ROD FOUND
- CONCRETE MONUMENT FOUND
- PIPE SET
- POINT

SITE DATA and ZONING SCHEDULE

TAX PARCEL No.:	232-19.00-30.01 (P/O)
PROPERTY ADDRESS:	18201 ADAMS ROAD, LAUREL, DE 19956
NET DEVELOPMENT AREA:	38.813 Acres
EXISTING NUMBER OF LOTS:	ONE (1)
EXISTING SITE USE:	RESIDENTIAL/AGRICULTURAL
PROPOSED NUMBER OF LOTS:	THIRTY NINE (39)
PROPOSED SITE USE:	SINGLE-FAMILY HOME SUBDIVISION
EXISTING ZONING:	AR-1 (AGRICULTURAL/RESIDENTIAL)
INVESTMENT LEVEL AREA:	LEVEL FOUR (4)

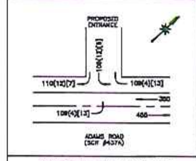
NO TRANSPORTATION IMPROVEMENT DISTRICTS (TIDs) IN THE PROXIMITY OF THE PROJECT

ORDINANCE ITEM	REQUIREMENT:	PROVIDED:
MINIMUM LOT AREA	32,670 Sq. Ft.	32,670 Sq. Ft.
MINIMUM LOT WIDTH	100 Ft.	100 Ft.
MINIMUM LOT DEPTH	100 Ft.	100 Ft.
MINIMUM SETBACKS:		
FRONT	30 Ft.	30 Ft.
SIDE	15 Ft.	15 Ft.
REAR	20 Ft.	20 Ft.
MAXIMUM BUILDING HEIGHT	42 Ft./3 Stories	42 Ft./3 Stories
SEWER SERVICE	PRIVATE SEPTIC	PRIVATE SEPTIC
WATER SERVICE	PRIVATE WELL	PRIVATE WELL

PROPERTY OWNER/DEVELOPER

SUSSEX VENTURES, INC.
23051 WARD FARM LANE
MILLSBORO, DE 19966
302.934.8887

TRIP GENERATION - ADAMS ROAD (SCR #437A)
(FULL MOVEMENT)



TRAFFIC GENERATION DIAGRAM
TRIPS PER DAY (VEHICLES IN A.M.) [P.M. PEAK HOUR]

ROAD TRAFFIC DATA:

FUNCTIONAL CLASSIFICATION – S-437A (ADAMS ROAD) – LOCAL
POSTED SPEED LIMIT – 45 MPH
AADT – 800 TRIPS (FROM 2019 DelDOT TRAFFIC SUMMARY)
10-YR PROJECTED AADT – 1.20 x 800 TRIPS = 960 TRIPS
10-YR PROJECTED AADT + SITE ADT = 1,338 TRIPS
TRAFFIC PATTERN GROUP – 7 (FROM 2019 DelDOT TRAFFIC SUMMARY)
PEAK HOUR = 13.70% x 1,338 = 184 TRIPS

SITE TRIPS GENERATED:

SOURCE: ITE TRIP GENERATION MANUAL 10th EDITION
39 SINGLE FAMILY DETACHED UNITS (210)

ONE ENTRANCE – FULL MOVEMENT
DESIGN VEHICLE: SU-30
39 SINGLE FAMILY DETACHED UNITS
WEEKDAY – 437 TRIPS (218 IN/219 OUT)
SATURDAY – 405 TRIPS (202 IN/203 OUT)
SUNDAY – 281 TRIPS (140 IN/141 OUT)

TOTAL ADT FOR SUBDIVISION (WEEKDAY) – 437 TRIPS
DIRECTIONAL DISTRIBUTION:
50% TO AND FROM THE WEST: 218 TRIPS [16 A.M. PEAK] [20 P.M. PEAK]
50% TO AND FROM THE EAST: 219 TRIPS [16 A.M. PEAK] [21 P.M. PEAK]
5.00% TRUCKS & BUSES x 437 = 22 TRIPS

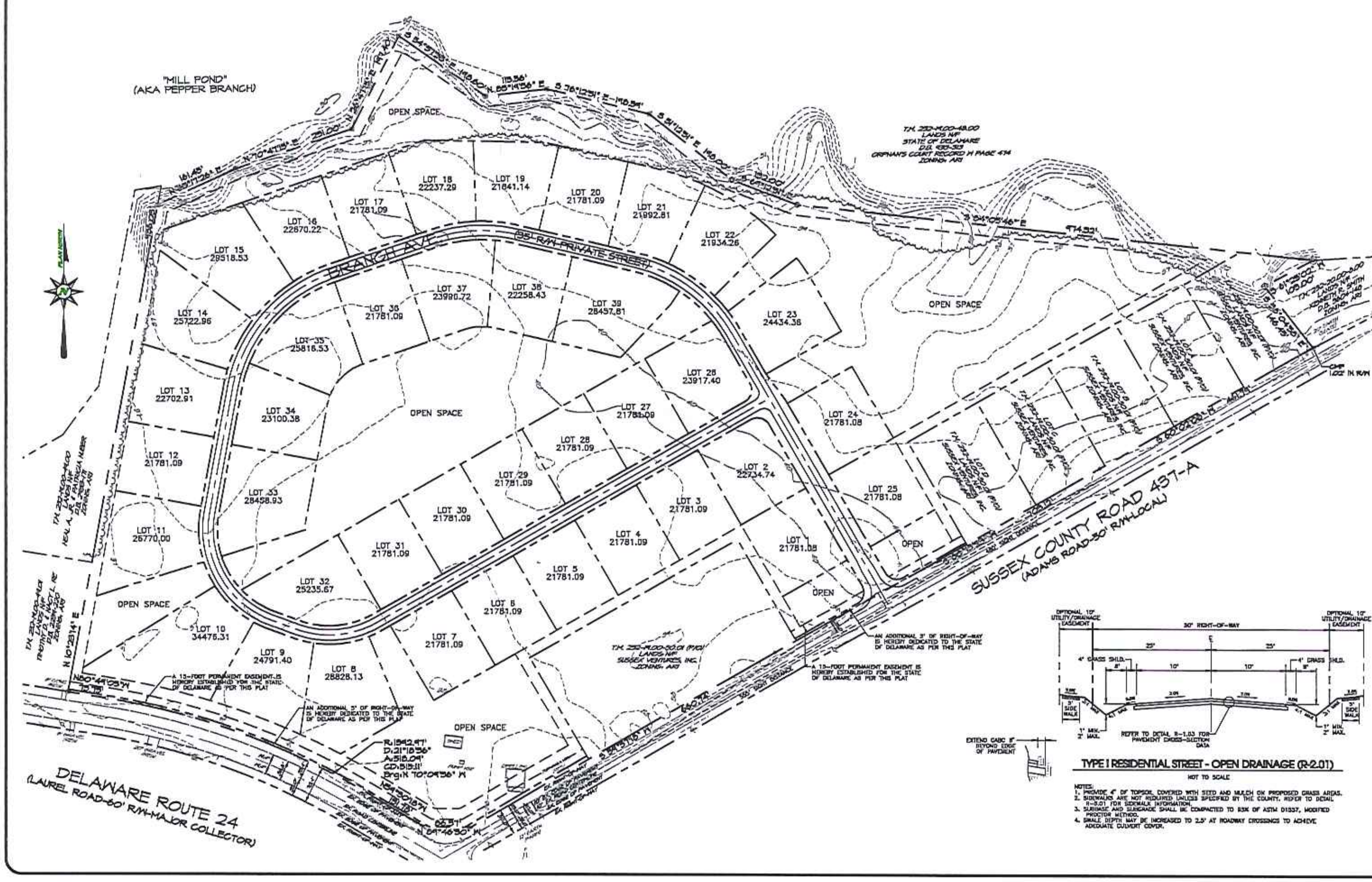
GENERAL NOTES

1. THE PROJECT SITE IS KNOWN AS THE CROSSINGS AT TRAP POND, (T.P. 232-19.00-30.01), AND IS LOCATED AT THE NORTHEAST CORNER OF THE ADAMS ROAD (SCR 437A) AND DELAWARE ROUTE 24 INTERSECTION IN LAUREL, DE.
2. THE PROPERTY BOUNDS, EXISTING FEATURES AND TOPOGRAPHIC INFORMATION SHOWN ON THIS PLAN IS THE RESULT OF A FIELD SURVEY BY MILLER-LEWIS, INC., 1560 MIDDLEFORD ROAD, SEAFORD, DELAWARE 19973. TOPOGRAPHY IS BASED ON NAVD88 AND NORTH REFERENCE IS DELAWARE STATE PLANE COORDINATE SYSTEM NAD83.
3. ALL PROPOSED STORMWATER MANAGEMENT FACILITIES ARE TO BE MAINTAINED BY THE DEVELOPER UNTIL SUCH TIME AS A HOMEOWNERS ASSOCIATION CAN PROVIDE FOR SAID MAINTENANCE.
4. ALL SUBDIVISION LOTS SHALL BE ACCESSED FROM THE INTERIOR SUBDIVISION STREETS ONLY. NO DIRECT ACCESS SCR 437A SHALL BE PERMITTED.
5. THIS PLAN DOES NOT VERIFY TO THE LOCATION AND/OR EXISTENCE OF EASEMENTS OR RIGHT-OF-WAYS CROSSING SUBJECT PROPERTY AS NO TITLE SEARCH WAS PROVIDED.
6. THE CONTRACTOR SHALL ENSURE THAT ALL NECESSARY PERMITS AND APPROVALS HAVE BEEN OBTAINED PRIOR TO COMMENCEMENT OF ANY SITE CONSTRUCTION ACTIVITIES.
7. ALL CONTRACTORS WORKING ON THIS PROJECT SHALL COMPLY WITH THE REQUIREMENTS OF THE DELAWARE EROSION AND SEDIMENT CONTROL HANDBOOK (LATEST EDITION).
8. CONSTRUCTION MATERIALS AND PROCEDURES SHALL FOLLOW THE SUSSEX COUNTY ENGINEERING DEPARTMENT SPECIFICATIONS AND STANDARD DRAWINGS (LATEST EDITION).
9. EXISTING SUBSURFACE UTILITY INFORMATION INDICATED IS BASED UPON VISUAL FIELD INSPECTION BY MILLER-LEWIS, INC. SUCH INFORMATION CONCERNING THE SIZE, LOCATION, DEPTH, QUANTITY, ETC. OF SUBSURFACE UTILITIES IS APPROXIMATE IN NATURE AND HAS BEEN OBTAINED AS AN AID IN THE PROJECT DESIGN. THE INFORMATION PROVIDED IS REPRESENTATIVE OF SUBSURFACE CONDITIONS ONLY AT LOCATIONS AND DEPTHS WHERE SUCH INFORMATION WAS OBTAINED. THERE IS NO EXPRESSED OR IMPLIED AGREEMENT THAT UTILITY SIZE, LOCATION, DEPTH, QUANTITY, ETC. AS SHOWN EXISTS BETWEEN EXPLORED LOCATIONS. ACCORDINGLY, UTILITY INFORMATION SHOWN SHOULD NOT BE RELIED UPON FOR CONSTRUCTION PURPOSES. IT IS INCUMBENT UPON THE CONTRACTOR TO VERIFY THE SIZE, LOCATION, DEPTH, QUANTITY, ETC. OF ALL UTILITIES BEFORE EXCAVATION.
10. BASED ON THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) FLOOD INSURANCE RATE MAP (FIRM) 100029 0440 K, MAP NUMBER 10005C0440K, DATED MARCH 16, 2015, THIS PROPERTY IS LOCATED IN A ZONE "X"-UNSHADED WHICH IS AN AREA DETERMINED TO BE OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOODPLAIN.
11. THE WETLANDS BOUNDARY SHOWN WAS DELINEATED BY COASTAL & ESTUARINE RESEARCH, INC.
12. ALL FIRE LANES, FIRE HYDRANTS AND FIRE DEPARTMENT CONNECTIONS SHALL BE MARKED IN ACCORDANCE WITH THE DELAWARE STATE FIRE PREVENTION REGULATIONS.
13. ALL CUL-DE-SACS ARE TO HAVE A 38' PAVED RADIUS. NO PARKING PERMITTED ON CUL-DE-SAC.
14. ALL PROPOSED LOT LINES SUBJECT TO EASEMENTS FOR UTILITY, STORMWATER CONSTRUCTION AND/OR MAINTENANCE, UNLESS OTHERWISE NOTED ON THE PLANS, EASEMENTS AS FOLLOWS:
    FRONT LOT LINES – 10 FEET
    SIDE LOT LINES – 10 FEET
    REAR LOT LINES – 10 FEET
15. IN ACCORDANCE WITH THE DELAWARE STATE FIRE PREVENTION REGULATIONS PART V, CHAPTER 4, SECTION 4-1.1, THE DEVELOPER SHALL PROVIDE, TO THE EMERGENCY DISPATCH CENTER HAVING JURISDICTION, A PLOT PLAN OF THE DEVELOPMENT SHOWING EACH LOT LOCATION. THE DEVELOPER SHALL ALSO ASSIGN NUMBERS TO ALL HOMES IN A CONSECUTIVE MANOR AND HAVE PLACED THE ASSIGNED NUMBER IN A READILY VISIBLE LOCATION ON EACH HOME TO ELIMINATE CONFUSION IN THE EVENT THAT AN EMERGENCY VEHICLE IS NEEDED.
16. THIS PROPERTY IS LOCATED IN THE VICINITY OF LAND USED PRIMARILY FOR AGRICULTURAL PURPOSES ON 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 CHEMICALS AND NIGHTTIME FARM OPERATIONS. THE USE AND ENJOYMENT OF PROPERTY IS EXPRESSLY CONDITIONED ON ACCEPTANCE OF ANY ANNOYANCE OR INCONVENIENCE WHICH MAY RESULT FROM SUCH NORMAL AGRICULTURAL USES AND ACTIVITIES.
17. ALL PROPOSED LANDSCAPE BUFFERS ARE TO BE MAINTAINED BY THE OWNER/DEVELOPER UNTIL SUCH TIME AS A HOMEOWNERS ASSOCIATION CAN PROVIDE FOR SAID MAINTENANCE.

DELDOT SITE GENERAL NOTES

LAST REVISED: MARCH 21, 2019

1. ALL ENTRANCES SHALL CONFORM TO THE DELAWARE DEPARTMENT OF TRANSPORTATION'S (DELDOT'S) CURRENT DEVELOPMENT COORDINATION MANUAL AND SHALL BE SUBJECT TO ITS APPROVAL.
2. NO LANDSCAPING SHALL BE ALLOWED WITHIN THE RIGHT-OF-WAY UNLESS THE PLANS ARE COMPLIANT WITH SECTION 3.7 OF THE DEVELOPMENT COORDINATION MANUAL.
3. SHRUBBERY, PLANTINGS, SIGNS AND/OR OTHER VISUAL BARRIERS THAT COULD OBSTRUCT THE SIGHT DISTANCE OF A DRIVER PREPARING TO ENTER THE ROADWAY ARE PROHIBITED WITHIN THE DEFINED DEPARTURE SIGHT TRIANGLE AREA ESTABLISHED ON THIS PLAN. IF THE ESTABLISHED DEPARTURE SIGHT TRIANGLE AREA IS OUTSIDE THE RIGHT-OF-WAY OR PROJECTS ONTO AN ADJACENT PROPERTY OWNER'S LAND, A SIGHT EASEMENT SHOULD BE ESTABLISHED AND RECORDED WITH ALL AFFECTED PROPERTY OWNERS TO MAINTAIN THE REQUIRED SIGHT DISTANCE.
4. UPON COMPLETION OF THE CONSTRUCTION OF THE SIDEWALK OR SHARED-USE PATH ACROSS THIS PROJECT'S FRONTAGE AND PHYSICAL CONNECTION TO ADJACENT EXISTING FACILITIES, THE DEVELOPER, THE PROPERTY OWNERS OR BOTH ASSOCIATED WITH THIS PROJECT, SHALL BE RESPONSIBLE TO REMOVE ANY EXISTING ROAD TIE-IN CONNECTIONS LOCATED ALONG ADJACENT PROPERTIES, AND RESTORE THE AREA TO GRASS. SUCH ACTIONS SHALL BE COMPLETED AT DELDOT'S DISCRETION, AND IN CONFORMANCE WITH DELDOT'S DEVELOPMENT COORDINATION MANUAL.
5. PRIVATE STREETS CONSTRUCTED WITHIN THIS SUBDIVISION SHALL BE MAINTAINED BY THE DEVELOPER, THE PROPERTY OWNERS WITHIN THIS SUBDIVISION OR BOTH (TITLE 17 .131). DELDOT ASSUMES NO RESPONSIBILITIES FOR THE FUTURE MAINTENANCE OF THESE STREETS.
6. THE SIDEWALK SHALL BE THE RESPONSIBILITY OF THE DEVELOPER, THE PROPERTY OWNERS OR BOTH WITHIN THIS SUBDIVISION. THE STATE OF DELAWARE ASSUMES NO RESPONSIBILITY FOR THE FUTURE MAINTENANCE FOR THE SIDEWALK.
7. LOTS WILL BE PERMITTED TO HAVE ACCESS POINTS THAT COMPLY WITH THE DEVELOPMENT COORDINATION MANUAL (DCM) SPACING REQUIREMENTS OF CHAPTER 1 AND LIMITATIONS ON NUMBER OF ACCESS POINTS ESTABLISHED IN DCM CHAPTER 7. HORSESHOE DRIVEWAYS AND SECONDARY ENTRANCES REQUIRE ADDITIONAL DELDOT REVIEW AND SEPARATE PERMITTING. RESTRICTIONS AS DESCRIBED IN THE DCM CHAPTER 7 MAY PROHIBIT SOME SECONDARY ENTRANCE REQUESTS FROM BEING GRANTED.
8. TO MINIMIZE RUTTING AND EROSION OF THE ROADSIDE DUE TO ON-STREET PARKING, DRIVEWAY AND BUILDING LAYOUTS MUST BE CONFIGURED TO ALLOW FOR VEHICLES TO BE STORED IN THE DRIVEWAY BEYOND THE RIGHT-OF-WAY, WITHOUT INTERFERING WITH SIDEWALK ACCESS AND CLEARANCE.
9. THE DEVELOPER SHALL BE REQUIRED TO FURNISH AND PLACE RIGHT-OF-WAY MONUMENTS IN ACCORDANCE WITH DELDOT'S DEVELOPMENT COORDINATION MANUAL.
10. THE DEVELOPER SHALL BE REQUIRED TO FURNISH AND PLACE RIGHT-OF-WAY MARKERS TO PROVIDE A PERMANENT REFERENCE FOR RE-ESTABLISHING THE RIGHT-OF-WAY AND PROPERTY CORNERS ON LOCAL AND HIGHER ORDER FRONTAGE ROADS. RIGHT-OF-WAY MARKERS SHALL BE SET AND/OR PLACED ALONG THE FRONTAGE ROAD RIGHT-OF-WAY AT PROPERTY CORNERS AND AT EACH CHANGE IN RIGHT-OF-WAY ALIGNMENT IN ACCORDANCE WITH SECTION 3.2.4.2 OF THE DEVELOPMENT COORDINATION MANUAL.



TYPE I RESIDENTIAL STREET - OPEN DRAINAGE (R-2.01)

NOT TO SCALE

NOTES:
1. PROVIDE 4" OF TOPSOIL, COVERED WITH SEED AND MULCH ON PROPOSED GRASS AREAS.
2. SIDEWALKS ARE NOT REQUIRED UNLESS SPECIFIED BY THE COUNTY. REFER TO DETAIL R-8.01 FOR SIDEWALK INFORMATION.
3. SUBBASE AND SUBGRADE SHALL BE COMPACTED TO 95% OF ASTM D1557, MODIFIED PROCTOR METHOD.
4. SWALE DEPTH MAY BE INCREASED TO 2.5' AT ROADWAY CROSSINGS TO ACHIEVE ADEQUATE CULVERT COVER.

PLANNING COMMISSION CERTIFICATE

RECOMMENDED FOR APPROVAL BY THE PLANNING COMMISSION OF SUSSEX COUNTY ON THIS ______ DAY OF ______ 20__.

SECRETARY (ATTEST) ______

RECOMMENDED FOR APPROVAL BY THE SUSSEX COUNTY COUNCIL ON THIS ______ DAY OF ______ 20__.

PRESIDENT ______

OWNER CERTIFICATE

I HEREBY CERTIFY THAT I AM THE EQUITABLE OWNER OF THE PROPERTY DESCRIBED AND SHOWN ON THIS PLAN, THAT THE PLAN WAS MADE AT MY DIRECTION, THAT I ACKNOWLEDGE THE SAME TO BE MY ACT AND DESIRE THE PLAN TO BE RECORDED AS SHOWN IN ACCORDANCE WITH ALL APPLICABLE LAWS AND REGULATIONS.

______ DATE ______

SUSSEX VENTURES, INC.
23051 WARD FARM LANE
MILLSBORO, DE 19966
Phone: 302.934.8887

WETLANDS CERTIFICATION

I, CERTIFY THAT THIS PROPERTY HAS BEEN EXAMINED FOR WETLANDS/WATERS OF THE UNITED STATES IN ACCORDANCE WITH CRITERIA FOUND IN THE 1987 U.S. ARMY CORPS OF ENGINEERS' WETLAND DELINEATION MANUAL AND ASSOCIATED GUIDANCE MEMORANDA. THE DELINEATION HERE SHOWN, IN MY BEST PROFESSIONAL JUDGEMENT, ACCURATELY DEPICTS WETLANDS/WATERS OF THE UNITED STATES BOUNDARIES PRESENT WITHIN THE SUBJECT PROPERTY BOUNDS. NO STATE WETLANDS ARE PRESENT WITHIN THE SUBJECT PROPERTY BOUNDS.

______ DATE ______

EVELYN MAURMEYER
COASTAL & ESTUARINE RESEARCH, INC.
P.O. BOX 674
LEWES, DE 19958
302.645.9610

No.	DATE:	DESCRIPTION:	BY:
1	06/23/20	UPDATE TRIP GENERATION DIAGRAM PER DELDOT COMMENTS	JDW

REVISIONS

I HEREBY CERTIFY THAT THIS PLAN HAS BEEN PREPARED UNDER MY SUPERVISION AND TO THE BEST OF MY KNOWLEDGE COMPLIES WITH THE APPLICABLE ORDINANCES OF SUSSEX COUNTY AND THE LAWS OF THE STATE OF DELAWARE.

DESIGN PROFESSIONAL ______ DATE ______

SCALE IN FEET (1" = 50')

PRELIMINARY PLAN (Not To Be Recorded)

RECORD PLAN

THE CROSSINGS AT TRAP POND

BROAD CREEK HUNDRED – SUSSEX COUNTY – DELAWARE

OWNER/APPLICANT: SUSSEX VENTURES, INC., 23051 WARD FARM LANE, MILLSBORO, DE 19966, Phone: 302.934.8887

PARCEL INFORMATION: T.P.: 232-19.00-30.01

THE KERCHER GROUP, INC.
CONSULTING • SYSTEMS • ENGINEERING

JOB No: 20-0401
PLAN DATE: June 9, 2020
SHEET No.: R1

DELDOT Project Meeting Minutes
Prepared by: John Murray, The Kercher Group, Inc.

Date: July 17, 2020

Project: The Crossings at Trap Pond
TM#: 232-19.00-50.01

Attendees:

Susanne Laws (DelDOT)
John Andrescavage (DelDOT)
James Argo (DelDOT)
Drew Ward (Owner/Applicant)
John Murray (The Kercher Group, Inc.)

Items Discussed:

Open:

- The owners/applicants are proposing to develop The Crossings at Trap Pond, a 39-lot, single-family home subdivision.
- The subject parcel is located at the northwest corner of the Delaware Route 24 (Laurel Road) and Adams Road (SCR 437A) intersection.
- Access to the property will come from Adams Road in the way of a 24'-wide paved entrance.
- DELDOT reserves the right to comment on items not discussed during the meeting during future reviews and/or meetings

All:

- All submittals to be made through PDCA
- Sidewalks along the fronting roadways may be required but that has yet to be determined.
- Adams Road is a local street and will be required to be upgraded along the property frontage to have 11' travel lanes and 5' wide shoulders.
- The entrance width shall be 24' wide, minimum.
- If any islands are proposed in the entrance area, they must be designed as per the DCM.
- There are no capital projects planned within the project vicinity.
- The applicant will be required to contact the DTC to see if any transit facilities will be required or the project.
- A Level 1 inspection agreement will be required for the project.
- The auxiliary lane worksheet will need to be updated as per the mark-ups provided by DelDOT.
- A request for pavement cores shall be made to DelDOT for Adams Road.
- It is the responsibility of the owner/applicant to verify rights-of-way and acquire any right-of-way or easements needed for the project.

- The project's Initial Stage Fee shall be $520.00 and the Construction Stage Fee shall be $780.00.
- The applicant filed an official application for four (4) minor subdivision lots along Adams Road. An internal access to the minor subdivision lots may be required. As per the applicant, no internal roadways are planned in the vicinity of the minor subdivision lots (open space) and a formal application for the major subdivision has not been made. The minor subdivision lots have been designed as per Sussex County and DelDOT standards permit.

From:	Laws, Susanne K (DelDOT)
To:	John Murray
Cc:	Jamie Whitehouse; Lauren DeVore; Polasko, Wendy (DelDOT); Andrescavage, John (DelDOT)
Subject:	RE: Project Lands of Sussex Ventures, Inc. -- Submission #2 TAX ID 232-19.00-50.01: Not Accepted - Crossings at Trap Pond
Date:	Monday, September 14, 2020 9:53:15 AM
Attachments:	R1 Minor Subdivision Plan.pdf R1 Record Plan (revised).pdf image004.png

Hi John,
Thank you for your email. Although I understand the applicant's rationale behind seeking a minor subdivision of lots in front of a proposed major subdivision, please understand that DelDOT is tasked by regulation with managing access. The Development Coordination Manual (DCM) is explicit regarding the design of entrances for safe and reasonable access while providing the least impact on the existing roadway system and its users (DCM 1.1). Number, spacing, type and location of access have a direct effect on the capacity, speed and safety of the roadway.

DCM 3.3 outlines the requirements for minor residential subdivisions, that the property owner must coordinate access with DelDOT. In our opinion, to preserve capacity and maintain safety on Adams Road, the four proposed lots should take access from an internal subdivision street, which according to the major concept plan would only require 35' of private right-of-way, and could run along the backs of the four minor lots.

I've included Sussex County on this email so that they can understand DelDOT's opinion and recommendation. If the County does not agree with DelDOT and will allow the minor subdivision separate from the major subdivision, please understand that there will be no waivers or deviations allowed by DelDOT for the improvements required under the major subdivision, including but not limited to, turn lane lengths, slopes, lane widths.

We look forward to working with you and the applicant toward a satisfactory resolution and a successful outcome.

Thanks,
Susanne

Susanne K. Laws, P.E.
Sussex County Review Coordinator
President, DelDOT Toastmasters
Planning/Development Coordination
Delaware Department of Transportation
P.O. Box 778 – 800 Bay Road
Dover, DE 19903
(302) 760-2128 office
(302) 760-2569 fax

DEPARTMENT OF TRANSPORTATION
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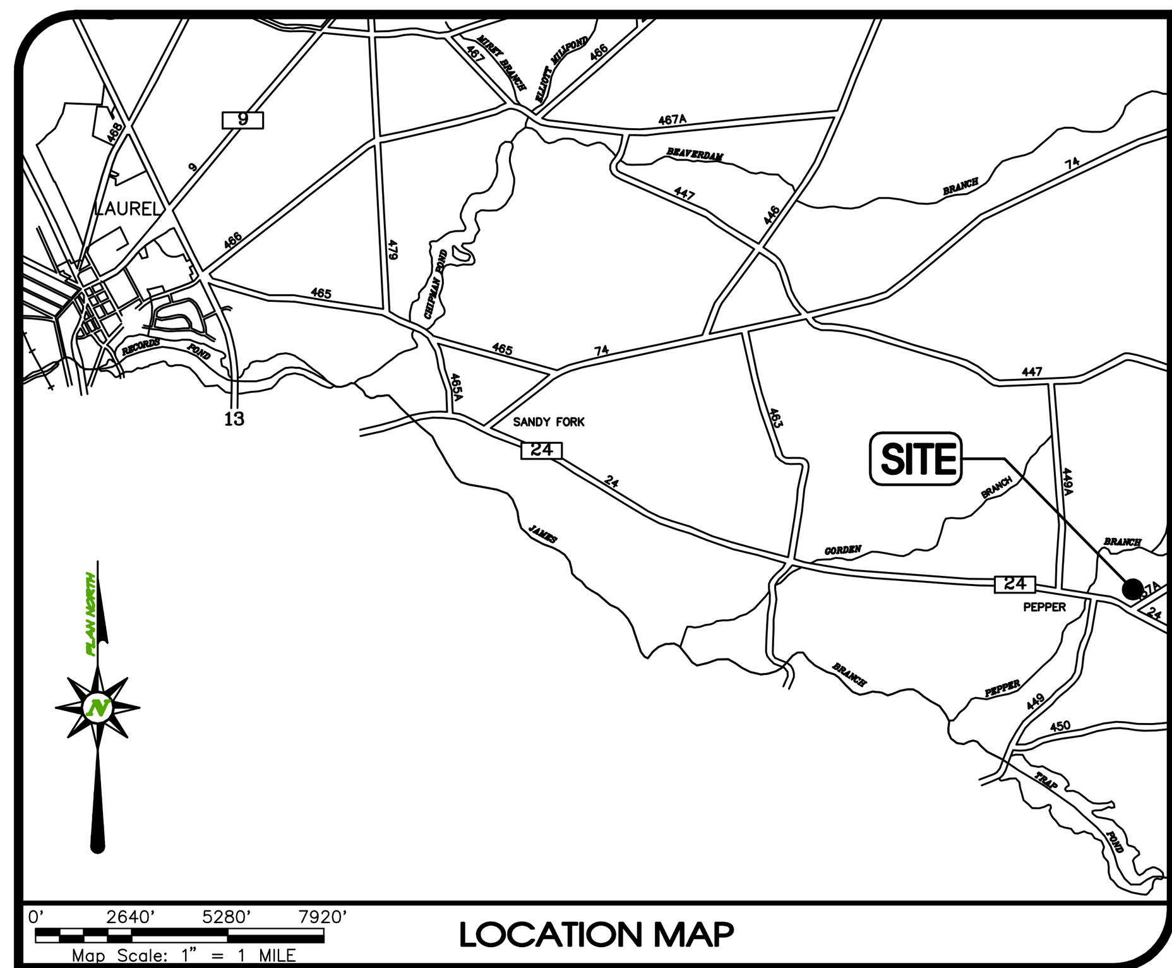
From: John Murray <jom@kerchergroup.com>



LOCATION MAP

LEGEND

- EXISTING PROPERTY BOUNDARY
- EXISTING ADJACENT LOT LINES
- EXISTING EDGE OF PAVEMENT
- EXISTING CENTERLINE OF ROAD
- EXISTING TREE LINE
- EXISTING WETLANDS LIMITS
- EXISTING BUILDING
- BUILDING RESTRICTION LINE
- PROPOSED EDGE OF PAVEMENT
- PROPOSED LOT LINES
- PROPOSED RIGHT-OF-WAY BOUNDARY
- PROPOSED CENTERLINE OF ROAD
- PROPOSED EASEMENT
- SUPPLEMENTAL CONTOUR (1' INTERVAL)
- INDEX CONTOUR (5' INTERVAL)
- EXISTING PAVEMENT STRIPING
- EXISTING FLOODZONE LIMITS
- EXISTING UTILITY POLE
- EXISTING SIGN
- IRON ROD FOUND
- CONCRETE MONUMENT FOUND
- PIPE SET
- POINT

SITE DATA and ZONING SCHEDULE

TAX PARCEL No.:	232–19.00–50.01 (P/O)
PROPERTY ADDRESS:	16201 ADAMS ROAD, LAUREL, DE 19956
NET DEVELOPMENT AREA:	39.02 Acres
EXISTING NUMBER OF LOTS:	ONE (1)
EXISTING SITE USE:	RESIDENTIAL/AGRICULTURAL
PROPOSED NUMBER OF LOTS:	THIRTY NINE (39)
PROPOSED SITE USE:	SINGLE–FAMILY HOME SUBDIVISION
EXISTING ZONING:	AR–1 (AGRICULTURAL/RESIDENTIAL)
INVESTMENT LEVEL AREA:	LEVEL FOUR (4)

NO TRANSPORTATION IMPROVEMENT DISTRICTS (TIDs) IN THE PROXIMITY OF THE PROJECT

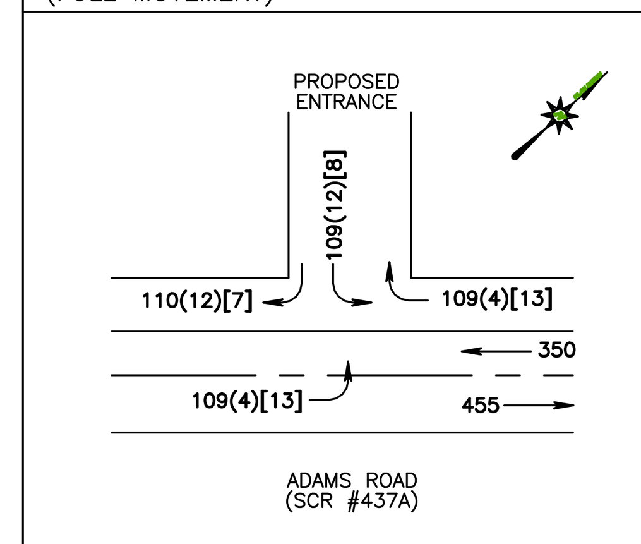
ORDINANCE ITEM	REQUIREMENT:	PROVIDED:
MINIMUM LOT AREA	21,780 Sq. Ft.	23,713 Sq. Ft. (AVG)
MINIMUM LOT WIDTH	100 Ft.	100 Ft.
MINIMUM LOT DEPTH	100 Ft.	100 Ft.
MINIMUM SETBACKS:		
FRONT	30 Ft.	30 Ft.
SIDE	15 Ft.	15 Ft.
REAR	20 Ft.	20 Ft.
MAXIMUM BUILDING HEIGHT	42 Ft./3 Stories	42 Ft./3 Stories
SEWER SERVICE	PRIVATE SEPTIC	PRIVATE SEPTIC
WATER SERVICE	PRIVATE WELL	PRIVATE WELL

PROPERTY OWNER/DEVELOPER

SUSSEX VENTURES, INC.
25051 WARD FARM LANE
MILLSBORO, DE 19966
302.934.5687

TRIP GENERATION - ADAMS ROAD (SCR #437A)

(FULL MOVEMENT)



TRAFFIC GENERATION DIAGRAM

TRIPS PER DAY (VEHICLES IN A.M.) [P.M. PEAK HOUR]

ROAD TRAFFIC DATA:

FUNCTIONAL CLASSIFICATION – S–437A (ADAMS ROAD) – LOCAL
POSTED SPEED LIMIT – 45 MPH
AADT = 805 TRIPS (FROM 2019 DelDOT TRAFFIC SUMMARY)
10–YR PROJECTED AADT = 1.20 x 805 TRIPS = 966 TRIPS
10–YR PROJECTED AADT + SITE ADT = 1,338 TRIPS
TRAFFIC PATTERN GROUP – 7 (FROM 2019 DelDOT TRAFFIC SUMMARY)
PEAK HOUR = 13.70% x 1,338 = 184 TRIPS

SITE TRIPS GENERATED:

SOURCE: ITE TRIP GENERATION MANUAL 10th EDITION
39 SINGLE FAMILY DETACHED UNITS (210)

ONE ENTRANCE – FULL MOVEMENT
DESIGN VEHICLE: SU–30
39 SINGLE FAMILY DETACHED UNITS
WEEKDAY = 437 TRIPS (218 IN/219 OUT)
SATURDAY = 405 TRIPS (202 IN/203 OUT)
SUNDAY = 281 TRIPS (140 IN/141 OUT)

TOTAL ADT FOR SUBDIVISION (WEEKDAY) = 437 TRIPS
DIRECTIONAL DISTRIBUTION:
50% TO AND FROM THE WEST: 218 TRIPS
(16 A.M. PEAK) [20 P.M. PEAK]
50% TO AND FROM THE EAST: 219 TRIPS
(16 A.M. PEAK) [21 P.M. PEAK)
5.00% TRUCKS & BUSES x 437 = 22 TRIPS

PROPERTY AREA	
LOT AREA:	21.23 Ac. (54.4%)
RIGHT–OF–WAY AREA:	2.74 Ac. (7.0%)
OPEN SPACE AREA:	11.79 Ac. (30.2%)
WOODED BUFFER/PERMANENT EASEMENT AREA:	3.03 Ac. (7.8%)
R.O.W. DEDICATION AREA:	0.16 Ac. (0.4%)
NON–TIDAL WETLAND AREA:	0.07 Ac. (0.2%)
TOTAL AREA:	39.02 Acres
PROPOSED GROSS DENSITY:	1.00 Units Per Ac.
AREA OF EXISTING WOODS:	3.06 Ac.
AREA OF PROPOSED WOODS:	3.06 Ac.

WETLANDS LINE TABLE

BEGIN @ CONC. MON. FOUND
S 34°55'02" W 76.01' TO L1

LINE	BEARING	DISTANCE
L1	N 15°42'06" E	70.31'
L2	N 69°46'46" E	78.66'
L3	N 61°48'13" E	52.84'
L4	N 75°30'38" E	49.75'
L5	N 61°24'14" E	52.84'
L6	N 88°25'05" E	34.61'
L7	N 66°54'05" E	32.09'
L8	N 72°47'23" E	71.84'
L9	N 50°00'18" E	41.76'
L10	N 03°19'50" E	87.92'
L11	N 27°11'11" E	59.02'
L12	N 76°26'30" E	69.91'
L13	S 71°04'16" E	54.71'
L14	S 36°33'06" E	66.23'
L15	S 65°11'33" E	112.03'
L16	N 69°35'04" E	61.41'
L17	S 87°17'35" E	56.84'
L18	S 69°40'13" E	104.19'
L19	S 80°53'49" E	55.48'
L20	S 61°05'53" E	50.09'
L21	S 41°47'56" E	45.20'
L22	S 43°37'41" E	55.47'
L23	S 77°22'21" E	55.36'
L24	N 73°15'54" E	54.90'
L25	N 32°10'19" E	89.57'
L26	N 43°24'52" E	51.37'
L27	S 76°01'03" E	38.29'
L28	S 24°34'10" E	59.63'
L29	S 26°16'13" E	69.02'
L30	S 54°12'35" E	74.07'
L31	S 83°50'00" E	66.02'
L32	N 83°43'03" E	90.90'
L33	N 70°07'33" E	77.79'
L34	N 66°35'03" E	91.40'
L35	S 69°32'26" E	106.32'
L36	S 39°14'23" E	100.98'
L37	S 70°36'53" E	83.36'

TYPE I RESIDENTIAL STREET - OPEN DRAINAGE (R-2.01)

NOT TO SCALE

NOTES:
1. PROVIDE 4" OF TOPSOIL COVERED WITH SEED AND MULCH ON PROPOSED GRASS AREAS.
2. SIDEWALKS ARE NOT REQUIRED UNLESS SPECIFIED BY THE COUNTY. REFER TO DETAIL R-5.01 FOR SIDEWALK INFORMATION.
3. SUBBASE AND SUBGRADE SHALL BE COMPACTED TO 95% OF ASTM D1557, MODIFIED PROCTOR METHOD.
4. SWALE DEPTH MAY BE INCREASED TO 2.5' AT ROADWAY CROSSINGS TO ACHIEVE ADEQUATE CULVERT COVER.

LOT LINE TABLE

CURVE	RADIUS	DELTA	ARC
C1	25.00'	90°11'15"	39.35'
C2	25.00'	90°00'00"	39.27'
C3	200.00'	7°54'52"	27.63'
C4	200.00'	30°26'13"	106.24'
C5	200.00'	12°30'51"	43.68'
C6	200.00'	9°35'29"	33.48'
C7	200.00'	28°57'18"	101.07'
C8	200.00'	14°21'41"	50.13'
C9	200.00'	28°06'38"	98.12'
C10	300.00'	6°15'53"	32.80'
C11	300.00'	20°09'26"	105.54'
C12	300.00'	20°09'26"	105.54'
C13	300.00'	14°05'35"	73.79'
C14	300.00'	16°47'23"	87.91'
C15	300.00'	15°22'15"	80.48'
C16	300.00'	11°31'02"	60.30'
C17	300.00'	20°09'26"	105.54'
C18	300.00'	7°20'56"	38.48'
C19	300.00'	7°47'31"	40.80'
C20	25.00'	89°48'45"	39.19'
C21	1397.97'	21°18'36"	519.95'
C22	1432.97'	3°32'16"	88.48'
C23	1432.97'	7°14'13"	181.00'
C24	1432.97'	7°43'20"	193.13'
C25	463.35'	11°31'02"	93.14'
C26	463.35'	20°09'26"	163.01'
C27	463.35'	7°47'31"	63.01'
C28	25.00'	90°00'00"	39.27'
C29	165.00'	50°51'55"	146.48'
C30	165.00'	27°10'46"	78.27'
C31	165.00'	25°43'42"	74.09'
C32	165.00'	28°06'38"	80.95'
C33	265.00'	11°16'40"	52.16'
C34	265.00'	49°23'41"	228.46'
C35	265.00'	24°17'18"	112.34'
C36	265.00'	7°52'20"	36.41'
C37	265.00'	20°12'27"	93.46'
C38	265.00'	17°46'45"	82.23'
C39	265.00'	8°49'43"	40.83'
C40	101.65'	11°16'40"	20.01'
C41	101.65'	49°23'41"	87.63'
C42	101.65'	24°17'18"	43.09'
C43	101.65'	7°52'20"	13.97'

GENERAL NOTES

1. THE PROJECT SITE IS KNOWN AS THE CROSSINGS AT TRAP POND , (T.P. 232–19.00–50.01), AND IS LOCATED AT THE NORTHWEST CORNER OF THE ADAMS ROAD (SCR 437A) AND DELAWARE ROUTE 24 INTERSECTION IN LAUREL, DE.
2. THE PROPERTY BOUNDS, EXISTING FEATURES AND TOPOGRAPHIC INFORMATION SHOWN ON THIS PLAN IS THE RESULT OF A FIELD SURVEY BY MILLER–IEWIS, INC., 1560 MIDDLEFORD ROAD, SEAFORD, DELAWARE 19973. TOPOGRAPHY IS BASED ON NAVD88 AND NORTH REFERENCE IS DELAWARE STATE PLANE COORDINATE SYSTEM NAD83.
3. ALL PROPOSED STORMWATER MANAGEMENT FACILITIES ARE TO BE MAINTAINED BY THE DEVELOPER UNTIL SUCH TIME AS A HOMEOWNERS ASSOCIATION CAN PROVIDE FOR SAID MAINTENANCE.
4. ALL SUBDIVISION LOTS SHALL BE ACCESSED FROM THE INTERIOR SUBDIVISION STREETS ONLY. NO DIRECT ACCESS SCR 437A SHALL BE PERMITTED.
5. THIS PLAN DOES NOT VERIFY TO THE LOCATION AND/OR EXISTENCE OF EASEMENTS OR RIGHT–OF–WAYS CROSSING SUBJECT PROPERTY AS NO TITLE SEARCH WAS PROVIDED.
6. THE CONTRACTOR SHALL ENSURE THAT ALL NECESSARY PERMITS AND APPROVALS HAVE BEEN OBTAINED PRIOR TO COMMENCEMENT OF ANY SITE CONSTRUCTION ACTIVITIES.
7. ALL CONTRACTORS WORKING ON THIS PROJECT SHALL COMPLY WITH THE REQUIREMENTS OF THE DELAWARE EROSION AND SEDIMENT CONTROL HANDBOOK (LATEST EDITION).
8. CONSTRUCTION MATERIALS AND PROCEDURES SHALL FOLLOW THE SUSSEX COUNTY ENGINEERING DEPARTMENT SPECIFICATIONS AND STANDARD DRAWINGS (LATEST EDITION).
9. EXISTING SUBSURFACE UTILITY INFORMATION INDICATED IS BASED UPON VISUAL FIELD INSPECTION BY MILLER–LEWIS, INC. SUCH INFORMATION CONCERNING THE SIZE, LOCATION, DEPTH, QUANTITY, ETC. OF SUBSURFACE UTILITIES IS APPROXIMATE IN NATURE AND HAS BEEN OBTAINED AS AN AID IN THE PROJECT DESIGN. THE INFORMATION PROVIDED IS REPRESENTATIVE OF SUBSURFACE CONDITIONS ONLY AT LOCATIONS AND DEPTHS WHERE SUCH INFORMATION WAS OBTAINED. THERE IS NO EXPRESSED OR IMPLIED AGREEMENT THAT UTILITY SIZE, LOCATION, DEPTH, QUANTITY, ETC. AS SHOWN EXISTS BETWEEN EXPLORED LOCATIONS. ACCORDINGLY, UTILITY INFORMATION SHOWN SHOULD NOT BE RELIED UPON FOR CONSTRUCTION PURPOSES. IT IS INCUMBENT UPON THE CONTRACTOR TO VERIFY THE SIZE, LOCATION, DEPTH, QUANTITY, ETC. OF ALL UTILITIES BEFORE EXCAVATION.
10. BASED ON THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) FLOOD INSURANCE RATE MAP (FIRM) 100029 0440 K, MAP NUMBER 10005C0440K, DATED MARCH 16, 2015, THIS PROPERTY IS LOCATED IN A ZONE "X"–UNSHADED WHICH IS AN AREA DETERMINED TO BE OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOODPLAIN AND A ZONE A, WHICH IS A SPECIAL FLOOD HAZARD AREA SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD.
11. THE WETLANDS BOUNDARY SHOWN WAS DELINEATED BY COASTAL & ESTUARINE RESEARCH, INC.
12. ALL FIRE LANES, FIRE HYDRANTS AND FIRE DEPARTMENT CONNECTIONS SHALL BE MARKED IN ACCORDANCE WITH THE DELAWARE STATE FIRE PREVENTION REGULATIONS.
13. ALL CUL–DE–SACS ARE TO HAVE A 38' PAVED RADIUS. NO PARKING PERMITTED ON CUL–DE–SAC.
14. ALL PROPOSED LOT LINES SUBJECT TO EASEMENTS FOR UTILITY, STORMWATER CONSTRUCTION AND/OR MAINTENANCE. UNLESS OTHERWISE NOTED ON THE PLANS, EASEMENTS AS FOLLOWS:
FRONT LOT LINES – 10 FEET
SIDE LOT LINES – 5 FEET
REAR LOT LINES – 10 FEET
15. IN ACCORDANCE WITH THE DELAWARE STATE FIRE PREVENTION REGULATIONS PART V, CHAPTER 4, SECTION 4–1.1, THE DEVELOPER SHALL PROVIDE, TO THE EMERGENCY DISPATCH CENTER HAVING JURISDICTION, A PLOT PLAN OF THE DEVELOPMENT SHOWING EACH LOT LOCATION. THE DEVELOPER SHALL ALSO ASSIGN NUMBERS TO ALL HOMES IN A CONSECUTIVE MANOR AND HAVE PLACED THE ASSIGNED NUMBER IN A READILY VISIBLE LOCATION ON EACH HOME TO ELIMINATE CONFUSION IN THE EVENT THAT AN EMERGENCY VEHICLE IS NEEDED.
16. THIS PROPERTY IS LOCATED IN THE VICINITY OF LAND USED PRIMARILY FOR AGRICULTURAL PURPOSES ON 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 CHEMICALS AND NIGHTTIME FARM OPERATIONS. THE USE AND ENJOYMENT OF PROPERTY IS EXPRESSLY CONDITIONED ON ACCEPTANCE OF ANY ANNOYANCE OR INCOVENIENCE WHICH MAY RESULT FROM SUCH NORMAL AGRICULTURAL USES AND ACTIVITIES.
17. ALL PROPOSED LANDSCAPE BUFFERS ARE TO BE MAINTAINED BY THE OWNER/ DEVELOPER UNTIL SUCH TIME AS A HOMEOWNERS ASSOCIATION CAN PROVIDE FOR SAID MAINTENANCE.

DELDOT SITE GENERAL NOTES

LAST REVISED: MARCH 21, 2019

1. ALL ENTRANCES SHALL CONFORM TO THE DELAWARE DEPARTMENT OF TRANSPORTATION'S (DELDOT'S) CURRENT DEVELOPMENT COORDINATION MANUAL AND SHALL BE SUBJECT TO ITS APPROVAL.
2. NO LANDSCAPING SHALL BE ALLOWED WITHIN THE RIGHT–OF–WAY UNLESS THE PLANS ARE COMPLIANT WITH SECTION 3.7 OF THE DEVELOPMENT COORDINATION MANUAL.
3. SHRUBBERY, PLANTINGS, SIGNS AND/OR OTHER VISUAL BARRIERS THAT COULD OBSTRUCT THE SIGHT DISTANCE OF A DRIVER PREPARING TO ENTER THE ROADWAY ARE PROHIBITED WITHIN THE DEFINED DEPARTURE SIGHT TRIANGLE AREA ESTABLISHED ON THIS PLAN. IF THE ESTABLISHED DEPARTURE SIGHT TRIANGLE AREA IS OUTSIDE THE RIGHT–OF–WAY OR PROJECTS ONTO AN ADJACENT PROPERTY OWNER'S LAND, A SIGHT EASEMENT SHOULD BE ESTABLISHED AND RECORDED WITH ALL AFFECTED PROPERTY OWNERS TO MAINTAIN THE REQUIRED SIGHT DISTANCE.
4. UPON COMPLETION OF THE CONSTRUCTION OF THE SIDEWALK OR SHARED–USE PATH ACROSS THIS PROJECT'S FRONTAGE AND PHYSICAL CONNECTION TO ADJACENT EXISTING FACILITIES, THE DEVELOPER, THE PROPERTY OWNERS OR BOTH ASSOCIATED WITH THIS PROJECT, SHALL BE RESPONSIBLE TO REMOVE ANY EXISTING ROAD TIE–IN CONNECTIONS LOCATED ALONG ADJACENT PROPERTIES, AND RESTORE THE AREA TO GRASS. SUCH ACTIONS SHALL BE COMPLETED AT DELDOT'S DISCRETION, AND IN CONFORMANCE WITH DELDOT'S DEVELOPMENT COORDINATION MANUAL.
5. PRIVATE STREETS CONSTRUCTED WITHIN THIS SUBDIVISION SHALL BE MAINTAINED BY THE DEVELOPER, THE PROPERTY OWNERS WITHIN THIS SUBDIVISION OR BOTH (TITLE 17 .131). DELDOT ASSUMES NO RESPONSIBILITIES FOR THE FUTURE MAINTENANCE OF THESE STREETS.
6. THE SIDEWALK SHALL BE THE RESPONSIBILITY OF THE DEVELOPER, THE PROPERTY OWNERS OR BOTH WITHIN THIS SUBDIVISION. THE STATE OF DELAWARE ASSUMES NO RESPONSIBILITY FOR THE FUTURE MAINTENANCE FOR THE SIDEWALK.
7. LOTS WILL BE PERMITTED TO HAVE ACCESS POINTS THAT COMPLY WITH THE DEVELOPMENT COORDINATION MANUAL (DCM) SPACING REQUIREMENTS OF CHAPTER 1 AND LIMITATIONS ON NUMBER OF ACCESS POINTS ESTABLISHED IN DCM CHAPTER 7. HORSESHOE DRIVEWAYS AND SECONDARY ENTRANCES REQUIRE ADDITIONAL DELDOT REVIEW AND SEPARATE PERMITTING, RESTRICTIONS AS DESCRIBED IN THE DCM CHAPTER 7 MAY PROHIBIT SOME SECONDARY ENTRANCE REQUESTS FROM BEING GRANTED.
8. TO MINIMIZE RUTTING AND EROSION OF THE ROADSIDE DUE TO ON–STREET PARKING, DRIVEWAY AND BUILDING LAYOUTS MUST BE CONFIGURED TO ALLOW FOR VEHICLES TO BE STORED IN THE DRIVEWAY BEYOND THE RIGHT–OF–WAY, WITHOUT INTERFERING WITH SIDEWALK ACCESS AND CLEARANCE.
9. THE DEVELOPER SHALL BE REQUIRED TO FURNISH AND PLACE RIGHT–OF–WAY MONUMENTS IN ACCORDANCE WITH DELDOT'S DEVELOPMENT COORDINATION MANUAL.
10. THE DEVELOPER SHALL BE REQUIRED TO FURNISH AND PLACE RIGHT–OF–WAY MARKERS TO PROVIDE A PERMANENT REFERENCE FOR RE–ESTABLISHING THE RIGHT–OF–WAY AND PROPERTY CORNERS ON LOCAL AND HIGHER ORDER FRONTAGE ROADS. RIGHT–OF–WAY MARKERS SHALL BE SET AND/OR PLACED ALONG THE FRONTAGE ROAD RIGHT–OF–WAY AT PROPERTY CORNERS AND AT EACH CHANGE IN RIGHT–OF–WAY ALIGNMENT IN ACCORDANCE WITH SECTION 3.2.4.2 OF THE DEVELOPMENT COORDINATION MANUAL.

SUSSEX CONSERVATION DISTRICT CERTIFICATE

PLANNING COMMISSION CERTIFICATE

RECOMMENDED FOR APPROVAL BY THE PLANNING COMMISSION OF SUSSEX COUNTY ON THIS ________________ DAY OF ________________ 20___.

SECRETARY (ATTEST) ________________________________

COUNTY COUNCIL PRESIDENT ________________________________

OWNER CERTIFICATE

I HEREBY CERTIFY THAT I AM THE EQUITABLE OWNER OF THE PROPERTY DESCRIBED AND SHOWN ON THIS PLAN, THAT THE PLAN WAS MADE AT MY DIRECTION, THAT I ACKNOWLEDGE THE SAME TO BE MY ACT AND DESIRE THE PLAN TO BE RECORDED AS SHOWN IN ACCORDANCE WITH ALL APPLICABLE LAWS AND REGULATIONS

SUSSEX VENTURES, INC.
25051 WARD FARM LANE
MILLSBORO, DE 19966
Phone: 302.934.5687
DATE

WETLANDS CERTIFICATION

I, CERTIFY THAT THIS PROPERTY HAS BEEN EXAMINED FOR WETLANDS/WATERS OF THE UNITED STATES IN ACCORDANCE WITH CRITERIA FOUND IN THE 1987 U.S. ARMY CORPS OF ENGINEERS' WETLAND DELINEATION MANUAL AND ASSOCIATED GUIDANCE MEMORANDA. THE DELINEATION HERE SHOWN, IN MY BEST PROFESSIONAL JUDGEMENT, ACCURATELY DEPICTS WETLANDS/WATERS OF THE UNITED STATES BOUNDARIES PRESENT WITHIN THE SUBJECT PROPERTY BOUNDS. NO STATE WETLANDS ARE PRESENT WITHIN THE SUBJECT PROPERTY BOUNDS.

EVELYN MAURMEYER
COASTAL & ESTUARINE RESEARCH, INC.
P.O. BOX 674
LEWES, DE 19958
302.645.9610
DATE

REVISIONS

No.	DATE:	DESCRIPTION:	BY:
1	06/23/20	UPDATE TRIP GENERATION DIAGRAM PER DELDOT COMMENTS	J.O.M.
2	08/12/20	PLAN REVISIONS PER PZ WRITTEN COMMENTS DATED 07/30/20	J.O.M.

I HEREBY CERTIFY THAT THIS PLAN HAS BEEN PREPARED UNDER MY SUPERVISION AND TO THE BEST OF MY KNOWLEDGE COMPLIES WITH THE APPLICABLE ORDINANCES OF SUSSEX COUNTY AND THE LAWS OF THE STATE OF DELAWARE.

DESIGN PROFESSIONAL DATE

APPROVED BY: J.C.M. DESIGNED BY: J.O.M. DRAWN BY: J.O.M. LAYER LIST: B-02

SCALE IN FEET (1" = 100')

OWNER/APPLICANT: SUSSEX VENTURES, INC. 25051 WARD FARM LANE MILLSBORO, DE 19966 Phone: 302.934.5687

PARCEL INFORMATION: T.P.: 232–19.00–50.01 DEED REF: 5193–39

PRELIMINARY PLAN (Not To Be Recorded)

RECORD PLAN

THE CROSSINGS AT TRAP POND

BROAD CREEK HUNDRED – SUSSEX COUNTY – DELAWARE

THE KERCHER GROUP, INC.
CONSULTING • SURVEYING • ENGINEERING

JOB No: 20–0401

PLAN DATE: June 9, 2020

SHEET No.: R1

20246 Coastal Highway
Rehoboth Beach, DE 19971
PH: (302) 236-3600
www.scaledengineering.com

SOIL FEASIBILITY REPORT

THE CROSSINGS AT TRAP POND
16201 ADAMS ROAD
LAUREL, DE 19956

PREPARED FOR:
Sussex Ventures Inc
25051 Ward Farm Lane
Millsboro, DE 19966

PREPARED BY:

Scaled Engineering Inc
20246 Coastal Highway
Rehoboth Beach, DE 19971

M. Josh Stallings
Class D.2 Soil Scientist
License #4601

AAA Environmental Services, LLC
1617 Andrews Lake Road
Felton, DE 19943

Michael L. Stallings
Class D Soil Scientist
License #2347

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1.0 INTRODUCTION

Sussex Ventures Inc (Client) contracted Scaled Engineering Inc (Scaled) and AAA Environmental Services, LLC (AAAES) to perform a soil feasibility study at 16201 Adams Road, Laurel, DE 19956, Sussex County tax parcel number 232-19.00-50.01 (herein referred as "site" and "subject property"). Sussex County zoning form is provided in Appendix A. A major subdivision, named "The Crossings at Trap Pond", is proposed for the site. Thirty-nine (39) residential, single-family lots, utilizing private on-site well and septic are proposed for the subdivision. The Client is the current landowner and developer of the site. The proposed subdivision plan is provided in Appendix A.

The soil feasibility study was performed in accordance with DNREC Regulations, to evaluate site suitability for on-site wastewater treatment and disposal systems (OWTDS). Soil was evaluated by method of hand-auger borings and test pit analysis. Soil profiles were evaluated in accordance with the United States Department of Agriculture (USDA), Soil Survey Manual (Handbook 18), and USDA Natural Resources Conservation Service (NRCS) Field Book for Describing and Sampling Soils. Soils were classified in accordance with USDA, NRCS "Keys to Soil Taxonomy", Twelfth Edition, 2014.

2.0 EXISTING CONDITIONS

The site at the time of the investigation consisted of an approximate forty-two (42) acre agricultural/residential lot. The site was improved with a residential dwelling and supporting outbuildings. The site is partially wooded, and currently used for agricultural crop production. The site is bordered to the north by Pepper Branch and Grays Branch watercourses. Per Sussex County Plot Book 327, Page 76, and the US Fish and Wildlife Service, National Wetlands Inventory (NWI), wetlands associated with said watercourses partially exist within the site. Said plot reference and NWI map are provided in Appendix A.

The net development area is 38.915+/- acres. Said area occupies the agricultural farmland portion of the site. Topographically, the area is gently sloped with approximately four (4) feet of relief. The area excludes three (3) proposed lots located along Adams Road, northeast of the existing dwelling.

3.0 NRCS SOIL MAPPING

Per the USDA, NRCS Web Soil Survey, two (2) soil mapping units are delineated for the site, Pepperbox Loamy Sand (PpA) and Runclint Loamy Sand (RuA) and (RuB). Soils mapped in the Pepperbox Loamy Sand (Aquic Arenic Paleudults) mapping unit are moderately well drained with depth to seasonal high water table (SHWT) twenty (20) to forty (40) inches below the soil surface. Soils mapped in the Runclint Loamy Sand (Lamellic Quartzipsamments) mapping unit are excessively drained with depth to SHWT forty (40) to seventy-two (72) inches below the soil surface.

Information in the Web Soil Survey provides insight to regional soil conditions and land uses. Map unit delineations may include areas of other taxonomic classes such as similar or minor components, or complexes. As such, findings of site-specific soil investigations may vary from map unit delineations provided in the Web Soil Survey. The NRCS web soil survey report is provided in Appendix A.

4.0 SITE GEOLOGY

Per The Delaware Geological Survey (DGS), the site is located within the Turtle Branch Formation. Said Formation is interpreted to be a sand-dominated fluvial to tidal and shoreline deposit associated with a high stand of sea level during the middle Pleistocene. The Formation consists of one to five feet of gray coarse sand and pebbles overlain by one to ten feet of tan to gray clayey silt to silty clay that is in turn overlain by three to five feet

of fine to medium sand. Along the margins of the unit where it is adjacent to the Beaverdam Formation, the unit commonly consists of pale-yellow to yellowish-brown, fine to very fine silty sand.

5.0 SOIL INVESTIGATION

Soil investigation was performed November 18, 2020, and November 25, 2020. Per nearby well data provided in the DGS, groundwater was above average seasonal peak level during the month of November. Thirty (30) hand-auger borings and six (6) test pits were excavated throughout the net development area, utilizing a two hundred (200) foot grid. Soil boring and test pit locations were established by GPS with reported sub-meter accuracy, and are approximate (see Appendix B). Soil boring / test pit summary table is provided in Appendix B. Soil profile logs are provided in Appendix C. Based on the borings and test pits, eleven (11) soil taxon were classified during the investigations; Typic Hapludults, Arenic Hapludults, Oxyaquic Hapludults, Aquic Hapludults, Typic Paleudults, Arenic Paleudults, Lamellic Paleudults, Oxyaquic Paleudults, Typic Quartzipsamments, Lamellic Quartzipsamments, and Oxyaquic Quartzipsamments. For purposes of this study, the site was divided into two (2) feasibility classifications, Potential Gravity OWTDS and Potential Low Pressure Pipe OWTDS, based on depth to limiting zone and associated OWTDS suitability.

Soils within the Potential Gravity OWTDS classification consisted of Typic Hapludults, Arenic Hapludults, Typic Paleudults, Arenic Paleudults, Lamellic Paleudults, Typic Quartzipsamments, and Lamellic Quartzipsamments. Soils were well drained, moderate to slowly permeable (estimated), with redoximorphic features and/or indications of SHWT forty-eight (48) to sixty-eight (68) inches below the soil surface. Freewater was encountered thirty-seven (37) to greater than seventy-two (72) inches below the soil surface. Measured freewater above observed redoximorphic features was attributed to above normal groundwater levels; therefore, was not considered a limiting zone. Soil solum generally consisted of loamy sand to loamy fine sand textured surface horizon, loamy fine sand eluvial horizon with or without lamellae, and sandy loam to clay loam argillic horizon (if encountered). Substratum was comprised of stratified coarse loamy and/or fine loamy sediments, with variable clayey and silty sediments. Deeper portions of the argillic horizons and fine textured substratum were interpreted as lithologic discontinuities. Limiting zones were commonly encountered within the slowly permeable lithologic discontinuities, or within horizons/layers immediately overlying the discontinuities. Soils encountered within this feasibility classification are potentially suitable for Capping Fill and Full Depth Gravity OWTDS, with exception of soil borings/test pits C2, C3, F1, F5, G2 and H2. Said borings/test pits meet the soil taxon for the group, but had limiting zones shallower than forty-eight (48) inches below the soil surface. Twenty-three (23) of the thirty-six (36) overall soil borings/test pits are within the Potential Gravity OWTDS classification, making it the most prevalent for the site.

Soils within the Potential Low Pressure Pipe OWTDS classification consisted of Oxyaquic Hapludults, Aquic Hapludults, Oxyaquic Paleudults, Oxyaquic Quartzipsamments, Typic Hapludults (C2, C3, & H2), Typic Paleudults (F1), Typic Quartzipsamments (G2), and Lamellic Quartzipsamments (F5). Soils were moderately well drained, moderate to slowly permeable (estimated), with redoximorphic features and/or indications of SHWT twenty-seven (27) to forty-six (46) inches below the soil surface. Freewater was encountered thirty-four (34) to seventy (70) inches below the soil surface. Soil solum generally consisted of loamy sand to loamy fine sand textured surface horizon, loamy fine sand eluvial horizon with or without lamellae, and sandy loam to clay loam argillic horizon (if encountered). Substratum was comprised of stratified coarse loamy and/or fine loamy sediments, with variable clayey and silty sediments. Deeper portions of the argillic horizons and fine textured substratum were interpreted as lithologic discontinuities. Limiting zones were commonly encountered within the slowly permeable lithologic discontinuities, or within horizons/layers immediately overlying the discontinuities. Soils encountered within this feasibility classification are potentially suitable for Capping Fill and Full Depth Low Pressure Pipe OWTDS, with exception of soil boring I2. Said boring meets the soil taxon for the group, but had limiting zone shallower than twenty-seven (27) inches below the soil surface. The boring was excavated footslope of a concave landscape. Area of soil boring I2 is within proposed subdivision open space. Said area is not recommended for OWTDS due to shallower limiting zone and slower relative permeability. Thirteen (13) of the thirty-six (36) overall soil borings/test pits are within the Potential Low Pressure Pipe OWTDS classification, making it the least prevalent for the site.

6.0 INFILTRATION TESTING

Infiltration testing was performed December 23, 2020, by method of single-ring infiltrometer, falling head analysis. Tests were performed utilizing twelve (12) and twenty-four (24) inch diameter metal rings, driven approximately six (6) inches below grade at the testing depth. Six (6) tests (INF-1 to INF-6) were conducted. Tests INF-1, INF-2 and INF-4 were conducted within the Proposed Low Pressure Pipe OWTDS classification. Tests INF-3, INF-5 and INF-6 were conducted within the Proposed Gravity OWTDS classification. Test locations and results are provided in the Soil Feasibility Plan (see Appendix B). Infiltration test logs are provided in Appendix D. Test results are provided in the table below:

Test #	Date	Test Depth (Inches Below Existing Grade)	Measured Rate (Minutes/Inch)
INF-1	12/23/2020	18	6.67
INF-2	12/23/2020	18	13.33
INF-3	12/23/2020	12	8.89
INF-4	12/23/2020	12	7.27
INF-5	12/23/2020	24	N/A
INF-6	12/23/2020	24	8.89

Infiltration testing within the soil horizon controlling water movement vertically and/or horizontally to a depth of sixty (60) inches was not feasible due to above normal groundwater conditions. The most hydraulically limiting soil horizons/layers were encountered near or below measured freewater; therefore, infiltration testing was performed near the installation depth of the associated OWTDS type. Measured rates provide insight to soil permeability at the installation depth, but do not account for permeability of the most restrictive soil horizons/layers, which factors into the sizing and long term performance of an OWTDS. For individual site evaluations, the Class D Soil Scientist should assign a percolation rate provided in Exhibit Y of the DNREC regulations, or perform infiltration testing in hydraulically limiting soils within the upper sixty (60) inches of the soil profile.

Infiltration test INF-5 was abandoned due to excessive measured rate, which was highly inconsistent compared to other tests, and was determined unreliable.

7.0 CONCLUSION

Soils encountered during the investigation were somewhat variable across the site. Limiting zones did not directly correlate with elevation or landscape position, and appeared to be influenced by slowly permeable subsoil/substratum interpreted as a lithologic discontinuity, which is attributed to the variability of soils. Generally, soils were moderately well to well drained with redoximorphic features twenty-seven (27) to sixty-eight (68) inches below the soil surface, with exception of soil boring I2.

Per nearby well data provided in the DGS, groundwater was above average seasonal peak levels. Freewater was encountered thirty-four (34) to greater than seventy-two (72) inches below the soil surface. Measured freewater above observed redoximorphic features was attributed to above normal groundwater levels; therefore, was not considered a limiting zone.

Infiltration testing confirms soil permeability meets DNREC requirements for OWTDS. Due to testing limitations associated with above normal groundwater conditions, the Class D Soil Scientist should assign an estimated

permeability rate based on DNREC guidelines, or perform necessary permeability tests within hydraulically limiting soil horizons/layers.

Approximately sixty-four (64) percent of the soil borings/test pits were found potentially suitable for gravity OWTDS, and the remaining thirty-six (36) percent were found potentially suitable for low pressure pipe OWTDS, with exception of soil boring I2. Based on results of the soil feasibility study, the investigated area is suitable for individual OWTDS.

Potential OWTDS area depicted in the “Soil Feasibility Plan” was delineated from broad generalizations using LIDAR topographic contour data, soil boring/test pit results, field observations, and site aerial imagery, and may change during a formal site evaluation. Information provided in the Plan and this report are for planning purposes only.

REFERENCES

The following documents, publications, maps, etc., were used as source materials for this Engineering Report:

- Sussex County Delaware, Online Mapping: https://maps.sussexcountyde.gov/OnlineMap/Map.html
- *Wetlands Online Mapper* website published by the United States Fish and Wildlife Service. Available on-line at: http://wetlandsfws.er.usgs.gov/wtlnds/launch.html
- Sussex County Delaware Property Records: https://property.sussexcountyde.gov; https://maps.sussexcountyde.gov/OnlineMap/Map.html; https://sussexcountyde.gov/recorder-deeds
- The Delaware Geological Survey: https://www.dgs.udel.edu/
- USDA, NRCS, Web Soil Survey: https://websoilsurvey.nrcs.usda.gov/app/HomePage.htm

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APPENDIX A
SUPPORTING DOCUMENTS

PARID: 232-19.00-50.01
SUSSEX VENTURES INC

ROLL: RP
16201 ADAMS RD

Property Information

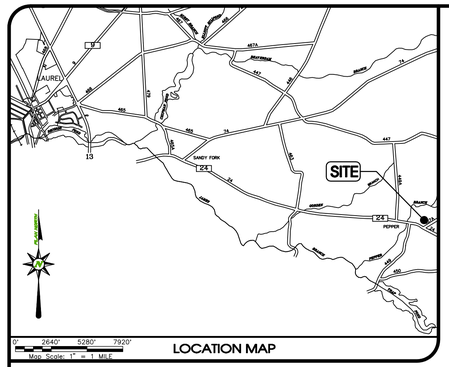
Property Location:	16201 ADAMS RD
Unit:	
City:	LAUREL
State:	DE
Zip:	19956
Class:	AGR-Agriculture
Use Code (LUC):	FH0-AG W/ HOMESITE IN FAA A-I
Town	00-None
Tax District:	232 – BROAD CREEK
School District:	2 - LAUREL
Council District:	1-Vincent
Fire District:	81-Laurel
Deeded Acres:	42.0400
Frontage:	0
Depth:	.000
Irr Lot:	
Zoning 1:	AR-1-AGRICULTURAL/RESIDEINTIAL
Zoning 2:	-
Plot Book Page:	327-76/PB
100% Land Value:	$3,000
100% Improvement Value	$24,900
100% Total Value	$27,900

Legal

Legal Description	NE/RT 24 RT 437A

Owners

Owner	Co-owner	Address	City	State	Zip
SUSSEX VENTURES INC		25051 WARD FARM LN	MILLSBORO	DE	19966



LOCATION MAP

LEGEND

- EXISTING PROPERTY BOUNDARY
- EXISTING ADJACENT LOT LINES
- EXISTING EDGE OF PAVEMENT
- EXISTING CENTERLINE OF ROAD
- EXISTING TREE LINE
- EXISTING WETLANDS LIMITS
- EXISTING BUILDING
- BUILDING RESTRICTION LINE
- PROPOSED EDGE OF PAVEMENT
- PROPOSED LOT LINES
- PROPOSED RIGHT-OF-WAY BOUNDARY
- PROPOSED CENTERLINE OF ROAD
- PROPOSED EASEMENT
- SUPPLEMENTAL CONTOUR (1' INTERVAL)
- INDEX CONTOUR (5' INTERVAL)
- EXISTING STRIPING
- EXISTING UTILITY POLE
- EXISTING SIGN
- IRON ROD FOUND
- CONCRETE MONUMENT FOUND
- PIPE SET
- POINT

SITE DATA and ZONING SCHEDULE

TAX PARCEL No.:	232-19.00-50.01 (P/O)
PROPERTY ADDRESS:	16201 ADAMS ROAD, LAUREL, DE 19956
NET DEVELOPMENT AREA:	38.915 Acres
EXISTING NUMBER OF LOTS:	ONE (1)
EXISTING SITE USE:	RESIDENTIAL/AGRICULTURAL
PROPOSED NUMBER OF LOTS:	THIRTY NINE (39)
PROPOSED SITE USE:	SINGLE-FAMILY HOME SUBDIVISION
EXISTING ZONING:	AR-1 (AGRICULTURAL/RESIDENTIAL)
INVESTMENT LEVEL AREA:	LEVEL FOUR (4)

NO TRANSPORTATION IMPROVEMENT DISTRICTS (TIDs) IN THE PROXIMITY OF THE PROJECT

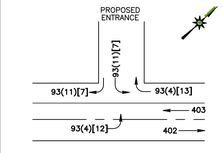
ORDINANCE ITEM	REQUIREMENT:	PROVIDED:
MINIMUM LOT AREA	32,670 Sq. Ft.	32,670 Sq. Ft.
MINIMUM LOT WIDTH	100 Ft.	100 Ft.
MINIMUM LOT DEPTH	100 Ft.	100 Ft.
MINIMUM SETBACKS:		
FRONT	30 Ft.	30 Ft.
SIDE	15 Ft.	15 Ft.
REAR	20 Ft.	20 Ft.
MAXIMUM BUILDING HEIGHT	42 Ft./3 Stories	42 Ft./3 Stories
SEWER SERVICE	PRIVATE SEPTIC	PRIVATE SEPTIC
WATER SERVICE	PRIVATE WELL	PRIVATE WELL

PROPERTY OWNER/DEVELOPER

SUSSEX VENTURES, INC.
25051 WARD FARM LANE
MILLSBORO, DE 19966
302.934.5687

TRIP GENERATION - ADAMS ROAD (SCR #437A)

(FULL MOVEMENT)



TRAFFIC GENERATION DIAGRAM

TRIPS PER DAY (VEHICLES IN A.M.) [P.M. PEAK HOUR]

ROAD TRAFFIC DATA:

FUNCTIONAL CLASSIFICATION = S-437A (ADAMS ROAD) - LOCAL
POSTED SPEED LIMIT = 35 MPH
AADT = 805 TRIPS (FROM 2019 DelDOT TRAFFIC SUMMARY)
10-YR PROJECTED AADT = 1.20 x 805 TRIPS = 966 TRIPS
10-YR PROJECTED AADT + SITE AADT = 1,338 TRIPS
TRAFFIC PATTERN GROUP = 7 (FROM 2019 DelDOT TRAFFIC SUMMARY)
PEAK HOUR = 13.70% x 1,338 = 184 TRIPS

SITE TRIPS GENERATED:

SOURCE: ITE TRIP GENERATION MANUAL 10th EDITION
39 SINGLE FAMILY DETACHED UNITS (210)

ONE ENTRANCE - FULL MOVEMENT
DESIGN VEHICLE: SU-30
39 SINGLE FAMILY DETACHED UNITS
WEEKDAY = 368 TRIPS
SATURDAY = 372 TRIPS
SUNDAY = 333 TRIPS

TOTAL ADT FOR SUBDIVISION (SATURDAY) = 372 TRIPS
DIRECTIONAL DISTRIBUTION:
50% TO AND FROM THE WEST: 186 TRIPS
(15 A.M. PEAK) [19 P.M. PEAK]
50% TO AND FROM THE EAST: 186 TRIPS
(15 A.M. PEAK) [20 P.M. PEAK]
5.00% TRUCKS & BUSES x 372 = 19 TRIPS

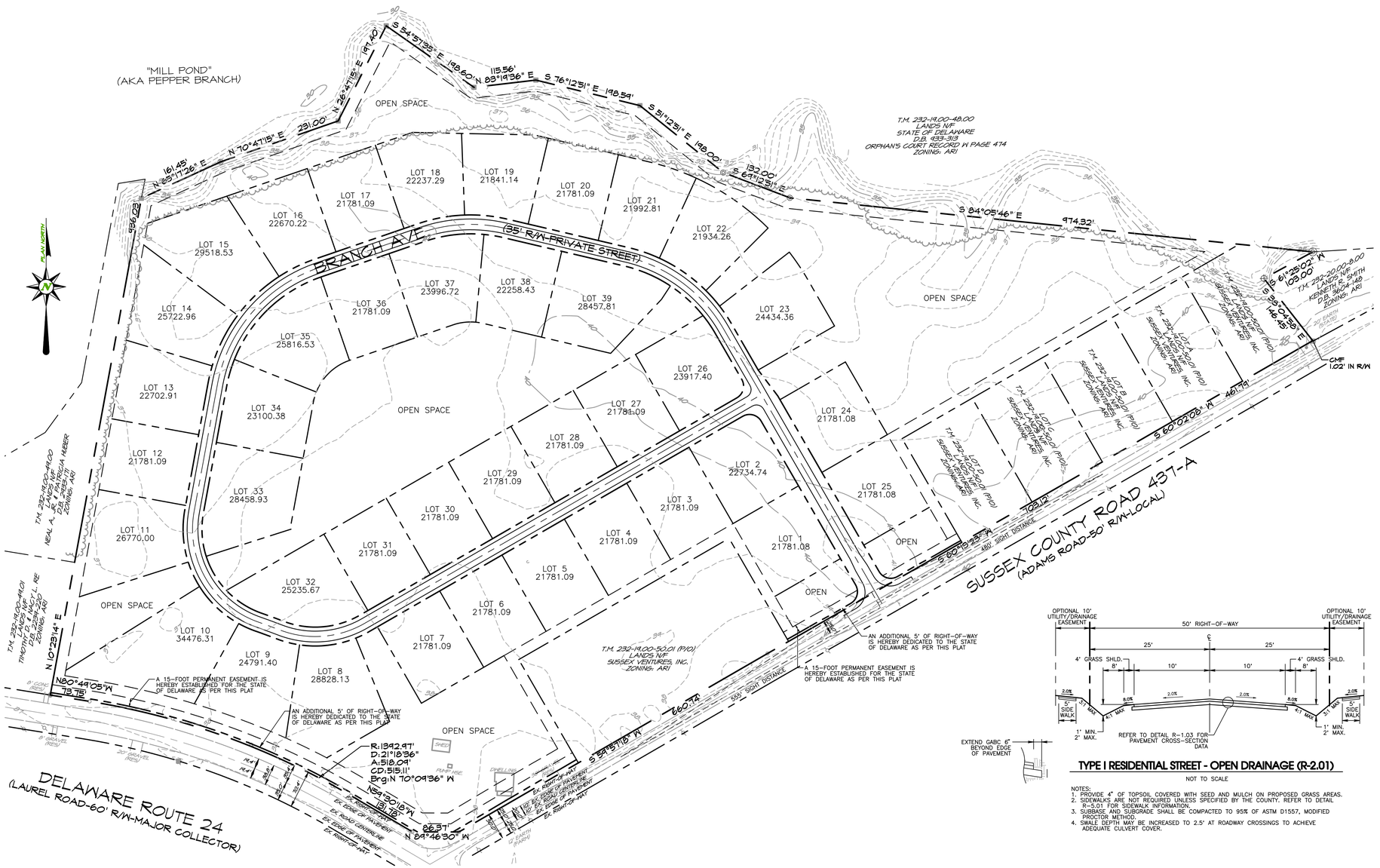
GENERAL NOTES

1. THE PROJECT SITE IS KNOWN AS THE CROSSINGS AT TRAP POND - (T.P. 232-19.00-50.01), AND IS LOCATED AT THE NORTHEAST CORNER OF THE ADAMS ROAD (SCR 437A) AND DELAWARE ROUTE 24 INTERSECTION IN LAUREL, DE.
2. THE PROPERTY BOUNDS, EXISTING FEATURES AND TOPOGRAPHIC INFORMATION SHOWN ON THIS PLAN IS THE RESULT OF A FIELD SURVEY BY MILLER-LEWIS, INC., 1960 MIDDLEFORD ROAD, SEAFORD, DELAWARE 19973. TOPOGRAPHY IS BASED ON NAVD88 AND NORTH REFERENCE IS DELAWARE STATE PLANE COORDINATE SYSTEM NAD83.
3. ALL PROPOSED STORMWATER MANAGEMENT FACILITIES ARE TO BE MAINTAINED BY THE DEVELOPER UNTIL SUCH TIME AS A HOMEOWNERS ASSOCIATION CAN PROVIDE FOR SAID MAINTENANCE.
4. ALL SUBDIVISION LOTS SHALL BE ACCESSED FROM THE INTERIOR SUBDIVISION STREETS ONLY. NO DIRECT ACCESS SCR 437A SHALL BE PERMITTED.
5. THIS PLAN DOES NOT VERIFY TO THE LOCATION AND/OR EXISTENCE OF EASEMENTS OR RIGHT-OF-WAYS CROSSING SUBJECT PROPERTY AS NO TITLE SEARCH WAS PROVIDED.
6. THE CONTRACTOR SHALL ENSURE THAT ALL NECESSARY PERMITS AND APPROVALS HAVE BEEN OBTAINED PRIOR TO COMMENCEMENT OF ANY SITE CONSTRUCTION ACTIVITIES.
7. ALL CONTRACTORS WORKING ON THIS PROJECT SHALL COMPLY WITH THE REQUIREMENTS OF THE DELAWARE EROSION AND SEDIMENT CONTROL HANDBOOK (LATEST EDITION).
8. CONSTRUCTION MATERIALS AND PROCEDURES SHALL FOLLOW THE SUSSEX COUNTY ENGINEERING DEPARTMENT SPECIFICATIONS AND STANDARD DRAWINGS (LATEST EDITION).
9. EXISTING SUBSURFACE UTILITY INFORMATION INDICATED IS BASED UPON VISUAL FIELD INSPECTION BY MILLER-LEWIS, INC. SUCH INFORMATION CONCERNING THE SIZE, LOCATION, DEPTH, QUANTITY, ETC. OF SUBSURFACE UTILITIES IS APPROXIMATE IN NATURE AND HAS BEEN OBTAINED AS AN AID IN THE PROJECT DESIGN. THE INFORMATION PROVIDED IS REPRESENTATIVE OF SUBSURFACE CONDITIONS ONLY AT LOCATIONS AND DEPTHS WHERE SUCH INFORMATION WAS OBTAINED. THERE IS NO EXPRESSED OR IMPLIED AGREEMENT THAT UTILITY SIZE, LOCATION, DEPTH, QUANTITY, ETC. AS SHOWN EXISTS BETWEEN EXPLORED LOCATIONS. ACCORDINGLY, UTILITY INFORMATION SHOWN SHOULD NOT BE RELIED UPON FOR CONSTRUCTION PURPOSES. IT IS INCUMBENT UPON THE CONTRACTOR TO VERIFY THE SIZE, LOCATION, DEPTH, QUANTITY, ETC. OF ALL UTILITIES BEFORE EXCAVATION.
10. BASED ON THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) FLOOD INSURANCE RATE MAP (FIRM) 10002g 0440 K, MAP NUMBER 10005C0440K, DATED MARCH 16, 2015, THIS PROPERTY IS LOCATED IN A ZONE "X"-UNSHADED WHICH IS AN AREA DETERMINED TO BE OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOODPLAIN.
11. THE WETLANDS BOUNDARY SHOWN WAS DELINEATED BY COASTAL & ESTUARINE RESEARCH, INC.
12. ALL FIRE LANES, FIRE HYDRANTS AND FIRE DEPARTMENT CONNECTIONS SHALL BE MARKED IN ACCORDANCE WITH THE DELAWARE STATE FIRE PREVENTION REGULATIONS.
13. ALL CUL-DE-SACS ARE TO HAVE A 38' PAVED RADIUS. NO PARKING PERMITTED ON CUL-DE-SAC.
14. ALL PROPOSED LOT LINES SUBJECT TO EASEMENTS FOR UTILITY, STORMWATER CONSTRUCTION AND/OR MAINTENANCE, UNLESS OTHERWISE NOTED ON THE PLANS, EASEMENTS AS FOLLOWS:
FRONT LOT LINES - 10 FEET
SIDE LOT LINES - 10 FEET
REAR LOT LINES - 10 FEET
15. IN ACCORDANCE WITH THE DELAWARE STATE FIRE PREVENTION REGULATIONS PART V, CHAPTER 4, SECTION 4-1.1, THE DEVELOPER SHALL PROVIDE, TO THE EMERGENCY DISPATCH CENTER HAVING JURISDICTION, A PLOT PLAN OF THE DEVELOPMENT SHOWING EACH LOT LOCATION. THE DEVELOPER SHALL ALSO ASSIGN NUMBERS TO ALL HOMES IN A CONSECUTIVE MANOR AND HAVE PLACED THE ASSIGNED NUMBER IN A READILY VISIBLE LOCATION ON EACH HOME TO ELIMINATE CONFUSION IN THE EVENT THAT AN EMERGENCY VEHICLE IS NEEDED.
16. THIS PROPERTY IS LOCATED IN THE VICINITY OF LAND USED PRIMARILY FOR AGRICULTURAL PURPOSES ON 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 CHEMICALS AND NIGHTTIME FARM OPERATIONS. THE USE AND ENJOYMENT OF PROPERTY IS EXPRESSLY CONDITIONED ON ACCEPTANCE OF ANY ANNOYANCE OR INCONVENIENCE WHICH MAY RESULT FROM SUCH NORMAL AGRICULTURAL USES AND ACTIVITIES.
17. ALL PROPOSED LANDSCAPE BUFFERS ARE TO BE MAINTAINED BY THE OWNER/DEVELOPER UNTIL SUCH TIME AS A HOMEOWNERS ASSOCIATION CAN PROVIDE FOR SAID MAINTENANCE.

DELDOT SITE GENERAL NOTES

LAST REVISED: MARCH 21, 2019

1. ALL ENTRANCES SHALL CONFORM TO THE DELAWARE DEPARTMENT OF TRANSPORTATION'S (DELDOT'S) CURRENT DEVELOPMENT COORDINATION MANUAL AND SHALL BE SUBJECT TO ITS APPROVAL.
2. NO LANDSCAPING SHALL BE ALLOWED WITHIN THE RIGHT-OF-WAY UNLESS THE PLANS ARE COMPLIANT WITH SECTION 3.7 OF THE DEVELOPMENT COORDINATION MANUAL.
3. SHRUBBERY, PLANTINGS, SIGNS AND/OR OTHER VISUAL BARRIERS THAT COULD OBSTRUCT THE SIGHT DISTANCE OF A DRIVER PREPARING TO ENTER THE ROADWAY ARE PROHIBITED WITHIN THE DEFINED DEPARTURE SIGHT TRIANGLE AREA ESTABLISHED ON THIS PLAN. IF THE ESTABLISHED DEPARTURE SIGHT TRIANGLE AREA IS OUTSIDE THE RIGHT-OF-WAY OR PROJECTS ONTO AN ADJACENT PROPERTY OWNER'S LAND, A SIGHT EASEMENT SHOULD BE ESTABLISHED AND RECORDED WITH ALL AFFECTED PROPERTY OWNERS TO MAINTAIN THE REQUIRED SIGHT DISTANCE.
4. UPON COMPLETION OF THE CONSTRUCTION OF THE SIDEWALK OR SHARED-USE PATH ACROSS THIS PROJECT'S FRONTAGE AND PHYSICAL CONNECTION TO ADJACENT EXISTING FACILITIES, THE DEVELOPER, THE PROPERTY OWNERS OR BOTH ASSOCIATED WITH THIS PROJECT, SHALL BE RESPONSIBLE TO REMOVE ANY EXISTING ROAD TIE-IN CONNECTIONS LOCATED ALONG ADJACENT PROPERTIES, AND RESTORE THE AREA TO GRASS. SUCH ACTIONS SHALL BE COMPLETED AT DELDOT'S DISCRETION, AND IN CONFORMANCE WITH DELDOT'S DEVELOPMENT COORDINATION MANUAL.
5. PRIVATE STREETS CONSTRUCTED WITHIN THIS SUBDIVISION SHALL BE MAINTAINED BY THE DEVELOPER, THE PROPERTY OWNERS WITHIN THIS SUBDIVISION OR BOTH (TITLE 17 - 131). DELDOT ASSUMES NO RESPONSIBILITIES FOR THE FUTURE MAINTENANCE OF THESE STREETS.
6. THE SIDEWALK SHALL BE THE RESPONSIBILITY OF THE DEVELOPER, THE PROPERTY OWNERS OR BOTH WITHIN THIS SUBDIVISION, THE STATE OF DELAWARE ASSUMES NO RESPONSIBILITY FOR THE FUTURE MAINTENANCE FOR THE SIDEWALK.
7. LOTS WILL BE PERMITTED TO HAVE ACCESS POINTS THAT COMPLY WITH THE DEVELOPMENT COORDINATION MANUAL (DCM) SPACING REQUIREMENTS OF CHAPTER 1 AND LIMITATIONS ON NUMBER OF ACCESS POINTS ESTABLISHED IN DCM CHAPTER 7. HORSESHOE DRIVEWAYS AND SECONDARY ENTRANCES REQUIRE ADDITIONAL DELDOT REVIEW AND SEPARATE PERMITTING; RESTRICTIONS AS DESCRIBED IN THE DCM CHAPTER 7 MAY PROHIBIT SOME SECONDARY ENTRANCE REQUESTS FROM BEING GRANTED.
8. TO MINIMIZE RUTTING AND EROSION OF THE ROADSIDE DUE TO ON-STREET PARKING, DRIVEWAY AND BUILDING LAYOUTS MUST BE CONFIGURED TO ALLOW FOR VEHICLES TO BE STORED IN THE DRIVEWAY BEYOND THE RIGHT-OF-WAY, WITHOUT INTERFERING WITH SIDEWALK ACCESS AND CLEARANCE.
9. THE DEVELOPER SHALL BE REQUIRED TO FURNISH AND PLACE RIGHT-OF-WAY MONUMENTS IN ACCORDANCE WITH DELDOT'S DEVELOPMENT COORDINATION MANUAL.
10. THE DEVELOPER SHALL BE REQUIRED TO FURNISH AND PLACE RIGHT-OF-WAY MARKERS TO PROVIDE A PERMANENT REFERENCE FOR RE-ESTABLISHING THE RIGHT-OF-WAY AND PROPERTY CORNERS ON LOCAL AND HIGHER FRONTAGE ROADS. RIGHT-OF-WAY MARKERS SHALL BE SET AND/OR PLACED ALONG THE FRONTAGE ROAD RIGHT-OF-WAY AT PROPERTY CORNERS AND AT EACH CHANGE IN RIGHT-OF-WAY ALIGNMENT IN ACCORDANCE WITH SECTION 3.2.4.2 OF THE DEVELOPMENT COORDINATION MANUAL.



TYPE I RESIDENTIAL STREET - OPEN DRAINAGE (R-2.01)

NOT TO SCALE

NOTES:
1. PROVIDE 4" OF TOPSOIL COVERED WITH SEED AND MULCH ON PROPOSED GRASS AREAS.
2. SIDEWALKS ARE NOT REQUIRED UNLESS SPECIFIED BY THE COUNTY. REFER TO DETAIL R-5.01 FOR SIDEWALK INFORMATION.
3. SUBBASE AND SUBGRADE SHALL BE COMPACTED TO 95% OF ASTM D1557, MODIFIED PROCTOR METHOD.
4. SWALE DEPTH MAY BE INCREASED TO 2.5' AT ROADWAY CROSSINGS TO ACHIEVE ADEQUATE CULVERT COVER.

PLANNING COMMISSION CERTIFICATE

RECOMMENDED FOR APPROVAL BY THE PLANNING COMMISSION OF SUSSEX COUNTY ON THIS _____ DAY OF _____, 20____.

SECRETARY (ATTEST) _____

RECOMMENDED FOR APPROVAL BY THE SUSSEX COUNTY COUNCIL ON THIS _____ DAY OF _____, 20____.

PRESIDENT _____

OWNER CERTIFICATE

I HEREBY CERTIFY THAT I AM THE EQUITABLE OWNER OF THE PROPERTY DESCRIBED AND SHOWN ON THIS PLAN, THAT THE PLAN WAS MADE AT MY DIRECTION, THAT I ACKNOWLEDGE THE SAME TO BE MY ACT AND DESIRE THE PLAN TO BE RECORDED AS SHOWN IN ACCORDANCE WITH ALL APPLICABLE LAWS AND REGULATIONS

_____ _____
SUSSEX VENTURES, INC. DATE
25051 WARD FARM LANE
MILLSBORO, DE 19966
Phone: 302.934.5687

WETLANDS CERTIFICATION

I, CERTIFY THAT THIS PROPERTY HAS BEEN EXAMINED FOR WETLANDS/WATERS OF THE UNITED STATES IN ACCORDANCE WITH CRITERIA FOUND IN THE 1987 U.S. ARMY CORPS OF ENGINEERS' WETLAND DELINEATION MANUAL AND ASSOCIATED GUIDANCE MEMORANDA. THE DELINEATION HERE SHOWN, IN MY BEST PROFESSIONAL JUDGEMENT, ACCURATELY DEPICTS WETLANDS/WATERS OF THE UNITED STATES BOUNDARIES PRESENT WITHIN THE SUBJECT PROPERTY BOUNDS. NO STATE WETLANDS ARE PRESENT WITHIN THE SUBJECT PROPERTY BOUNDS.

_____ _____
EVELYN MAURMEYER DATE
COASTAL & ESTUARINE RESEARCH, INC.
P.O. BOX 674
LEWES, DE 19958
302.645.9610

REVISIONS

No.:	DATE:	DESCRIPTION:	BY:

I HEREBY CERTIFY THAT THIS PLAN HAS BEEN PREPARED UNDER MY SUPERVISION AND TO THE BEST OF MY KNOWLEDGE COMPLIES WITH THE APPLICABLE ORDINANCES OF SUSSEX COUNTY AND THE LAWS OF THE STATE OF DELAWARE.

DESIGN PROFESSIONAL DATE

LAYER LISB: B-22
DESIGNED BY: JDM
DRAWN BY: JDM
APPROVED BY: JDM
SCALE IN FEET 0' 50' 100' (1" = 50')

OWNER/APPLICANT:
SUSSEX VENTURES, INC.
25051 WARD FARM LANE
MILLSBORO, DE 19966
Phone: 302.934.5687

PARCEL INFORMATION:
T.P.: 232-19.00-50.01
DEED REF: 5193-39

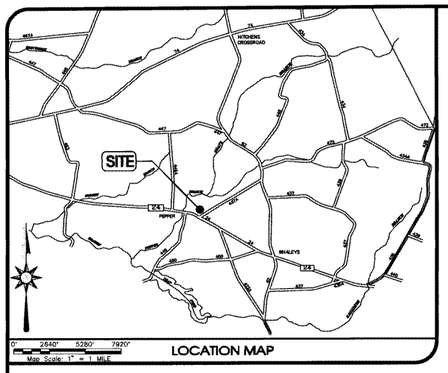
PRELIMINARY PLAN (Not To Be Recorded)
RECORD PLAN
THE CROSSINGS AT TRAP POND
BROAD CREEK HUNDRED - SUSSEX COUNTY - DELAWARE

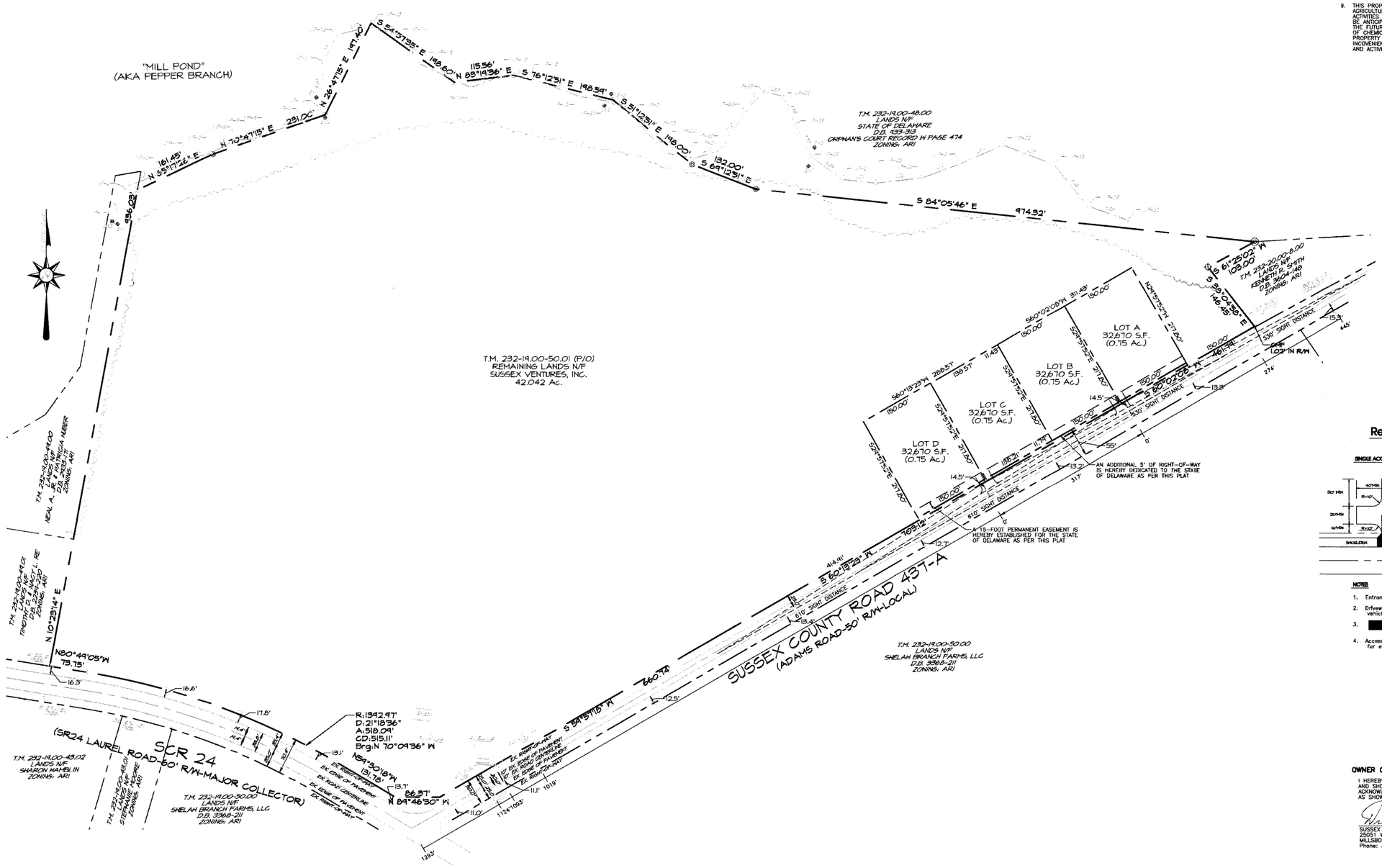
THE KERCHER GROUP, INC.
CONSULTING • SYSTEMS • ENGINEERING
32366 REHOBOTH AVE., UNIT 11, REHOBOTH BEACH, DE 19971
302.854.9062 (Voice) 302.854.9064 (Fax) www.kerchergroup.com

JOB No: 20-0401

PLAN DATE: June 9, 2020

SHEET No.: R1





LOCATION MAP

LEGEND

▬ ─ ─ ▬	EXISTING PROPERTY BOUNDARY
─ ─ ─ ─	EXISTING ADJACENT LOT LINES
┄┄┄	EXISTING EDGE OF PAVEMENT
── ─ ──	EXISTING CENTERLINE OF ROAD
⁓⁓⁓	EXISTING TREE LINE
─ · ─ ·	EXISTING WETLANDS LIMITS
▬ ─ ─ ▬	PROPOSED RIGHT-OF-WAY
┄┄┄	EXISTING STRIPING
▬ ─ ─ ▬	PROPOSED LOT LINES
─ ─ ─ ─	PROPOSED PERMANENT EASEMENT
	EXISTING UTILITY POLE
	EXISTING SIGN
	IRON ROD FOUND
	CONCRETE MONUMENT FOUND
◎	PIPE SET
○	POINT

SITE DATA

TAX PARCEL NUMBER:	232-19.00-50.01 (P/O)
GROSS ACREAGE:	45.042 Acres
PROPERTY ZONING:	AR (AGRICULTURAL RESIDENTIAL)
TOTAL LOTS (EX.):	1
TOTAL LOTS (PR):	FOUR (4) SINGLE FAMILY LOTS (EXCLUDING THE RESIDUAL LANDS)
EXISTING SITE USE:	AGRICULTURAL/FARMED
PROPOSED SITE USE:	FOUR SINGLE FAMILY LOTS AND AGRICULTURAL/FARMED
ZONING DISTRICT:	AR (AGRICULTURAL RESIDENTIAL)
SEWER PROVIDER:	PRIVATE SEPTIC
WATER PROVIDER:	PRIVATE WELL
SPEED LIMIT:	50 MPH (SCR 437A)

DELDOT PLAN NOTES

LAST REVISED: OCTOBER 19, 2018

1. ALL ENTRANCES SHALL CONFORM TO THE DELAWARE DEPARTMENT OF TRANSPORTATION'S (DELDOT'S) CURRENT DEVELOPMENT COORDINATION MANUAL AND SHALL BE SUBJECT TO ITS APPROVAL.
2. SHRUBBERY, PLANTINGS, SIGNS AND/OR OTHER VISUAL BARRIERS THAT COULD OBSTRUCT THE SIGHT DISTANCE OF A DRIVER PREPARING TO ENTER THE ROADWAY ARE PROHIBITED WITHIN THE DEFINED DEPARTURE SIGHT TRIANGLE AREA ESTABLISHED ON THIS PLAN. IF THE ESTABLISHED DEPARTURE SIGHT TRIANGLE AREA IS OUTSIDE THE RIGHT-OF-WAY OR PROJECTS ONTO AN ADJACENT PROPERTY OWNER'S LAND, A SIGHT EASEMENT SHOULD BE ESTABLISHED AND RECORDED WITH ALL AFFECTED PROPERTY OWNERS TO MAINTAIN THE REQUIRED SIGHT DISTANCE.
3. THE RESIDUAL LANDS SHALL HAVE ACCESS TO SCR #437-A VIA THE EXISTING ENTRANCES AS SHOWN ON THE PLAN. IF THE RESIDUAL LANDS OF THE APPLICANT ARE EVER DEVELOPED INTO A MAJOR SUBDIVISION, THEN THE ACCESS TO THE PARCELS CREATED BY THIS MINOR SUBDIVISION PLAN MAY BE REQUIRED TO BE FROM AN INTERNAL SUBDIVISION STREET.
4. LOT A AND LOT B SHALL HAVE A COMBINED ACCESS TO SCR 437A.
5. LOT C AND LOT D SHALL HAVE A COMBINED ACCESS TO SCR 437A.

DelDOT
NO OBJECTION TO RECORDATION
November 23, 2020
DATE

GENERAL NOTES

1. THE PROJECT SITE IS KNOWN AS LANDS OF SUSSEX VENTURES, INC. , (T.P. 232-19.00-50.01), AND IS LOCATED AT THE NORTHEAST CORNER OF THE ADAMS ROAD (SCR 437A) AND DELAWARE ROUTE 24 INTERSECTION IN LAUREL, DE.
2. THE PROPERTY BOUNDS, EXISTING FEATURES AND TOPOGRAPHIC INFORMATION SHOWN ON THIS PLAN IS THE RESULT OF A FIELD SURVEY BY MILLER-LEWIS, INC., 1560 MIDDLEFORD ROAD, SEAFORD, DELAWARE 19973. TOPOGRAPHY IS BASED ON NAVD88 AND NORTH REFERENCE IS DELAWARE STATE PLANE COORDINATE SYSTEM NAD83.
3. THIS PLAN DOES NOT VERIFY TO THE LOCATION AND/OR EXISTENCE OF EASEMENTS OR RIGHT-OF-WAYS CROSSING SUBJECT PROPERTY AS NO TITLE SEARCH WAS PROVIDED.
4. THE CONTRACTOR SHALL ENSURE THAT ALL NECESSARY PERMITS AND APPROVALS HAVE BEEN OBTAINED PRIOR TO COMMENCEMENT OF ANY SITE CONSTRUCTION ACTIVITIES.
5. EXISTING SUBSURFACE UTILITY INFORMATION INDICATED IS BASED UPON VISUAL FIELD INSPECTION BY MILLER-LEWIS, INC. SUCH INFORMATION CONCERNING THE SIZE, LOCATION, DEPTH, QUANTITY, ETC. OF SUBSURFACE UTILITIES IS APPROXIMATE IN NATURE AND HAS BEEN OBTAINED AS AN AID IN THE PROJECT DESIGN. THE INFORMATION PROVIDED IS REPRESENTATIVE OF SUBSURFACE CONDITIONS ONLY AT LOCATIONS AND DEPTHS WHERE SUCH INFORMATION WAS OBTAINED. THERE IS NO EXPRESSED OR IMPLIED AGREEMENT THAT UTILITY SIZE, LOCATION, DEPTH, QUANTITY, ETC. AS SHOWN EXISTS BETWEEN EXPLORED LOCATIONS. ACCORDINGLY, UTILITY INFORMATION SHOWN SHOULD NOT BE RELIED UPON FOR CONSTRUCTION PURPOSES. IT IS INCUMBENT UPON THE CONTRACTOR TO VERIFY THE SIZE, LOCATION, DEPTH, QUANTITY, ETC. OF ALL UTILITIES BEFORE EXCAVATION.
6. BASED ON THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) FLOOD INSURANCE RATE MAP (FIRM) 100029 0440 K, MAP NUMBER 10005C0440K, DATED MARCH 16, 2015, THIS PROPERTY IS LOCATED IN A ZONE "X"-UNSHADED WHICH IS AN AREA DETERMINED TO BE OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOODPLAIN.
7. THE WETLANDS BOUNDARY SHOWN WAS DELINEATED BY COASTAL & ESTUARINE RESEARCH, INC.
8. IN ACCORDANCE WITH THE DELAWARE STATE FIRE PREVENTION REGULATIONS PART V, CHAPTER 4, SECTION 4-1.1, THE DEVELOPER SHALL PROVIDE, TO THE EMERGENCY DISPATCH CENTER HAVING JURISDICTION, A PLOT PLAN OF THE DEVELOPMENT SHOWING EACH LOT LOCATION. THE DEVELOPER SHALL ALSO ASSIGN NUMBERS TO ALL HOMES IN A CONSECUTIVE MANOR AND HAVE PLACED THE ASSIGNED NUMBER IN A READILY VISIBLE LOCATION ON EACH HOME TO ELIMINATE CONFUSION IN THE EVENT THAT AN EMERGENCY VEHICLE IS NEEDED.
9. THIS PROPERTY IS LOCATED IN THE VICINITY OF LAND USED PRIMARILY FOR AGRICULTURAL PURPOSES ON 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 CHEMICALS AND NIGHTTIME FARM OPERATIONS. THE USE AND ENJOYMENT OF PROPERTY IS EXPRESSLY CONDITIONED ON ACCEPTANCE OF ANY ANNOYANCE OR INCOVENIENCE WHICH MAY RESULT FROM SUCH NORMAL AGRICULTURAL USES AND ACTIVITIES.

WETLANDS LINE TABLE

BEGIN @ CONC. MON. FOUND
S 34°55'02" W 76.01' TO L1

Figure 7.2.3.3-a
Residential Access Design Requirements

NOT TO SCALE

NOTES

1. Entrance geometrics shall conform to DelDOT Standard Construction Detail C-3.
2. Driveway widths may be increased with DelDOT's approval for special purpose vehicles i.e. farm vehicles, etc.
3. ■ Minimum residential pavement section – 6" Graded Aggregate Base Course.
4. Access to residential lots should be limited to one access point. (See Section 7.2.3.1 for exceptions.

APPROVED
Minor subdivision
NA SUSSEX COUNTY 11/24/20
PLANNING & ZONING COMMISSION
i89.

OWNER CERTIFICATE

I HEREBY CERTIFY THAT I AM THE EQUITABLE OWNER OF THE PROPERTY DESCRIBED AND SHOWN ON THIS PLAN, THAT THE PLAN WAS MADE AT MY DIRECTION, THAT I ACKNOWLEDGE THE SAME TO BE MY ACT AND DESIRE THE PLAN TO BE RECORDED AS SHOWN IN ACCORDANCE WITH ALL APPLICABLE LAWS AND REGULATIONS

SUSSEX VENTURES, INC.
25051 WARD FARM LANE
MILLSBORO, DE 19966
Phone: 302.934.5687

11/17/20
DATE

No.:	DATE:	DESCRIPTION:	BY:
1	08/03/20	REVISIONS PER DELDOT WRITTEN COMMENTS	J.O.M.
2	11/11/20	REVISIONS PER DELDOT WRITTEN COMMENTS	J.O.M.

REVISIONS

I HEREBY CERTIFY THAT THIS PLAN HAS BEEN PREPARED UNDER MY SUPERVISION AND TO THE BEST OF MY KNOWLEDGE COMPLIES WITH THE APPLICABLE ORDINANCES OF SUSSEX COUNTY AND THE LAWS OF THE STATE OF DELAWARE.

DESIGN PROFESSIONAL DATE
11/18/20

JEFFREY G. WILLIAMS
No. 13803

APPROVED BY:	DESIGNED BY:	DRAWN BY:	LAYER LIST:
J.C.W.	J.O.M.	J.O.M.	B-02

100' 0' 100' 200'
SCALE IN FEET (1" = 100')

ONLY PLANS INCORPORATING A RAISED PROFESSIONAL SEAL ARE CONSIDERED TO BE OFFICIAL AND RELIED UPON BY THE USER. THIS PLAN HAS BEEN PREPARED SPECIFICALLY FOR THE CLIENT AND PROJECT DESIGNATED HEREON. ANY MODIFICATION, REVISION, DUPLICATION OR USE WITHOUT WRITTEN CONSENT OF THE KERCHER GROUP, INC. IS PROHIBITED BY LAW.

OWNER/APPLICANT:
SUSSEX VENTURES, INC.
25051 WARD FARM LANE
MILLSBORO, DE 19966
Phone: 302.934.5687

PARCEL INFORMATION:
T.P.: 232-19.00-50.01
DEED REF: 5193-39

MINOR SUBDIVISION PLAN
LANDS OF SUSSEX VENTURES, INC.

BROAD CREEK HUNDRED – SUSSEX COUNTY – DELAWARE

THE KERCHER GROUP
THE KERCHER GROUP, INC.
CONSULTING • SYSTEMS • ENGINEERING
37385 REHOBOTH AVE., UNIT 11 – REHOBOTH BEACH, DELAWARE 19971
302.854.9062 (Voice) 302.854.9064 (Fax) www.kerchergroup.com

JOB No:
20-0401

PLAN DATE:
July 8, 2020

SHEET No.:
R1

LANDS OF SUSSEX VENTURES, INC. Tue, Nov 17, 2020 (18:32)

U.S. Fish and Wildlife Service
National Wetlands Inventory

The Crossings at Trap Pond

January 29, 2021

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

United States Department of Agriculture

NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Sussex County, Delaware

November 3, 2020

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require

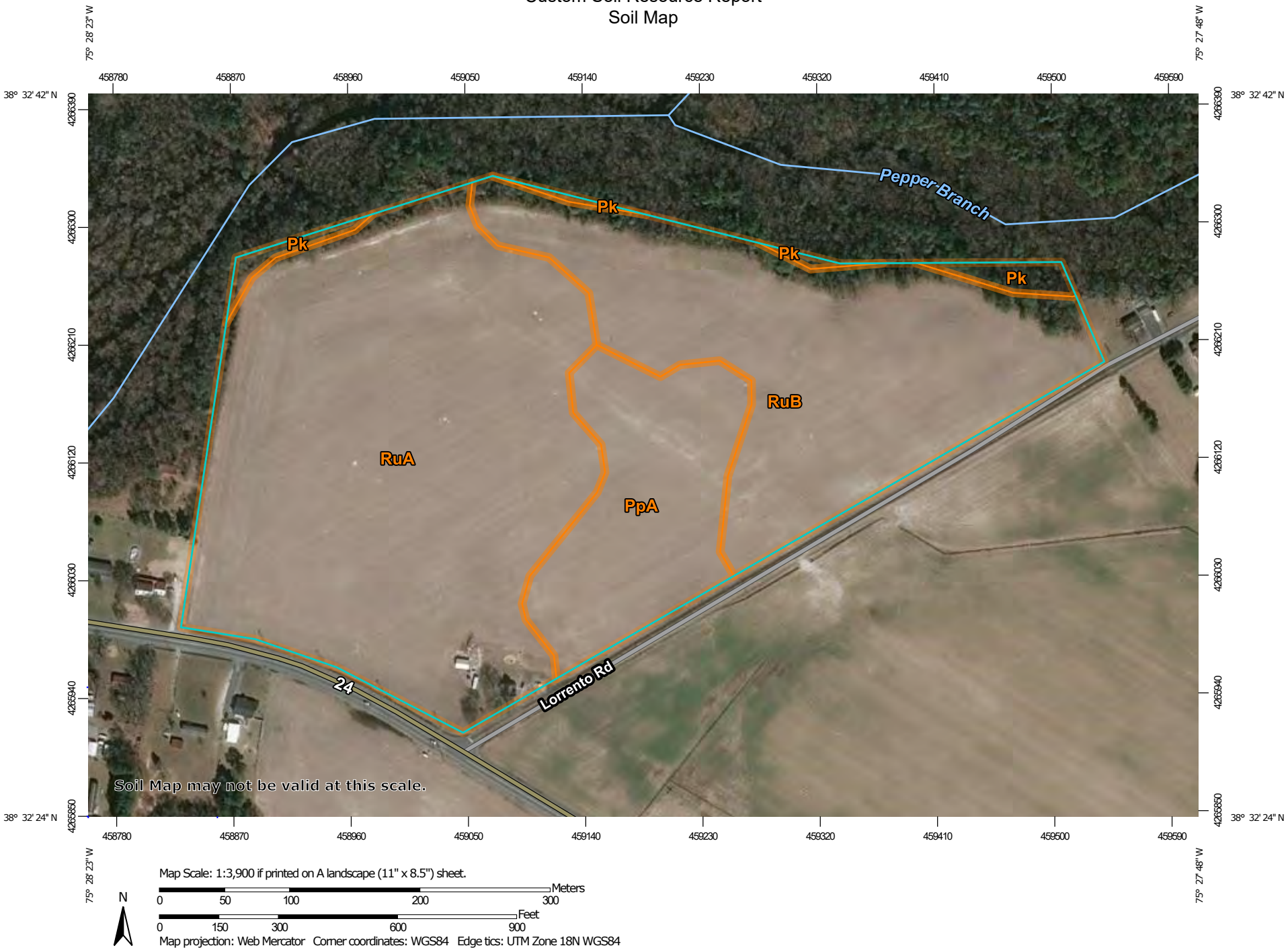
alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

Contents

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report
Soil Map



Map Scale: 1:3,900 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 50 100 200 300

Feet: 0 150 300 600 900

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 18N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Sussex County, Delaware
Survey Area Data: Version 21, Jun 11, 2020

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Nov 21, 2018—Mar 12, 2019

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
Pk	Puckum muck, frequently flooded	1.0	2.2%
PpA	Pepperbox loamy sand, 0 to 2 percent slopes	6.5	14.3%
RuA	Runclint loamy sand, 0 to 2 percent slopes	23.4	51.5%
RuB	Runclint loamy sand, 2 to 5 percent slopes	14.5	32.0%
Totals for Area of Interest		**45.4**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Sussex County, Delaware

Pk—Puckum muck, frequently flooded

Map Unit Setting

National map unit symbol: 1qtjg
Elevation: 0 to 20 feet
Mean annual precipitation: 42 to 48 inches
Mean annual air temperature: 52 to 58 degrees F
Frost-free period: 180 to 220 days
Farmland classification: Not prime farmland

Map Unit Composition

Puckum and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Puckum

Setting

Landform: Flood plains, swamps, depressions
Down-slope shape: Linear, concave
Across-slope shape: Linear, concave
Parent material: Woody organic material

Typical profile

Oa1 - 0 to 20 inches: muck
Oa2 - 20 to 80 inches: muck

Properties and qualities

Slope: 0 to 1 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Very poorly drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr)
Depth to water table: About 0 to 5 inches
Frequency of flooding: Frequent
Frequency of ponding: Frequent
Maximum salinity: Nonsaline to slightly saline (0.0 to 4.0 mmhos/cm)
Available water capacity: Very high (about 23.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7w
Hydrologic Soil Group: A/D
Hydric soil rating: Yes

Minor Components

Manahawkin

Percent of map unit: 10 percent
Landform: Flood plains, swamps
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: Yes

Indiantown

Percent of map unit: 5 percent
Landform: Flood plains
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: Yes

PpA—Pepperbox loamy sand, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: 1qtjj
Elevation: 0 to 70 feet
Mean annual precipitation: 42 to 48 inches
Mean annual air temperature: 52 to 58 degrees F
Frost-free period: 180 to 220 days
Farmland classification: Prime farmland if irrigated

Map Unit Composition

Pepperbox and similar soils: 80 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Pepperbox

Setting

Landform: Flats, depressions
Landform position (three-dimensional): Dip
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Sandy eolian deposits over fluvial marine sediments

Typical profile

A - 0 to 10 inches: loamy sand
E - 10 to 25 inches: loamy sand
Bt - 25 to 37 inches: sandy loam
2Btg - 37 to 65 inches: sandy clay loam
2Cg - 65 to 80 inches: sandy clay loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high (0.06 to 1.98 in/hr)
Depth to water table: About 20 to 40 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Moderate (about 8.2 inches)

Interpretive groups

Land capability classification (irrigated): 2w
Land capability classification (nonirrigated): 2w
Hydrologic Soil Group: A
Hydric soil rating: No

Minor Components

Rosedale

Percent of map unit: 10 percent
Landform: Flats
Hydric soil rating: No

Fort mott

Percent of map unit: 5 percent
Landform: Knolls, flats
Landform position (three-dimensional): Rise
Hydric soil rating: No

Rockawalkin

Percent of map unit: 5 percent
Landform: Flats
Hydric soil rating: No

RuA—Runclint loamy sand, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: 1qtjz
Elevation: 0 to 120 feet
Mean annual precipitation: 42 to 48 inches
Mean annual air temperature: 52 to 58 degrees F
Frost-free period: 180 to 220 days
Farmland classification: Not prime farmland

Map Unit Composition

Runclint and similar soils: 75 percent
Minor components: 25 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Runclint

Setting

Landform: Flats, fluviomarine terraces
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Sandy eolian deposits and/or fluviomarine sediments

Typical profile

Ap - 0 to 9 inches: loamy sand
E - 9 to 22 inches: sand
Bw - 22 to 39 inches: sand

BC - 39 to 59 inches: sand
2C - 59 to 80 inches: loamy coarse sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Excessively drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to very high (0.57 to 19.98 in/hr)
Depth to water table: About 40 to 72 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Low (about 3.5 inches)

Interpretive groups

Land capability classification (irrigated): 3s
Land capability classification (nonirrigated): 4s
Hydrologic Soil Group: A
Hydric soil rating: No

Minor Components

Evesboro

Percent of map unit: 10 percent
Landform: Flats
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Klej

Percent of map unit: 5 percent
Landform: Flats, depressions
Down-slope shape: Linear, concave
Across-slope shape: Linear, concave
Hydric soil rating: No

Hurlock, drained

Percent of map unit: 5 percent
Landform: Depressions, flats, swales
Landform position (three-dimensional): Dip
Down-slope shape: Concave, linear
Across-slope shape: Concave, linear
Hydric soil rating: Yes

Galloway

Percent of map unit: 5 percent
Landform: Depressions, flats
Down-slope shape: Concave, linear
Across-slope shape: Concave, linear
Hydric soil rating: No

RuB—Runclint loamy sand, 2 to 5 percent slopes

Map Unit Setting

National map unit symbol: 1qtk1
Elevation: 0 to 120 feet
Mean annual precipitation: 42 to 48 inches
Mean annual air temperature: 52 to 58 degrees F
Frost-free period: 180 to 220 days
Farmland classification: Not prime farmland

Map Unit Composition

Runclint and similar soils: 75 percent
Minor components: 25 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Runclint

Setting

Landform: Flats, fluviomarine terraces, dunes, knolls
Landform position (three-dimensional): Rise
Down-slope shape: Linear, convex
Across-slope shape: Linear, convex
Parent material: Sandy eolian deposits and/or fluviomarine sediments

Typical profile

Ap - 0 to 9 inches: loamy sand
E - 9 to 22 inches: sand
Bw - 22 to 39 inches: sand
BC - 39 to 59 inches: sand
2C - 59 to 80 inches: loamy coarse sand

Properties and qualities

Slope: 2 to 5 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Excessively drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to very high (0.57 to 19.98 in/hr)
Depth to water table: About 40 to 72 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Low (about 3.5 inches)

Interpretive groups

Land capability classification (irrigated): 3s
Land capability classification (nonirrigated): 4s
Hydrologic Soil Group: A
Hydric soil rating: No

Minor Components

Evesboro

Percent of map unit: 10 percent
Landform: Flats
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Klej

Percent of map unit: 5 percent
Landform: Depressions, flats
Down-slope shape: Concave, linear
Across-slope shape: Concave, linear
Hydric soil rating: No

Hurlock, drained

Percent of map unit: 5 percent
Landform: Swales, depressions, flats
Landform position (three-dimensional): Dip
Down-slope shape: Concave, linear
Across-slope shape: Linear, concave
Hydric soil rating: Yes

Galloway

Percent of map unit: 5 percent
Landform: Flats, depressions
Down-slope shape: Linear, concave
Across-slope shape: Linear, concave
Hydric soil rating: No

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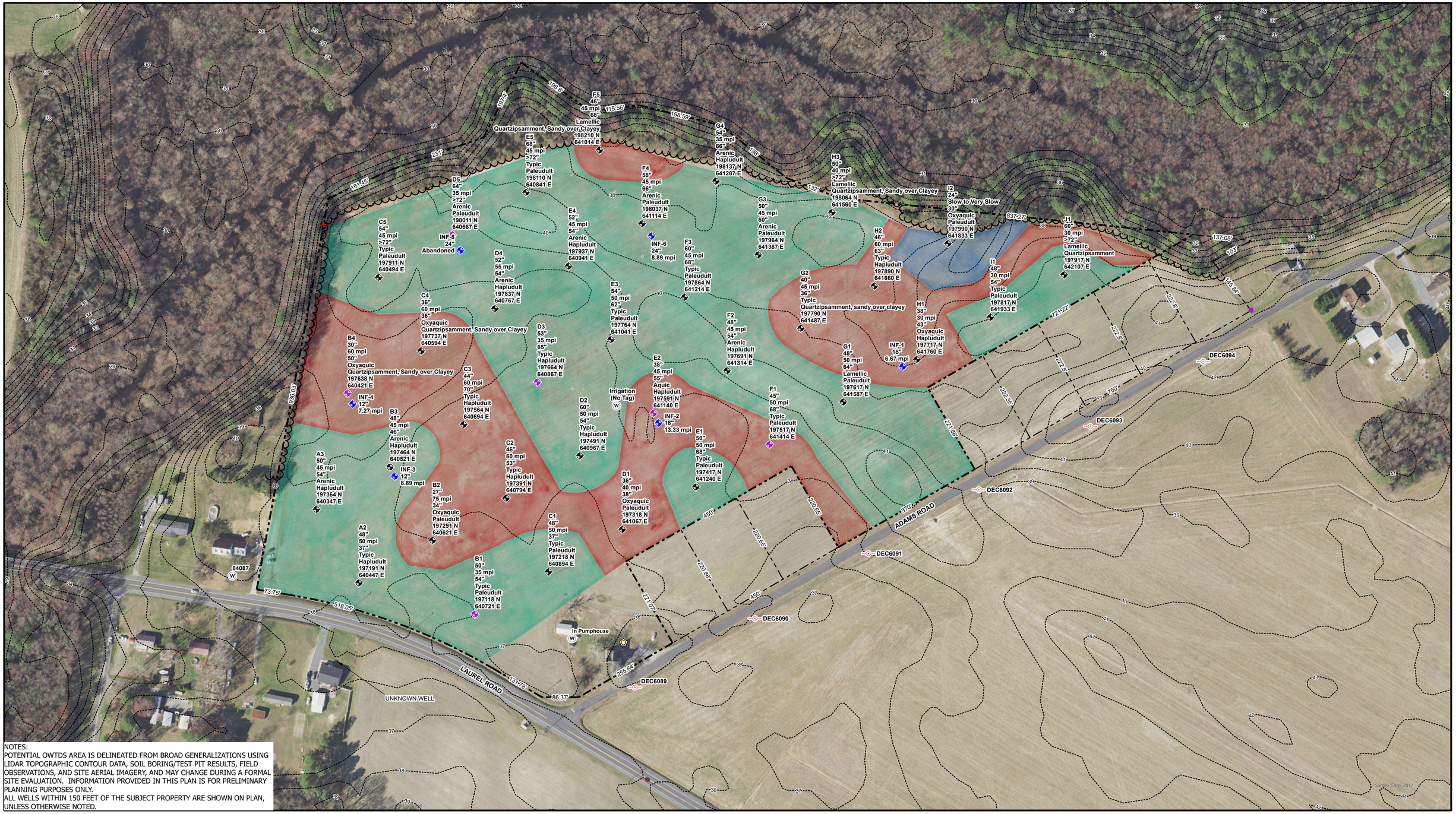
APPENDIX B
SOIL FEASIBILITY PLAN



NOTES:
POTENTIAL OWTDS AREA IS DELINEATED FROM BROAD GENERALIZATIONS USING LIDAR TOPOGRAPHIC CONTOUR DATA, SOIL BORING/TEST PIT RESULTS, FIELD OBSERVATIONS, AND SITE AERIAL IMAGERY, AND MAY CHANGE DURING A FORMAL SITE EVALUATION. INFORMATION PROVIDED IN THIS PLAN IS FOR PRELIMINARY PLANNING PURPOSES ONLY.
ALL WELLS WITHIN 150 FEET OF THE SUBJECT PROPERTY ARE SHOWN ON PLAN, UNLESS OTHERWISE NOTED.

Legend

Soil Investigation Boring
- Profile ID
- Depth to Limiting Zone
- Estimated Permeability Rate
- Depth to Freewater
- Taxonomic Subgroup
- Taxonomic Great Group
- GPS Coordinates

Test Pit
- Profile ID
- Depth to Limiting Zone
- Estimated Permeability Rate
- Depth to Freewater
- Taxonomic Subgroup
- Taxonomic Great Group
- GPS Coordinates

Infiltration Test
- Test Number
- Test Depth
- Test Result

- Concrete Monument
- OWTDS Component
- Iron Pipe
- Utility Pole
- (W) Well
- Survey Stake
- Property Line Adjacent
- Potential Gravity OWTDS
- Potential Low Pressure Pipe OWTDS
- Potential Sand Mound OWTDS
- 2014 Sussex Contours

SOIL BORING / TEST PIT RESULTS

PROFILE ID	A2	A3	B1	B2	B3	B4	C1	C2	C3	C4	C5	D1	D2	D3	D4	D5	E1	E2	E3	E4	E5	F1	F2	F3	F4	F5	G1	G2	G3	G4	H1	H2	H3	I1	I2	J1
DEPTH TO LIMITING ZONE (IN)	48	50	50	27	48	30	48	46	44	36	54	36	60	53	52	64	50	38	54	52	68	45	48	60	58	46	48	40	50	54	38	46	50	48	24	60
POTENTIAL OWTDS SUITABILITY	CFG	CFG	CFG	CFLPP	CFG	CFLPP	CFG	FDLPP	FDLPP	FDLPP	CFG	FDLPP	FDG	CFG	CFG	FDG	CFG	FDLPP	CFG	CFG	FDG	FDLPP	CFG	FDG	CFG	FDLPP	CFG	FDLPP	CFG	CFG	FDLPP	FDLPP	CFG	CFG	ESM	FDG

FDG = FULL DEPTH GRAVITY
CFG = CAPPING FILL GRAVITY
FDLPP = FULL DEPTH LOW PRESSURE PIPE
CFLPP = CAPPING FILL LOW PRESSURE PIPE
ESM = ELEVATED SAND MOUND

0 50 100 200 Feet

SOIL FEASIBILITY PLAN

SUSSEX VENTURES INC.
THE CROSSINGS AT TRAP POND
LAUREL, DE 19956
TM: 232-19.00-50.01
Date: 1/26/2021 1 IN = 100 FT
Drawn: MJS Project: WARD002

N

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APPENDIX C
SOIL PROFILES

SCALED. ENGINEERING
20246 Coastal Highway
Rehoboth Beach, DE 19971
PH: (302) 632-7548
www.scaledengineering.com

Date: 11/25/2020 **Tax ID Number:** 232-19.00-50.01

Property Owner: Sussex Ventures Inc. **Project Number:** WARD002

Property Location: 16201 Adams Road, Laurel, DE 19956

Profile #: B1 **Slope:** 1-2% **Estimated Permeability:** 35mpi

Profile Type: **Soil Boring** ☐ **Test Pit** ☒ **GPS:** See Plot

		Colors		Mottles Desc.			
Horizon	Depth (in.)	Matrix	Mottles	Ab. S. Con.	Texture	Structure	Consistence
Ap	0-7	10yr 3/3			LS	m	fi
AB	7-11	10yr 3/3 10yr 3/4			LS	m	fi
EandBt1	11-25	2.5y 6/4	10yr 4/6	5% Lamellae	LS SL	m m	fr/fi fr
EandBt2	25-50	2.5y 6/4 7.5yr 4/6	(E 20%) (B+80%)		LS SL	m 2msbk	vfr fr
C	50-60	7.5yr 5/6	2.5y 6/2 5yr 6/8	C2P C2D	fSL	m	vfi

Soil Classification: Typic Paleudult **Relief:** Gently Sloping

Depth to Limiting Zone: 50"+ to Redox Features **Depth to Freewater:** 54"

Comments:

Soil Scientist: M. Josh Stalling

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20246 Coastal Highway
Rehoboth Beach, DE 19971
PH: (302) 632-7548
www.scaledengineering.com

Date: 11/25/2020 **Tax ID Number:** 232-19.00-50.01

Property Owner: Sussex Ventures Inc. **Project Number:** WARD002

Property Location: 16201 Adams Road, Laurel, DE 19956

Profile #: C1 **Slope:** 1-2% **Estimated Permeability:** 50 mpi

Profile Type: **Soil Boring** ☒ **Test Pit** ☐ **GPS:** See Plot

		Colors		Mottles Desc.			
Horizon	Depth (in.)	Matrix	Mottles	Ab. S. Con.	Texture	Structure	Consistence
Ap	0-6	10yr 4/3			LFS	m	fr
E and Bt	6-27	10yr 5/4	10yr 4/6	5% Lamellae	LFS SL	m m	vfr fr
E	27-42	2.5y 7/3			LFS	m	vfr
E and B't	42-50	10yr 5/6 2.5y 6/4	(SL 20%) (LFS)		SL LFS	m m	fr vfr
2Bt1	50-58	7.5yr 5/6	2.5y 7/2 5yr 6/8	C1P C2d	SCL	m	fi
2Bt2	58-72	5yr 5/4	2.5y 6/2 7.5yr 5/8	C2d C2P	CL	m	fi

Soil Classification: Typic Paleudult **Relief:** Gently Sloping

Depth to Limiting Zone: 50" to Redox Features **Depth to Freewater:** 37"

Comments:

Soil Scientist: M. Josh Stalley

SCALED. ENGINEERING
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Date: 11/25/2020 **Tax ID Number:** 232-19.00-50.01

Property Owner: Sussex Ventures Inc. **Project Number:** WARD002

Property Location: 16201 Adams Road, Laurel, DE 19956

Profile #: D1 **Slope:** 1-2% **Estimated Permeability:** 40 mpi

Profile Type: **Soil Boring** X **Test Pit** □ **GPS:** See Plot

		Colors		Mottles Desc.			
Horizon	Depth (in.)	Matrix	Mottles	Ab. S. Con.	Texture	Structure	Consistence
Ap	0-6	10yr 3/3			LS	m	fr
E_1	6-28	2.5y 5/4			LS	m	vfr
E_2	28-36	2.5y 6/4			LS	m	vfr
E_3	36-50	2.5y 6/4	10yr 5/6	C3d	LS	m	vfr
Bt	50-58	10yr 5/4	7.5yr 5/8	C2p	SL	m	fr
2C	58-72	7.5yr 5/6	2.5y 6/2 5yr 6/8	C2p C2d	fSL	m	fi

Soil Classification: Oxyaquic Paleudult **Relief:** backslope

Depth to Limiting Zone: 36" to Redox Conc. **Depth to Freewater:** 38"

Comments:

Soil Scientist: M. Josh Stalley

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Date: 11/25/2020 **Tax ID Number:** 232-19.00-50.01

Property Owner: Sussex Ventures Inc. **Project Number:** WARD002

Property Location: 16201 Adams Road, Laurel, DE 19956

Profile #: E1 **Slope:** 1-2% **Estimated Permeability:** 50 mpi

Profile Type: **Soil Boring** ☒ **Test Pit** ☐ **GPS:** See Plot

		Colors		Mottles Desc.			
Horizon	Depth (in.)	Matrix	Mottles	Ab. S. Con.	Texture	Structure	Consistence
Ap	0-6	10yr 4/3			LS	m	fr
E and Bt1	6-28	2.5y 5/4	7.5yr 4/6	5-10% Lamellae	LS SL	m m	vfr fr
E and Bt2	28-50	7.5yr 4/6 10yr 5/6	(B+ 75%) (E 25%)		SL+ LS	m m	fr fr
2C1	50-56	2.5y 5/4	7.5yr 5/8	c2p	SCL+	m	fr
2C2	56-72	2.5y 6/3	2.5y 7/1 7.5yr 6/8	c3d c2p	fSL+SCL	m	fi

Soil Classification: Typic Paleudult **Relief:** backslope

Depth to Limiting Zone: 50" to Redox Conc. **Depth to Freewater:** 68"

Comments:

Soil Scientist: M. Josh Stalley

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Date: 11/25/2020 **Tax ID Number:** 232-19.00-50.01

Property Owner: Sussex Ventures Inc. **Project Number:** WARD002

Property Location: 16201 Adams Road, Laurel, DE 19956

Profile #: F1 **Slope:** 1-2% **Estimated Permeability:** 50 mpi

Profile Type: **Soil Boring** ☐ **Test Pit** ☒ **GPS:** See Plot

		Colors		Mottles Desc.			
Horizon	Depth (in.)	Matrix	Mottles	Ab. S. Con.	Texture	Structure	Consistence
Ap	0-8	10yr 3/3			LS	m	fr
E and Bt	8-26	2.5y 5/3	7.5yr 4/6	5-10% Lamellae	LS SL	m m	fr/fi fr
Bt	26-45	7.5yr 4/6 10yr 5/6	2.5y 6/4	c2d	fSL + LfS (Lenses)	m	fr
2C1	45-50	7.5y 4/6	2.5y 6/2 7.5yr 5/8	c1p c2d	fSL	m	vfi
2C2	50-58	2.5y 6/4	7.5yr 5/8	c2p	SCL	m	fr
2Cg	58-72	2.5y 6/1	2.5y 6/4 5yr 5/8	m3d c2p	fSL	m	vfr

Soil Classification: Typic Paleudult **Relief:** backslope

Depth to Limiting Zone: 45" to Redox Features **Depth to Freewater:** 68"

Comments: Bt had discontinuous redox conc.

Soil Scientist: M. Josh Stalling

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Date: 11/25/2020 **Tax ID Number:** 232-19.00-50.01

Property Owner: Sussex Ventures Inc. **Project Number:** WARD002

Property Location: 16201 Adams Road, Laurel, DE 19956

Profile #: G1 **Slope:** 1-3% **Estimated Permeability:** 50 mpi

Profile Type: **Soil Boring** ☒ **Test Pit** ☐ **GPS:** See Plot

		Colors		Mottles Desc.			
Horizon	Depth (in.)	Matrix	Mottles	Ab. S. Con.	Texture	Structure	Consistence
Ap	0-6	10yr 4/3			LS	m	fr
BE	6-18	10yr 5/4			LfS	m	fr
E and Bt	18-48	10yr 5/6	7.5yr 4/6	20-30% Lamellae	LfS SL	m m	vfr fr
2C	48-62	2.5y 5/4	2.5y 6/1 7.5yr 6/8	C1d C2P	SCL+	m	fr/fi
2Cg	62-72	2.5y 6/2	10yr 6/8	C2P	fS + SCL	m	fi

Soil Classification: Lamellic Paleudult **Relief:** backslope

Depth to Limiting Zone: 48" +o Redox Features **Depth to Freewater:** 64"

Comments:

Soil Scientist: M. Josh Stalley

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Date: 11/25/2020 **Tax ID Number:** 232-19.00-50.01

Property Owner: Sussex Ventures Inc. **Project Number:** WARD002

Property Location: 16201 Adams Road, Laurel, DE 19956

Profile #: H1 **Slope:** 1-3% **Estimated Permeability:** 30 mpi

Profile Type: **Soil Boring** ☒ **Test Pit** ☐ **GPS:** See Plot

		Colors		Mottles Desc.			
Horizon	Depth (in.)	Matrix	Mottles	Ab. S. Con.	Texture	Structure	Consistence
Ap	0-6	10yr 3/3			LS	m	fr
BE	6-24	10yr 5/6			LS	m	fr/fi
E and Bt	24-38	10yr 6/6 10yr 4/6	(E 20%) (Bt 80%)		LS SL	m m	vfr fr
C1	38-58	10yr 7/4	10yr 5/8	m 3 p	LS	m	vfr
C2	58-72	2.5y 6/4	10yr 5/8	f 2 p	LS	m	vfr

Soil Classification: Oxyaquic Hapludult **Relief:** footslope

Depth to Limiting Zone: 38" to Redox Conc. **Depth to Freewater:** 43"

Comments:

Soil Scientist: M. Josh Stalley

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Date: 11/25/2020 **Tax ID Number:** 232-19.00-50.01

Property Owner: Sussex Ventures Inc. **Project Number:** WARD002

Property Location: 16201 Adams Road, Laurel, DE 19956

Profile #: I 1 **Slope:** 1-2% **Estimated Permeability:** 30 mpi

Profile Type: **Soil Boring** ☒ **Test Pit** ☐ **GPS:** See Plot

		Colors		Mottles Desc.			
Horizon	Depth (in.)	Matrix	Mottles	Ab. S. Con.	Texture	Structure	Consistence
Ap	0-6	10yr 2/1			LS	m	fr
BE	6-18	10yr 5/6			LFS	m	fr
E and Bt1	18-38	7.5yr 4/6 10yr 5/6	(B+75%) (E 25%)		SL LFS	m m	fr vfr
E and Bt2	38-48	10yr 6/4	7.5yr 4/6	20-30% Lamellae	LFS SL	m m	vfr fr
C	48-66	10yr 4/6 2.5y 6/4	2.5y 7/2 10yr 5/8	c2d,p c2d,p	LFS + SL	m	fr
Cg	66-72	2.5y 7/2	2.5y 6/4	m3d	LS	m	vfr

Soil Classification: Typic Paleudult **Relief:** backslope

Depth to Limiting Zone: 48" to Redox Features **Depth to Freewater:** 54"

Comments:

Soil Scientist: M. Josh Stalley

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Date: 11/25/2020 **Tax ID Number:** 232-19.00-50.01

Property Owner: Sussex Ventures Inc. **Project Number:** WARD002

Property Location: 16201 Adams Road, Laurel, DE 19956

Profile #: J1 **Slope:** 1-3% **Estimated Permeability:** 30 mp.

Profile Type: **Soil Boring** ☒ **Test Pit** ☐ **GPS:** See Plot

		Colors		Mottles Desc.			
Horizon	Depth (in.)	Matrix	Mottles	Ab. S. Con.	Texture	Structure	Consistence
Ap	0-6	10yr 3/3			LfS	m	fr
BE	6-14	10yr 5/6			LfS	m	vfr
E and Bt1	14-38	10yr 5/4	7.5yr 4/6	5-10% Lamellae	LfS SL	m m	vfr fr
E and Bt2	38-60	2.5y 6/4	7.5yr 4/6	20-30% Lamellae	LfS SL	m m	vfr fr
C	60-72	2.5y 6/3	10yr 5/8	c i p	LfS	m	vfr

Soil Classification: Lamellic Quartzipsamment **Relief:** backslope

Depth to Limiting Zone: 60" to Redox Conc **Depth to Freewater:** >72"

Comments:

Soil Scientist: M. Josh Stalley

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Date: 11/18/2020 **Tax ID Number:** 232-19.00-50.01

Property Owner: Sussex Ventures Inc. **Project Number:** WARD002

Property Location: 16201 Adams Road, Laurel, DE 19956

Profile #: A 2 **Slope:** 1-2% **Estimated Permeability:** 50mpi

Profile Type: **Soil Boring** ☒ **Test Pit** ☐ **GPS:** See Plot

		Colors		Mottles Desc.			
Horizon	Depth (in.)	Matrix	Mottles	Ab. S. Con.	Texture	Structure	Consistence
Ap	0-6	10yr 4/3			LfS	m	vfr
E and Bt	6-24	10yr 5/4	7.5yr 4/6	10% Lamellae	LfS SL	m m	vfr fr
Bt	24-32	10yr 4/6			SL	1ms bk	fr
E and B't	32-48	10yr 5/6 2.5y 6/4	(Bt 30-40%) (E)		SL LS	m m	vfr vfr
2Bt	48-60	7.5yr 5/6	2.5y 7/2 7.5yr 6/8	c2p c2d	vfSL + SCL	m	fi

Soil Classification: Typic Hapludult **Relief:** backslope

Depth to Limiting Zone: 48" to Redox Features **Depth to Freewater:** 37"

Comments: Auger refusal @ 60"

Soil Scientist: M. Josh Stalley

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20246 Coastal Highway
Rehoboth Beach, DE 19971
PH: (302) 632-7548
www.scaledengineering.com

Date: 11/18/2020 **Tax ID Number:** 232-19.00-50.01

Property Owner: Sussex Ventures Inc. **Project Number:** WARD002

Property Location: 16201 Adams Road, Laurel, DE 19956

Profile #: B2 **Slope:** 1-2% **Estimated Permeability:** 75 mpi

Profile Type: **Soil Boring** ☒ **Test Pit** ☐ **GPS:** See Plot

		Colors		Mottles Desc.			
Horizon	Depth (in.)	Matrix	Mottles	Ab. S. Con.	Texture	Structure	Consistence
Ap	0-8	10yr 3/3			LfS	m	fr
BE	8-27	2.5y 5/4			LfS	m	vfr
E	27-38	2.5y 6/4	10yr 6/8	f2p	LfS	m	vfr
2B+	38-50	7.5yr 5/6	5yr 5/8	e2d	SCL+	m	fr
2C	50-60	10yr 6/6	2.5y 7/2 5yr 6/8	c2p c2p	SCL+CL	m	fi

Soil Classification: Oxyaquic Paleudult **Relief:** backslope

Depth to Limiting Zone: 27" to Redox Con **Depth to Freewater:** 34"

Comments:

Soil Scientist: M. Josh Stalley

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PH: (302) 632-7548
www.scaledengineering.com

Date: 11/18/2020 **Tax ID Number:** 232-19.00-50.01

Property Owner: Sussex Ventures Inc. **Project Number:** WARD002

Property Location: 16201 Adams Road, Laurel, DE 19956

Profile #: C2 **Slope:** 1-2% **Estimated Permeability:** 60 mph

Profile Type: **Soil Boring** ☒ **Test Pit** ☐ **GPS:** See Plot

		Colors		Mottles Desc.			
Horizon	Depth (in.)	Matrix	Mottles	Ab. S. Con.	Texture	Structure	Consistence
Ap	0-8	10yr 3/3			fSL	2mgr	fr
E	8-18	2.5y 6/4			LfS	m	fr
Bt1	18-28	10yr 5/6			SCL	2msbk	fr
Bt2	28-46	10yr 5/4			SCL+	2msbk	fr
2C1	46-60	2.5y 6/4	2.5y 7/2 10yr 5/6	C3d C2d	vfS + SCL	m	fi
2C2	60-72	2.5y 5/6	10yr 6/8	C1d	LS	m	fr

Soil Classification: Typic Hapludult **Relief:** backslope

Depth to Limiting Zone: 46" to Redox Features **Depth to Freewater:** 53"

Comments:

Soil Scientist: M. Josh Stalley

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www.scaledengineering.com

Date: 11/18/2020 **Tax ID Number:** 232-19.00-50.01

Property Owner: Sussex Ventures Inc. **Project Number:** WARD002

Property Location: 16201 Adams Road, Laurel, DE 19956

Profile #: D 2 **Slope:** 1-2% **Estimated Permeability:** 50 mpi

Profile Type: **Soil Boring** ☒ **Test Pit** ☐ **GPS:** See Plot

		Colors		Mottles Desc.			
Horizon	Depth (in.)	Matrix	Mottles	Ab. S. Con.	Texture	Structure	Consistence
Ap	0-8	10yr 3/3			SL	2mgr	fr
BE	8-20	10yr 5/4			SL	m	fr
Bt1	20-30	10yr 5/6			SL/SCL	2msbk	fr
Bt2	30-42	7.5yr 5/6			SCL	2msbk	fr
BC	42-54	10yr 6/6			LFS+SL	m	fr
C1	54-60	10yr 5/4	10yr 6/6	C 3d	LFS	m	vfr
C2	60-72	10yr 6/4	10yr 6/8 2.5y 7/2	C 1P C 2d	LS	m	vfr

Soil Classification: Typic Hapludult **Relief:** backslope

Depth to Limiting Zone: 60" to Redox Features **Depth to Freewater:** 54"

Comments:

Soil Scientist: M. Josh Stalley

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Date: 11/25/2020 **Tax ID Number:** 232-19.00-50.01

Property Owner: Sussex Ventures Inc. **Project Number:** WARD002

Property Location: 16201 Adams Road, Laurel, DE 19956

Profile #: E2 **Slope:** 1-2% **Estimated Permeability:** 45 mpi

Profile Type: **Soil Boring** ☐ **Test Pit** ☒ **GPS:** See Plot

		Colors		Mottles Desc.			
Horizon	Depth (in.)	Matrix	Mottles	Ab. S. Con.	Texture	Structure	Consistence
Ap	0-8	10yr 4/3			LS	m	fr
E	8-17	2.5y 5/3			LS	2mpl	fr/fi
E and Bt	17-38	2.5y 5/3	10yr 4/6	15-20% Lamellae	LS SL	m m	vfr fr
Bt	38-46	10yr 5/6	2.5y 7/2 7.5yr 6/8	C 2 P C 2 D	fSL	2msbk	fr
C1	46-56	2.5y 6/4 10yr 5/6	2.5y 7/2 7.5yr 6/8	C 2 D, P C 2 D, P	LfS + fSL	m	fi
C2	56-72	2.5y 6/4	2.5y 7/2 7.5yr 5/8	C 2 D C 2 P	LfS	m	vfr

Soil Classification: Aquic Hapludult **Relief:** backslope

Depth to Limiting Zone: 38" to Redox Features **Depth to Freewater:** 55"

Comments:

Soil Scientist: M. Josh Stalling

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Date: 11/18/2020 **Tax ID Number:** 232-19.00-50.01

Property Owner: Sussex Ventures Inc. **Project Number:** WARD002

Property Location: 16201 Adams Road, Laurel, DE 19956

Profile #: F2 **Slope:** 1-3% **Estimated Permeability:** 45mpi

Profile Type: **Soil Boring** ☒ **Test Pit** ☐ **GPS:** See Plot

		Colors		Mottles Desc.			
Horizon	Depth (in.)	Matrix	Mottles	Ab. S. Con.	Texture	Structure	Consistence
Ap	0-8	10yr 4/3			LfS	m	vfr
BE	8-26	2.5y 5/4			LfS	m	vfr
B+	26-36	7.5yr 4/6			SL	m	fr
BC1	36-42	7.5yr 5/6			LfS	m	vfr
BC2	42-48	10yr 7/6			LfS	m	vfr
C	48-56	2.5y 7/4	10yr 7/8 2.5y 7/2	C2P C3d	LS	m	vfr
2B+	56-70	7.5yr 5/6	5yr 5/8	C2d	fSL	m	fi
2C	70-72	7.5yr 6/4	2.5y 6/2 7.5yr 5/8	C2P C2P	vfS	m	fi

Soil Classification: Arenic Hapludult **Relief:** Shoulder

Depth to Limiting Zone: 48" to Redox Features **Depth to Freewater:** 54"

Comments:

Soil Scientist: M. Josh Stalling

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Date: 11/18/2020 **Tax ID Number:** 232-19.00-50.01

Property Owner: Sussex Ventures Inc. **Project Number:** WARD002

Property Location: 16201 Adams Road, Laurel, DE 19956

Profile #: G-2 **Slope:** 1-3% **Estimated Permeability:** 45mpi

Profile Type: **Soil Boring** ☒ **Test Pit** ☐ **GPS:** See Plot

		Colors		Mottles Desc.			
Horizon	Depth (in.)	Matrix	Mottles	Ab. S. Con.	Texture	Structure	Consistence
Ap	0-8	10yr 4/3			LS	m	fr
Bw	8-30	2.5y 5/4			Lfs	m	vfr
BC	30-40	2.5y 6/4			Lfs	m	vfr
C	40-56	2.5y 7/4	7.5yr 5/8	f2p	Lfs	m	vfr
2Bt1	56-62	7.5yr 5/6	5yr 5/8	c2d	fSL+	m	fr/fi
2Bt2	62-68	7.5yr 5/8	2.5y 6/1 5yr 4/6	c2p c2d	SCL+	m	fi
2Cg	68-72	2.5y 6/1	5yr 5/8	c1p	CL+	m	vfi

Soil Classification: Typic Quartzipsamment, sandy over clayey **Relief:** backslope

Depth to Limiting Zone: 40" to Redox Conc **Depth to Freewater:** 36"

Comments:

Soil Scientist: M. Josh Stalley

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Date: 11/18/2020 **Tax ID Number:** 232-19.00-50.01

Property Owner: Sussex Ventures Inc. **Project Number:** WARD002

Property Location: 16201 Adams Road, Laurel, DE 19956

Profile #: H 2 **Slope:** 1-3 % **Estimated Permeability:** 60 mpi

Profile Type: **Soil Boring** ☒ **Test Pit** ☐ **GPS:** See Plot

		Colors		Mottles Desc.			
Horizon	Depth (in.)	Matrix	Mottles	Ab. S. Con.	Texture	Structure	Consistence
Ap	0-8	10yr 4/3			LfS	m	vfr
E and Bt1	8-30	2.5y 5/4	7.5yr 4/6	5-10% Lamellae	LfS SL	m m	vfr fr
E and Bt2	30-40	2.5y 6/4	10yr 4/6	5% Lamellae	LfS SL	m m	vfr fr
E and Bt3	40-46	2.5y 6/4 7.5yr 4/6	(E 30%) (Bt 70%)		LfS SL+	m 2msbk	vfr fr
2Bt	46-56	7.5yr 5/4 7.5yr 5/6	2.5y 6/2 5yr 4/8	C2P C2d,P	CL	2msbk	fr
2C	56-72	2.5y 6/3	10yr 7/6 2.5y 6/1	C2P An3d	vfSL + SCL	m	fr

Soil Classification: Typic Hapludult **Relief:** backslope

Depth to Limiting Zone: 46" to Redox Features **Depth to Freewater:** 63"

Comments:

Soil Scientist: M. Josh Stalley

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Date: 11/18/2020 **Tax ID Number:** 232-19.00-50.01

Property Owner: Sussex Ventures Inc. **Project Number:** WARD002

Property Location: 16201 Adams Road, Laurel, DE 19956

Profile #: I 2 **Slope:** 2-4% **Estimated Permeability:** Slow to Very Slow

Profile Type: **Soil Boring** ☒ **Test Pit** ☐ **GPS:** See Plot

		Colors		Mottles Desc.			
Horizon	Depth (in.)	Matrix	Mottles	Ab. S. Con.	Texture	Structure	Consistence
Ap	0-8	10yr 4/3			LfS	m	fr
Bw	8-24	2.5y 5/4			LfS	m	vfr
C	24-36	2.5y 7/3	10yr 6/6	f2p	LfS	m	vfr
2Bt	36-46	10yr 5/6	2.5y 6/1 7.5yr 5/8	C2p C2d	CL	m	fr
2Cg1	46-62	2.5y 6/1	7.5yr 6/8 2.5y 6/4	C2p M3d	(Lenses) vfS+CL	m	vfi
2Cg2	62-72	2.5y 6/2	7.5yr 6/8 10yr 7/4	C2p C2d	vfS, SCL, CL	m	fi

Soil Classification: Oxyaquic Paleudult **Relief:** footslope

Depth to Limiting Zone: 24" to Redox Conc **Depth to Freewater:** 30"

Comments: Boring in concave landscape. Avoiding Area. Recommend

Soil Scientist: M. Josh Stalling

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Date: 11/18/2020 **Tax ID Number:** 232-19.00-50.01

Property Owner: Sussex Ventures Inc. **Project Number:** WARD002

Property Location: 16201 Adams Road, Laurel, DE 19956

Profile #: A3 **Slope:** 1-2% **Estimated Permeability:** 45 mpi

Profile Type: **Soil Boring** ☒ **Test Pit** ☐ **GPS:** See Plot

		Colors		Mottles Desc.			
Horizon	Depth (in.)	Matrix	Mottles	Ab. S. Con.	Texture	Structure	Consistence
Ap	0-6	10yr 3/4			LFS	1mgr	fr
BE	6-26	10yr 6/6			LFS	m	vfr
Bt	26-42	7.5yr 4/6			fSL/SCL	1,2msbk	fr
BCt	42-50	10yr 6/4 10yr 6/6			LvfS+vfSL	m	fr
C1	50-62	2.5y 6/4	2.5y 7/2 10yr 5/6	C&D C&D	vfS	m	fr/fi
C2	62-72	10yr 6/6			LFS	m	fr

Soil Classification: Arenic Hapludult **Relief:** footslope

Depth to Limiting Zone: 50" to Redox Features **Depth to Freewater:** 54"

Comments:

Soil Scientist: M. Josh Stalling

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Date: 11/18/2020 **Tax ID Number:** 232-19.00-50.01

Property Owner: Sussex Ventures Inc. **Project Number:** WARD002

Property Location: 16201 Adams Road, Laurel, DE 19956

Profile #: B3 **Slope:** 1-3% **Estimated Permeability:** 45mp

Profile Type: **Soil Boring** ☒ **Test Pit** ☐ **GPS:** See Plot

		Colors		Mottles Desc.			
Horizon	Depth (in.)	Matrix	Mottles	Ab. S. Con.	Texture	Structure	Consistence
Ap	0-6	10yr 3/4			LfS	1mgr	fr
BE	6-28	10yr 5/4			LfS	m	fr
B+	28-48	10yr 6/6 7.5yr 4/6			SL/scL	m	fr
C	48-72	2.5y 6/4	10yr 6/8 2.5y 7/2	C2D C3d	vfS	m	fi

Soil Classification: Arenic Hapludult **Relief:** backslope

Depth to Limiting Zone: 48" to Redox Features **Depth to Freewater:** 46"

Comments:

Soil Scientist: M. Josh Stalley

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Date: 11/18/2020 **Tax ID Number:** 232-19.00-50.01

Property Owner: Sussex Ventures Inc. **Project Number:** WARD002

Property Location: 16201 Adams Road, Laurel, DE 19956

Profile #: C3 **Slope:** 1-2% **Estimated Permeability:** 60 mpi

Profile Type: **Soil Boring** ☒ **Test Pit** ☐ **GPS:** See Plot

		Colors		Mottles Desc.			
Horizon	Depth (in.)	Matrix	Mottles	Ab. S. Con.	Texture	Structure	Consistence
Ap	0-6	10yr 3/3			LfS	2mgr	fr
BE	6-16	10yr 5/4			LfS	m	vfr
B+	16-26	7.5yr 4/6			SCL	2msbk	fr
BC	26-44	7.5yr 5/8			LfS	m	vfr
C	44-48	7.5yr 6/4	2.5y 7/2 7.5yr 5/8	f2p C2p	LfS	m	vfr
2B+	48-54	7.5yr 4/6	2.5y 7/1 7.5yr 6/8	C2p C2d	SCL+	m	fr
2C	54-62	2.5y 6/4	2.5y 6/2 7.5yr 5/8	C2d C2p	vfS+SCL	m	fi
2Cg	62-72	2.5y 6/1	2.5y 7/4	C3d	vfS+vfSL	m	vfi

Soil Classification: Typic Hapludult **Relief:** backslope

Depth to Limiting Zone: 44" to Redox Features **Depth to Freewater:** 70"

Comments:

Soil Scientist: M. Josh Stalley

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Date: 11/25/2020 **Tax ID Number:** 232-19.00-50.01

Property Owner: Sussex Ventures Inc. **Project Number:** WARD002

Property Location: 16201 Adams Road, Laurel, DE 19956

Profile #: D3 **Slope:** 1-2% **Estimated Permeability:** 35 mpi

Profile Type: **Soil Boring** ☐ **Test Pit** ☒ **GPS:** See Plot

		Colors		Mottles Desc.			
Horizon	Depth (in.)	Matrix	Mottles	Ab. S. Con.	Texture	Structure	Consistence
Ap	0-7	10yr 3/3			LS	m	fr
E and Bt1	7-21	2.5y 5/4	10yr 4/6	5% Lamellae	LS	m	fr
Bt	21-42	7.5yr 4/6	10yr 5/4	LS Variegations	SL	m	fr
E and Bt2	42-53	10yr 5/6	7.5yr 4/6	20-30% Lamellae	LS SL	m m	fr fr
2C1	53-64	10yr 5/4 7.5yr 4/6	2.5y 7/4 7.5yr 5/8	c 2 d, p c 2 d, p	LfS fSL	m m	fr fi
2C2	64-70	7.5yr 5/6	2.5y 6/4	C 3 p	LcoS	m	vfr

Soil Classification: Typic Hapludult **Relief:** backslope

Depth to Limiting Zone: 53" to Redox Features **Depth to Freewater:** 65"

Comments:

Soil Scientist: M. Josh Stalley

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Date: 11/18/2020 **Tax ID Number:** 232-19.00-50.01

Property Owner: Sussex Ventures Inc. **Project Number:** WARD002

Property Location: 16201 Adams Road, Laurel, DE 19956

Profile #: E3 **Slope:** 2-4% **Estimated Permeability:** 50 mpi

Profile Type: **Soil Boring** ☒ **Test Pit** ☐ **GPS:** See Plot

		Colors		Mottles Desc.			
Horizon	Depth (in.)	Matrix	Mottles	Ab. S. Con.	Texture	Structure	Consistence
Ap	0-6	10yr 3/3			LS	m	fr
E and Bt1	6-24	2.5y 5/4			LFS + SL	m	fr
E and Bt2	24-46	2.5y 7/4	7.5yr 4/6	5% Lamellae	LFS SL	m m	vfr fr
Bt1	46-54	7.5yr 4/6			SCL+	2msbk	fr
Bt2	54-62	10yr 6/4	7.5yr 5/8	C1P	SCL	m	fr
C	62-72	2.5y 7/4	10yr 6/6 2.5y 7/2	C2 d C3 d	vFS + vFSL	m	fi

Soil Classification: Typic Paleudult **Relief:** backslope

Depth to Limiting Zone: 54" to Redox Conc **Depth to Freewater:** 62"

Comments:

Soil Scientist: M. Josh Stalley

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Date: 11/18/2020 **Tax ID Number:**

Property Owner: **Project Number:**

Property Location:

Profile #: F3 **Slope:** 2-4% **Estimated Permeability:** 45 mpi

Profile Type: **Soil Boring** ☒ **Test Pit** ☐ **GPS:**

		Colors		Mottles Desc.			
Horizon	Depth (in.)	Matrix	Mottles	Ab. S. Con.	Texture	Structure	Consistence
Ap	0-8	10yr 3/3			LfS	m	fr
E and Bt1	8-28	2.5y 5/4	7.5yr 4/6	10% Lamellae	LfS SL	m m	vfr fr
E and Bt2	28-46	2.5y 6/4	7.5yr 4/6	5% Lamellae	LS SL	m m	vfr fr
Bt1	46-60	7.5yr 4/6			SCL	2m sbk	fr
Bt2	60-66	10yr 6/4	2.5y 7/2 7.5yr 5/8	c2d c2p	SCL	m	fr/fi
C	66-72	2.5y 6/4	10yr 6/6	fid	LfS	m	vfr

Soil Classification: Typic Paleudult **Relief:** Shoulder

Depth to Limiting Zone: 60" to Redox Features **Depth to Freewater:** 68"

Comments:

Soil Scientist: M. Josh Stalley

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Date: 11/18/2020 **Tax ID Number:** 232-19.00-50.01

Property Owner: Sussex Ventures Inc. **Project Number:** WARD002

Property Location: 16201 Adams Road, Laurel, DE 19956

Profile #: G3 **Slope:** 1-2% **Estimated Permeability:** 45 mpi

Profile Type: **Soil Boring** ☒ **Test Pit** ☐ **GPS:** See Plot

		Colors		Mottles Desc.			
Horizon	Depth (in.)	Matrix	Mottles	Ab. S. Con.	Texture	Structure	Consistence
Ap	0-6	10yr 3/3			LS	m	fr
BE	6-24	2.5y 5/4			LS	m	vfr
E and Bt	24-40	7.5yr 4/6 2.5y 6/4	(Bt+ 60-70%) (E)		SL+ LS	1msbk m	fr vfr
Bt1	40-50	7.5yr 5/6			SCL	2msbk	fr
Bt2	50-56	10yr 6/4 7.5yr 5/6	2.5y 7/2 7.5yr 5/8	C2d, P C2d, P	SCL	2msbk	fr
C1	56-66	2.5y 6/4	2.5y 7/2 7.5yr 5/8	C2d C2P	FS+SCL	m	fr/fi
C2	66-72	7.5yr 5/6	2.5y 7/2 7.5yr 6/8	C2P C2d	LFS+SCL	m	fr

Soil Classification: Arenic Paleudult **Relief:** backslope

Depth to Limiting Zone: 50"+ Redox Features **Depth to Freewater:** 60"

Comments:

Soil Scientist: M. Josh Stalley

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Date: 11/18/2020 **Tax ID Number:** 232-19.00-50.01

Property Owner: Sussex Ventures Inc. **Project Number:** WARD002

Property Location: 16201 Adams Road, Laurel, DE 19956

Profile #: H3 **Slope:** 1-2% **Estimated Permeability:** 40 mpi

Profile Type: **Soil Boring** X **Test Pit** □ **GPS:** See Plot

		Colors		Mottles Desc.			
Horizon	Depth (in.)	Matrix	Mottles	Ab. S. Con.	Texture	Structure	Consistence
Ap	0-6	10yr 3/3			LS	m	vfr
E and Bt1	6-32	2.5y 5/4	7.5yr 4/6	<5% Lamellae	LFS	m	vfr
E and Bt2	32-42	2.5y 6/4	7.5yr 4/6	5% Lamellae	LS SL	m m	vfr fr
C	42-50	2.5y 7/4			LS	m	vfr
2C	50-72	10yr 6/4	2.5y 6/1 7.5yr 5/8	C 3 P C 2 P	SCL + CL	m	fr
					sandy over clayey		

Soil Classification: Lamellic Quartzipsamment **Relief:** backslope

Depth to Limiting Zone: 50" to Redox Features **Depth to Freewater:** >72"

Comments:

Soil Scientist: M. Josh Stalley

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Date: 11/25/2020 **Tax ID Number:** 232-19.00-50.01

Property Owner: Sussex Ventures Inc. **Project Number:** WARD002

Property Location: 16201 Adams Road, Laurel, DE 19956

Profile #: B4 **Slope:** 1-2% **Estimated Permeability:** 60 mpi

Profile Type: **Soil Boring** ☐ **Test Pit** ☒ **GPS:** See Plot

		Colors		Mottles Desc.			
Horizon	Depth (in.)	Matrix	Mottles	Ab. S. Con.	Texture	Structure	Consistence
Ap	0-8	10yr 3/3			LfS	m	fr
Bw	8-30	10yr 6/4			LfS	2mpl	fr/fi
BC	30-49	2.5y 6/4	7.5yr 6/8	C2P	LfS	m	fr
2C1	49-63	7.5yr 5/6	2.5y 6/2 5yr 6/8	C2P C2d	SCL	m	fi
2C2	63-72	10yr 5/6 2.5y 6/2	5yr 6/8 2.5y 6/4	C2P C2d,P	CL	m	vfi
					sandy over clayey		

Soil Classification: Oxyaquic Quartzipsamment, **Relief:** footslope

Depth to Limiting Zone: 30" to Redox Conc **Depth to Freewater:** 50"

Comments:

Soil Scientist: M. Josh Stalley

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Date: 11/18/2020 **Tax ID Number:** 232-19.00-50.01

Property Owner: Sussex Ventures Inc. **Project Number:** WARD002

Property Location: 16201 Adams Road, Laurel, DE 19956

Profile #: C4 **Slope:** 1-2% **Estimated Permeability:** 60 mph

Profile Type: **Soil Boring** ☒ **Test Pit** ☐ **GPS:** See Plot

		Colors		Mottles Desc.			
Horizon	Depth (in.)	Matrix	Mottles	Ab. S. Con.	Texture	Structure	Consistence
Ap	0-8	10yr 3/3			LfS	1mgr	fr
Bw1	8-22	2.5y 5/4			LfS	m	vfr
Bw2	22-36	2.5y 6/4			LfS	m	vfr
BC	36-42	2.5y 7/4	10yr 6/8	f,p	LfS	m	vfr
2C1	42-60	7.5yr 5/6	2.5y 6/1 5yr 6/8	c,p c,d	vfSL + SCL	m	fi
2C2	60-72	7.5yr 5/6 7.5yr 6/4	2.5y 6/1 5yr 6/8	c,d,p c,d,p	CL	m	vfi
					sandy over clayey		

Soil Classification: Oxyaquic Quartzipsamment **Relief:** footslope

Depth to Limiting Zone: 36" to Redox Conc. **Depth to Freewater:** 36"

Comments:

Soil Scientist: M. Josh Stalling

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Date: 11/18/2020 **Tax ID Number:** 232-19.00-50.01

Property Owner: Sussex Ventures Inc. **Project Number:** WARD002

Property Location: 16201 Adams Road, Laurel, DE 19956

Profile #: D 4 **Slope:** 1-3% **Estimated Permeability:** 55 mpi

Profile Type: **Soil Boring** ☒ **Test Pit** ☐ **GPS:** See Plot

		Colors		Mottles Desc.			
Horizon	Depth (in.)	Matrix	Mottles	Ab. S. Con.	Texture	Structure	Consistence
Ap	0-8	10yr 3/3			LfS	m	fr
E	8-28	2.5y 6/4			LS	m	vfr
E and Bt1	28-42	2.5y 6/4 7.5yr 4/6	E 30% B+ 70%		LfS fSL	m 2msbk	vfr fr
E and Bt2	42-52	2.5y 6/4 7.5yr 4/6	E 60-70% B+ 30-40%		LfS fSL	m m	vfr fr
C	52-64	2.5y 6/3	2.5y 6/1 10yr 5/6	C 3d C 2p	vfS	m	fi
2Cg	64-72	2.5y 6/1	7.5yr 6/8 2.5y 6/3	C 2p M 3d	SCL+	m	vfi

Soil Classification: Arenic Hapludult **Relief:** backslope

Depth to Limiting Zone: 52" to Redox Features **Depth to Freewater:** 54+

Comments:

Soil Scientist: M. Josh Stalley

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www.scaledengineering.com

Date: 11/18/2020 **Tax ID Number:** 232-19.00-50.01

Property Owner: Sussex Ventures Inc. **Project Number:** WARD002

Property Location: 16201 Adams Road, Laurel, DE 19956

Profile #: E4 **Slope:** 2-4% **Estimated Permeability:** 45 mpi

Profile Type: **Soil Boring** ☒ **Test Pit** ☐ **GPS:** See Plot

		Colors		Mottles Desc.			
Horizon	Depth (in.)	Matrix	Mottles	Ab. S. Con.	Texture	Structure	Consistence
Ap	0-12	10yr 3/3			LfS	1mgr	fr
BE1	12-18	10yr 4/4			LfS	m	vfr
BE2	18-30	2.5y 5/4			LfS	m	vfr
Bt	30-42	7.5yr 4/6			fSL	1msbk	fr
BCt	42-48	10yr 6/6	2.5y 6/4 7.5yr 4/6	C 2 d (SL) C 3 d	LfS + fSL	m	fr
CBt	48-62	2.5y 7/4	2.5y 7/2 7.5yr 4/6	C 2 d (SL 15%)	LfS + fSL	m	fr
C	62-72	2.5y 6/4	10yr 5/6	C 2 d	LS	m	vfr

Soil Classification: Arenic Hapludult **Relief:** backslope

Depth to Limiting Zone: 52" to Redox Features **Depth to Freewater:** 54"

Comments:

Soil Scientist: M. Josh Stalley

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Date: 11/18/2020 **Tax ID Number:** 232-19.00-50.01

Property Owner: Sussex Ventures Inc. **Project Number:** WARD002

Property Location: 16201 Adams Road, Laurel, DE 19956

Profile #: F4 **Slope:** 1-3% **Estimated Permeability:** 45mp'

Profile Type: **Soil Boring** ☒ **Test Pit** ☐ **GPS:** See Plot

		Colors		Mottles Desc.			
Horizon	Depth (in.)	Matrix	Mottles	Ab. S. Con.	Texture	Structure	Consistence
Ap	0-8	10yr 3/3			LfS	m	fr
BE	8-20	10yr 5/4			LfS	m	vfr
E and Bt1	20-42	2.5y 7/4	7.5yr 4/6	5% Lamellae	LfS	m	vfr
E and Bt2	42-58	7.5yr 4/6 2.5y 6/3	(SL 10%)		LvfS	m	fr/fi
2Bt	58-70	7.5yr 4/6	7.5yr 6/8	c2d	fSL	m	fr
2C	70-72	10yr 6/4	2.5y 6/2 7.5y 5/6	c2d c2d	SCL+	m	fr

Soil Classification: Arenic Paleudult **Relief:** backslope

Depth to Limiting Zone: 58" to Redox Conc **Depth to Freewater:** 66"

Comments:

Soil Scientist: M. Josh Stalley

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Date: 11/18/2020 **Tax ID Number:** 232-19.00-50.01

Property Owner: Sussex Ventures Inc. **Project Number:** WARD002

Property Location: 16201 Adams Road, Laurel, DE 19956

Profile #: G4 **Slope:** 1-3% **Estimated Permeability:** 35 mpi

Profile Type: **Soil Boring** ☒ **Test Pit** ☐ **GPS:** See Plot

		Colors		Mottles Desc.			
Horizon	Depth (in.)	Matrix	Mottles	Ab. S. Con.	Texture	Structure	Consistence
Ap	0-8	10yr 3/4			LfS	1mgr	fr
BE	8-20	2.5y 5/4			LfS	m	vfr
E and Bt	20-40	7.5yr 4/6 10yr 5/4	30-40% Bt E		SL LfS	m m	fr vfr
Bt	40-54	7.5yr 4/6	10yr 6/6	Texture Variegations	(Lenses) LfS + SL	1msbk	fr
BC	54-66	10yr 7/6	10yr 6/8	f2d	LfS	m	vfr
Cg	66-72	2.5y 6/2	7.5yr 6/8 2.5y 6/4	C2P M3d	LfS	m	vfr

Soil Classification: Arenic Hapludult **Relief:** backslope

Depth to Limiting Zone: 54" to Redox Conc **Depth to Freewater:** 66"

Comments:

Soil Scientist: M. Josh Stalley

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Date: 11/18/2020 **Tax ID Number:** 232-19.00-50.01

Property Owner: Sussex Ventures Inc. **Project Number:** WARD002

Property Location: 16201 Adams Road, Laurel, DE 19956

Profile #: C5 **Slope:** 1-2% **Estimated Permeability:** 45 mpi

Profile Type: **Soil Boring** ☒ **Test Pit** ☐ **GPS:** See Plot

		Colors		Mottles Desc.			
Horizon	Depth (in.)	Matrix	Mottles	Ab. S. Con.	Texture	Structure	Consistence
Ap	0-6	10yr 4/3			LS	lmgr	fr
EandBt1	6-30	10yr 5/4	10yr 4/6	10-15% Lamellae	LS SL	m m	vfr fr
EandBt2	30-48	2.5y 7/4	7.5yr 4/6	5-10% Lamellae	LfS SL	m m	vfr fr
2Bt	48-54	7.5yr 5/6			SCL	m	fr
2C	54-72	7.5yr 5/4 10yr 6/6	2.5y 6/2 7.5yr 5/8		fSL + SCL	m	fr

Soil Classification: Typic Paleudult **Relief:** backslope

Depth to Limiting Zone: 54" to Redox Features **Depth to Freewater:** >72"

Comments:

Soil Scientist: M. Josh Stalley

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Date: 11/25/2020 **Tax ID Number:** 232-19.00-50.01

Property Owner: Sussex Ventures Inc. **Project Number:** WARD002

Property Location: 16201 Adams Road, Laurel, DE 19956

Profile #: D5 **Slope:** 2-4% **Estimated Permeability:** 35 mpi

Profile Type: **Soil Boring** ☐ **Test Pit** ☒ **GPS:** See Plot

		Colors		Mottles Desc.			
Horizon	Depth (in.)	Matrix	Mottles	Ab. S. Con.	Texture	Structure	Consistence
Ap	0-9	10yr 4/3			LS	m	fr
E	9-23	2.5y 6/4			LS	2mpl	fi
EandBt1	23-34	2.5y 5/4	7.5yr 4/6	10-15% Lamellae	LS SL	m m	fr/fi fr
EandBt2	34-56	Cyr 6/6	7.5yr 4/6	30-40% Lamellae	LS SL	m m	x fr fr
2Bt1	56-64	7.5yr 4/6			fSL	m	fi
2Bt2	64-72	7.5yr 5/6	2.5y 7/4 5yr 6/8	c z p c z d	fSL	m	fi

Soil Classification: Arenic Paleudult **Relief:** backslope

Depth to Limiting Zone: 64" to Redox Features **Depth to Freewater:** >72"

Comments:

Soil Scientist: M. Josh Stalley

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Date: 11/18/2020 **Tax ID Number:** 232-19.00-50.01

Property Owner: Sussex Ventures Inc. **Project Number:** WARD002

Property Location: 16201 Adams Road, Laurel, DE 19956

Profile #: ES **Slope:** 2-4% **Estimated Permeability:** 45 mph

Profile Type: **Soil Boring** ☒ **Test Pit** ☐ **GPS:** See Plot

		Colors		Mottles Desc.			
Horizon	Depth (in.)	Matrix	Mottles	Ab. S. Con.	Texture	Structure	Consistence
Ap	0-6	10yr 4/3			LS	1 vgr	fr
EandBt	6-32	10yr 5/4	7.5yr 4/6	5-10% Lamellae	LfS SL	m m	vfr fr
BCt	32-60	2.5y 7/4	10yr 4/6	<5% Lamellae	LfS	m	vfr
2Bt1	60-68	7.5yr 4/6	7.5yr 4/4	m3d	SCL	2msbk	fr
2Bt2	68-72	7.5yr 5/6	2.5y 7/2 7.5yr 5/8	C1P C1d	SCL	m	fr

Soil Classification: Typic Paleudult **Relief:** Shoulder

Depth to Limiting Zone: 68" to Redox Features **Depth to Freewater:** >72"

Comments:

Soil Scientist: M. Josh Stalley

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Date: 11/18/2020 **Tax ID Number:** 232-19.00-50.01

Property Owner: Sussex Ventures Inc. **Project Number:** WARD002

Property Location: 16201 Adams Road, Laurel, DE 19956

Profile #: F5 **Slope:** 2-4% **Estimated Permeability:** 45 mpi

Profile Type: **Soil Boring** X **Test Pit** □ **GPS:** See Plot

		Colors		Mottles Desc.			
Horizon	Depth (in.)	Matrix	Mottles	Ab. S. Con.	Texture	Structure	Consistence
Ap	0-6	10yr 4/3			LFS	m	fr
BE	6-22	2.5y 5/4			LFS	m	fr
E and Bt	22-30	2.5y 5/4	7.5yr 4/6	5% Lamellae	LFS SL	m m	vfr fr
BC+	30-46	2.5y 7/4	10yr 4/6	<5% Lamellae	LFS	m	vfr
C	46-54	2.5y 6/3	7.5yr 6/8	C3P	LFS	m	fr
2C	54-72	10yr 6/4	2.5y 6/1 7.5yr 6/8	C2P C2P	SCL+	m	fr
					sandy over clayey		

Soil Classification: Lamellic Quartzipsamment **Relief:** footslope

Depth to Limiting Zone: 46" to Redox Conc **Depth to Freewater:** 68"

Comments: 2C had lenses.

Soil Scientist: M. Josh Stalley

APPENDIX D
INFILTRATION TEST LOGS

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Date: 12/23/2020 **Tax ID Number:** 232-19.00-50.01

Property Owner: Sussex Ventures Inc. **Project Number:** WARD002

Property Location: 16201 Adams Road, Laurel, DE 19956

Test #: INF-1 **Test Depth:** 18" **Soil Texture at Testing Depth:** LfS

Test Type: **Single Ring** ☒ **Double Ring** ☐ **GPS:** Adjacent to H1

Analysis Method: **Falling Head** ☒ **Constant Head** ☐ **Ring Diameter:** 12"

Saturation Period Start Time: 755 **Weather:** Sunny; 40-49 degrees

Test Period 1 Start Time: 1155 **Test Period 2 Start Time:** N/A

TIME:	MEASURE (IN):	DROP (IN):	TIME:	MEASURE (IN):	DROP (IN):
1155	6	N/A			
1205	4-3/8	1-5/8			
1215	4-1/2	1-1/2			
1225	4-1/2	1-1/2			
1235	4-1/2	1-1/2			
1245	4-1/2	1-1/2			
1255	4-1/2	1-1/2			

RESULT: **1.5"/10min = 6.67 mpi**

Comments:

Soil Scientist: M. Josh Stalley

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Date: 12/23/2020 **Tax ID Number:** 232-19.00-50.01

Property Owner: Sussex Ventures Inc. **Project Number:** WARD002

Property Location: 16201 Adams Road, Laurel, DE 19956

Test #: INF-2 **Test Depth:** 18" **Soil Texture at Testing Depth:** LS & SL

Test Type: **Single Ring** ☒ **Double Ring** ☐ **GPS:** Adjacent to E2

Analysis Method: **Falling Head** ☒ **Constant Head** ☐ **Ring Diameter:** 24"

Saturation Period Start Time: 905 **Weather:** Sunny; 40-49 degrees

Test Period 1 Start Time: 1305 **Test Period 2 Start Time:** N/A

TIME:	MEASURE (IN):	DROP (IN):	TIME:	MEASURE (IN):	DROP (IN):
1305	6	N/A			
1315	5	1			
1325	5-1/4	3/4			
1335	5-1/4	3/4			
1345	5-1/4	3/4			
1355	5-1/4	3/4			
1405	5-1/4	3/4			

RESULT: **0.75"/10min = 13.33 mpi**

Comments:

Soil Scientist: M. Josh Stalling

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Date: 12/23/2020 **Tax ID Number:** 232-19.00-50.01

Property Owner: Sussex Ventures Inc. **Project Number:** WARD002

Property Location: 16201 Adams Road, Laurel, DE 19956

Test #: INF-3 **Test Depth:** 12" **Soil Texture at Testing Depth:** LfS

Test Type: **Single Ring** ☒ **Double Ring** ☐ **GPS:** Adjacent to B3

Analysis Method: **Falling Head** ☒ **Constant Head** ☐ **Ring Diameter:** 24"

Saturation Period Start Time: 830 **Weather:** Sunny; 40-49 degrees

Test Period 1 Start Time: 1230 **Test Period 2 Start Time:** N/A

TIME:	MEASURE (IN):	DROP (IN):	TIME:	MEASURE (IN):	DROP (IN):
1230	6	N/A			
1240	4-3/4	1-1/4			
1250	4-3/4	1-1/4			
1300	4-7/8	1-1/8			
1310	4-7/8	1-1/8			
1320	4-7/8	1-1/8			
1330	4-7/8	1-1/8			

RESULT: **1.125"/10min = 8.89 mpi**

Comments:

Soil Scientist: M. Josh Stalling

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Date: 12/23/2020 **Tax ID Number:** 232-19.00-50.01

Property Owner: Sussex Ventures Inc. **Project Number:** WARD002

Property Location: 16201 Adams Road, Laurel, DE 19956

Test #: INF-4 **Test Depth:** 12" **Soil Texture at Testing Depth:** LfS

Test Type: **Single Ring** ☒ **Double Ring** ☐ **GPS:** Adjacent to B4

Analysis Method: **Falling Head** ☒ **Constant Head** ☐ **Ring Diameter:** 12"

Saturation Period Start Time: 930 **Weather:** Sunny; 40-49 degrees

Test Period 1 Start Time: 1340 **Test Period 2 Start Time:** N/A

TIME:	MEASURE (IN):	DROP (IN):	TIME:	MEASURE (IN):	DROP (IN):
1340	6	N/A			
1350	4-5/8	1-3/8			
1400	4-5/8	1-3/8			
1410	4-5/8	1-3/8			
1420	4-5/8	1-3/8			
1430	4-5/8	1-3/8			
1440	4-5/8	1-3/8			

RESULT: **1.375"/10min = 7.27 mpi**

Comments:

Soil Scientist: M. Josh Stalley

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Date: 12/23/2020 **Tax ID Number:** 232-19.00-50.01

Property Owner: Sussex Ventures Inc. **Project Number:** WARD002

Property Location: 16201 Adams Road, Laurel, DE 19956

Test #: INF-5 **Test Depth:** 24" **Soil Texture at Testing Depth:** LS & SL

Test Type: **Single Ring** ☒ **Double Ring** ☐ **GPS:** Adjacent to D5

Analysis Method: **Falling Head** ☒ **Constant Head** ☐ **Ring Diameter:** 24"

Saturation Period Start Time: 1000 **Weather:** Sunny; 40-49 degrees

Test Period 1 Start Time: N/A **Test Period 2 Start Time:** **N/A**

TIME:	MEASURE (IN):	DROP (IN):	TIME:	MEASURE (IN):	DROP (IN):

RESULT: **N/A**

Comments: Test was abandoned due to excessive rate. Water was infiltrating 1.5" / 4 minutes. Test was not consistent with other results.

Soil Scientist: M. Josh Stalling

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Date: 12/23/2020 **Tax ID Number:** 232-19.00-50.01

Property Owner: Sussex Ventures Inc. **Project Number:** WARD002

Property Location: 16201 Adams Road, Laurel, DE 19956

Test #: INF-6 **Test Depth:** 24" **Soil Texture at Testing Depth:** LfS & SL

Test Type: **Single Ring** ☒ **Double Ring** ☐ **GPS:** Adjacent to F4

Analysis Method: **Falling Head** ☒ **Constant Head** ☐ **Ring Diameter:** 12"

Saturation Period Start Time: 1025 **Weather:** Sunny; 40-49 degrees

Test Period 1 Start Time: 1425 **Test Period 2 Start Time:** N/A

TIME:	MEASURE (IN):	DROP (IN):	TIME:	MEASURE (IN):	DROP (IN):
1425	6	N/A			
1435	4-7/8	1-1/8			
1445	4-7/8	1-1/8			
1455	4-7/8	1-1/8			
1505	4-7/8	1-1/8			
1515	4-7/8	1-1/8			
1525	4-7/8	1-1/8			

RESULT: **1.1.25"/10min = 8.89 mpi**

Comments:

Soil Scientist: M. Josh Stalley

Pepper Branch

Eagle Way

Open Space

Open Space

Eagle Way

Eagle Way

Open Space

Open Space

Open Space

Open Space

Open Space

Sussex County Road 437-A / Adams Road

Delaware Route 24

N

W

E

S

THE CROSSINGS

Proposed Subdivision Summary

The Crossings– Single Family Homes

The Crossings is proposed as a low-density subdivision, with restrictions, for single-family, stick-built homes. The site is presently zoned AR-1, Agricultural/Residential by the Sussex County Planning & Zoning Department and is currently farmland. The application proposes subdividing 39 acres into 39 lots (cluster design) while maintaining approximately 30% of open space. The property in located on Adams Rd, Broad Creek Hundred, in Sussex County.

The soils on this site are feasible for on-site septic systems. On-site wells are also proposed for this subdivision. Roads are planned to be built to county specifications. On-site storm water will be diverted to storm water management areas shown in future sections of this booklet. A tree buffer is planned that will buffer neighboring properties and Rt 24.

The Crossings

OVERVIEW

The Crossings is proposed as a 39 lot community on approximately 39 +/- acres. The site is located east of Laurel at the intersection of Laurel Rd & Adams Rd. Being near Laurel, this proposed subdivision is designed ideally to provide housing for 1st time home buyers. With shopping, restaurants, and commercial center areas just a short drive away, it appears to be a good location for a housing community where the local workforce can raise a family.

The subdivision application is requesting to subdivide 39 acres into 39 lots with a cluster design. The cluster design requested is superior to that of a conventional subdivision by providing approximately 12 acres of open space (30+ %). This open space will allow residents an area for walking trails, passive recreation, as well as providing a buffer between homes. The proposed size and density of this project better fits with the overall character of the community than one of higher density and less open space.

CRITERIA

Sussex County regulations require that developers consider seventeen (17) criteria prior to submission of any subdivision request. Each of these criteria has been given careful consideration. In addition to the consideration of the criteria, several experts and professionals have been consulted. This list includes DelDOT employees, soil scientists, environmental scientists, storm-water design professionals, civil engineers, and road construction contractors.

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

This site fits adjacent to Laurel Rd and other area farmland A twenty foot (20) buffer is planned on the South side of the proposed subdivision parcel. Experience has shown that a buffer of evergreen trees provides a more effective buffer since these types of trees keep their foliage throughout the year. The goal of a buffer is to block or minimize undesirable elements such as prevailing winds, roadway traffic, excessive noise or lighting, etc. Since this site is mostly clear, these trees will create an effective buffer from vehicular traffic, noise and lights. What is a buffer expected to achieve? As defined, a buffer is used to prevent the damaging or undesirable effects of one land use on another, such as farmland and residential subdivisions. If the uses are the same, they would not be considered undesirable nor would there be negative impacts. This being said, the proposed buffer as shown on the rendering and proposed plans to be located along the west and south of the project would be very effective. Requiring a buffer between the development lots and similar lots on Adams Rd seems to be unnecessary since the use is the same. Families, friends, and neighbors would look forward to the opportunity to purchase homes near one another. If they choose to incorporate a fence, buffer, etc between the two lots, the homeowner should have that choice and option to do so, but not be mandated to do

so. The rear of the site is a wooded parcel owned by DNREC and will almost certainly remain wooded.

2. Minimal use of wetlands and flood plains.

Coastal & Estuarine Research (Evelyn Maurmeyer, PhD) conducted a wetland delineation study and determined that a small area, .07 acres, within the wooded section of the site is wetlands. There are no plans to disturb the wetlands or any of the wooded areas.

3. Preservation of natural and historic features.

The natural feature of this parcel is a gentle rolling field. This will be preserved by moving a minimum amount of soil.

4. Preservation of open space and scenic views.

The concept plan calls for a significant amount (30+%) of open space. Current views to the north and west is the edge of an area owned by DNREC.

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

There are no plans to remove any of the wooded area at the rear of the property. This will provide an ideal buffer for the development and minimize any disturbance to the natural habitat. The final road design will incorporate a minimum movement of soil and maintain current grade to the extent possible. It is anticipated that final grades will be changed very little.

6. Screening of objectionable features from neighboring properties and roadway.

While there are few objectionable features visible on neighboring properties, the planting of trees on the proposed buffer will limit the views of the neighboring roadway. This tree buffer will also provide a wind buffer as well as a landscape border.

7. Provision for water supply.

Water supply will be from on-site wells.

8. Provision for sewage disposal.

Sewage disposal is proposed to be by on-site septic systems. We have received a letter from DNREC (enclosed) stating that the site is feasible for on-site septic systems.

9. Prevention of pollution of surface and groundwater.

The project design has a system of swales that forces the surface water (rain runoff) to be diverted to designated storm-water management areas (shown on the plans) where it will be slowly released into Pepper's Branch at a controlled rate.

10. Minimization of erosion and sedimentation, changes in groundwater levels, increased rates of runoff, potential for flooding, and maximize groundwater recharge.

This subdivision will greatly reduce erosion and sedimentation, have little impact on ground water levels, decrease the rate of runoff, decrease the potential for flooding and maximize groundwater recharge. Erosion and sedimentation will be reduced since water from this site will not leave as fast as it does currently. It will be slowed by the grassed swales and storm-water controls. Because of the storm-water design, there is a significant decrease in any potential flooding. Groundwater recharge will be increased since the on-site storm water will be kept on site longer and seep slowly back into the earth. The tree buffer will also reduce wind erosion. Each of these areas listed above will be positively impacted by this project.

11. Provision for safe vehicular and pedestrian movement within the site and adjacent ways.

The interior roads are proposed to be built to county specifications. A speed limit of 15 miles per hour is proposed within the development. The proposed entrance is located on Adams Rd, which is categorized by DELDOT as a local rd. With the walking trails we are proposing within the open space, and the project's close proximity to Trap Pond State Park, we are requesting to build the interior street to include a walking path as part of the street design.

12. Effect of property values.

The proposed deed restrictions (enclosed) will provide an attractive well-maintained community. With proposed land/home packages from $249,000 and up, this project will have a positive effect on property values in the area.

13. Preservation and conservation of farmland.

By approving this project, more lots will be available, therefore some of the market pressure to create additional homes on neighboring farmland will be decreased, thus tending to preserve farmland.

14. Effect on schools, public buildings, etc.

The major effect on schools will be an increase in the amount of tax revenue that is generated from this property. Laurel School District, as well as Sussex County, will reap significant increase in tax revenue from the homes that will be built on this site.

15. Effect on area roadways and public transportation.

There will be a small increase in traffic on Adams Rd as well as Laurel Rd. This increase will not change the classification of the road. The proposed entrance is visible on Adams Road from over 1000 feet in both directions.

16. Compatibility with other area land uses.

The Trap Pond area is not an industrial or commercial area. It is composed of homes and farmland. This subdivision will be very compatible with other land uses.

17. Effect on area waterways.

Pepper's Branch is located to the rear of the subject parcel. With the proposed subdivision in place, erosion and runoff will be significantly reduced and water quality will be improved since most water will be kept on the property longer because of the storm water design

A system of grassy swales will capture the storm-water runoff and direct it to approved storm-water management areas. These storm-water management areas will be able to slow the water and allow it to be discharged at a controlled rate. Based on the soil testing completed on this site, the soils are extremely sandy and will provide for ideal drainage. A feasibility study has been conducted and approved by DNREC for on-site septic systems. Included in the preliminary plan, we have designed approximately 12 acres of open space, 30% of the total project. This open space will provide buffers from neighboring properties. We are proposing to build the roads on this site to county specifications.

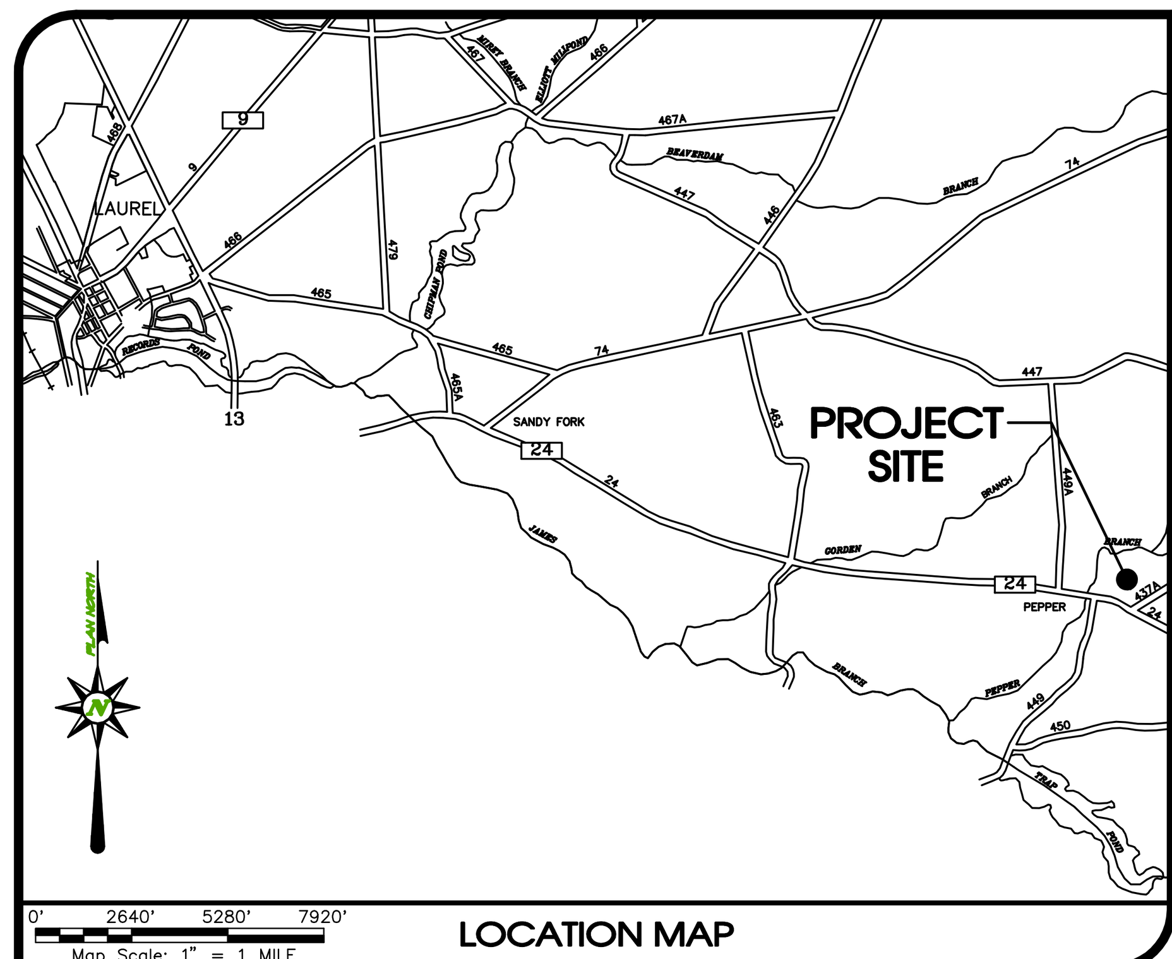
As mentioned earlier, it is anticipated homeowners in this community will include nurses, school teachers, public safety personnel as well as many other types of individuals. This development has been designed with local Sussex County residents in mind.

HOMES

Local residents desire lots and homes that are reasonably priced, yet restricted to preserve long term values. In the current economic market, affordable homes are somewhat difficult to find. This project would allow many people who currently rent to purchase a new home, and ultimately take a step towards financial prosperity. I anticipate lot prices to be $45,000-$55,000, with homes selling from $249,000 - $275,000. These price points seem to be consistent with the current real estate market sales. With historically low mortgage rates, this subdivision will allow an opportunity for many people who currently rent homes to purchase a home and maintain the same housing payment while building equity at the same time. I have submitted restrictions for this community that allow stick-built, but do NOT allow manufactured homes. An architectural review is also provided to maintain styling and aesthetics within the community. These restrictions provide for 1200 square foot minimum homes. These homes will certainly increase property values in the area. Included in the packet are several photos/renderings of proposed homes in this development. It is our hope that this site will provide a community where affordable housing in the Laurel area can be achieved.

CLOSING

In closing, the proposed subdivision application is a low density, single-family community in a country setting. This request is for a lot density that is significantly lower than the county code allows. We have positively addressed the criteria in 99-9C of the subdivision code. We are planning to help form a homeowner's association to be responsible for maintenance of the streets, buffers, storm-water areas, and other common areas. The subdivision will be a restricted community and will have a positive effect on property values. We respectfully request that you approve this subdivision application since it meets the criteria for development and will provide for more affordable housing for Sussex County families.



LOCATION MAP

PLAN LEGEND

- EXISTING PROPERTY BOUNDARY
- EXISTING ADJACENT LOT LINES
- EXISTING EDGE OF PAVEMENT
- EXISTING CENTERLINE OF ROAD
- EXISTING TREE LINE
- EXISTING WETLANDS LIMITS
- EXISTING BUILDING
- BUILDING RESTRICTION LINE
- PROPOSED EDGE OF PAVEMENT
- PROPOSED LOT LINES
- PROPOSED RIGHT-OF-WAY BOUNDARY
- PROPOSED CENTERLINE OF ROAD
- PROPOSED UTILITY EASEMENT
- SUPPLEMENTAL CONTOUR (1' INTERVAL)
- INDEX CONTOUR (5' INTERVAL)
- EXISTING PAVEMENT STRIPING
- EXISTING FLOODZONE LIMITS
- EXISTING UTILITY POLE
- EXISTING SIGN
- IRON ROD FOUND
- CONCRETE MONUMENT FOUND
- PIPE SET
- POINT

SITE DATA and ZONING SCHEDULE

TAX PARCEL No.:	232-19.00-50.01
PROPERTY ADDRESS:	16201 ADAMS ROAD, LAUREL, DE 19956
NET DEVELOPMENT AREA:	39.026 Acres
EXISTING NUMBER OF LOTS:	ONE (1)
EXISTING SITE USE:	RESIDENTIAL/AGRICULTURAL
PROPOSED NUMBER OF LOTS:	THIRTY NINE (39)
PROPOSED SITE USE:	SINGLE-FAMILY HOME SUBDIVISION
EXISTING ZONING:	AR-1 (AGRICULTURAL/RESIDENTIAL)
INVESTMENT LEVEL AREA:	LEVEL FOUR (4)

NO TRANSPORTATION IMPROVEMENT DISTRICTS (TIDs) IN THE PROXIMITY OF THE PROJECT

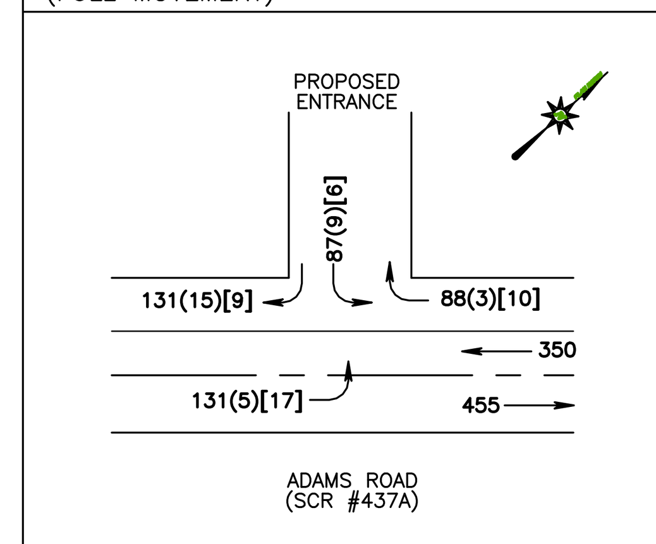
ORDINANCE ITEM	REQUIREMENT:	PROVIDED:
MINIMUM LOT AREA	21,780 Sq. Ft.	23,713 Sq. Ft. (AVG)
MINIMUM LOT WIDTH	100 Ft.	100 Ft.
MINIMUM LOT DEPTH	100 Ft.	100 Ft.
MINIMUM SETBACKS:		
FRONT	30 Ft.	30 Ft.
SIDE	15 Ft.	15 Ft.
REAR	20 Ft.	20 Ft.
MAXIMUM BUILDING HEIGHT	42 Ft./3 Stories	42 Ft./3 Stories
SEWER SERVICE	PRIVATE SEPTIC	PRIVATE SEPTIC
WATER SERVICE	PRIVATE WELL	PRIVATE WELL

PROPERTY OWNER/DEVELOPER

SUSSEX VENTURES, INC.
25051 WARD FARM LANE
MILLSBORO, DE 19966
302.841.3263

TRIP GENERATION - ADAMS ROAD (SCR #437A)

(FULL MOVEMENT)



TRAFFIC GENERATION DIAGRAM
TRIPS PER DAY (VEHICLES IN A.M.) [P.M. PEAK HOUR]

ROAD TRAFFIC DATA:

FUNCTIONAL CLASSIFICATION – S-437A (ADAMS ROAD) – LOCAL
POSTED SPEED LIMIT – 50 MPH
AADT = 805 TRIPS (FROM 2019 DelDOT TRAFFIC SUMMARY)
10-YR PROJECTED AADT = 1.20 x 805 TRIPS = 966 TRIPS
10-YR PROJECTED AADT + SITE ADT = 1,338 TRIPS
TRAFFIC PATTERN GROUP – 7 (FROM 2019 DelDOT TRAFFIC SUMMARY)
PEAK HOUR = 13.70% x 1,338 = 184 TRIPS

SITE TRIPS GENERATED:

SOURCE: ITE TRIP GENERATION MANUAL 10th EDITION
39 SINGLE FAMILY DETACHED UNITS (210)

ONE ENTRANCE – FULL MOVEMENT
DESIGN VEHICLE: SU-30
39 SINGLE FAMILY DETACHED UNITS
WEEKDAY = 437 TRIPS (218 IN/219 OUT)
SATURDAY = 405 TRIPS (202 IN/203 OUT)
SUNDAY = 281 TRIPS (140 IN/141 OUT)

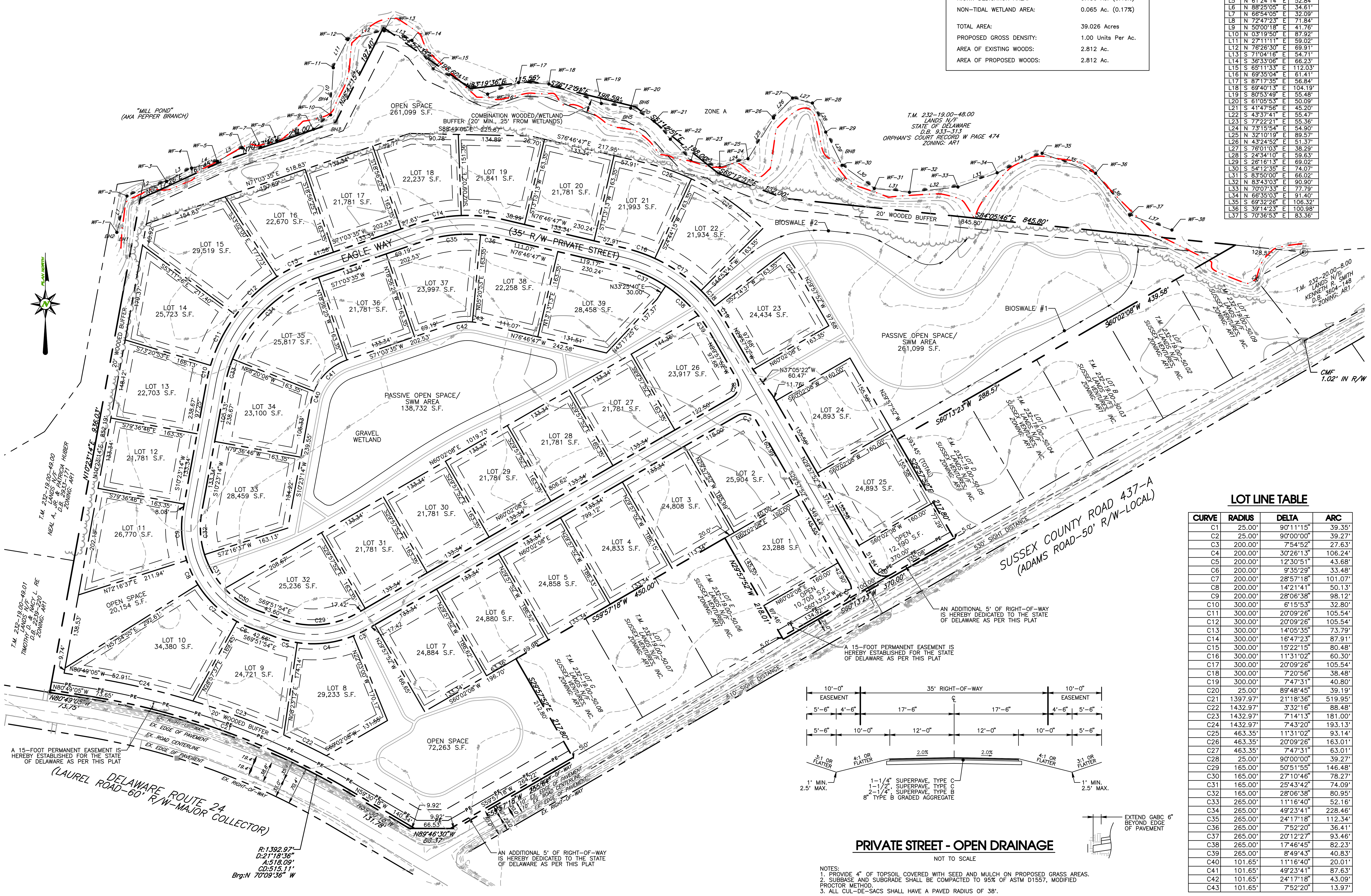
TOTAL ADT FOR SUBDIVISION (WEEKDAY) = 437 TRIPS
DIRECTIONAL DISTRIBUTION:
60% TO AND FROM THE WEST: 262 TRIPS
(20 A.M. PEAK) [25 P.M. PEAK]
40% TO AND FROM THE EAST: 175 TRIPS
(12 A.M. PEAK) [16 P.M. PEAK)
5.00% TRUCKS & BUSES x 437 = 22 TRIPS

PROPERTY AREA	
LOT AREA:	21.780 Ac. (55.81%)
RIGHT-OF-WAY AREA:	2.736 Ac. (7.00%)
OPEN SPACE AREA:	11.929 Ac. (30.57%)
WOODED BUFFER/PERMANENT EASEMENT AREA:	2.360 Ac. (6.05%)
R.O.W. DEDICATION AREA:	0.156 Ac. (0.40%)
NON-TIDAL WETLAND AREA:	0.065 Ac. (0.17%)
TOTAL AREA:	39.026 Acres
PROPOSED GROSS DENSITY:	1.00 Units Per Ac.
AREA OF EXISTING WOODS:	2.812 Ac.
AREA OF PROPOSED WOODS:	2.812 Ac.

WETLANDS LINE TABLE

BEGIN @ CONC. MON. FOUND
S 34°55'02" W 76.01' TO L1

LINE	BEARING	DISTANCE
L1	N 15°42'06" E	70.31'
L2	N 69°46'46" E	78.66'
L3	N 61°48'13" E	52.84'
L4	N 75°30'38" E	49.75'
L5	N 61°24'14" E	52.84'
L6	N 88°25'05" E	34.61'
L7	N 66°54'05" E	32.09'
L8	N 72°47'23" E	71.84'
L9	N 50°00'18" E	41.76'
L10	N 03°19'50" E	87.92'
L11	N 27°11'11" E	59.02'
L12	N 76°26'30" E	69.91'
L13	S 71°04'16" E	54.71'
L14	S 36°33'06" E	66.23'
L15	S 65°11'33" E	112.03'
L16	N 69°35'04" E	61.41'
L17	S 87°17'35" E	56.84'
L18	S 69°40'13" E	104.19'
L19	S 80°53'49" E	55.48'
L20	S 61°05'53" E	50.09'
L21	S 41°47'56" E	45.20'
L22	S 43°37'41" E	55.47'
L23	S 77°22'21" E	55.36'
L24	N 73°15'54" E	54.90'
L25	N 32°10'19" E	89.57'
L26	N 43°24'52" E	51.37'
L27	S 76°01'03" E	38.29'
L28	S 24°34'10" E	59.63'
L29	S 26°16'13" E	69.02'
L30	S 54°12'35" E	74.07'
L31	S 83°50'00" E	66.02'
L32	N 83°43'03" E	90.90'
L33	N 70°07'33" E	77.79'
L34	N 66°35'03" E	91.40'
L35	S 69°32'26" E	106.32'
L36	S 39°14'23" E	100.98'
L37	S 70°36'53" E	83.36'



PRIVATE STREET - OPEN DRAINAGE

NOT TO SCALE

NOTES:
1. PROVIDE 4" OF TOPSOIL COVERED WITH SEED AND MULCH ON PROPOSED GRASS AREAS.
2. SUBBASE AND SUBGRADE SHALL BE COMPACTED TO 95% OF ASTM D1557, MODIFIED PROCTOR METHOD.
3. ALL CUL-DE-SACS SHALL HAVE A PAVED RADIUS OF 38'.

LOT LINE TABLE

CURVE	RADIUS	DELTA	ARC
C1	25.00'	90°11'15"	39.35'
C2	25.00'	90°00'00"	39.27'
C3	200.00'	7°54'52"	27.63'
C4	200.00'	30°26'13"	106.24'
C5	200.00'	12°30'51"	43.68'
C6	200.00'	9°35'29"	33.48'
C7	200.00'	28°57'18"	101.07'
C8	200.00'	14°21'41"	50.13'
C9	200.00'	28°06'38"	98.12'
C10	300.00'	6°15'53"	32.80'
C11	300.00'	20°09'26"	105.54'
C12	300.00'	20°09'26"	105.54'
C13	300.00'	14°05'35"	73.79'
C14	300.00'	16°47'23"	87.91'
C15	300.00'	15°22'15"	80.48'
C16	300.00'	11°31'02"	60.30'
C17	300.00'	20°09'26"	105.54'
C18	300.00'	7°20'56"	38.48'
C19	300.00'	7°47'31"	40.80'
C20	25.00'	89°48'45"	39.19'
C21	1397.97'	21°18'36"	519.95'
C22	1432.97'	3°32'16"	88.48'
C23	1432.97'	7°14'13"	181.00'
C24	1432.97'	7°43'20"	193.13'
C25	463.35'	11°31'02"	93.14'
C26	463.35'	20°09'26"	163.01'
C27	463.35'	7°47'31"	63.01'
C28	25.00'	90°00'00"	39.27'
C29	165.00'	50°51'55"	146.48'
C30	165.00'	27°10'46"	78.27'
C31	165.00'	25°43'42"	74.09'
C32	165.00'	28°06'38"	80.95'
C33	265.00'	11°16'40"	52.16'
C34	265.00'	49°23'41"	228.46'
C35	265.00'	24°17'18"	112.34'
C36	265.00'	7°52'20"	36.41'
C37	265.00'	20°12'27"	93.46'
C38	265.00'	17°46'45"	82.23'
C39	265.00'	8°49'43"	40.83'
C40	101.65'	11°16'40"	20.01'
C41	101.65'	49°23'41"	87.63'
C42	101.65'	24°17'18"	43.09'
C43	101.65'	7°52'20"	13.97'

GENERAL NOTES

1. THE PROJECT SITE IS KNOWN AS THE CROSSINGS, (T.P. 232-19.00-50.01), AND IS LOCATED AT THE NORTHWEST CORNER OF THE ADAMS ROAD (SCR 437A) AND DELAWARE ROUTE 24 INTERSECTION IN LAUREL, DE.
2. THE PROPERTY BOUNDS, EXISTING FEATURES AND TOPOGRAPHIC INFORMATION SHOWN ON THIS PLAN IS THE RESULT OF A FIELD SURVEY BY MILLER-LEWIS, INC., 1560 MIDDLEFORD ROAD, SEAFORD, DELAWARE 19973. TOPOGRAPHY IS BASED ON NAVD88 AND NORTH REFERENCE IS DELAWARE STATE PLANE COORDINATE SYSTEM NAD83.
3. ALL PROPOSED STORMWATER MANAGEMENT FACILITIES ARE TO BE MAINTAINED BY THE DEVELOPER UNTIL SUCH TIME AS A HOMEOWNERS ASSOCIATION CAN PROVIDE FOR SAID MAINTENANCE.
4. ALL SUBDIVISION LOTS SHALL BE ACCESSED FROM THE INTERIOR SUBDIVISION STREETS ONLY. NO DIRECT ACCESS SCR 437A SHALL BE PERMITTED.
5. THIS PLAN DOES NOT VERIFY TO THE LOCATION AND/OR EXISTENCE OF EASEMENTS OR RIGHT-OF-WAYS CROSSING SUBJECT PROPERTY AS NO TITLE SEARCH WAS PROVIDED.
6. THE CONTRACTOR SHALL ENSURE THAT ALL NECESSARY PERMITS AND APPROVALS HAVE BEEN OBTAINED PRIOR TO COMMENCEMENT OF ANY SITE CONSTRUCTION ACTIVITIES.
7. ALL CONTRACTORS WORKING ON THIS PROJECT SHALL COMPLY WITH THE REQUIREMENTS OF THE DELAWARE EROSION AND SEDIMENT CONTROL HANDBOOK (LATEST EDITION).
8. CONSTRUCTION MATERIALS AND PROCEDURES SHALL FOLLOW THE SUSSEX COUNTY ENGINEERING DEPARTMENT SPECIFICATIONS AND STANDARD DRAWINGS (LATEST EDITION).
9. EXISTING SUBSURFACE UTILITY INFORMATION INDICATED IS BASED UPON VISUAL FIELD INSPECTION BY MILLER-LEWIS, INC. SUCH INFORMATION CONCERNING THE SIZE, LOCATION, DEPTH, QUANTITY, ETC. OF SUBSURFACE UTILITIES IS APPROXIMATE IN NATURE AND HAS BEEN OBTAINED AS AN AID IN THE PROJECT DESIGN. THE INFORMATION PROVIDED IS REPRESENTATIVE OF SUBSURFACE CONDITIONS ONLY AT LOCATIONS AND DEPTHS WHERE SUCH INFORMATION WAS OBTAINED. THERE IS NO EXPRESSED OR IMPLIED AGREEMENT THAT UTILITY SIZE, LOCATION, DEPTH, QUANTITY, ETC. AS SHOWN EXISTS BETWEEN EXPLORED LOCATIONS. ACCORDINGLY, UTILITY INFORMATION SHOWN SHOULD NOT BE RELIED UPON FOR CONSTRUCTION PURPOSES. IT IS INCUMBENT UPON THE CONTRACTOR TO VERIFY THE SIZE, LOCATION, DEPTH, QUANTITY, ETC. OF ALL UTILITIES BEFORE EXCAVATION.
10. BASED ON THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) FLOOD INSURANCE RATE MAP (FIRM) 100029 0440 K, MAP NUMBER 10005C0440K, DATED MARCH 16, 2015, THIS PROPERTY IS LOCATED IN A ZONE "X"-UNSHADED WHICH IS AN AREA DETERMINED TO BE OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOODPLAIN AND A ZONE A, WHICH IS A SPECIAL FLOOD HAZARD AREA SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD.
11. THE WETLANDS BOUNDARY SHOWN WAS DELINEATED BY COASTAL & ESTUARINE RESEARCH, INC.
12. ALL FIRE LANES, FIRE HYDRANTS AND FIRE DEPARTMENT CONNECTIONS SHALL BE MARKED IN ACCORDANCE WITH THE DELAWARE STATE FIRE PREVENTION REGULATIONS.
13. ALL CUL-DE-SACS ARE TO HAVE A 38' PAVED RADIUS. NO PARKING PERMITTED ON CUL-DE-SAC.
14. AUTOMATIC SPRINKLERS AREA NOT PROPOSED FOR ANY STRUCTURE.
15. ALL PROPOSED BUILDING CONSTRUCTION SHALL BE WOOD FRAME, TYPE II (000), NFPA 101 OCCUPANCY SHALL BE STORAGE, LOW & ORDINARY HAZARD.
16. ALL PROPOSED LOT LINES SUBJECT TO EASEMENTS FOR UTILITY, STORMWATER CONSTRUCTION AND/OR MAINTENANCE. UNLESS OTHERWISE NOTED ON THE PLANS, EASEMENTS AS FOLLOWS:
FRONT LOT LINES – 10 FEET
SIDE LOT LINES – 5 FEET
REAR LOT LINES – 10 FEET
17. IN ACCORDANCE WITH THE DELAWARE STATE FIRE PREVENTION REGULATIONS PART V, CHAPTER 4, SECTION 4-1.1, THE DEVELOPER SHALL PROVIDE, TO THE EMERGENCY DISPATCH CENTER HAVING JURISDICTION, A PLOT PLAN OF THE DEVELOPMENT SHOWING EACH LOT LOCATION. THE DEVELOPER SHALL ALSO ASSIGN NUMBERS TO ALL HOMES IN A CONSECUTIVE MANOR AND HAVE PLACED THE ASSIGNED NUMBER IN A READILY VISIBLE LOCATION ON EACH HOME TO ELIMINATE CONFUSION IN THE EVENT THAT AN EMERGENCY VEHICLE IS NEEDED.
18. THIS PROPERTY IS LOCATED IN THE VICINITY OF LAND USED PRIMARILY FOR AGRICULTURAL PURPOSES ON 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 CHEMICALS AND NIGHTTIME FARM OPERATIONS. THE USE AND ENJOYMENT OF PROPERTY IS EXPRESSLY CONDITIONED ON ACCEPTANCE OF ANY ANNOYANCE OR INCOVENIENCE WHICH MAY RESULT FROM SUCH NORMAL AGRICULTURAL USES AND ACTIVITIES.
19. ALL PROPOSED LANDSCAPE BUFFERS ARE TO BE MAINTAINED BY THE OWNER/DEVELOPER UNTIL SUCH TIME AS A HOMEOWNERS ASSOCIATION CAN PROVIDE FOR SAID MAINTENANCE.

DELDOT SITE GENERAL NOTES

LAST REVISED: MARCH 21, 2019

1. ALL ENTRANCES SHALL CONFORM TO THE DELAWARE DEPARTMENT OF TRANSPORTATION'S (DELDOT'S) CURRENT DEVELOPMENT COORDINATION MANUAL AND SHALL BE SUBJECT TO ITS APPROVAL.
2. NO LANDSCAPING SHALL BE ALLOWED WITHIN THE RIGHT-OF-WAY UNLESS THE PLANS ARE COMPLIANT WITH SECTION 3.7 OF THE DEVELOPMENT COORDINATION MANUAL.
3. SHRUBBERY, PLANTINGS, SIGNS AND/OR OTHER VISUAL BARRIERS THAT COULD OBSTRUCT THE SIGHT DISTANCE OF A DRIVER PREPARING TO ENTER THE ROADWAY ARE PROHIBITED WITHIN THE DEFINED DEPARTURE SIGHT TRIANGLE AREA ESTABLISHED ON THIS PLAN. IF THE ESTABLISHED DEPARTURE SIGHT TRIANGLE AREA IS OUTSIDE THE RIGHT-OF-WAY OR PROJECTS ONTO AN ADJACENT PROPERTY OWNER'S LAND, A SIGHT EASEMENT SHOULD BE ESTABLISHED AND RECORDED WITH ALL AFFECTED PROPERTY OWNERS TO MAINTAIN THE REQUIRED SIGHT DISTANCE.
4. UPON COMPLETION OF THE CONSTRUCTION OF THE SIDEWALK OR SHARED-USE PATH ACROSS THIS PROJECT'S FRONTAGE AND PHYSICAL CONNECTION TO ADJACENT EXISTING FACILITIES, THE DEVELOPER, THE PROPERTY OWNERS OR BOTH ASSOCIATED WITH THIS PROJECT, SHALL BE RESPONSIBLE TO REMOVE ANY EXISTING ROAD TIE-IN CONNECTIONS LOCATED ALONG ADJACENT PROPERTIES, AND RESTORE THE AREA TO GRASS. SUCH ACTIONS SHALL BE COMPLETED AT DELDOT'S DISCRETION, AND IN CONFORMANCE WITH DELDOT'S DEVELOPMENT COORDINATION MANUAL.
5. PRIVATE STREETS CONSTRUCTED WITHIN THIS SUBDIVISION SHALL BE MAINTAINED BY THE DEVELOPER, THE PROPERTY OWNERS WITHIN THIS SUBDIVISION OR BOTH (TITLE 17 .131). DELDOT ASSUMES NO RESPONSIBILITIES FOR THE FUTURE MAINTENANCE OF THESE STREETS.
6. THE SIDEWALK SHALL BE THE RESPONSIBILITY OF THE DEVELOPER, THE PROPERTY OWNERS OR BOTH WITHIN THIS SUBDIVISION. THE STATE OF DELAWARE ASSUMES NO RESPONSIBILITY FOR THE FUTURE MAINTENANCE FOR THE SIDEWALK.
7. LOTS WILL BE PERMITTED TO HAVE ACCESS POINTS THAT COMPLY WITH THE DEVELOPMENT COORDINATION MANUAL (DCM) SPACING REQUIREMENTS OF CHAPTER 1 AND LIMITATIONS ON NUMBER OF ACCESS POINTS ESTABLISHED IN DCM CHAPTER 7. HORSESHOE DRIVEWAYS AND SECONDARY ENTRANCES REQUIRE ADDITIONAL DELDOT REVIEW AND SEPARATE PERMITTING, RESTRICTIONS AS DESCRIBED IN THE DCM CHAPTER 7 MAY PROHIBIT SOME SECONDARY ENTRANCE REQUESTS FROM BEING GRANTED.
8. TO MINIMIZE RUTTING AND EROSION OF THE ROADSIDE DUE TO ON-STREET PARKING, DRIVEWAY AND BUILDING LAYOUTS MUST BE CONFIGURED TO ALLOW FOR VEHICLES TO BE STORED IN THE DRIVEWAY BEYOND THE RIGHT-OF-WAY, WITHOUT INTERFERING WITH SIDEWALK ACCESS AND CLEARANCE.
9. THE DEVELOPER SHALL BE REQUIRED TO FURNISH AND PLACE RIGHT-OF-WAY MONUMENTS IN ACCORDANCE WITH DELDOT'S DEVELOPMENT COORDINATION MANUAL.
10. THE DEVELOPER SHALL BE REQUIRED TO FURNISH AND PLACE RIGHT-OF-WAY MARKERS TO PROVIDE A PERMANENT REFERENCE FOR RE-ESTABLISHING THE RIGHT-OF-WAY AND PROPERTY CORNERS ON LOCAL AND HIGHER ORDER FRONTAGE ROADS. RIGHT-OF-WAY MARKERS SHALL BE SET AND/OR PLACED ALONG THE FRONTAGE ROAD RIGHT-OF-WAY AT PROPERTY CORNERS AND AT EACH CHANGE IN RIGHT-OF-WAY ALIGNMENT IN ACCORDANCE WITH SECTION 3.2.4.2 OF THE DEVELOPMENT COORDINATION MANUAL.

SUSSEX CONSERVATION DISTRICT CERTIFICATE

PLANNING COMMISSION CERTIFICATE

RECOMMENDED FOR APPROVAL BY THE PLANNING COMMISSION OF SUSSEX COUNTY ON THIS ________________ DAY OF ________________ 20___.

SECRETARY (ATTEST) ________________________

COUNTY COUNCIL PRESIDENT ________________________

OWNER CERTIFICATE

I HEREBY CERTIFY THAT I AM THE EQUITABLE OWNER OF THE PROPERTY DESCRIBED AND SHOWN ON THIS PLAN, THAT THE PLAN WAS MADE AT MY DIRECTION, THAT I ACKNOWLEDGE THE SAME TO BE MY ACT AND DESIRE THE PLAN TO BE RECORDED AS SHOWN IN ACCORDANCE WITH ALL APPLICABLE LAWS AND REGULATIONS

SUSSEX VENTURES, INC.
25051 WARD FARM LANE
MILLSBORO, DE 19966
Phone: 302.841.3263
DATE

WETLANDS CERTIFICATION

I, CERTIFY THAT THIS PROPERTY HAS BEEN EXAMINED FOR WETLANDS/WATERS OF THE UNITED STATES IN ACCORDANCE WITH CRITERIA FOUND IN THE 1987 U.S. ARMY CORPS OF ENGINEERS' WETLAND DELINEATION MANUAL AND ASSOCIATED GUIDANCE MEMORANDA. THE DELINEATION HERE SHOWN, IN MY BEST PROFESSIONAL JUDGEMENT, ACCURATELY DEPICTS WETLANDS/WATERS OF THE UNITED STATES BOUNDARIES PRESENT WITHIN THE SUBJECT PROPERTY BOUNDS. NO STATE WETLANDS ARE PRESENT WITHIN THE SUBJECT PROPERTY BOUNDS.

EVELYN MAURMEYER
COASTAL & ESTUARINE RESEARCH, INC.
P.O. BOX 674
LEWES, DE 19958
302.645.9610
DATE

REVISIONS
No.: | DATE: | DESCRIPTION: | BY:

I HEREBY CERTIFY THAT THIS PLAN HAS BEEN PREPARED UNDER MY SUPERVISION AND TO THE BEST OF MY KNOWLEDGE COMPLIES WITH THE APPLICABLE ORDINANCES OF SUSSEX COUNTY AND THE LAWS OF THE STATE OF DELAWARE.

DESIGN PROFESSIONAL DATE

APPROVED BY: J.C.W. | DESIGNED BY: K.T.S. | DRAWN BY: K.T.S. | LAYER LIST: B-02

SCALE IN FEET (1" = 100')

ONLY PLANS INCORPORATING A RAISED PROFESSIONAL SEAL ARE CONSIDERED TO BE OFFICIAL AND RELIED UPON BY THE USER. THIS PLAN HAS BEEN PREPARED SPECIFICALLY FOR THE CLIENT AND PROJECT DESIGNATED HEREON. ANY MODIFICATION, REVISION, DUPLICATION OR USE WITHOUT WRITTEN CONSENT OF THE KERCHER GROUP, INC. IS PROHIBITED BY LAW.

OWNER/APPLICANT: SUSSEX VENTURES, INC.
25051 WARD FARM LANE
MILLSBORO, DE 19966
Phone: 302.841.3263

PARCEL INFORMATION: T.P.: 232-19.00-50.01
DEED REF: 5193-39

RECORD PLAN
THE CROSSINGS
BROAD CREEK HUNDRED – SUSSEX COUNTY – DELAWARE

THE KERCHER GROUP, INC.
CONSULTING • SYSTEMS • ENGINEERING
37385 REHOBOTH AVE., UNIT 11 – REHOBOTH BEACH, DELAWARE 19971
302.854.9062 (Voice) 302.854.9064 (Fax) www.kerchergroup.com

JOB No: 20-0401
PLAN DATE: Feb. 9, 2021
SHEET No.: R1

THE CROSSINGS Fri, May 7, 2021 (18:19)

Aerial showing "The Crossings" site

Proposed Buffer

Green Giant Arborvitae

The Crossings

Proposed Restrictions

Lots 1-39

1. All lots shall be used exclusively for residential purposes and limited to one single family dwelling on any lot.
2. All dwellings shall be of new construction with a minimum of one thousand, two hundred (1200) square feet of living space (exclusive of garages, porches, decks, etc.) for a single-level dwelling, and shall have on a substantial portion of the structure, a minimum roof pitch of 5/12. Any multi-level dwelling shall contain a minimum total square footage of eighteen hundred (1800) square feet, and shall have, on a substantial portion of the structure, a minimum roof pitch of 6/12. In a multi-level dwelling, overall square footage calculations will be based on a four foot knee wall (cape cod style only). All homes shall have a minimum of a 2 car attached garage. Any steps, porches or decks on the front of dwellings must have a masonary structure (cement/brick/etc.)for a base.
3. All homes shall be stick-frame homes. No building, structure, fence, wall, swimming pool or other erection or improvements of any kind shall be commenced, erected, maintained, or used, nor shall any addition to or change or alterations therein, or in the use thereof, be made upon any of the lands conveyed by this deed, no matter what purpose or use, until complete and comprehensive plans and specifications, prepared by a competent residential draftsman, showing the nature, kind, shape, height, materials, elevation, foundation and footing plans, location of such building as well as proposed septic and well location shall have been submitted to and approved in writing by the developer/association. The developer/association shall have the right to refuse to approve any plans or specifications which are not suitable or desirable, in its or their opinion, for aesthetic, safety, health or any other reason, and in so passing upon such plans or specifications, the developer shall have the right to take into consideration such factors which in its or their opinion would affect the desirability or suitability of such proposed improvements. All homes must be built to BOCA code specifications. No mobile homes, or double wide manufactured homes shall be permitted to be placed on any lot.

4. No more than one outbuilding (i.e. sheds), excluding a detached garage and dog house/pen shall be placed on an individual lot. Any shed or outbuildings must be approved by the developer/association prior to any placement or construction on lots. No small metal kit-type sheds are permitted.
5. The only animals permitted are customary household pets and are not to be raised for commercial purposes. Pets shall be kept under the control of the owner at all times and shall not maintain objectionable noise or odor.
6. Inoperable or unlicensed vehicles, or other junked objects (cars, trucks, lawn tractors, etc.) shall not be stored or parked on any lots unless in an enclosed garage. No vehicle with more than two axles may be parked on any lot without written approval of the developer/association.
7. Once construction of any building has begun, the exterior portion shall be finished within six months of commencement.
8. Prior to any construction, a 12" culvert must be installed at the entrance to each lot. All driveways must be covered with stone, millings, cement, or blacktop within one year of occupancy. No seashell driveways are permitted.
9. It shall be the responsibility of each owner to prevent the development of any unclean, unsightly, and unkempt conditions of buildings or grounds upon a lot which will tend to substantially decrease the attractiveness of these parcels. No obnoxious or offensive activity shall be permitted upon any parcel, nor shall anything be done which may cause embarrassment, discomfort, and annoyance or nuisance to owners of other lots.
10. Lots may not be subdivided in such a way as to create an additional parcel.
11. The minimum set-back for building construction shall be thirty-five (35) feet for the front, fifteen (15) for the sides, and twenty (20) feet for the rear. Any auxiliary structures (sheds, garages, etc) shall be in compliance with Sussex County setback codes and guidelines.
12. Fences may be a maximum of three (3) feet in height in the front and may be six (6) feet in height from the rear of the house to the back property line.
13. All fuel tanks must be buried or shielded from view.
14. Except during construction, no advertising sign(s) may be placed on any property. Real Estate signs shall be exempt from this restriction.
15. Burn barrels, as well as burning of leaves, branches, roots, trash, etc. is strictly prohibited.

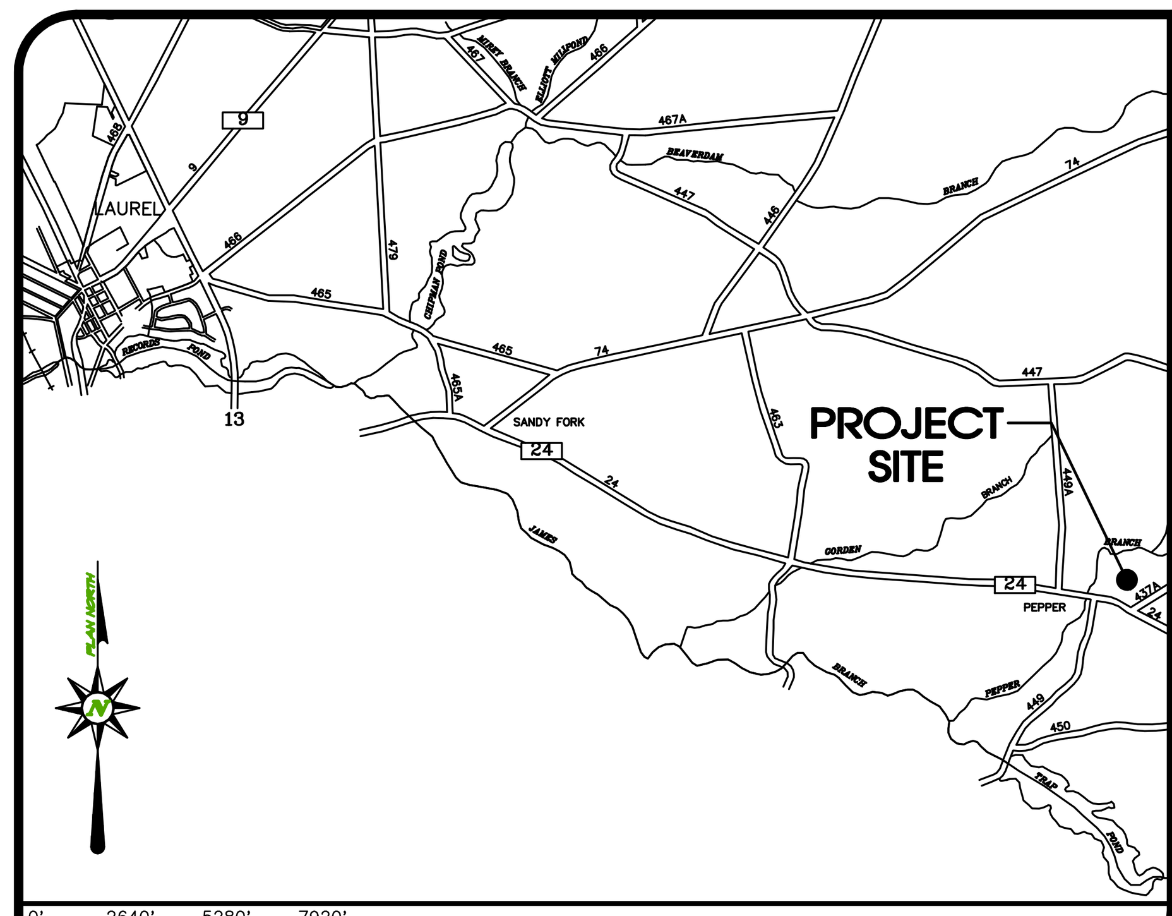
16. These restrictions and covenants may be changed only by the agreement of the owners of at least 75% of the lots covered by these restrictions.
17. Any restriction contained herein shall be null and void if it is in conflict with any law or regulation of the state or county.
18. Lot owners covered under these restrictions shall individually and collectively have the right, power, and authority to enforce the restrictions and covenants that run with the land and are contained herein. If enforcement is required, said property owners, their successors or assigns, shall recover from the offending party, the costs, expenses, and fees incurred in the enforcement.
19. All lot owners shall place septic drain field and well as per master septic plan except in cases where this is not possible because of DNREC regulations. If it is not possible to place septic drain field in accordance with master plan, site evaluation provided by developer will become invalid. If this occurs, a new site evaluation must be done at the lot owner's expense in an area agreed upon by the developer/association.
20. Hunting and discharging of firearms shall be prohibited on all lots.
21. When ½ of the lots in The Crossings have been sold, or earlier as determined by the developer, a Homeowner's Association will be formed which shall have the authority to assess dues and enforce restrictions. All owners of lots in this subdivision shall become members of the Meadow Ridge Homeowners Association and agree to pay such dues and annual assessments as shall be voted by a majority of the members of said Association. In addition to the annual assessment or other assessments, the Developer hereby establishes an initial assessment to be paid by the purchaser upon conveyance of each lot from the Developer. The amount of such initial assessment is set at $400.00. The Developer may use these funds from the initial assessments to pay the costs of maintaining the Common Areas until the transfer of the street and Common areas to the Association. Annual HOA assessment shall be $200/yr subject to future HOA policy. Once the subdivision streets have obtained county approval, the Homeowner's Association shall assume ownership and responsibility for the maintenance of the subdivision streets, stormwater management area(s), forested buffer(s), and all common areas and a deed will be recorded transferring ownership of the streets & common areas to the Homeowner's Association. Membership in the Homeowner's

Association is required by all lots covered under these restrictions. Each lot owner has (1) vote in any association voting process.

21. The following property subject to these restrictions shall be exempted from the assessments, dues, charges, and liens created herein:

    1. All properties dedicated and devoted to public use.
    2. All Common Areas.
    3. All lots owned by the Developer, its successors, and assigns and not sold or leased by the Developer, its successors or assigns, including lots or parcels leased for utilities.

This property is located in the vicinity of land used primarily for agricultural purposes on 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.



LOCATION MAP

PLAN LEGEND

- EXISTING PROPERTY BOUNDARY
- EXISTING ADJACENT LOT LINES
- EXISTING EDGE OF PAVEMENT
- EXISTING CENTERLINE OF ROAD
- EXISTING TREE LINE
- EXISTING WETLANDS LIMITS
- EXISTING BUILDING
- BUILDING RESTRICTION LINE
- PROPOSED EDGE OF PAVEMENT
- PROPOSED LOT LINES
- PROPOSED RIGHT-OF-WAY BOUNDARY
- PROPOSED CENTERLINE OF ROAD
- PROPOSED UTILITY EASEMENT
- SUPPLEMENTAL CONTOUR (1' INTERVAL)
- INDEX CONTOUR (5' INTERVAL)
- EXISTING PAVEMENT STRIPING
- EXISTING FLOODZONE LIMITS
- EXISTING UTILITY POLE
- EXISTING SIGN
- IRON ROD FOUND
- CONCRETE MONUMENT FOUND
- PIPE SET
- POINT

SITE DATA and ZONING SCHEDULE

TAX PARCEL No.:	232-19.00-50.01
PROPERTY ADDRESS:	16201 ADAMS ROAD, LAUREL, DE 19956
NET DEVELOPMENT AREA:	39.026 Acres
EXISTING NUMBER OF LOTS:	ONE (1)
EXISTING SITE USE:	RESIDENTIAL/AGRICULTURAL
PROPOSED NUMBER OF LOTS:	THIRTY EIGHT (38)
PROPOSED SITE USE:	SINGLE-FAMILY HOME SUBDIVISION
EXISTING ZONING:	AR-1 (AGRICULTURAL/RESIDENTIAL)
INVESTMENT LEVEL AREA:	LEVEL FOUR (4)

NO TRANSPORTATION IMPROVEMENT DISTRICTS (TIDs) IN THE PROXIMITY OF THE PROJECT

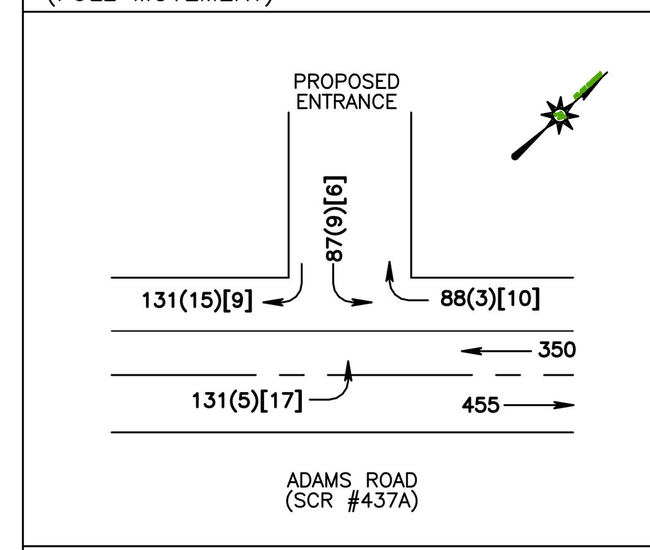
ORDINANCE ITEM	REQUIREMENT:	PROVIDED:
MINIMUM LOT AREA	32,670 Sq. Ft.	32,670 Sq. Ft.
MINIMUM LOT WIDTH	100 Ft.	100 Ft.
MINIMUM LOT DEPTH	100 Ft.	100 Ft.
MINIMUM SETBACKS:		
FRONT	30 Ft.	30 Ft.
SIDE	15 Ft.	15 Ft.
REAR	20 Ft.	20 Ft.
MAXIMUM BUILDING HEIGHT	42 Ft./3 Stories	42 Ft./3 Stories
SEWER SERVICE	PRIVATE SEPTIC	PRIVATE SEPTIC
WATER SERVICE	PRIVATE WELL	PRIVATE WELL

PROPERTY OWNER/DEVELOPER

SUSSEX VENTURES, INC.
25051 WARD FARM LANE
MILLSBORO, DE 19966
302.841.3263

TRIP GENERATION - ADAMS ROAD (SCR #437A)

(FULL MOVEMENT)



TRAFFIC GENERATION DIAGRAM

TRIPS PER DAY (VEHICLES IN A.M.) [P.M. PEAK HOUR]

ROAD TRAFFIC DATA:

FUNCTIONAL CLASSIFICATION – S-437A (ADAMS ROAD) – LOCAL
POSTED SPEED LIMIT – 50 MPH
AADT = 805 TRIPS (FROM 2019 DelDOT TRAFFIC SUMMARY)
10-YR PROJECTED AADT = 1.20 x 805 TRIPS = 966 TRIPS
10-YR PROJECTED AADT + SITE ADT = 1,338 TRIPS
TRAFFIC PATTERN GROUP – 7 (FROM 2019 DelDOT TRAFFIC SUMMARY)
PEAK HOUR = 13.70% x 1,338 = 184 TRIPS

SITE TRIPS GENERATED:

SOURCE: ITE TRIP GENERATION MANUAL 10th EDITION
38 SINGLE FAMILY DETACHED UNITS (210)

ONE ENTRANCE – FULL MOVEMENT
DESIGN VEHICLE: SU-30
39 SINGLE FAMILY DETACHED UNITS
WEEKDAY = 437 TRIPS (218 IN/219 OUT)
SATURDAY = 405 TRIPS (202 IN/203 OUT)
SUNDAY = 281 TRIPS (140 IN/141 OUT)

TOTAL ADT FOR SUBDIVISION (WEEKDAY) = 437 TRIPS
DIRECTIONAL DISTRIBUTION:
60% TO AND FROM THE WEST: 262 TRIPS
(20 A.M. PEAK) [25 P.M. PEAK]
40% TO AND FROM THE EAST: 175 TRIPS
(12 A.M. PEAK) [16 P.M. PEAK)
5.00% TRUCKS & BUSES x 437 = 22 TRIPS

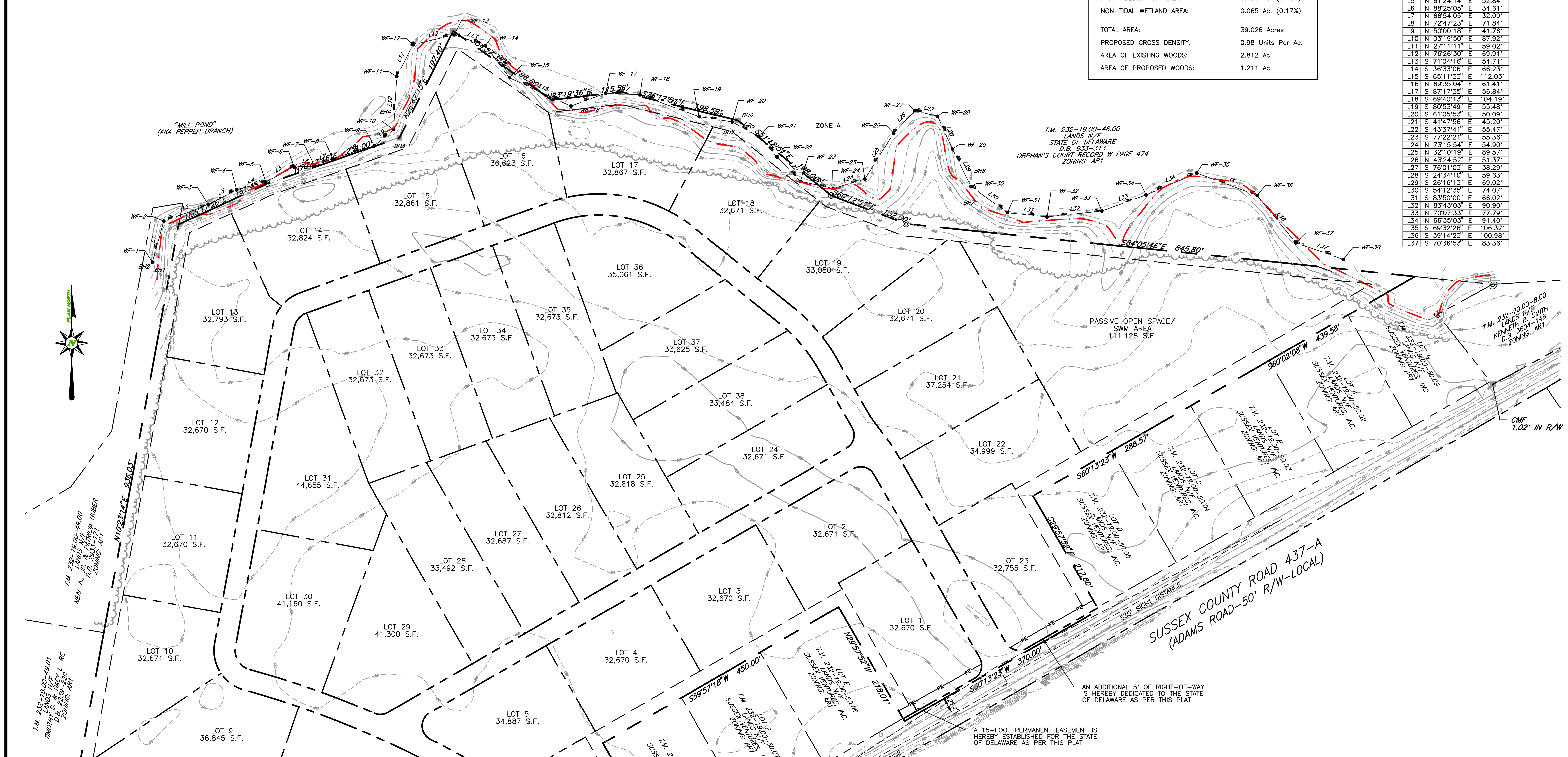
PROPERTY AREA

LOT AREA:	29.752 Ac. (76.24%)
RIGHT-OF-WAY AREA:	3.264 Ac. (8.36%)
OPEN SPACE AREA:	2.480 Ac. (6.35%)
WOODED BUFFER/PERMANENT EASEMENT AREA:	3.309 Ac. (8.48%)
R.O.W. DEDICATION AREA:	0.156 Ac. (0.40%)
NON-TIDAL WETLAND AREA:	0.065 Ac. (0.17%)
TOTAL AREA:	39.026 Acres
PROPOSED GROSS DENSITY:	0.98 Units Per Ac.
AREA OF EXISTING WOODS:	2.812 Ac.
AREA OF PROPOSED WOODS:	1.211 Ac.

WETLANDS LINE TABLE

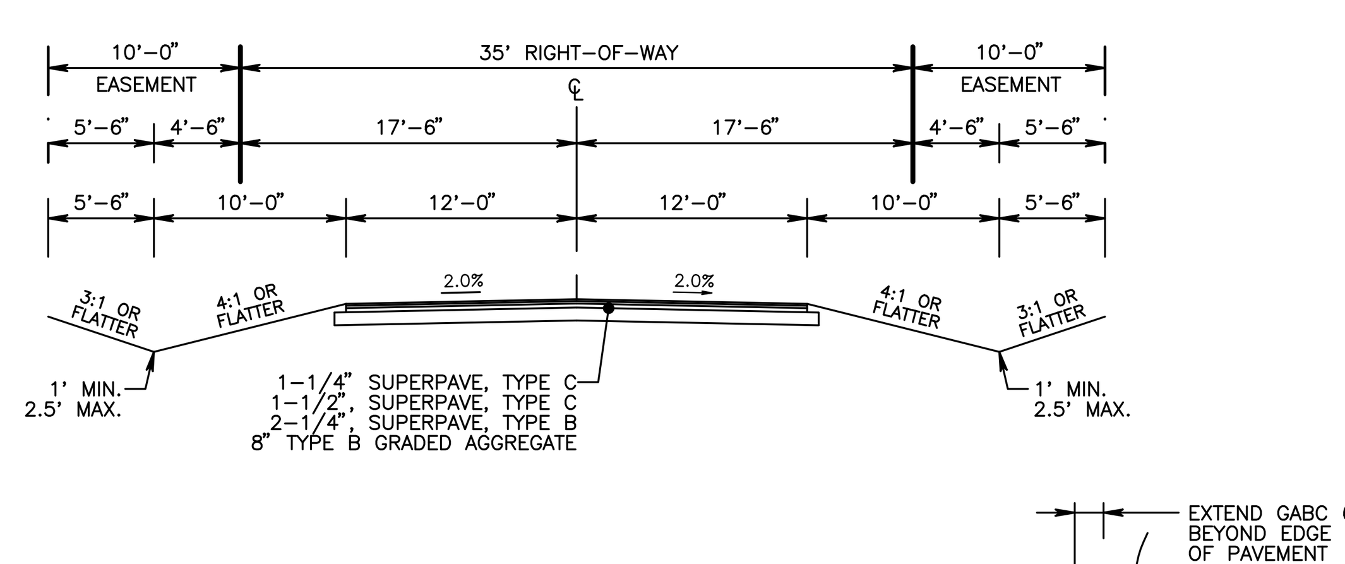
BEGIN @ CONC. MON. FOUND
S 34°55'02" W 76.01' TO L1

LINE	BEARING	DISTANCE
L1	N 15°42'06" E	70.31'
L2	N 69°46'46" E	78.66'
L3	N 61°48'13" E	52.84'
L4	N 75°30'38" E	49.75'
L5	N 61°24'14" E	52.84'
L6	N 88°25'05" E	34.61'
L7	N 66°54'05" E	32.09'
L8	N 72°47'23" E	71.84'
L9	N 50°00'18" E	41.76'
L10	N 03°19'50" E	87.92'
L11	N 27°11'11" E	59.02'
L12	N 76°26'30" E	69.91'
L13	S 71°04'16" E	54.71'
L14	S 36°33'06" E	66.23'
L15	S 65°11'33" E	112.03'
L16	N 69°35'04" E	61.41'
L17	S 87°17'35" E	56.84'
L18	S 69°40'13" E	104.19'
L19	S 80°53'49" E	55.48'
L20	S 61°05'53" E	50.09'
L21	S 41°47'56" E	45.20'
L22	S 43°37'41" E	55.47'
L23	S 77°22'21" E	55.36'
L24	N 73°15'54" E	54.90'
L25	N 32°10'19" E	89.57'
L26	N 43°24'52" E	51.37'
L27	S 76°01'03" E	38.29'
L28	S 24°34'10" E	59.63'
L29	S 26°16'13" E	69.02'
L30	S 54°12'35" E	74.07'
L31	S 83°50'00" E	66.02'
L32	N 83°43'03" E	90.90'
L33	N 70°07'33" E	77.79'
L34	N 66°35'03" E	91.40'
L35	S 69°32'26" E	106.32'
L36	S 39°14'23" E	100.98'
L37	S 70°36'53" E	83.36'



PRIVATE STREET - OPEN DRAINAGE

NOT TO SCALE



NOTES:
1. PROVIDE 4" OF TOPSOIL COVERED WITH SEED AND MULCH ON PROPOSED GRASS AREAS.
2. SUBBASE AND SUBGRADE SHALL BE COMPACTED TO 95% OF ASTM D1557, MODIFIED PROCTOR METHOD.
3. ALL CUL-DE-SACS SHALL HAVE A PAVED RADIUS OF 38'.

GENERAL NOTES

1. THE PROJECT SITE IS KNOWN AS THE CROSSINGS, (T.P. 232-19.00-50.01), AND IS LOCATED AT THE NORTHWEST CORNER OF THE ADAMS ROAD (SCR 437A) AND DELAWARE ROUTE 24 INTERSECTION IN LAUREL, DE.
2. THE PROPERTY BOUNDS, EXISTING FEATURES AND TOPOGRAPHIC INFORMATION SHOWN ON THIS PLAN IS THE RESULT OF A FIELD SURVEY BY MILLER-LEWIS, INC., 1560 MIDDLEFORD ROAD, SEAFORD, DELAWARE 19973. TOPOGRAPHY IS BASED ON NAVD88 AND NORTH REFERENCE IS DELAWARE STATE PLANE COORDINATE SYSTEM NAD83.
3. ALL PROPOSED STORMWATER MANAGEMENT FACILITIES ARE TO BE MAINTAINED BY THE DEVELOPER UNTIL SUCH TIME AS A HOMEOWNERS ASSOCIATION CAN PROVIDE FOR SAID MAINTENANCE.
4. ALL SUBDIVISION LOTS SHALL BE ACCESSED FROM THE INTERIOR SUBDIVISION STREETS ONLY. NO DIRECT ACCESS SCR 437A SHALL BE PERMITTED.
5. THIS PLAN DOES NOT VERIFY TO THE LOCATION AND/OR EXISTENCE OF EASEMENTS OR RIGHT-OF-WAYS CROSSING SUBJECT PROPERTY AS NO TITLE SEARCH WAS PROVIDED.
6. THE CONTRACTOR SHALL ENSURE THAT ALL NECESSARY PERMITS AND APPROVALS HAVE BEEN OBTAINED PRIOR TO COMMENCEMENT OF ANY SITE CONSTRUCTION ACTIVITIES.
7. ALL CONTRACTORS WORKING ON THIS PROJECT SHALL COMPLY WITH THE REQUIREMENTS OF THE DELAWARE EROSION AND SEDIMENT CONTROL HANDBOOK (LATEST EDITION).
8. CONSTRUCTION MATERIALS AND PROCEDURES SHALL FOLLOW THE SUSSEX COUNTY ENGINEERING DEPARTMENT SPECIFICATIONS AND STANDARD DRAWINGS (LATEST EDITION).
9. EXISTING SUBSURFACE UTILITY INFORMATION INDICATED IS BASED UPON VISUAL FIELD INSPECTION BY MILLER-LEWIS, INC. SUCH INFORMATION CONCERNING THE SIZE, LOCATION, DEPTH, QUANTITY, ETC. OF SUBSURFACE UTILITIES IS APPROXIMATE IN NATURE AND HAS BEEN OBTAINED AS AN AID IN THE PROJECT DESIGN. THE INFORMATION PROVIDED IS REPRESENTATIVE OF SUBSURFACE CONDITIONS ONLY AT LOCATIONS AND DEPTHS WHERE SUCH INFORMATION WAS OBTAINED. THERE IS NO EXPRESSED OR IMPLIED AGREEMENT THAT UTILITY SIZE, LOCATION, DEPTH, QUANTITY, ETC. AS SHOWN EXISTS BETWEEN EXPLORED LOCATIONS. ACCORDINGLY, UTILITY INFORMATION SHOWN SHOULD NOT BE RELIED UPON FOR CONSTRUCTION PURPOSES. IT IS INCUMBENT UPON THE CONTRACTOR TO VERIFY THE SIZE, LOCATION, DEPTH, QUANTITY, ETC. OF ALL UTILITIES BEFORE EXCAVATION.
10. BASED ON THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) FLOOD INSURANCE RATE MAP (FIRM) 100029 0440 K, MAP NUMBER 10005C0440K, DATED MARCH 16, 2015, THIS PROPERTY IS LOCATED IN A ZONE "X"-UNSHADED WHICH IS AN AREA DETERMINED TO BE OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOODPLAIN AND A ZONE A, WHICH IS A SPECIAL FLOOD HAZARD AREA SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD.
11. THE WETLANDS BOUNDARY SHOWN WAS DELINEATED BY COASTAL & ESTUARINE RESEARCH, INC.
12. ALL FIRE LANES, FIRE HYDRANTS AND FIRE DEPARTMENT CONNECTIONS SHALL BE MARKED IN ACCORDANCE WITH THE DELAWARE STATE FIRE PREVENTION REGULATIONS.
13. ALL CUL-DE-SACS ARE TO HAVE A 38' PAVED RADIUS. NO PARKING PERMITTED ON CUL-DE-SAC.
14. AUTOMATIC SPRINKLERS AREA NOT PROPOSED FOR ANY STRUCTURE.
15. ALL PROPOSED BUILDING CONSTRUCTION SHALL BE WOOD FRAME, TYPE II (000), NFPA 101 OCCUPANCY SHALL BE STORAGE, LOW & ORDINARY HAZARD.
16. ALL PROPOSED LOT LINES SUBJECT TO EASEMENTS FOR UTILITY, STORMWATER CONSTRUCTION AND/OR MAINTENANCE. UNLESS OTHERWISE NOTED ON THE PLANS, EASEMENTS AS FOLLOWS:
FRONT LOT LINES – 10 FEET
SIDE LOT LINES – 5 FEET
REAR LOT LINES – 10 FEET
17. IN ACCORDANCE WITH THE DELAWARE STATE FIRE PREVENTION REGULATIONS PART V, CHAPTER 4, SECTION 4-1.1, THE DEVELOPER SHALL PROVIDE, TO THE EMERGENCY DISPATCH CENTER HAVING JURISDICTION, A PLOT PLAN OF THE DEVELOPMENT SHOWING EACH LOT LOCATION. THE DEVELOPER SHALL ALSO ASSIGN NUMBERS TO ALL HOMES IN A CONSECUTIVE MANOR AND HAVE PLACED THE ASSIGNED NUMBER IN A READILY VISIBLE LOCATION ON EACH HOME TO ELIMINATE CONFUSION IN THE EVENT THAT AN EMERGENCY VEHICLE IS NEEDED.
18. THIS PROPERTY IS LOCATED IN THE VICINITY OF LAND USED PRIMARILY FOR AGRICULTURAL PURPOSES ON 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 CHEMICALS AND NIGHTTIME FARM OPERATIONS. THE USE AND ENJOYMENT OF PROPERTY IS EXPRESSLY CONDITIONED ON ACCEPTANCE OF ANY ANNOYANCE OR INCOVENIENCE WHICH MAY RESULT FROM SUCH NORMAL AGRICULTURAL USES AND ACTIVITIES.
19. ALL PROPOSED LANDSCAPE BUFFERS ARE TO BE MAINTAINED BY THE OWNER/DEVELOPER UNTIL SUCH TIME AS A HOMEOWNERS ASSOCIATION CAN PROVIDE FOR SAID MAINTENANCE.

DELDOT SITE GENERAL NOTES

LAST REVISED: MARCH 21, 2019

1. ALL ENTRANCES SHALL CONFORM TO THE DELAWARE DEPARTMENT OF TRANSPORTATION'S (DELDOT'S) CURRENT DEVELOPMENT COORDINATION MANUAL AND SHALL BE SUBJECT TO ITS APPROVAL.
2. NO LANDSCAPING SHALL BE ALLOWED WITHIN THE RIGHT-OF-WAY UNLESS THE PLANS ARE COMPLIANT WITH SECTION 3.7 OF THE DEVELOPMENT COORDINATION MANUAL.
3. SHRUBBERY, PLANTINGS, SIGNS AND/OR OTHER VISUAL BARRIERS THAT COULD OBSTRUCT THE SIGHT DISTANCE OF A DRIVER PREPARING TO ENTER THE ROADWAY ARE PROHIBITED WITHIN THE DEFINED DEPARTURE SIGHT TRIANGLE AREA ESTABLISHED ON THIS PLAN. IF THE ESTABLISHED DEPARTURE SIGHT TRIANGLE AREA IS OUTSIDE THE RIGHT-OF-WAY OR PROJECTS ONTO AN ADJACENT PROPERTY OWNER'S LAND, A SIGHT EASEMENT SHOULD BE ESTABLISHED AND RECORDED WITH ALL AFFECTED PROPERTY OWNERS TO MAINTAIN THE REQUIRED SIGHT DISTANCE.
4. UPON COMPLETION OF THE CONSTRUCTION OF THE SIDEWALK OR SHARED-USE PATH ACROSS THIS PROJECT'S FRONTAGE AND PHYSICAL CONNECTION TO ADJACENT EXISTING FACILITIES, THE DEVELOPER, THE PROPERTY OWNERS OR BOTH ASSOCIATED WITH THIS PROJECT, SHALL BE RESPONSIBLE TO REMOVE ANY EXISTING ROAD TIE-IN CONNECTIONS LOCATED ALONG ADJACENT PROPERTIES, AND RESTORE THE AREA TO GRASS. SUCH ACTIONS SHALL BE COMPLETED AT DELDOT'S DISCRETION, AND IN CONFORMANCE WITH DELDOT'S DEVELOPMENT COORDINATION MANUAL.
5. PRIVATE STREETS CONSTRUCTED WITHIN THIS SUBDIVISION SHALL BE MAINTAINED BY THE DEVELOPER, THE PROPERTY OWNERS WITHIN THIS SUBDIVISION OR BOTH (TITLE 17 .131). DELDOT ASSUMES NO RESPONSIBILITIES FOR THE FUTURE MAINTENANCE OF THESE STREETS.
6. THE SIDEWALK SHALL BE THE RESPONSIBILITY OF THE DEVELOPER, THE PROPERTY OWNERS OR BOTH WITHIN THIS SUBDIVISION. THE STATE OF DELAWARE ASSUMES NO RESPONSIBILITY FOR THE FUTURE MAINTENANCE FOR THE SIDEWALK.
7. LOTS WILL BE PERMITTED TO HAVE ACCESS POINTS THAT COMPLY WITH THE DEVELOPMENT COORDINATION MANUAL (DCM) SPACING REQUIREMENTS OF CHAPTER 1 AND LIMITATIONS ON NUMBER OF ACCESS POINTS ESTABLISHED IN DCM CHAPTER 7. HORSESHOE DRIVEWAYS AND SECONDARY ENTRANCES REQUIRE ADDITIONAL DELDOT REVIEW AND SEPARATE PERMITTING, RESTRICTIONS AS DESCRIBED IN THE DCM CHAPTER 7 MAY PROHIBIT SOME SECONDARY ENTRANCE REQUESTS FROM BEING GRANTED.
8. TO MINIMIZE RUTTING AND EROSION OF THE ROADSIDE DUE TO ON-STREET PARKING, DRIVEWAY AND BUILDING LAYOUTS MUST BE CONFIGURED TO ALLOW FOR VEHICLES TO BE STORED IN THE DRIVEWAY BEYOND THE RIGHT-OF-WAY, WITHOUT INTERFERING WITH SIDEWALK ACCESS AND CLEARANCE.
9. THE DEVELOPER SHALL BE REQUIRED TO FURNISH AND PLACE RIGHT-OF-WAY MONUMENTS IN ACCORDANCE WITH DELDOT'S DEVELOPMENT COORDINATION MANUAL.
10. THE DEVELOPER SHALL BE REQUIRED TO FURNISH AND PLACE RIGHT-OF-WAY MARKERS TO PROVIDE A PERMANENT REFERENCE FOR RE-ESTABLISHING THE RIGHT-OF-WAY AND PROPERTY CORNERS ON LOCAL AND HIGHER ORDER FRONTAGE ROADS. RIGHT-OF-WAY MARKERS SHALL BE SET AND/OR PLACED ALONG THE FRONTAGE ROAD RIGHT-OF-WAY AT PROPERTY CORNERS AND AT EACH CHANGE IN RIGHT-OF-WAY ALIGNMENT IN ACCORDANCE WITH SECTION 3.2.4.2 OF THE DEVELOPMENT COORDINATION MANUAL.

SUSSEX CONSERVATION DISTRICT CERTIFICATE

PLANNING COMMISSION CERTIFICATE

RECOMMENDED FOR APPROVAL BY THE PLANNING COMMISSION OF SUSSEX COUNTY ON THIS ________________ DAY OF ________________ 20___.

SECRETARY (ATTEST) ________________

COUNTY COUNCIL PRESIDENT ________________

OWNER CERTIFICATE

I HEREBY CERTIFY THAT I AM THE EQUITABLE OWNER OF THE PROPERTY DESCRIBED AND SHOWN ON THIS PLAN, THAT THE PLAN WAS MADE AT MY DIRECTION, THAT I ACKNOWLEDGE THE SAME TO BE MY ACT AND DESIRE THE PLAN TO BE RECORDED AS SHOWN IN ACCORDANCE WITH ALL APPLICABLE LAWS AND REGULATIONS

SUSSEX VENTURES, INC.
25051 WARD FARM LANE
MILLSBORO, DE 19966
Phone: 302.841.3263
DATE

WETLANDS CERTIFICATION

I, CERTIFY THAT THIS PROPERTY HAS BEEN EXAMINED FOR WETLANDS/WATERS OF THE UNITED STATES IN ACCORDANCE WITH CRITERIA FOUND IN THE 1987 U.S. ARMY CORPS OF ENGINEERS' WETLAND DELINEATION MANUAL AND ASSOCIATED GUIDANCE MEMORANDA. THE DELINEATION HERE SHOWN, IN MY BEST PROFESSIONAL JUDGEMENT, ACCURATELY DEPICTS WETLANDS/WATERS OF THE UNITED STATES BOUNDARIES PRESENT WITHIN THE SUBJECT PROPERTY BOUNDS. NO STATE WETLANDS ARE PRESENT WITHIN THE SUBJECT PROPERTY BOUNDS.

EVELYN MAURMEYER
COASTAL & ESTUARINE RESEARCH, INC.
P.O. BOX 674
LEWES, DE 19958
302.645.9610
DATE

REVISIONS

No.:	DATE:	DESCRIPTION:	BY:

I HEREBY CERTIFY THAT THIS PLAN HAS BEEN PREPARED UNDER MY SUPERVISION AND TO THE BEST OF MY KNOWLEDGE COMPLIES WITH THE APPLICABLE ORDINANCES OF SUSSEX COUNTY AND THE LAWS OF THE STATE OF DELAWARE.

DESIGN PROFESSIONAL DATE

APPROVED BY: J.C.W. DESIGNED BY: K.T.S. DRAWN BY: K.T.S. LAYER LIST: B-02A

100' 0' 100' 200'
SCALE IN FEET (1" = 100')

ONLY PLANS INCORPORATING A RAISED PROFESSIONAL SEAL ARE CONSIDERED TO BE OFFICIAL AND RELIED UPON BY THE USER. THIS PLAN HAS BEEN PREPARED SPECIFICALLY FOR THE CLIENT AND PROJECT DESIGNATED HEREON. ANY MODIFICATION, REVISION, DUPLICATION OR USE WITHOUT WRITTEN CONSENT OF THE KERCHER GROUP, INC. IS PROHIBITED BY LAW.

OWNER/APPLICANT:
SUSSEX VENTURES, INC.
25051 WARD FARM LANE
MILLSBORO, DE 19966
Phone: 302.841.3263

PARCEL INFORMATION:
T.P.: 232-19.00-50.01
DEED REF: 5193-39

RECORD PLAN
THE CROSSINGS
BROAD CREEK HUNDRED – SUSSEX COUNTY – DELAWARE

THE KERCHER GROUP, INC.
CONSULTING • SYSTEMS • ENGINEERING
37385 REHOBOTH AVE., UNIT 11 – REHOBOTH BEACH, DELAWARE 19971
302.854.9062 (Voice) 302.854.9064 (Fax) www.kerchergroup.com

JOB No: 20-0401
PLAN DATE: Feb. 9, 2021
SHEET No.: R1

THE CROSSINGS Fri, May 7, 2021 (20:06)

Proposed Homes

1200 Square Feet Rancher

1300 Square Feet Rancher

1300 Square Feet Rancher

STATE OF DELAWARE
DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL
DIVISION OF WATER
21309 BERLIN ROAD, UNIT 2
GEORGETOWN, DELAWARE 19947

GROUNDWATER DISCHARGES

PHONE
(302) 856-4561

February 16, 2021

Sussex Ventures, Inc.
25051 Ward Farm Lane
Millsboro DE 19966

RE: Feasibility Study
Lands of Sussex Ventures, Inc., The Crossings at Trap Pond
Tax Map No.: 232-19.00-50.01, Proposed Lots 1 Through 39

Dear Sussex Ventures, Inc.:

The Department of Natural Resources and Environmental Control (the Department) received a submission from Scaled Engineering, Inc. (SEI) and AAA Environmental Services (AAAEA), on February 1, 2021, requesting a non-binding statement of feasibility for subdivision as required by the Regulations Governing the Design, Installation and Operation of On-Site Wastewater Treatment and Disposal Systems, dated January 4, 1985, last amended on January 11, 2014 (the Regulations).

The submission consists of a report titled "SOIL FEASIBILITY REPORT, THE CROSSINGS AT TRAP POND," prepared by SEI and AAAES, dated January 29, 2021, that summarizes the information collected. The report includes, but is not necessarily limited to, the following information:

- A summary of the study,
- a plan titled "Soil Feasibility Plan," prepared by SEI (hereafter referred to as the Plan),
- a plan titled "Preliminary Plan (Not To Be Recorded), RECORD PLAN, THE CROSSINGS AT TRAP POND," prepared by The Kercher Group, Inc., dated 6/9/20, showing the conceptual lot layout of the proposed subdivision, including number and area for each of the proposed lots (metes and bounds not provided),
- soil profile notes and the results of infiltration testing,
- various reference maps, and
- a Sussex County Property Information form as proof of ownership.

Information shown by the Plan includes, but is not limited to, topography at an apparent 1-foot contour, locations of soil borings, test pits and infiltration tests, locations of wells within 150 feet and map units delineated by SEI and AAAES as related to on-site wastewater treatment and disposal system (OWTDS) feasibility.

Background Information

The property is located north of the of the intersection of Adams Road (437-A) and Laurel Road (SCR 24). The owner/developer proposes to subdivide the 42± acre parcel into 39 single-family residential building lots ranging in size from 0.50± to 0.79± acres. The parcel will hereafter be referred to as the project site. Based on information provided by SEI and AAAEA most of the project site is farmland. A fringe of woods is located along the project site's northern boundaries.

Soils Investigations by SEI and AAAES and Discussion

Thirty soil borings (SB) and six test pits (TP) were reportedly performed, logged, and submitted by SEI as part of the study. Three mapping units were delineated by SEI and AAAEA including the Potential Gravity OWTDS (GR) map unit, the Potential Low Pressure Pipe OWTDS (LPP) map unit and the Potential Sand Mound OWTDS (SM) map unit. No development is being proposed in the SM map unit and therefore, it will not be discussed.

The GR map unit has estimated limiting zones of 48 to 68 inches below the soil surface and estimated percolation rates of from 35 to 55 minutes per inch (MPI). Falling-head single-ring infiltration tests were performed in the GR map unit resulting in a measured rate of approximately 9 MPI. Estimated limiting zones, estimated percolation rates and the results of in-the-field measured infiltration rates suggest that the GR map unit is feasible for OWTDS.

The LPP map unit has estimated limiting zones of 27 to 46 inches below the soil surface and estimated percolation rates of from 30 to 75 MPI. Falling-head single-ring infiltration tests were performed in the LPP map unit resulting in measured rates of from 7 to 13 MPI. Estimated limiting zones, estimated percolation rates and the results of in-the-field measured infiltration rates suggest that the LPP map unit is feasible for OWTDS.

Conclusions

- Based on information collected, analyzed and presented by SEI and AAAEA, it appears that proposed lots 1 through 39 as depicted by the Plan have sufficient area to accommodate at least an initial OWTDS as long as judicious and coordinated use of land is exercised and areas delineated as being feasible for OWTDS as depicted by the Plan are accurate.

Site Preparation

Removal, disturbance, or compaction of soils mapped as being feasible for OWTDS during any portion of the construction and building phase other than that necessary for system installation may result in the rescission of the site evaluation approval. Soil material from road cuts and other excavated sources should not be placed on any portion of areas proposed for OWTDS. It is best to keep all areas proposed for OWTDS free from any form of disturbance by methods such as staking, flagging, or fencing. The Department reserves the right to inspect the construction site at any time to ensure compliance with the above.

Future Requirements and Comments

Prior to obtaining individual OWTDS construction permits complete site evaluation reports will be required for all lots in accordance with the Regulations. The Department requires one copy of the **Record Plat** following final subdivision approval by the Planning and Zoning Commission of Sussex County prior to processing and approving any site evaluations.

Non-Binding Statement of Feasibility

Based on the information prepared, analyzed and presented by SEI and AAAEA, it is the opinion of the Department that the proposed subdivision as shown by the Plan would be feasible for at least an initial OWTDS in accordance with the Regulations Governing the Design, Installation and Operation of On-Site Wastewater Treatment and Disposal Systems, dated January 4, 1985, last amended on January 11, 2014, as long as judicious and coordinated use of land is exercised and areas delineated by AE as being feasible for OWTDS as depicted by the Plan are accurate.

The comments in this letter are technical and are not intended to suggest that the Department supports this development proposal. 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 construct the development you indicate or any subdivision thereof on these lands.

Sincerely,

J. Scott Kline

J. Scott Kline
Environmental Scientist

Cc: Josh Stallings – SEI
Mike Stallings - AAAEA
file