

PLANNING & ZONING COMMISSION

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R. KELLER HOPKINS
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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 January 21, 2021

Application: Cardinal Grove (2020-11)

Applicant: 18898 Beaver Dam Road, LLC – Tim Green
20184 Phillips Street
Rehoboth Beach, DE 19971

Owner: 18898 Beaver Dam Road, LLC – Tim Green
20184 Phillips Street
Rehoboth Beach, DE 19971

Site Location: Western side of Beaver Dam Road (Rt. 23) at the intersection of
Kendale Road (S.C.R. 287)

Current Zoning: Agricultural Residential (AR-1) Zoning District

Proposed Use: 98 Single Family Lots as an AR-1 Cluster Subdivision

Comprehensive Land
Use Plan Reference: Low Density Area

Councilmanic
District: Mr. Schaeffer

School District: Cape Henlopen School District

Fire District: Millsboro Fire Company – Station No. 83

Sewer: Sussex County Sewer District

Water: Artesian

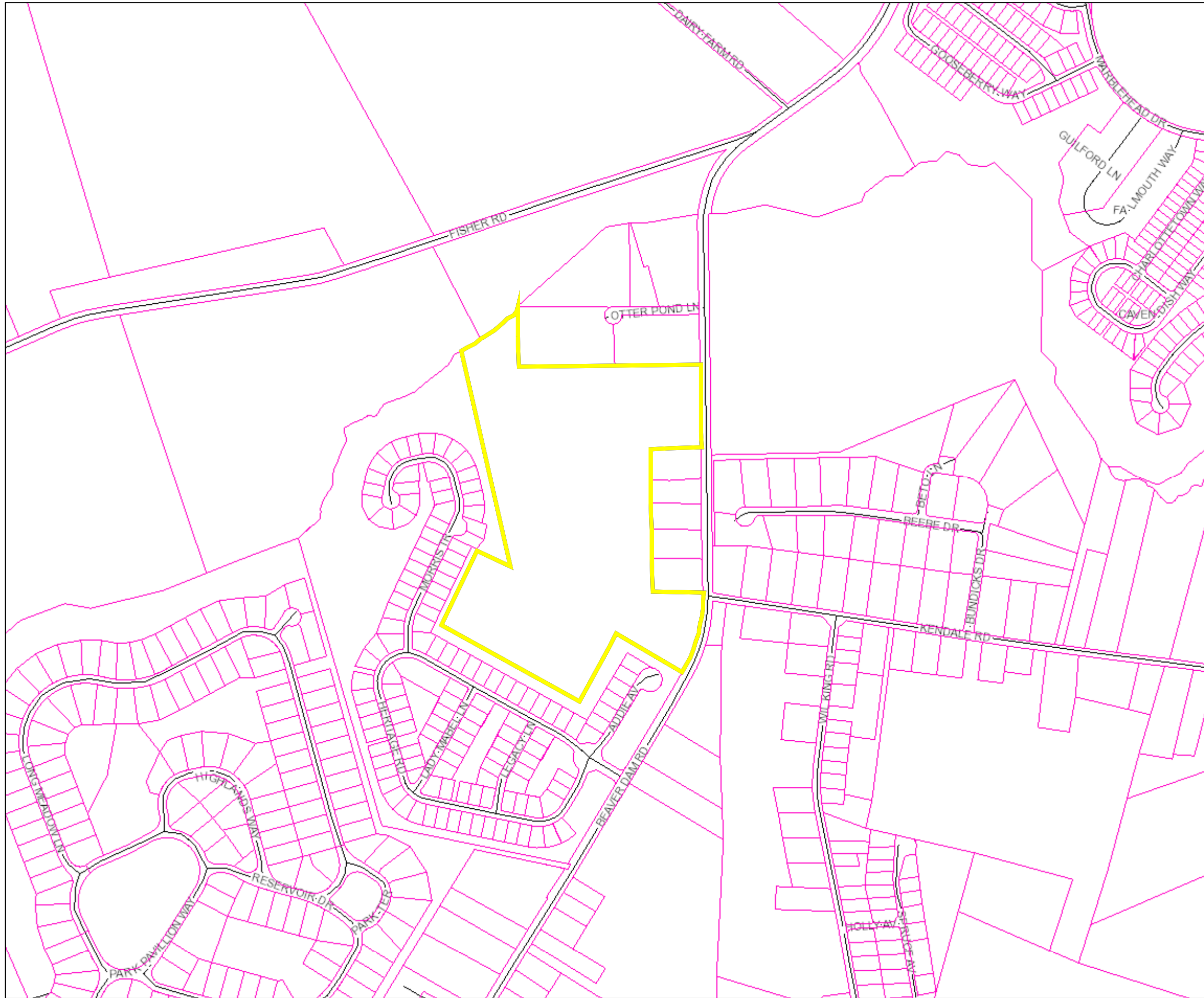
Site Area: 49.04 +/- acres

Tax Map ID.: 234-2.00-1.10








Sussex County



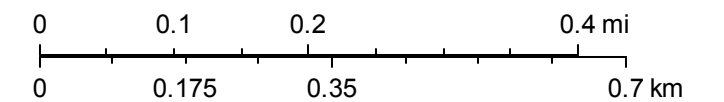
PIN:	234-2.00-1.10
Owner Name	18898 BEAVER DAM ROAD LLC
Book	4853
Mailing Address	20184 PHILLIPS ST
City	REHOBOTH BEACH
State	DE
Description	RESIDUAL LANDS
Description 2	
Description 3	
Land Code	

- polygonLayer**

Override 1
- polygonLayer**

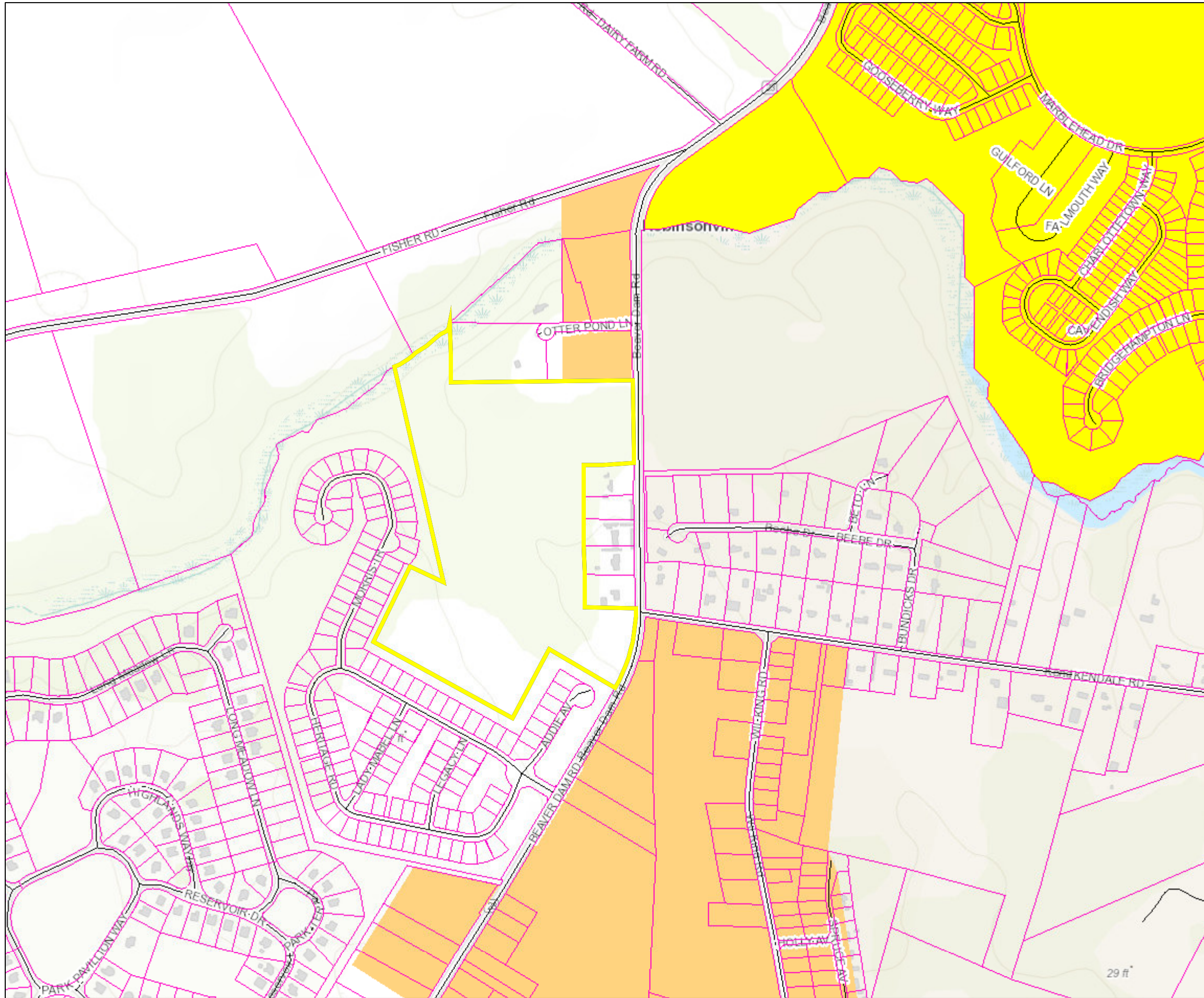
Override 1
-  Tax Parcels
-  Streets
-  County Boundaries

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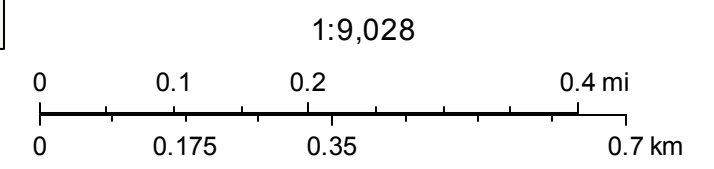


Sussex County



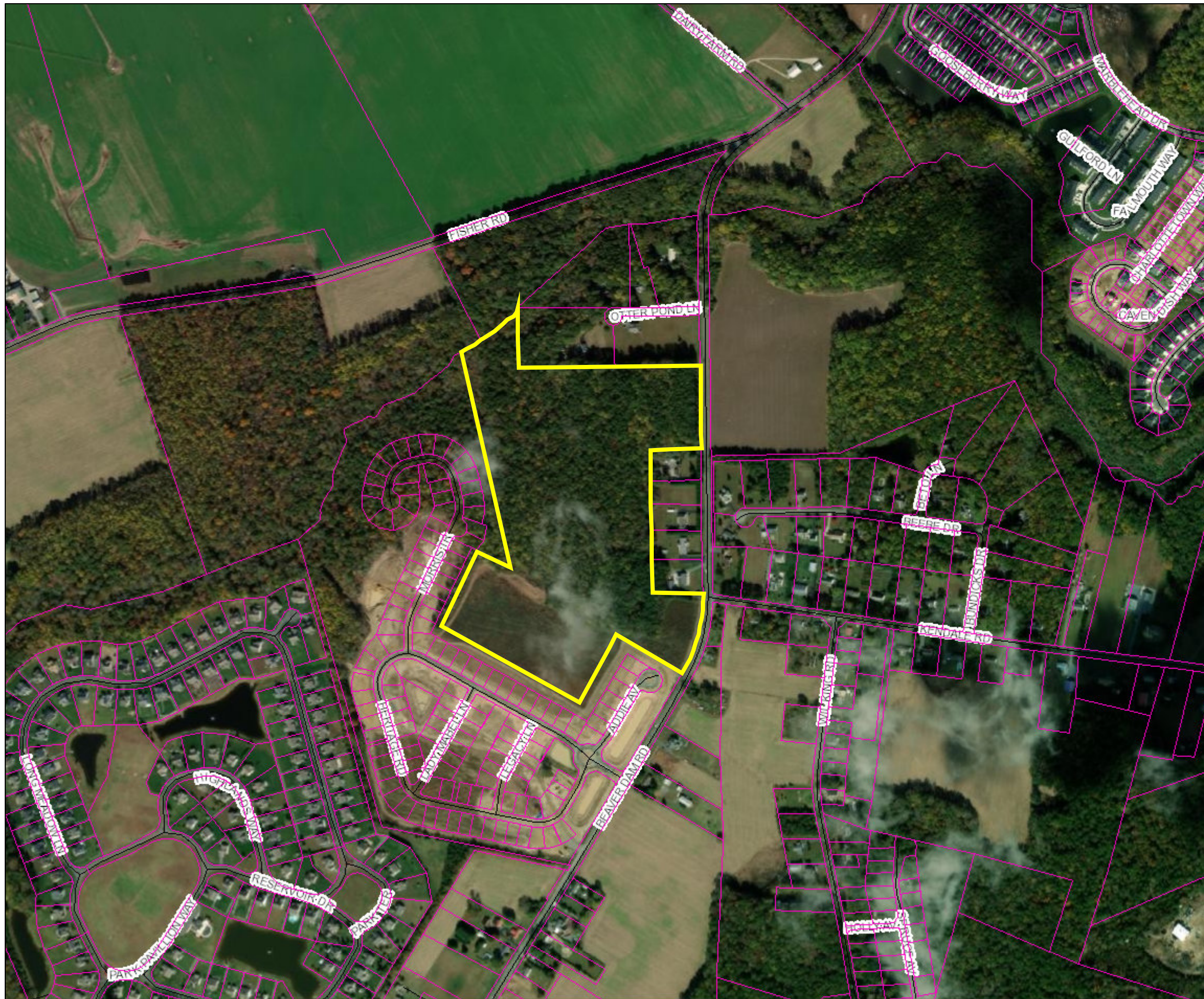
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- Override 1
- polygonLayer**
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- Tax Parcels
- Streets





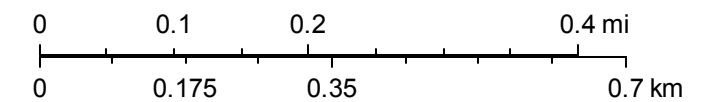
Sussex County



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

1:9,028



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:

Proposed Name of Subdivision:

Tax Map #:

Total Acreage:

Zoning:

Density:

Minimum Lot Size:

Number of Lots:

Open Space Acres:

Water Provider:

Sewer Provider:

Applicant Information

Applicant Name:

Applicant Address:

City:

State:

Zip Code:

Phone #:

E-mail:

Owner Information

Owner Name:

Owner Address:

City:

State:

Zip Code:

Phone #:

E-mail:

Agent/Attorney/Engineer Information

Agent/Attorney/Engineer Name:

Agent/Attorney/Engineer Address:

City:

State:

Zip Code:

Phone #:

E-mail:



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

Signature of Applicant/Agent/Attorney

Date:

Signature of Owner

Date:

For office use only:

Date Submitted: _____

Fee: \$500.00 Check #: _____

Staff accepting application: _____

Application & Case #: _____

Location of property: _____

Date of PC Hearing: _____

Recommendation of PC Commission: _____

COMMUNITY DEVELOPMENT & HOUSING

BRAD D. WHALEY
DIRECTOR

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



Sussex County

DELAWARE
sussexcountyde.gov

Affordable Housing Support Policy

I. Mission Statement

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

II. Affordable Housing Subdivisions

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

III. Affordable Housing Defined

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



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

IV. Affordable Housing Project Support

a. Letter of Support

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

b. Deferral of Fees

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

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

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

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

Sussex



County

FAIR HOUSING POLICY

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

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

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



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

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

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

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

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

TO: **Jamie Whitehouse**

REVIEWER: **Chris Calio**

DATE: **1/8/2021**

APPLICATION: **2020-11 – Cardinal Grove**

APPLICANT: **18898 Beaver Dam Road LLC – Tim Green**

FILE NO: **OM-9.04**

TAX MAP &
PARCEL(S): **234-2.00-1.10**

LOCATION: **West side of Beaver Dam Road (Rt. 23) at the intersection of
Kendale Road (SCR 287)**

NO. OF UNITS: **98 single family lots**

GROSS
ACREAGE: **49.04**

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

SEWER:

- (1). Is the project in a County operated and maintained sanitary sewer and/or water district?
Yes No
- a. If yes, see question (2).
- b. If no, see question (7).
- (2). Which County Tier Area is project in? **Tier 3**
- (3). Is wastewater capacity available for the project? **Yes** If not, what capacity is available? **N/A.**
- (4). Is a Construction Agreement required? **Yes** If yes, contact Utility Engineering at (302) 855-7717.
- (5). Are there any System Connection Charge (SCC) credits for the project? **Yes** If yes, how many? **N/A.** Is it likely that additional SCCs will be required? **Yes** If yes, the current System Connection Charge Rate is **Unified \$6,360.00** per EDU. Please contact **Christine Fletcher** at **302-855-7719** for additional information on charges.

- (6). Is the project capable of being annexed into a Sussex County sanitary sewer district? **Yes**
- Attached is a copy of the Policy for Extending District Boundaries in a Sussex County Water and/or Sanitary Sewer District.
- (7). Is project adjacent to the Unified Sewer District? **No**
- (8). Comments: **The proposed subdivision will need one adjacent parcel to be contiguous to the existing boundary. If annexed, the County will be the sole provider of sewer service for the project.**
- (9). Is a Sewer System Concept Evaluation required? **Already Completed, See Attached**
- (10). Is a Use of Existing Infrastructure Agreement Required? **Yes**

UTILITY PLANNING APPROVAL:

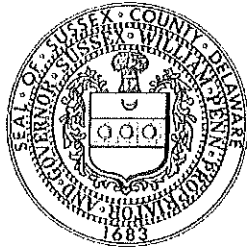


John J. Ashman
Director of Utility Planning

Xc: Hans M. Medlarz, P.E.
Lisa Walls
Christine Fletcher

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

JOHN J. ASHMAN
DIRECTOR OF UTILITY PLANNING

SEWER SERVICE CONCEPT EVALUATION (SSCE) UTILITY PLANNING DIVISION

Applicant: Solutions IPEM

Date: 12/28/2020

Reviewed by: Chris Calio

Agreement #:1156

Project Name: Cardinal Grove

Tax Map & Parcel(s): 234-2.00-1.10

Sewer Tier: Tier 2 - Sussex County Planning Area

Proposed EDUs: 100

Pump Station(s) Impacted: N/A

List of parcels to be served, created from the base parcel: 1.02, 1.11, 1.05, 1.06, 1.07, 1.08

List of additional parcels to be served (Parcels required for continuity must be served with infrastructure):234-2.00-2.01

Connection Point(s): Forcemain in Beaver Dam Road

Use of Existing Infrastructure Agreement required? Yes or No

Annexation Required? Yes or No

Easements Required? Yes or No

Fee for annexation (based on acreage):\$1,500 (10.00 - 150.00 Acres)

Current Zoning: AR-1 Zoning Proposed: AR-1

Acreage: 49.04



Additional Information: Provide a gravity sewer connection to the ROW of Beaver Dam Road for future connections.

* No capacity is guaranteed until System Connection Fees are paid

All gravity sewers with three (3) or more minor branches shall be designed at minimum slope and maximum depth.

Once Construction Drawings are completed with all of the above information satisfied, please submit to:

Sussex County Public Works Department
2 The Circle
P.O. Box 589
Georgetown DE 19947

CC: John Ashman
Lisa Walls
Michael Brady
Christine Fletcher

Policy for Extending District Boundaries

1. Property owner (developer) and/or his representative shall make a request to the Utility Planning Division for a Sewer System Concept Evaluation.
2. Property owner (developer) and/or his representative shall meet with the applicable planning and zoning agency to determine if zoning is appropriate for the development being planned.
3. With appropriate zoning, property owner (developer) and/or his representative shall send a letter (with appropriate application fee as listed below) requesting the Sussex County Council to consider extending the water and/or sanitary sewer district boundaries. (Sussex County Code)

Application Fees	
Less than 2 acres	\$500.00
2.1 -9.99 acres	\$750.00
10 - 150.00 acres	\$1,500.00
Greater than 150.00 acres	\$2,500.00

4. The Sussex County Engineering Department shall present, for Sussex County Council's consideration, posting of notices for the proposed extension of the district boundaries.
5. The Sussex County Council approves posting notices for the proposed extension of the boundaries. (If approval to post the notices is not given, the appropriate fee is refunded.)
6. Within ninety days of the posting of the notices, the Sussex County Council approves/disapproves extending the boundaries.
7. The Sussex County Council approves/disapproves of the extension of the water and/or sanitary sewer pipelines under the appropriate Sussex County Ordinance.



**STATE OF DELAWARE
EXECUTIVE DEPARTMENT
OFFICE OF STATE PLANNING COORDINATION**

July 23, 2020

Mr. Jason Palkewicz
Solutions, IPER LLC
303 North Bedford Street
Georgetown, DE 19947

RE: PLUS review 2020-06-01; Cardinal Grove

Dear Jason:

Thank you for meeting with State agency planners on June 24, 2020 to discuss the Cardinal Grove project. According to the information received you are seeking review of a proposed 98-unit subdivision on 49.04 acres along Beaver Dam Road in Level 4 in Sussex County.

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

Strategies for State Policies and Spending

As presented this project represents a major residential development with a Level 4 area according to the 2015 Strategies for State Policies and Spending. Investment Level 4 indicates where State investments will support agricultural preservation, natural resource protection, and the continuation of the rural nature of these areas. New development activities and suburban development are not supported in Investment Level 4 areas. These areas are comprised of prime agricultural lands and environmentally sensitive wetlands and wildlife habitats, which should be, and in many cases have been preserved.

We do recognize that this parcel is part of the proposed Henlopen TID, which has not been finalized by the County and the State; however because this parcel is in a Level 4 area, the Office of State Planning cannot support development of the property.

Code Requirements/Agency Permitting Requirements

Department of Transportation – Contact Bill Brockenbrough 760-2109

- The site access on Beaver Dam Road (Delaware Route 23) must be designed in accordance with DelDOT's Development Coordination Manual, which is available at <http://www.deldot.gov/Business/subdivisions/index.shtml?dc=changes>.
- Pursuant to Section 1.3 of the Manual, a Pre-Submittal Meeting is required before plans are submitted for review. The form needed to request the meeting and guidance on what will be covered there and how to prepare for it is located at https://www.deldot.gov/Business/subdivisions/pdfs/Meeting_Request_Form.pdf?08022017.
- Section 1.7 of the Manual addresses fees that are assessed for the review of development proposals. DelDOT anticipates collecting the Initial Stage Fee when the record plan is submitted for review and the Construction Stage Fee when construction plans are submitted for review.
- Per Section 2.2.2.1 of the Manual, Traffic Impact Studies (TIS) are warranted for developments generating more than 500 vehicle trip ends per day or 50 vehicle trip ends per hour in any hour of the day. From the PLUS application, the total daily trips are estimated at 950 vehicle trip ends per day. Using the 10th edition of the Institute of Transportation Engineers' Trip Generation Manual, DelDOT estimates this number at 1,021 and the weekday morning and evening peak hour trip ends at 74 and 100, respectively.

Section 2.2.2.2 of the Development Coordination Manual provides that for developments generating less than 2000 vehicle trip ends per day and less than 200 vehicle trip ends per hour in any hour of the day, DelDOT may accept an Area Wide Study (AWS) Fee in lieu of the TIS if the local government does not require a TIS. The AWS Fee is calculated as \$10 per daily trip or, in this case, \$10,210. AWS Fees are used to fund traffic studies, not to build improvements.

DelDOT anticipates requiring the developer to improve Beaver Dam Road, from the north limit of their north frontage to the south limit of their south frontage, to meet DelDOT's Major Collector Road standards, which include 12-foot lanes and 8-foot shoulders. DelDOT has also identified one off-site improvement toward which they would require the developer to contribute: improvement of Kendale Road (Sussex Road 287) to provide a second westbound lane approaching Beaver Dam Road. DelDOT would further require the developer to enter a signal agreement for the intersection of Beaver Dam and Kendale Roads.

- The subject development is located within the boundaries of the proposed Henlopen Transportation Improvement District (TID). Section 2.4 of the Manual addresses TIDs and Section 2.4.2.8 specifically addresses infrastructure fees that are paid by developers within a TID. The Henlopen TID is still being created and the specific fees that would be associated with it have not been established but when the TID is adopted by DelDOT and Sussex County, payment of the infrastructure fee would be required in place of contributions toward off-site improvements. As necessary, the applicant may contact Ms. Sarah Coakley, a Principal Planner in DelDOT's Statewide and Regional Planning Section for more information with regard to the TID. Ms. Coakley may be reached at (302) 760-2236 or Sarah.Coakley@delaware.gov.
- As necessary, in accordance with Section 3.2.5 and Figure 3.2.5-a of the Manual, DelDOT will require dedication of right-of-way along the site's frontage on Beaver Dam Road. By this regulation, this dedication is to provide a minimum of 40 feet of right-of-way from the physical centerline. The following right-of-way dedication note is required, **"An X-foot wide right-of-way is hereby dedicated to the State of Delaware, as per this plat."**
- In accordance with Section 3.2.5.1.2 of the Manual, DelDOT will require the establishment of a 15-foot wide permanent easement across the property frontage. The location of the easement shall be outside the limits of the ultimate right-of-way. The easement area can be used as part of the open space calculation for the site. The following note is required, **"A 15-foot wide permanent easement is hereby established for the State of Delaware, as per this plat."**
- Referring to Section 3.4.2.1 of the Manual, the following items, among other things, are required on the Record Plan:
 - A Traffic Generation Diagram. See Figure 3.4.2-a for the required format and content.
 - Depiction of all existing entrances within 450 feet of the entrance on Beaver Dam Road.
 - Notes identifying the type of off-site improvements, agreements (signal, letter) contributions and when the off-site improvements are warranted.
- Section 3.5 of the Manual provides DelDOT's requirements with regard to connectivity. The requirements in Sections 3.5.1 through 3.5.3 shall be followed for all development projects having access to state roads or proposing DelDOT maintained public streets for subdivisions. DelDOT recommends that the developer contact the developer or the homeowners association for the Estates at Cedar Grove and, if they are amenable, provide a bicycle and pedestrian path linking the cul-de-sac near the front of that development to the collector street entering the subject development.

- Section 3.5.4.2 of the Manual addresses requirements for Shared Use Paths (SUP) and sidewalks. For projects in Level 3 and 4 Investment Areas, installation of paths or sidewalks along the frontage on State-maintained roads is at DelDOT's discretion. DelDOT anticipates requiring the developer to build a SUP along both sections of their frontage on Beaver Dam Road.
- Section 3.5.4.4 of the Manual addresses requirements for accessways. Accessways are paths that connect subdivision streets to a sidewalk or SUP. DelDOT anticipates requiring an accessway to the SUP along the site frontage near Lot 20.
- In accordance with Section 3.8 of the Manual, storm water facilities, excluding filter strips and bioswales, shall be located a minimum of 20 feet from the ultimate State right-of-way along Beaver Dam Road.
- In accordance with Section 5.2.9 of the Manual, the Auxiliary Lane Worksheet should be used to determine whether auxiliary lanes are warranted at the site entrances and how long those lanes should be. The worksheet can be found at <http://www.deldot.gov/Business/subdivisions/index.shtml>.
- In accordance with Section 5.4 of the Manual, sight distance triangles are required and shall be established in accordance with American Association of State Highway and Transportation Officials (AASHTO) standards. A spreadsheet has been developed to assist with this task. It can be found at <http://www.deldot.gov/Business/subdivisions/index.shtml>.
- In accordance with Section 5.14 of the Manual, all existing utilities must be shown on the plan and a utility relocation plan will be required for any utilities that need to be relocated.

Department of Natural Resources and Environmental Control – Contact Michael Tholstrup 735-3352

Wetlands

- Statewide Wetlands Mapping Project (SWMP) maps indicate the presence of forested freshwater wetlands in the forested area of the property. The PLUS application indicates that the wetlands have been delineated and that development will avoid the delineated wetlands. Project plans also indicate that the developer proposes a wetland buffer of 50 feet.
- A permit from the US Army Corps of Engineers will be required if project plans are amended and wetland fill is proposed. In certain circumstances, additional certifications from the state are required as a part of the Army Corps of Engineers permit process.

Stormwater Management and Hydric Soils

- For projects greater than 5,000 square feet, a detailed sediment and stormwater plan will be required prior to any land disturbing activity taking place on the site.
- Based on soil maps, hydric soils are present at the southern portion of the proposed project area. Hydric soils are also present in the northeastern and northwestern corners of the property where no construction activities are proposed. DNREC reviewers discourage building on hydric soils because they are an important source of water storage. The loss of this water storage function through excavation, filling, or grading of intact native hydric soils increases the probability for more frequent drainage and flooding events.
- A stormwater management pond is proposed within the area of hydric soils. Siting a stormwater management pond within hydric soils is not considered an environmentally acceptable practice by DNREC and will likely increase the potential for future flooding impacts, while increasing nutrient and bacterial pollutant discharge to ground and surface waters.
- There have been 2 drainage complaints reported to DNREC associated with adjacent parcels to the west of his project parcel.
- The applicant must contact the Sussex Conservation District to schedule a pre-application meeting to discuss the sediment and erosion control and stormwater management components of the plan as soon as practicable. The applicant / consultant should submit the Stormwater Assessment Study to the Sussex Conservation District and schedule a project application meeting prior to moving forward with the stormwater and site design. The assessment should account for the 25 acres of recently removed forest cover. The site topography, soils mapping, pre and post development runoff, and proposed method(s) and location(s) of stormwater management should be brought to the meeting for discussion. The plan review and approval as well as construction inspection will be coordinated through the Sussex Conservation District.

Open Space

- A nutrient management plan is required under the Delaware Nutrient Management law (3 Del. Chapter 22) for all persons or entities who apply nutrients to lands or areas of open space in excess of 10 acres. This project's open space may exceed this 10-acre threshold.
- Please contact the Delaware Nutrient Management Program at (302) 739-4811 for further information concerning compliance requirements, or view additional information here: <http://dda.delaware.gov/nutrients/index.shtml>

Floodplain

- A portion of the parcel, outside of the proposed development footprint, is situated within a Zone A floodplain for Bundicks Branch. The proposed site plan does not show any

development activity within the mapped floodplain, which is located on the northwestern portion of the parcel.

- The applicant must comply with the local floodplain ordinance and regulations applicable to development or construction within the floodplain.

Forest and Habitat

- The northwestern portion of the project is located within the Love Creek Natural Area. A "Natural Area" is defined by the law is an area of land or water, or of both land and water, whether in public or private ownership, which either retains or has reestablished its natural character (although it need not be undisturbed), or has unusual flora or fauna, or has biotic, geological, scenic, or archaeological features of scientific or educational value.
- The entire forested area (including those areas already logged) is mapped as part of the Delaware Ecological Network. This network links large blocks of ecologically significant natural areas and natural corridors to allow the movement of wildlife and plant life between them, which create an *interconnecting network of natural lands* across the landscape. Large natural areas are usually more effective than small areas for protecting aquifers and watersheds, sustaining viable populations of forest species, and providing core habitat and escape-cover for a multitude of vertebrate species.
- The proposed application states that a 25-acre section of the forested area has been logged and cleared and that a 50-foot buffer will be maintained around the mapped wetlands. The current forest boundary is unknown/unclear from the application.

Water Quality and TMDLs

- This project is located within in the *low nutrient reduction* zone of the greater Inland Bays watershed of the Rehoboth Bay. A Total Maximum Daily Load (TMDL) is the maximum amount of a pollutant allowed to enter a waterbody so that the waterbody will meet and continue to meet water quality standards. The TMDL for the *low reduction* zone of the Inland Bays watershed calls for 40 percent reduction in nitrogen and phosphorus from baseline conditions. The TMDL also calls for a 40 percent reduction (17 percent for marine waters) in bacteria from baseline conditions.

State Historic Preservation Office – Contact Carlton Hall 736-7400

- The Delaware SHPO does not recommend development in Level 4 areas. Soils are mostly moderate to well drained and prime farmland and some of the parcel is within the range of favorable distance to Bundicks Branch. There are comparable prehistoric sites nearby. Archaeological Site S07901, researchers were unable to follow out the site extent due to trees/forest, so it may extend south or west into the parcel. Historic potential is low to moderate. Prehistoric archaeological potential is moderate to high.

- If any project or development proceeds, the developer should be aware of the Unmarked Human Burials and Human Skeletal Remains Law (Del. C. Title 7, Ch. 54).
- If there is federal involvement, in the form of licenses, permits, or funds, the federal agency, often through its client, is responsible for complying with Section 106 of the National Historic Preservation Act (36 CFR 800) and must consider their project's effects on any known or potential cultural or historic resources. For further information on the Section 106 process please review the Advisory Council on Historic Preservation's website at: www.achp.gov
- If there are any questions, inquiries, or concerns, feel free to contact the Delaware State Historic Preservation Office for assistance at 302-736-7400.

Department of Agriculture – Contact: Milton Melendez 698-4534

- The proposed project is adjacent to a property protected through the State's Agricultural Lands Preservation Program (Hopkins Covered District S-95-07-042 Parcel 334-10.00-56.00). Therefore, the activities conducted on this preserved property are protected by the agricultural use protections outlined in Title 3, Del. C., Chapter 9. These protections effect adjoining developing properties. The 300-foot notification requirement affects all new deeds in a subdivision located in whole or part within 300 feet of an Agricultural District/Easement. Please take note of these restrictions as follows:

§ 910. Agricultural use protections.

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

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

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

expressly conditioned on acceptance of any annoyance or inconvenience which may result from such normal agricultural uses and activities."

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

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

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

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

Sussex County Housing – Contact: Brandy Nauman 855-7779

- Sussex County endeavors to promote non-discrimination and affordable housing whenever possible throughout the County. In this regard, the developer and associated financial institutions are encouraged to provide and finance affordable housing opportunities to Sussex County residents in all new developments, and affirmatively market those affordable housing units to diverse populations.
- For questions about opportunities available for affordable housing projects within Sussex County, please consult Sussex County's "Affordable Housing Support Policy". The policy along with other resources are available on the County's Affordable & Fair Housing Resource Center website: www.sussexcountyde.gov/affordable-and-fair-housing-resource-center. The County's Community Development & Housing

Department can advise about existing affordable housing opportunities in Sussex County and the appropriate County Department to contact regarding specific development issues concerning future affordable housing projects within Sussex County.

- The Community Development & Housing Department can also explain and assist with any financial support or incentives that may be available to a project from federal, state and county sources, as well as private funding sources that also promote affordable housing in Sussex County.
- Please understand that all residential projects, including Affordable Housing Projects are subject to the applicable provisions of the Sussex County Subdivision and Zoning Codes, and the approval processes set forth in those Codes.

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

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

Sincerely,

A handwritten signature in cursive script that reads "Constance C. Holland".

Constance C. Holland, AICP
Director, Office of State Planning Coordination

CC: Sussex County



United States Department of Agriculture

Natural Resources
Conservation
Service

December 18, 2020

Georgetown
Service Center

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

21315 Berlin Road
Unit 3
Georgetown, DE
19947

**RE: Cardinal Grove
Indian River Hundred
98 single family lots**

Voice 302.856.3990
Fax 855.306.8272

RECEIVED
DEC 28 2020
SUSSEX COUNTY
PLANNING & ZONING

Dear Mr. Whitehouse:

Soils within the delineated area on the enclosed map are:

- DoA Downer sandy loam, 0 to 2 percent slopes
- DoB Downer sandy loam, 2 to 5 percent slopes
- EvD Evesboro loamy sand, 5 to 15 percent slopes
- FgA Fallsington loam, 0 to 2 percent slopes
- FhA Fort Mott-Henlopen complex, 0 to 2 percent slopes
- FhB Fort Mott-Henlopen complex, 2 to 5 percent slopes
- HnA Hammonton sandy loam, 0 to 2 percent slopes
- LO Longmarsh and Indiantown soils, frequently flooded

Soil Interpretation Guide

Soil Limitation Class

Buildings

Map Symbol	Urbanizing Subclass	With Basement	Without Basement	Septic Filter Fields
DoA	G1	Not limited	Not limited	Not limited
DoB	G1	Not limited	Not limited	Not limited
EvD	Y3	Somewhat limited	Somewhat limited	Very limited
FgA	R2	Very limited	Very limited	Very limited
FhA	G1	Not limited	Not limited	Somewhat limited/Not limited

FhB	G1	Not limited	Not limited	Somewhat limited/Not limited
HnA	Y2	Very limited	Somewhat limited	Very limited
LO	R3	Very limited	Very limited	Very limited

Definition of soil limitation ratings classes:

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

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

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

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

G1:

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

R2:

The soils in this classification are nearly or gently sloping, very poorly, poorly, and somewhat poorly drained. Seasonal high water tables, local ponding, and high potential frost action severely limit these soils for residential developments. The principal soil limitations are: 1) soil is highly susceptible to frost action, 2) excavations are likely to fill with water in late winter or early spring, 3) wet foundations or basements probable, and 4) hazard of temporary ponding of water in areas lacking outlets. Loose running sand commonly encountered in deep excavations.

R3:

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

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.

Y3:

Strongly sloping to steep (5-15% slopes) excessively drained, very sandy, rapidly permeable soils. These are the same kind of soils as in subclass G2 but are more sloping. Slopes moderately limit their use for residential developments, but available moisture for lawns, trees, shrubs, and gardens is severely limited, especially if the soil has been graded.

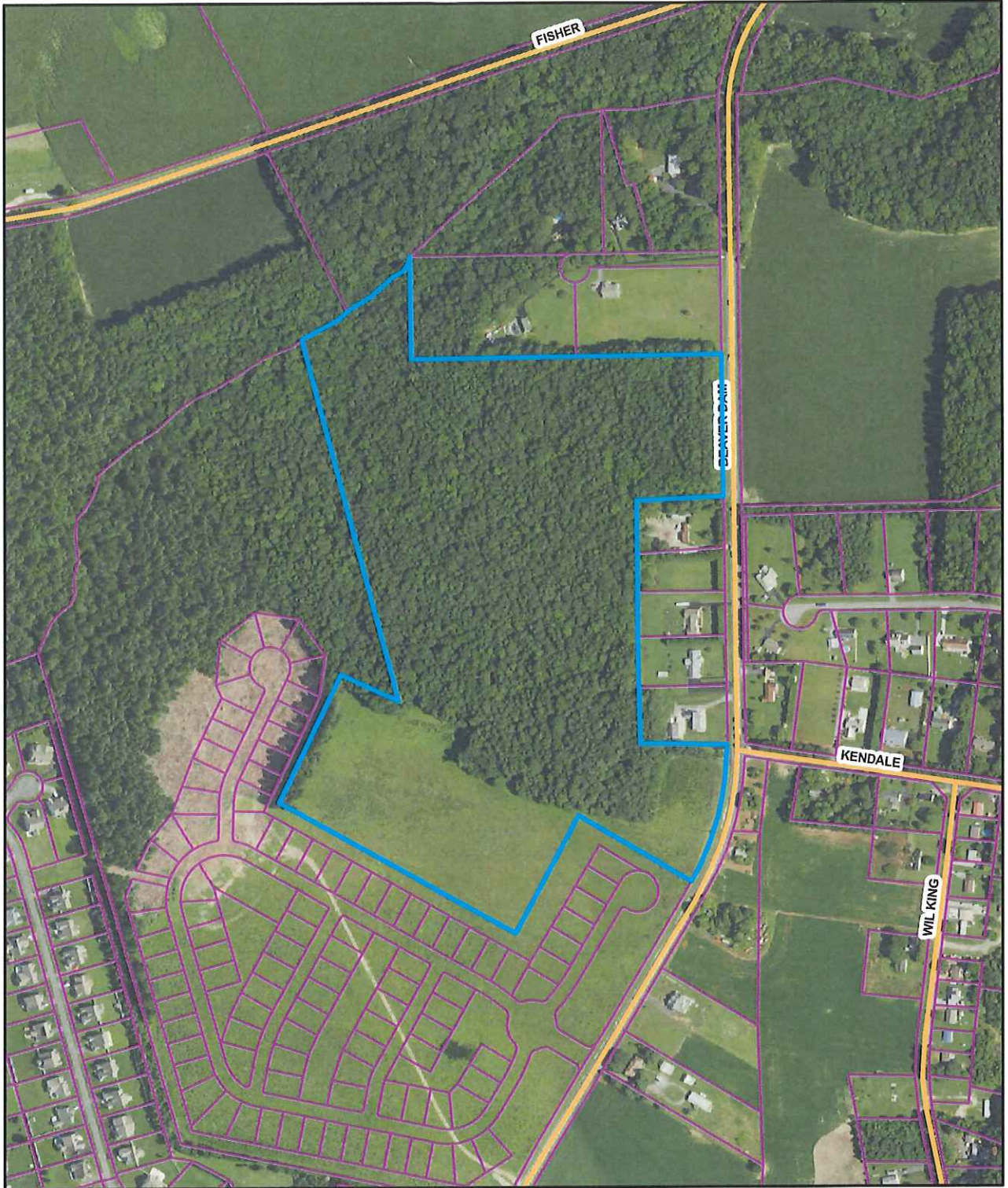
The soil interpretations above do not eliminate the need for detailed investigations at each proposed construction site. However, the interpretations can serve as a guide to planning more detailed investigations. No consideration was given in these interpretations regarding the size and shape of the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

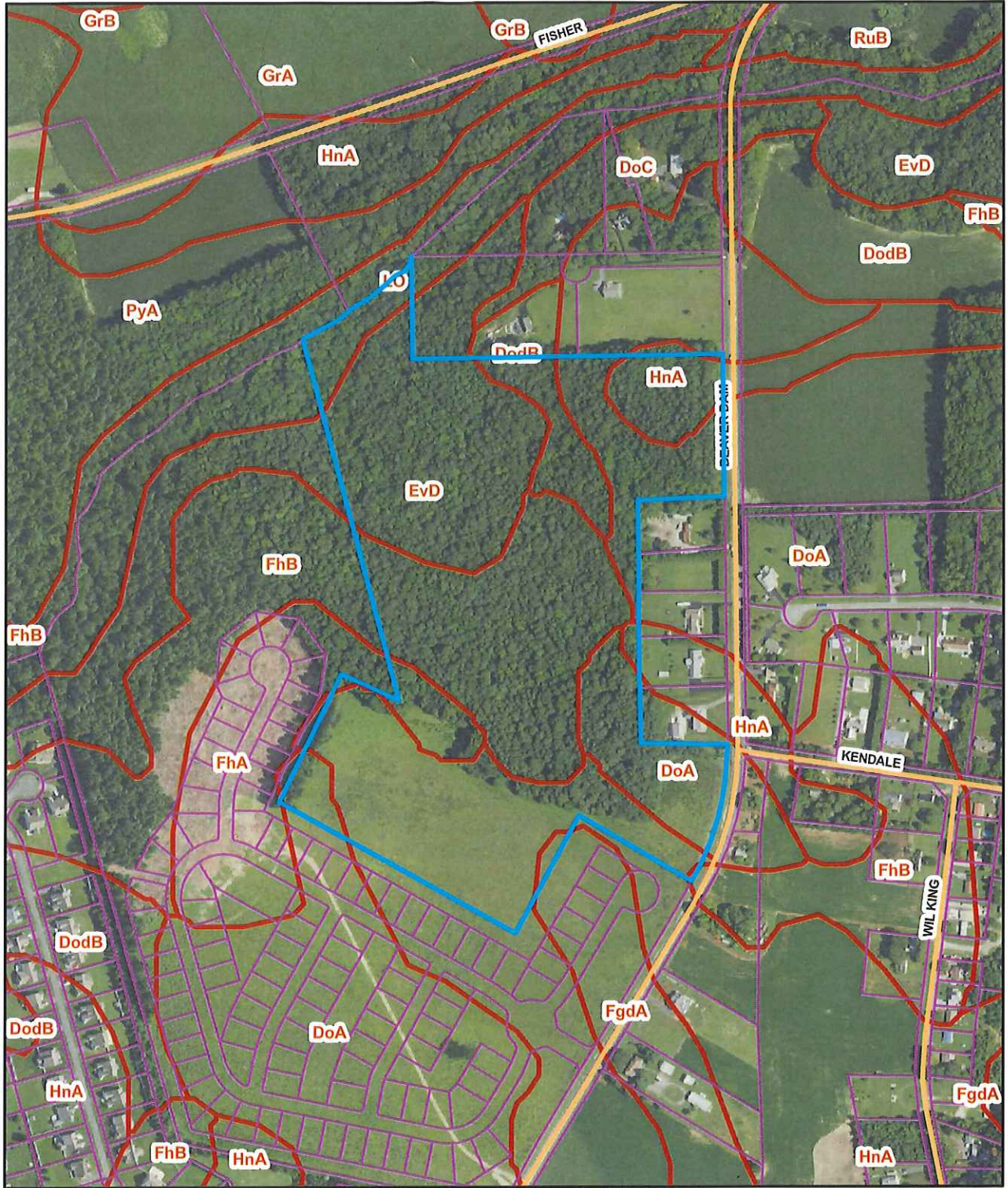


Thelton D. Savage
District Conservationist
USDA, Natural Resources Conservation Service

TDS/bh



2020-11
TM #234-2.00-1.10
Cardinal Grove



2020-11
TM #234-2.00-1.10
Cardinal Grove

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: October 15th, 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 **December 23rd, 2020**.

2020-11 – Cardinal Grove- This is a Cluster subdivision. The Cluster subdivision is for the creation of ninety-eight (98) single family lots. The property is located on the west side of Beaver Dam Rd (S.C.R 285) approximately 0.27 mile south of Fisher Road (S.C.R 262) Tax Parcel: 234-2.00-1.10. Zoning: AR-1 (Agricultural Residential District). Owner: 18898 Beaver Dam Rd, 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.

Agency Name: Dept. of Transportation Project Name: Cardinal Grove
Division: Planning Contact Person: Bill Brockenbrough

Regulations/Code Requirements

- The site access on Beaver Dam Road (Delaware Route 23) must be designed in accordance with DeIDOT's Development Coordination Manual, which is available at <http://www.deldot.gov/Business/subdivisions/index.shtml?dc=changes>.
- Pursuant to Section 1.3 of the Manual, a Pre-Submittal Meeting is required before plans are submitted for review. The form needed to request the meeting and guidance on what will be covered there and how to prepare for it is located at https://www.deldot.gov/Business/subdivisions/pdfs/Meeting_Request_Form.pdf?08022017.
- Section 1.7 of the Manual addresses fees that are assessed for the review of development proposals. DeIDOT anticipates collecting the Initial Stage Fee when the record plan is submitted for review and the Construction Stage Fee when construction plans are submitted for review.
- Per Section 2.2.2.1 of the Manual, Traffic Impact Studies (TIS) are warranted for developments generating more than 500 vehicle trip ends per day or 50 vehicle trip ends per hour in any hour of the day. From the PLUS application, the total daily trips are estimated at 950 vehicle trip ends per day. Using the 10th edition of the Institute of Transportation Engineers' Trip Generation Manual, DeIDOT estimates this number at 1,021 and the weekday morning and evening peak hour trip ends at 74 and 100, respectively.

Section 2.2.2.2 of the Development Coordination Manual provides that for developments generating less than 2000 vehicle trip ends per day and less than 200 vehicle trip ends per hour in any hour of the day, DeIDOT may accept an Area Wide Study (AWS) Fee in lieu of the TIS if the local government does not require a TIS. The AWS Fee is calculated as \$10 per daily trip or, in this case, \$10,210. AWS Fees are used to fund traffic studies, not to build improvements.

DeIDOT anticipates requiring the developer to improve Beaver Dam Road, from the north limit of their north frontage to the south limit of their south frontage, to meet DeIDOT's Major Collector Road standards, which include 12-foot lanes and 8-foot shoulders. DeIDOT has also identified one off-site improvement toward which they would require the developer to contribute: improvement of Kendale Road (Sussex Road 287) to provide a second westbound lane approaching Beaver Dam Road. DeIDOT would further require the developer to enter a signal agreement for the intersection of Beaver Dam and Kendale Roads.

- Section 3.5.4.2 of the Manual addresses requirements for Shared Use Paths (SUP) and sidewalks. For projects in Level 3 and 4 Investment Areas, installation of paths or sidewalks along the frontage on State-maintained roads is at DeIDOT's discretion. DeIDOT anticipates requiring the developer to build an SUP along both sections of their frontage on Beaver Dam Road.
- Section 3.5.4.4 of the Manual addresses requirements for accessways. Accessways are paths that connect subdivision streets to a sidewalk or SUP. DeIDOT anticipates requiring an accessway to the SUP along the site frontage near Lot 20.
- In accordance with Section 3.8 of the Manual, storm water facilities, excluding filter strips and bioswales, shall be located a minimum of 20 feet from the ultimate State right-of-way along Beaver Dam Road.
- In accordance with Section 5.2.9 of the Manual, the Auxiliary Lane Worksheet should be used to determine whether auxiliary lanes are warranted at the site entrances and how long those lanes should be. The worksheet can be found at <http://www.deldot.gov/Business/subdivisions/index.shtml>.
- In accordance with Section 5.4 of the Manual, sight distance triangles are required and shall be established in accordance with American Association of State Highway and Transportation Officials (AASHTO) standards. A spreadsheet has been developed to assist with this task. It can be found at <http://www.deldot.gov/Business/subdivisions/index.shtml>.
- In accordance with Section 5.14 of the Manual, all existing utilities must be shown on the plan and a utility relocation plan will be required for any utilities that need to be relocated.

Suggestions

- The applicant should expect a requirement that any substation and/or wastewater facilities will be required to have access from an internal driveway with no direct access to Beaver Dam Road.
- The applicant should expect a requirement that all PLUS and Technical Advisory Committee (TAC) comments be addressed prior to submitting plans for review.
- Please be advised that the Standard General Notes have been updated and posted to the DeIDOT website. Please begin using the new versions and look for the revision dates of March 21, 2019 and March 25, 2019. The notes can be found at <https://www.deldot.gov/Business/subdivisions/>.

DELAWARE DEPARTMENT OF TRANSPORTATION
COMMENTS FOR
T.A.C. MEETING
OF DECEMBER 2020

Lands of 18898 Beaver Dam Rd, LLC
Tax Map # 234-2.00-1.10
Beaver Dam Road (SCR 285)
Sussex County

#2020-11, Cardinal Grove

1. Referring to the “*Development Coordination Manual*”, Chapter 3 – Record Plan Design, Section 3.4.1: Commercial or Major Residential Subdivisions Record Plan Application Process, prior to submitting the Record Plan for review, a pre-submittal meeting with DelDOT is required for projects generating 200 or more site ADT.
2. The subject development is located within the boundaries of the adopted Henlopen Transportation Improvement District (TID). Section 2.4 of the Manual addresses TIDs and Section 2.4.2.8 specifically addresses infrastructure fees that are paid by developers within a TID. As necessary, the applicant may contact Ms. Sarah Coakley, a Principal Planner in DelDOT's Statewide and Regional Planning Section for more information with regard to the TID. Ms. Coakley may be reached at (302) 760-2236 or Sarah.Coakley@delaware.gov.
 - a. DelDOT met with the applicant on December 15, 2020 in a Project Coordination Meeting to preliminarily discuss anticipated project requirements and contributions. At that time, the applicant noted that the project’s record plan was submitted to Sussex County in July of 2020, prior to the Henlopen TID becoming formally adopted in October of 2020. Since the record plan was already submitted to the County before adoption of the TID, they have the option to request TID participation under the transitional rules, in which the Developer would be choosing complete TID participation instead of conducting a TIS and making off-site improvement contributions. Absent of TID participation, the development will be processed according to Section 2.2.2.1 of the “*Development Coordination Manual*”, as outlined below.
 - b. Referring to the “*Development Coordination Manual*”, Chapter 2 – Traffic Analysis and Improvements, Traffic Impact Studies (TIS) are warranted for developments generating more than 500 vehicle trip ends per day or 50 vehicle trip ends per hour in any hour of the day. From the application, the total daily trips are estimated at 1,021 vehicle trip ends per day and the weekday morning and evening peak hour trip ends at 74 and 100, respectively.

8. 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. Beaver Dam Road is classified as a Major Collector according to DelDOT’s Roadway Functional Classification Map and would require a minimum of 40’ of Right-Of-Way measured from the physical centerline of the roadway.

<https://deldot.gov/Programs/gate/index.shtml>

9. 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.
10. 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.
11. 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.
12. 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.
13. Referring to the “*Development Coordination Manual*”, Chapter 3 – Record Plan Design, Section 3.2.5.1.4: Drainage easements are required for all drainage facilities which collect or convey roadway runoff but are not located within a dedicated right-of-way. Drainage easements must be shown and labeled on the Plans and must take into account the requirements of Sections 3.8 and 5.7.2.6 of the manual. These easements will require additional metes and bounds and other documentation to clarify the exact location and extents of these permanent easements.
14. 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. The requirements in Sections 3.5.1 through 3.5.3 shall be followed for all development projects having access to state roads or proposing DelDOT maintained public streets for subdivisions. DelDOT recommends that the

21. Standard General Notes have been updated and posted to the DeIDOT Website. Please begin using the new versions and look for the revision date of August 10, 2020. The notes can be found at the following website under the *Guidance* tab;

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

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

- a. DeIDOT previously reviewed a similar application for the subject lands and issued the comments to the State of Delaware, Office of State Planning Coordination in July of 2020, as attached.

23. 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.

24. The Auxiliary Lane Spreadsheet has been posted to the DeIDOT 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>

25. 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>

26. 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 DeIDOT 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>

- The subject development is located within the boundaries of the proposed Henlopen Transportation Improvement District (TID). Section 2.4 of the Manual addresses TIDs and Section 2.4.2.8 specifically addresses infrastructure fees that are paid by developers within a TID. The Henlopen TID is still being created and the specific fees that would be associated with it have not been established but when the TID is adopted by DelDOT and Sussex County, payment of the infrastructure fee would be required in place of contributions toward off-site improvements. As necessary, the applicant may contact Ms. Sarah Coakley, a Principal Planner in DelDOT's Statewide and Regional Planning Section for more information with regard to the TID. Ms. Coakley may be reached at (302) 760-2236 or Sarah.Coakley@delaware.gov.
- As necessary, in accordance with Section 3.2.5 and Figure 3.2.5-a of the Manual, DelDOT will require dedication of right-of-way along the site's frontage on Beaver Dam Road. By this regulation, this dedication is to provide a minimum of 40 feet of right-of-way from the physical centerline. The following right-of-way dedication note is required, **"An X-foot wide right-of-way is hereby dedicated to the State of Delaware, as per this plat."**
- In accordance with Section 3.2.5.1.2 of the Manual, DelDOT will require the establishment of a 15-foot wide permanent easement across the property frontage. The location of the easement shall be outside the limits of the ultimate right-of-way. The easement area can be used as part of the open space calculation for the site. The following note is required, **"A 15-foot wide permanent easement is hereby established for the State of Delaware, as per this plat."**
- Referring to Section 3.4.2.1 of the Manual, the following items, among other things, are required on the Record Plan:
 - A Traffic Generation Diagram. See Figure 3.4.2-a for the required format and content.
 - Depiction of all existing entrances within 450 feet of the entrance on Beaver Dam Road.
 - Notes identifying the type of off-site improvements, agreements (signal, letter) contributions and when the off-site improvements are warranted.
- Section 3.5 of the Manual provides DelDOT's requirements with regard to connectivity. The requirements in Sections 3.5.1 through 3.5.3 shall be followed for all development projects having access to state roads or proposing DelDOT maintained public streets for subdivisions. DelDOT recommends that the developer contact the developer or the homeowners association for the Estates at Cedar Grove and, if they are amenable, provide a bicycle and pedestrian path linking the cul-de-sac near the front of that development to the collector street entering the subject development.



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

December 23, 2020

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

Subject: **Preliminary Plans for Cardinal Grove Subdivision**

Dear Mr. Torrance,

Thank you for providing preliminary plans for Cardinal Grove subdivision submitted by Solutions Integrated Planning Engineering and Management, LLC. The plans submitted to our section dated June 26, 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 Cardinal Grove preliminary subdivision plans dated June 26, 2020 at this time.

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

Sincerely,

A handwritten signature in blue ink that reads "Taryn Davidson". The signature is written in a cursive, flowing style.

Taryn Davidson
Urban Forestry Program
Delaware Forest Service

c. **Accessibility**

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

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

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

e. **Required Notes:**

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

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

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

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

Nick Torrance

From: Dickerson, Troy <TDickerson@delaware.coop>
Sent: Thursday, October 15, 2020 3:24 PM
To: Nick Torrance
Subject: RE: TAC Review 2020-11 Cardinal Grove

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

Nick,

This development is located within DP&L's service territory.

Thanks!!

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



DELAWARE ELECTRIC CO-OP
"We Keep the Lights On"

From: Nick Torrance

Sent: Thursday, October 15, 2020 11:12 AM

To: Beth Krumrine <beth.krumrine@delaware.gov>; Brad Hawkes <bhawkes@sussexcountyde.gov>; Chris Calio <ccalio@sussexcountyde.gov>; dholden@chpk.com; C. Daniel Parsons <dparsons@sussexcountyde.gov>; Duane.Fox@delaware.gov; eileen.butler@delaware.gov; James Sullivan <James.Sullivan@delaware.gov>; jennifer.cinelli@delaware.gov; jessica.watson@sussexconservation.org; jmartin@chpk.com; John J. Ashman <jashman@sussexcountyde.gov>; kgabbard@chpk.com; megan.crystall@delaware.gov; michael.tholstrup@delaware.gov; Mike Brady <MBRADY@sussexcountyde.gov>; Milton.melendez@delaware.gov; mindy.Anthony@delaware.gov; subdivision@delaware.gov; Susan Isaacs <sisaac@sussexcountyde.gov>; susanne.laws@delaware.gov; Dickerson, Troy <TDickerson@delaware.coop>; Terri Dukes <tdukes@sussexcountyde.gov>; tgiroux@chpk.com; Vince Robertson <vrobertson@pgslegal.com>

Subject: TAC Review 2020-11 Cardinal Grove

All,

Sussex County Planning Office has received one (1) application that requires TAC review. Attached is a memo regarding the application and a PDF of the plans submitted. A second email will follow.

Please provide comments on or before December 23rd, 2020.

Please feel free to contact me with any questions.

Thanks,

Nick Torrance

From: Terri Dukes
Sent: Thursday, October 15, 2020 11:23 AM
To: Nick Torrance
Subject: RE: TAC Review 2020-11 Cardinal Grove

Nick, This project has been approved as well as the street names.

From: Nick Torrance <nicholas.torrance@sussexcountyde.gov>
Sent: Thursday, October 15, 2020 11:12 AM
To: Beth Krumrine <beth.krumrine@delaware.gov>; Brad Hawkes <bhawkes@sussexcountyde.gov>; Chris Calio <ccalio@sussexcountyde.gov>; dholden@chpk.com; C. Daniel Parsons <dparsons@sussexcountyde.gov>; Duane.Fox@delaware.gov; eileen.butler@delaware.gov; James Sullivan <James.Sullivan@delaware.gov>; jennifer.cinelli@delaware.gov; jessica.watson@sussexconservation.org; jmartin@chpk.com; John J. Ashman <jashman@sussexcountyde.gov>; kgabbard@chpk.com; megan.crystall@delaware.gov; michael.tholstrup@delaware.gov; Mike Brady <MBRADY@sussexcountyde.gov>; Milton.melendez@delaware.gov; mindy.Anthony@delaware.gov; subdivision@delaware.gov; Susan Isaacs <sisaac@sussexcountyde.gov>; susanne.laws@delaware.gov; tdickerson@decoop.com; Terri Dukes <tdukes@sussexcountyde.gov>; tgiroux@chpk.com; Vince Robertson <vrobertson@pgslegal.com>
Subject: TAC Review 2020-11 Cardinal Grove

All,

Sussex County Planning Office has received one (1) application that requires TAC review. Attached is a memo regarding the application and a PDF of the plans submitted. A second email will follow.

Please provide comments on or before December 23rd, 2020.

Please feel free to contact me with any questions.

Thanks,

Nick Torrance

Planner I
Department of Planning and Zoning
(302) 855-7878
2 The Circle
P.O. Box 417
Georgetown, DE 19947

Nick Torrance

From: Cullen, Kathleen M <kathleen_cullen@fws.gov>
Sent: Wednesday, December 9, 2020 8:16 AM
To: Nick Torrance
Subject: FWS Review of Cardinal Grove

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

Hi Nicholas-

Thank you for sending this project in for review. There are no federally listed species at this location, so no further Section 7 consultation is needed. You can fill out the Online Certification Letter if further documentation is needed: <https://www.fws.gov/chesapeakebay/saving-wildlife/project-review/online-certification-letter.html>

Thank you,
Kathleen



DELAWARE HEALTH AND SOCIAL SERVICES

Division of Public Health

Office of Engineering
Phone: (302) 741-8640
Fax: (302) 741-8641

October 19, 2020

Mr. Nick Torrance
Sussex County Planning & Zoning Commission
PO Box 417
Georgetown, DE 19947

10

Re: Sussex County Technical Advisory Committee

Dear Mr. Torrance:

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

1. **Application:** 2020-11 – Cardinal Grove

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

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

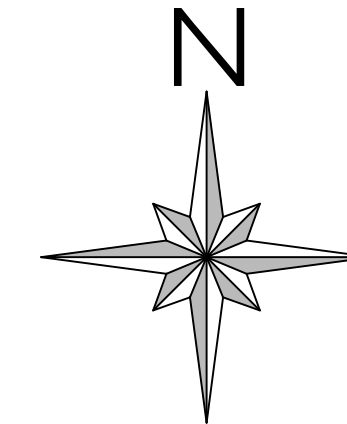
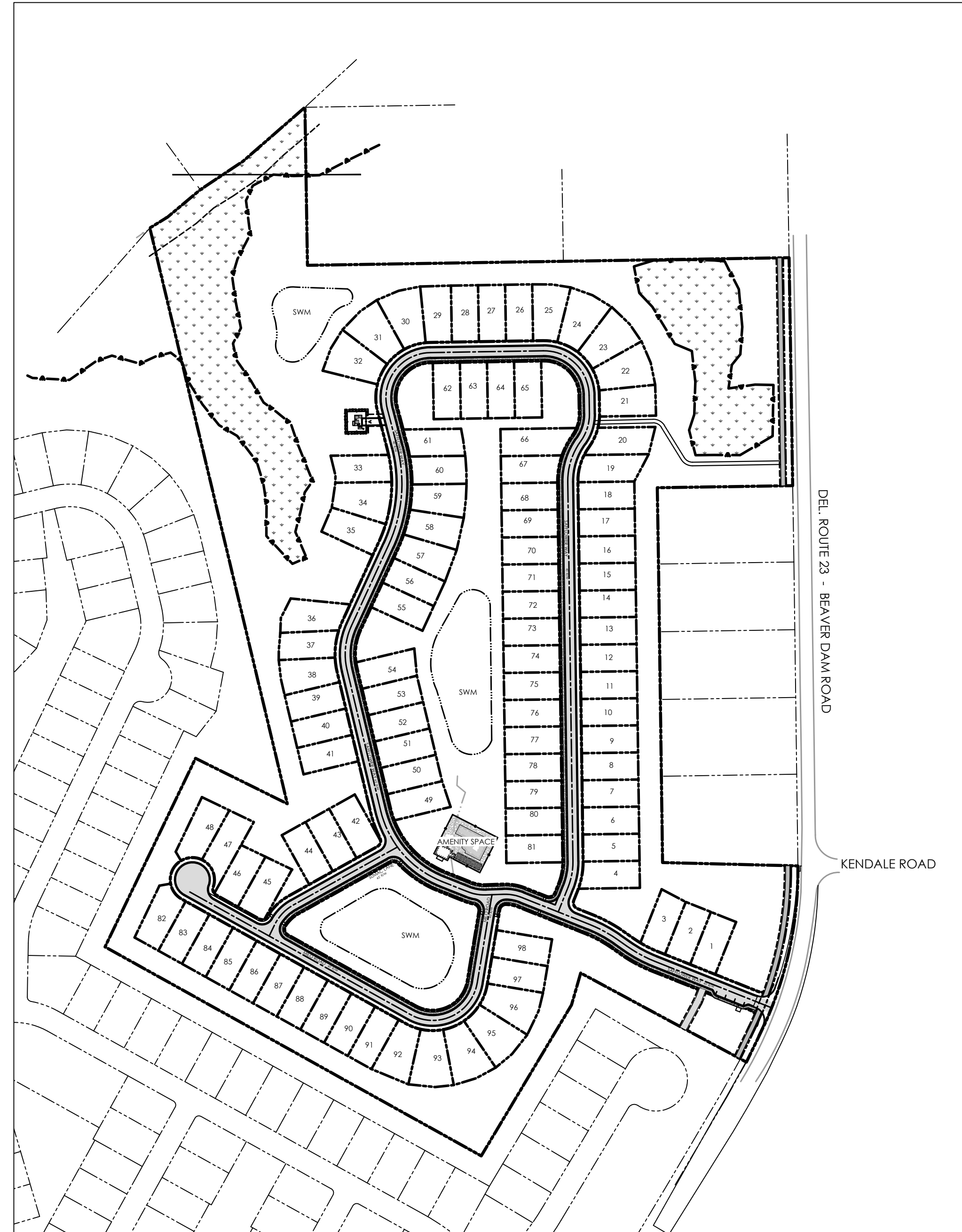
Please do not hesitate to contact me at 302-741-8646 with questions or comments.

Sincerely,

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

PRELIMINARY PLAT FOR CARDINAL GROVE

INDIAN RIVER HUNDRED
SUSSEX COUNTY, DELAWARE
SUSSEX COUNTY PROJECT NUMBER: 2020-11



PRELIMINARY PLAT SHEET INDEX

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

LEGEND

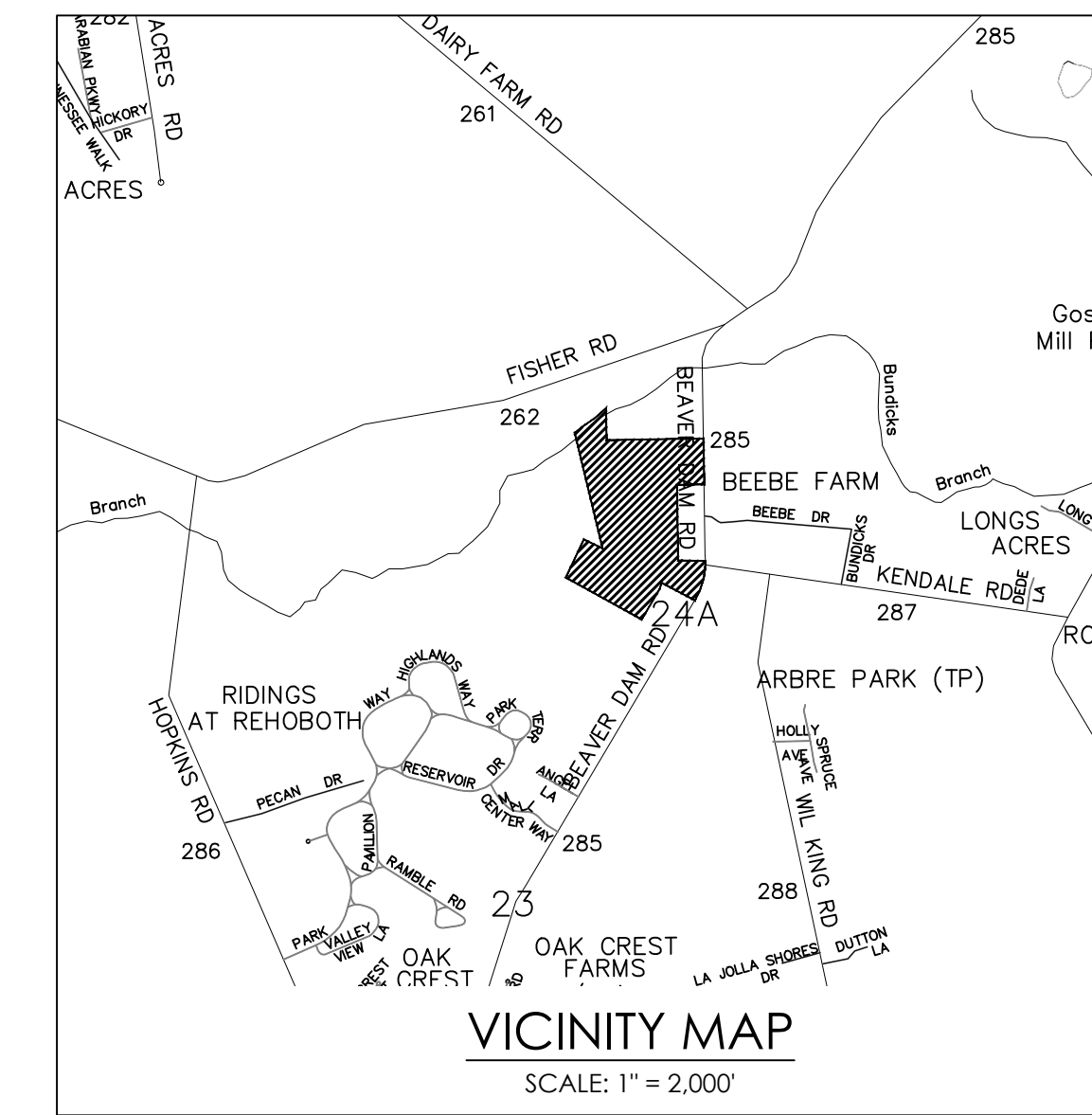
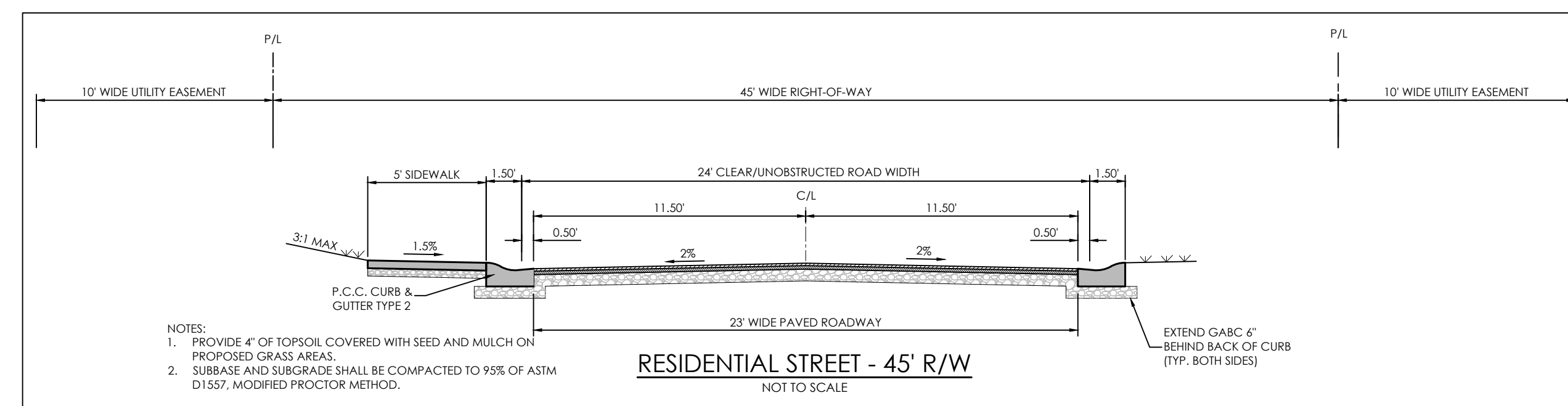
	EXISTING	PROPOSED
PROPERTY LINE	---	---
EASEMENT/BUFFER LINE	---	---
SETBACK LINE	---	---
R.O.W. LINE	---	---
CONCRETE MONUMENT FOUND	□ CMF	
IRON PIPE FOUND	IPF ○	
IRON ROD CAPPED FOUND	IRCF ○	
MAJOR CONTOUR	---	---
MINOR CONTOUR	---	---
ROAD CENTERLINE	---	---
GAS LINE	---	---
EDGE OF PAVEMENT	---	---
PAVEMENT HATCH		▨
CURB AND GUTTER		▨
SIDEWALK		▨
CONCRETE HATCH		▨
UTILITY POLE	○	○
EDGE OF POND	---	---
SANITARY MANHOLE	⊙	⊙
SANITARY PIPE	SS	SS
WATER PIPE	W	W
NON-TIDAL WETLANDS	---	N/A
WOOD LINE	---	---
CATCHBASIN	⊙	⊙
STORM DRAIN MANHOLE	⊙	⊙
STORM PIPE	SD	SD
FLOODPLAIN	---	---
DITCH	---	---

GENERAL NOTES:

- DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY. ALL WORK MUST BE PERFORMED IN COMPLIANCE WITH THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970, AS AMENDED AND ALL RULES AND REGULATIONS THERETO APPURTENANT.
- EXISTING CONTOURS SHOWN WERE TAKEN FROM AERIAL TOPOGRAPHIC MAPPING PROVIDED BY DNREC PUBLIC RECORDS AND WILL BE FIELD VERIFIED DURING THE DESIGN STAGE OF THE PROJECT.
- FORESTED AND/OR LANDSCAPED BUFFER STRIP - A STRIP OF LAND, NOT LESS THAN 20 FEET IN WIDTH, EXCLUSIVE OF ANY RESIDENTIAL LOTS, STORMWATER MANAGEMENT AREAS OR FACILITIES, OPEN SPACE (EXCEPT THAT THE LAND AREA WITHIN THE BUFFER STRIP MAY BE INCLUDED IN THE OVERALL CALCULATION OF OPEN SPACE), RECREATIONAL AMENITIES, WASTEWATER TREATMENT AND/OR DISPOSAL FACILITIES, WATER TREATMENT FACILITIES, STREETS, BUILDINGS OR OTHER SURFACE IMPROVEMENTS AND LOCATED ALONG THE ENTIRE OUTER PERIMETER OF ANY PORTION OF A MAJOR SUBDIVISION OF LANDS INTO FOUR OR MORE LOTS ADJACENT TO LAND OF OTHER OWNERSHIP
- STORMWATER WILL BE HANDLED ONSITE AND WILL MEET THE CURRENT STATE OF DELAWARE REGULATIONS. ALL STORMWATER FACILITIES WILL BE PRIVATE AND MAINTAINED BY THE DEVELOPER UNTIL A HOMEOWNERS ASSOCIATION CAN ASSUME OWNERSHIP AND RESPONSIBILITY FOR THE STORMWATER FACILITIES.
- ALL INTERNAL ROADWAYS AND SIDEWALKS ARE "PRIVATE" AND WILL BE MAINTAINED BY THE DEVELOPER UNTIL A HOMEOWNERS OR CONDOMINIUM ASSOCIATION CAN ASSUME OWNERSHIP AND RESPONSIBILITY FOR THE ROADWAYS AND SIDEWALKS.
- FOR ANY NEW DEVELOPMENT LOCATED IN WHOLE OR IN PART WITH 50 FEET OF THE BOUNDARY OF LAND USED PRIMARILY FOR AGRICULTURAL PURPOSES, NO IMPROVEMENT REQUIRING AN OCCUPANCY APPROVAL FOR A RESIDENTIAL TYPE USE SHALL BE CONSTRUCTED WITHIN 50 FEET OF THE BOUNDARY OF THE LANDS USED PRIMARILY FOR AGRICULTURAL PURPOSES.

NOTES:

- ALL ON-SITE STREETS ARE PRIVATE AND SHALL BE MAINTAINED BY THE OWNER UNTIL DEDICATION TO THE HOMEOWNERS ASSOCIATION. THE PERPETUAL MAINTENANCE OF THE STREETS SHALL BE BY THE RESPECTIVE ORGANIZATION.
- STORMWATER MANAGEMENT AND STORM DRAINAGE SHALL BE IN ACCORDANCE WITH THE SUSSEX COUNTY CONSERVATION DISTRICT AND SUSSEX COUNTY ENGINEERING REQUIREMENTS. THE SITE IS TO BE TREATED BY MULTIPLE WET PONDS. MAINTENANCE OF THE ON-SITE STORMWATER MANAGEMENT FACILITIES AND STORM DRAINAGE SYSTEM SHALL BE BY THE OWNER UNTIL DEDICATION TO THE HOMEOWNERS ASSOCIATION. THE PERPETUAL MAINTENANCE OF THE ABOVE PROACTIVE SHALL BE BY THE RESPECTIVE ORGANIZATION.
- ALL OPEN SPACE, INCLUDING BUFFERS AND FOREST STRIPS, SHALL BE MAINTAINED BY THE HOMEOWNERS ASSOCIATION.
- FOR ANY NEW DEVELOPMENT LOCATED IN WHOLE OR IN PART WITH 50 FEET OF THE BOUNDARY OF LAND USED PRIMARILY FOR AGRICULTURAL PURPOSES, NO IMPROVEMENT REQUIRING AN OCCUPANCY APPROVAL FOR A RESIDENTIAL TYPE USE SHALL BE CONSTRUCTED WITHIN 50 FEET OF THE BOUNDARY OF THE LANDS USED PRIMARILY FOR AGRICULTURAL PURPOSES.
- POTABLE WATER, SANITARY SEWER, STORM DRAINAGE, STREET PAVEMENT SHALL BE CONSTRUCTED BY DEVELOPER. PHASING OF IMPROVEMENTS SHALL BE PER COUNTY AND CONSERVATION DISTRICT REQUIREMENTS.



SITE DATA:

OWNER: 18898 BEAVER DAM ROAD LLC
20184 PHILLIPS STREET
REHOBOTH BEACH, DE

DEVELOPER: 18898 BEAVER DAM ROAD LLC
20184 PHILLIPS STREET
REHOBOTH BEACH, DE 19971
MR. CHRIS SCHELL

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

- TM 234-2.00-1.10
TOTAL AREA = 49.04± AC.
- EXISTING ZONING:
AR-1
- PROPOSED USE: AR-1 CLUSTER

SINGLE FAMILY LOTS = 98 LOTS (2.0 UNITS/ACRE)
MIN. LOT AREA = 7,500 S.F.
MIN. LOT WIDTH = 60'

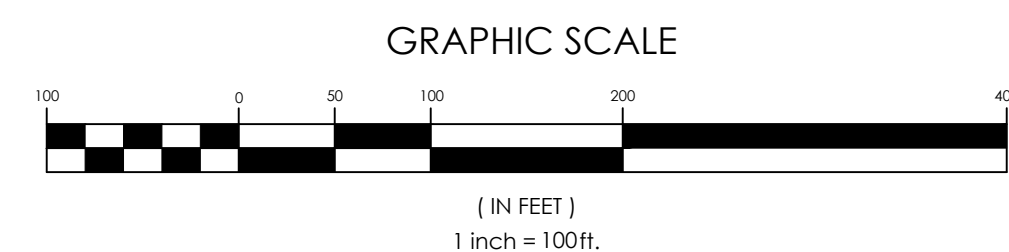
MAXIMUM BUILDING HEIGHT: 42'
FRONT YARD = 25' (15' ON CORNER)
SIDE YARD = 10'
REAR YARD = 10'

- BOUNDARY AND TOPOGRAPHY AS SHOWN HEREON ARE AS PROVIDED BY SOLUTIONS IPEM LLC

- FLOOD ZONE:
PROPERTY IS LOCATED IN ZONE A (SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD) AND ZONE X (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN) PER FIRM MAP NUMBER 10005C0330J, MAP REVISED JANUARY 6, 2005.

SOIL TYPES:
DoA & DodB - DOWNER SANDY LOAM - HYDROLOGIC SOIL GROUP A
Evd - EYEBORO LOAMY SAND - HYDROLOGIC SOIL GROUP A
FgdA - FALLINGSTON LOAMS - HYDROLOGIC SOIL GROUP C/D
FhA & FhB - FORT MOTT-HENLOPEN COMPLEX - HYDROLOGIC SOIL GROUP A
HnA - KAMMONTON SANDY LOAM - HYDROLOGIC SOIL GROUP B
Lo - LONGMARSH AND INDIANTOWN SOILS - HYDROLOGIC SOIL GROUP B-D
PyA - PINEYNECK LOAM - HYDROLOGIC SOIL GROUP A

- WATER SUPPLY:
ARTESIAN WATER COMPANY
- SANITARY SEWER:
SUSSEX COUNTY UNIFIED SANITARY SEWER DISTRICT
- OPEN SPACE = 26.12± AC (53.3% ±)
- EXISTING WOODLANDS = 25.00± AC
WOODLANDS TO REMAIN = 11.25± AC (45%)
WOODLANDS TO BE REMOVED = 13.75± AC (55%)
- EXISTING NON-TIDAL WETLANDS & WATERS OF THE U.S. = 4.47± AC
NON-TIDAL WETLANDS TO REMAIN = 4.47± AC
- AMENITIES SHOWN ARE CONCEPTUAL. ACTUAL AMENITY DETAILS SHALL BE PROVIDED AS PART OF FINAL SITE PLAN SUBMITTAL.
- PROJECT IS NOT LOCATED IN A WELLHEAD PROTECTION AREA.
- PROJECT IS LOCATED WITHIN FAIR GROUNDWATER RECHARGE POTENTIAL AREA.



solutions
INCORPORATED
A PROFESSIONAL CORPORATION

303 North Bedford Street
Georgetown, DE 19947
T. 302.297.9215

3033 Manthill Mill Road
Salisbury, MD 21804
T. 410.572.8833

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NO.	DATE	DESCRIPTION
1	11/2/20	REVISIONS PER AGENCY REVIEW LETTER, DATED 10/28/20.

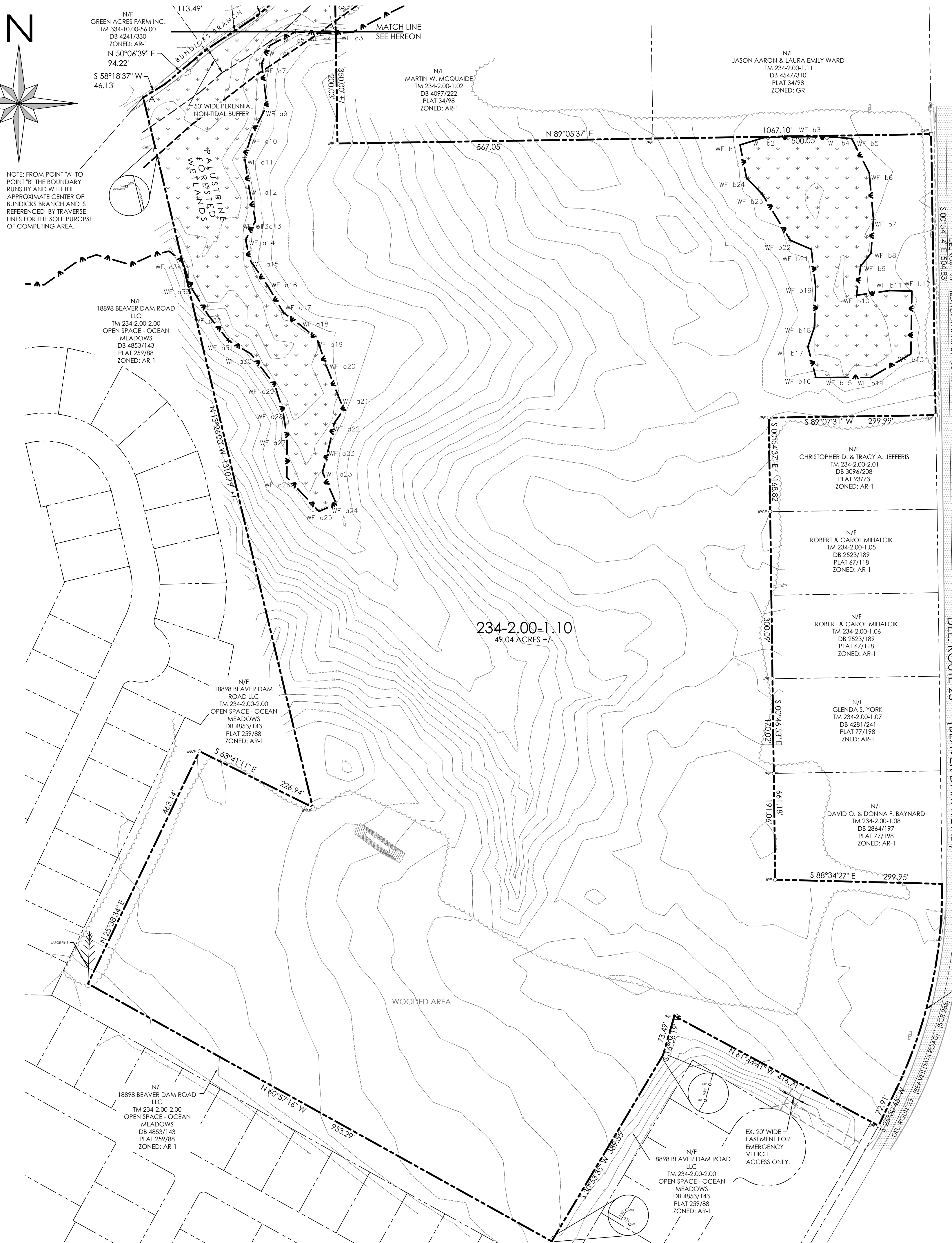
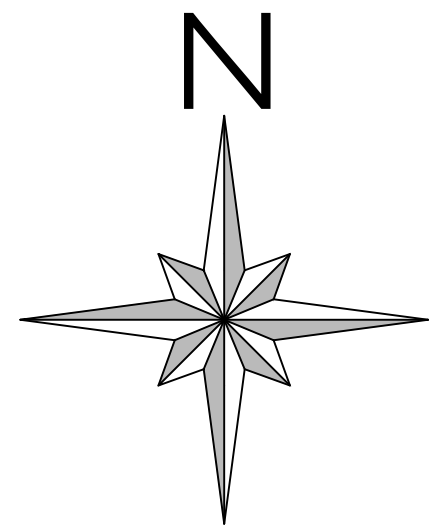
PRELIMINARY PLAT COVER SHEET

for
CARDINAL GROVE
INDIAN RIVER HUNDRED
SUSSEX COUNTY, DELAWARE

Date:	6/26/20
Job Number:	G 19076
Scale:	AS NOTED
Drawn By:	ML
Designed By:	DP
Approved By:	JIP

Sheet No.: 1

File Name: 19076-prelim-over



WETLAND COORDINATE TABLE
(PLAGS A1-A42)

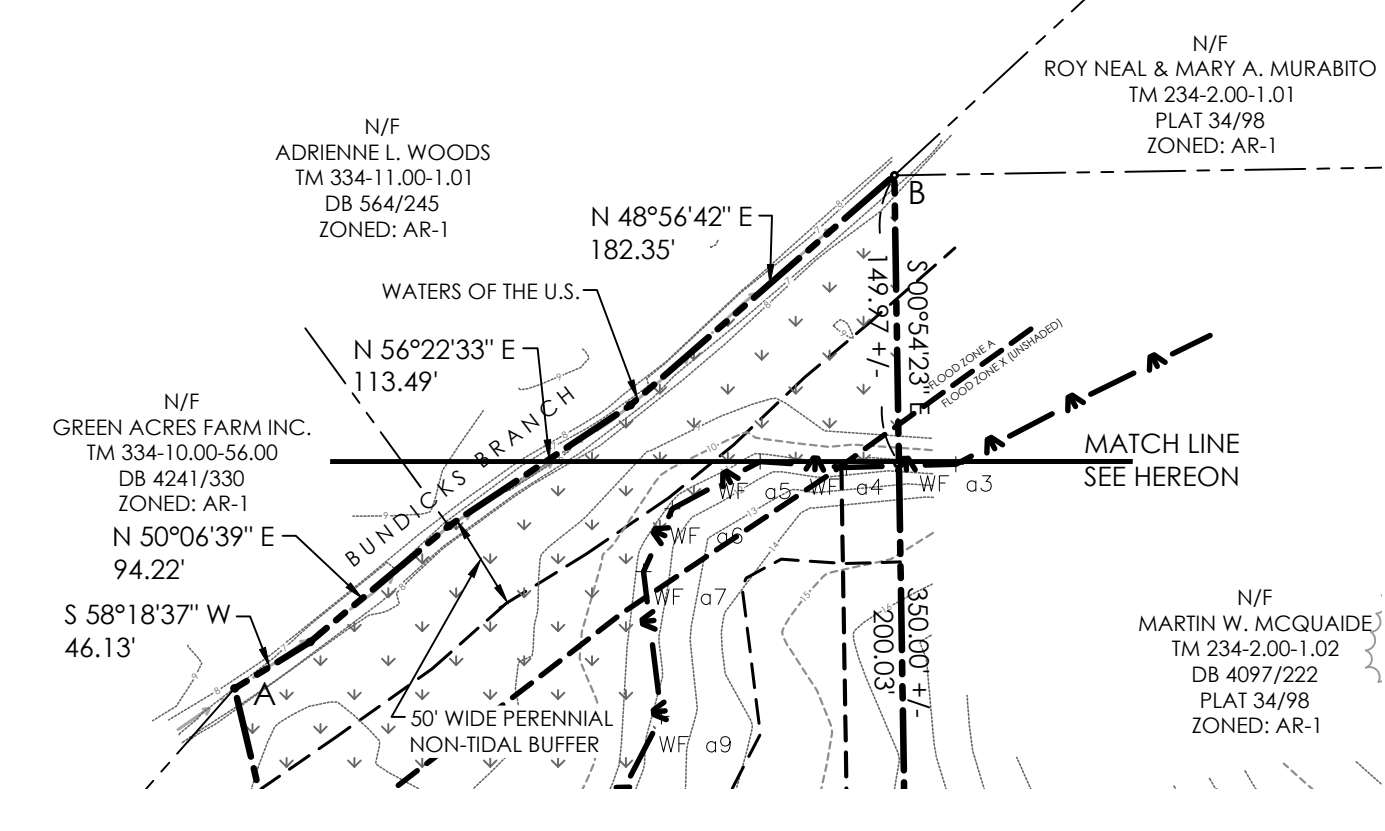
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wf/a3	262105.3403	715127.4270
wf/a4	262103.6480	715070.4604
wf/a5	262106.7420	715025.5556
wf/a6	262082.1474	714979.8469
wf/a7	262049.3629	714964.7991
wf/a9	261973.9639	714974.1377
wf/a10	261919.7947	714946.0167
wf/a11	261880.8010	714934.1786
wf/a12	261826.0656	714941.9009
wf/a13	261766.9161	714953.6473
wf/a14	261732.9038	714936.0258
wf/a15	261696.1878	714943.6733
wf/a16	261649.9301	714975.9152
wf/a17	261602.1138	715003.7730
wf/a18	261581.3863	715032.1593
wf/a19	261555.0980	715064.2964
wf/a20	261509.2381	715079.7056
wf/a21	261428.2952	715112.2558
wf/a22	261403.0871	715094.9446
wf/a23	261359.2468	715085.3023
wf/a23	261315.5359	715074.1599
wf/a24	261258.4431	715098.8971
wf/a25	261243.9629	715068.0697
wf/a26	261306.5098	715009.9379
wf/a27	261377.0477	715010.3611
wf/a28	261423.6829	715003.1591
wf/a29	261470.7943	714988.7908
wf/a30	261528.0422	714945.3478
wf/a31	261551.8899	714905.1292
wf/a32	261597.7580	714868.4258
wf/a33	261645.7840	714838.8831
wf/a34	261693.9765	714822.4107

WETLAND COORDINATE TABLE
(PLAGS B1-B13)

Description	Northing	Easting
wf/b1	261903.3389	715824.3666
wf/b2	261916.4457	715867.2785
wf/b3	261918.1667	715945.3730
wf/b4	261916.7099	716002.0421
wf/b5	261914.6161	716025.2185
wf/b6	261853.0847	716056.5692
wf/b7	261769.5963	716064.1980
wf/b8	261708.6950	716059.8823
wf/b9	261685.3150	716041.0952
wf/b10	261633.2107	716033.7665
wf/b11	261641.6302	716092.6820
wf/b12	261640.9413	716133.2383
wf/b14	261485.5893	716059.3276
wf/b15	261485.8776	716002.2316
wf/b16	261485.3173	715960.8349
wf/b17	261540.7987	715946.4154
wf/b18	261575.7462	715957.9914
wf/b19	261647.9411	715960.2789
wf/b21	261715.9597	715952.5534
wf/b22	261731.9368	715914.6952
wf/b23	261814.1098	715864.9671
wf/b24	261844.4554	715836.0578
wf/b13	261527.7770	716131.4235

ACREAGE

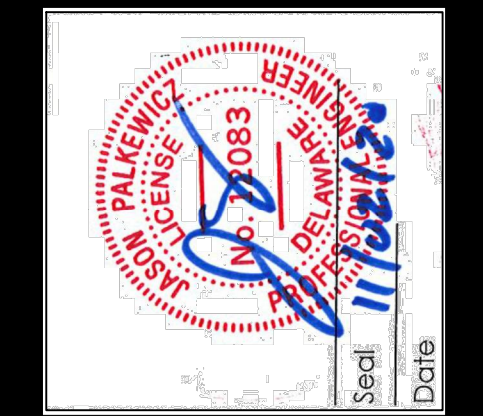
UPLAND AGRICULTURAL FIELD	12.73 ACRES±
UPLAND FOREST	31.81 ACRES±
ISOLATED FORESTED WETLANDS SUBJECT TO CORPS REGULATION UNDER PRELIMINARY JURISDICTIONAL DETERMINATION	1.61 ACRES±
FORESTED WETLANDS REGULATED BY CORPS OF ENGINEERS	2.78 ACRES±
WATERS OF THE U.S. (BUNDICKS BRANCH)	0.08 ACRES±
TOTAL SITE AREA OF WETLAND INVESTIGATION	49.04 ACRES±



ISOLATED PALU FORESTED WET SUBJECT TO (REGULATION PRELIMINARY JURISDICTIONAL DETERMINA

DEL. ROUTE 23 (BEAVER DAM ROAD)

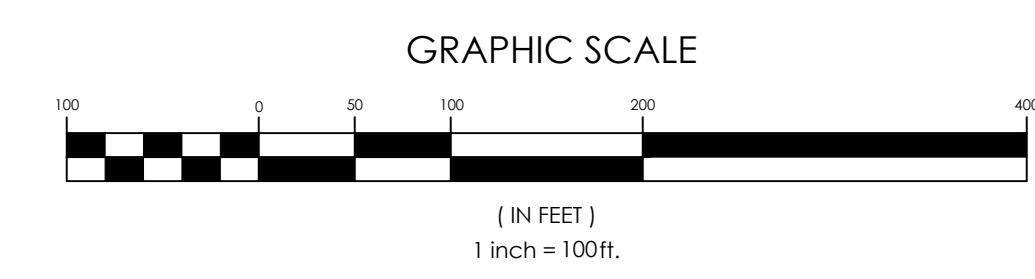
CURVE DATA
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Arc: 381.37'
Deg.: 26°31'54"
Chd. Brg.: N 12°34'48" E
Chd. Dist.: 377.98'

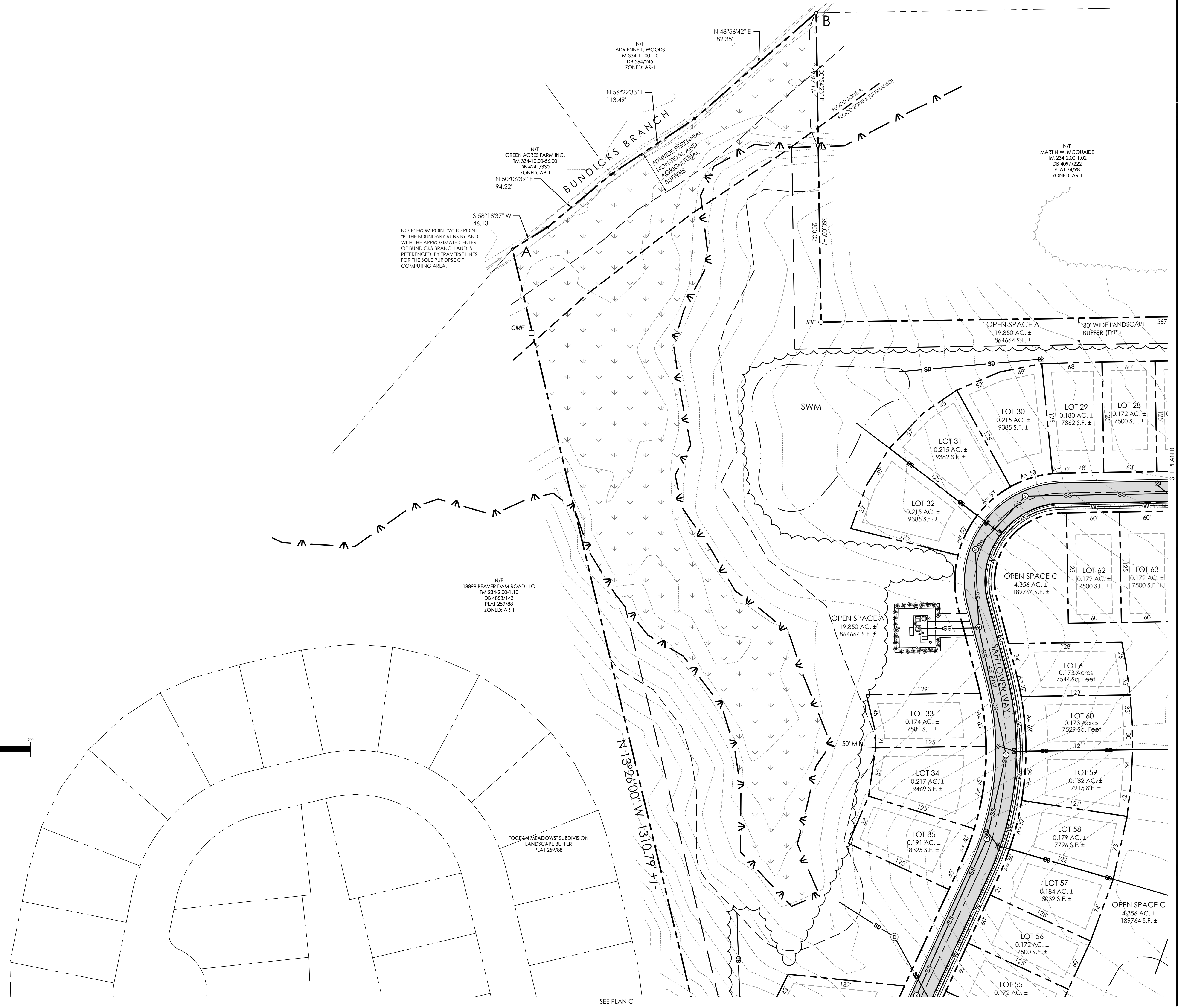
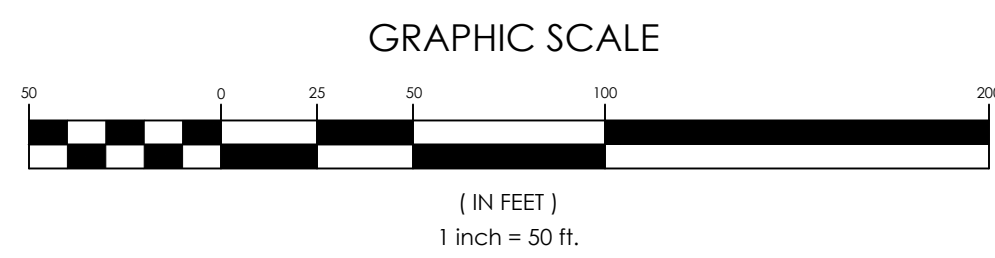
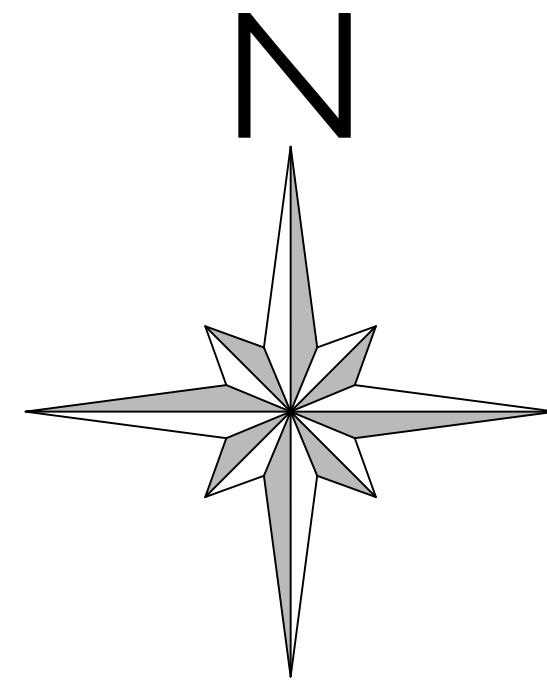


NO.	DATE	DESCRIPTION
1	11/2/20	REVISIONS PER AGENCY REVIEW LETTER, DATED 10/28/20.

PRELIMINARY PLAT EXISTING CONDITIONS
for
CARDINAL GROVE
INDIAN RIVER HUNDRED
SUSSEX COUNTY, DELAWARE

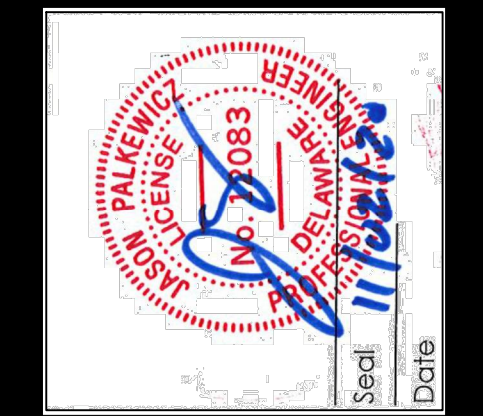
Date:	6/26/20
Job Number:	G19076
Scale:	1"=100'
Drawn By:	ML
Designed By:	VE
Approved By:	JIP





solutions
 CONSULTANTS
 303 North Bedford Street
 Georgetown, DE 19840
 T. 302.297.9215
 3033 Manitt Mill Road
 Salisbury, MD 21804
 T. 410.572.8833
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NO.	DATE	DESCRIPTION
1	11/2/20	REVISIONS PER AGENCY REVIEW LETTER, DATED 10/28/20.

PRELIMINARY PLAT PLAN A
 for
CARDINAL GROVE
 INDIAN RIVER HUNDRED
 SUSSEX COUNTY, DELAWARE

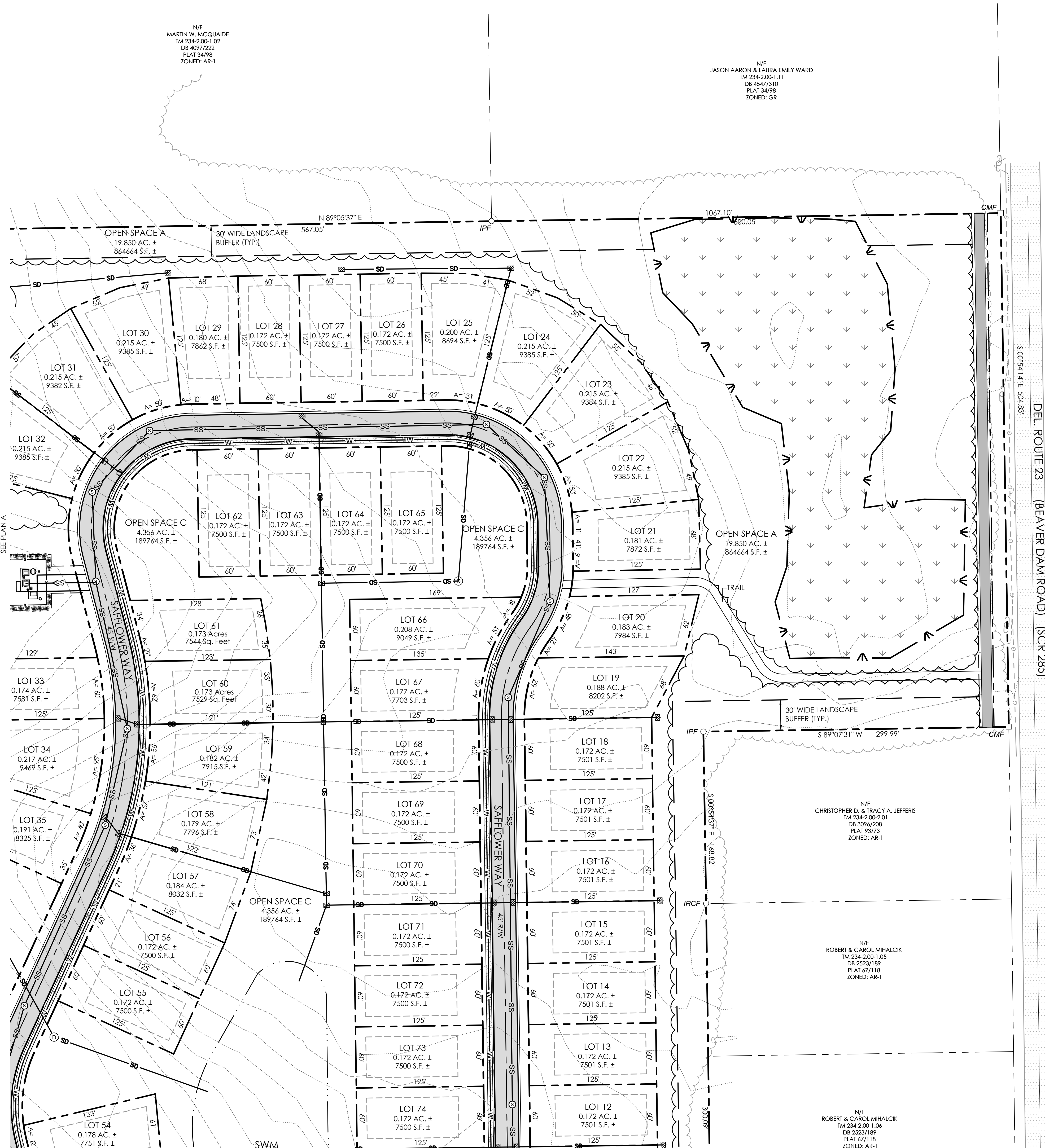
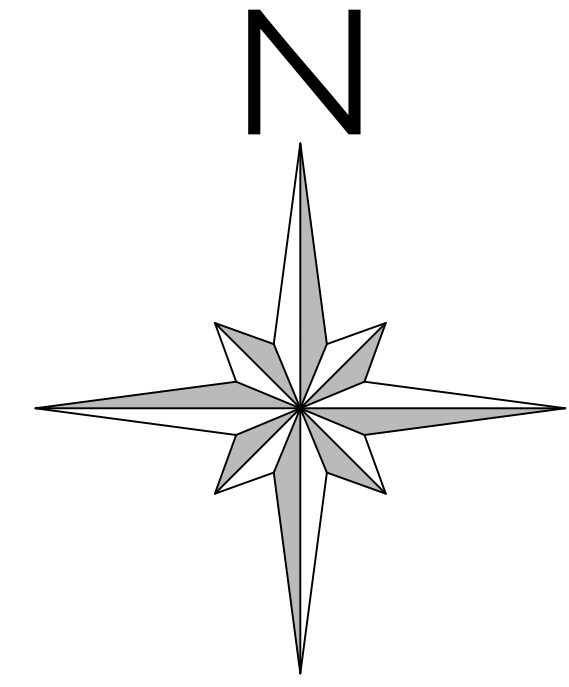
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Drawn By:	ML
Designed By:	DP
Approved By:	JIP

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File Name: 19076-prelim-plat

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DB 4097/222
PLAT 34/798
ZONED: AR-1

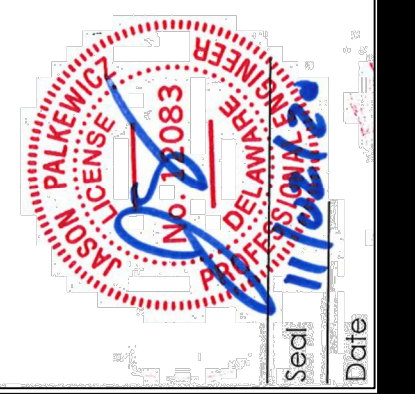
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JASON AARON & LAURA EMILY WARD
TM 234-2.00-1.11
DB 4547/310
PLAT 34/798
ZONED: GR



DEL. ROUTE 23 (BEAVER DAM ROAD) (SCR 285)

solutions
LANDSCAPE ARCHITECTURE

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Georgetown, DE 19947
T. 302-271-9215
3033 Manitt Mill Road
Salisbury, MD 21804
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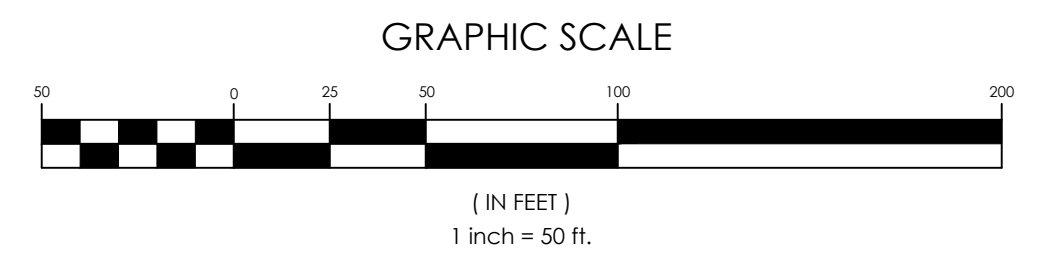


REVISIONS	
NO.	DESCRIPTION
1	REVISIONS PER AGENCY REVIEW LETTER, DATED 10/28/20.

PRELIMINARY PLAT PLAN B
for
CARDINAL GROVE
INDIAN RIVER HUNDRED
SUSSEX COUNTY, DELAWARE

Date:	6/26/20
Job Number:	G 19076
Scale:	1"=50'
Drawn By:	ML
Designed By:	DP
Approved By:	JIP

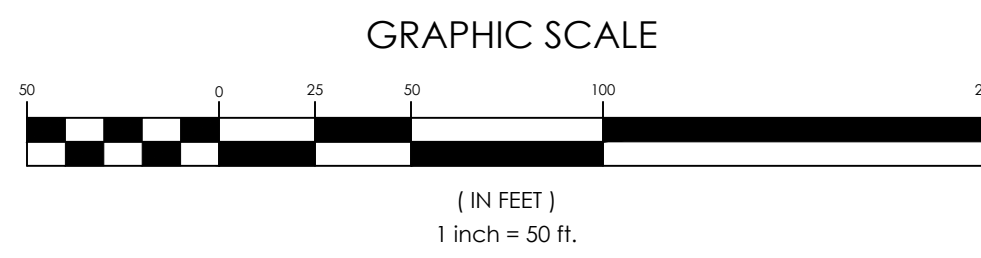
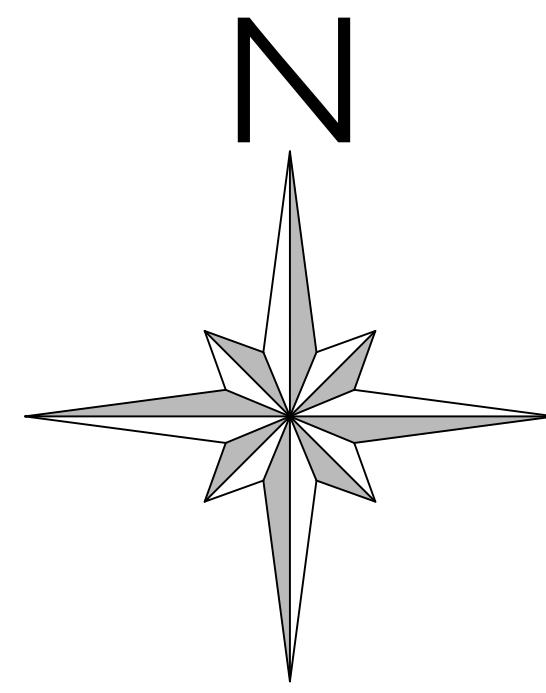
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File Name: 19076-prelim-plat



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CHRISTOPHER D. & TRACY A. JEFFERIS
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DB 3076/098
PLAT 93/773
ZONED: AR-1

N/F
ROBERT & CAROL MIHALCIK
TM 234-2.00-1.05
DB 2523/189
PLAT 67/118
ZONED: AR-1

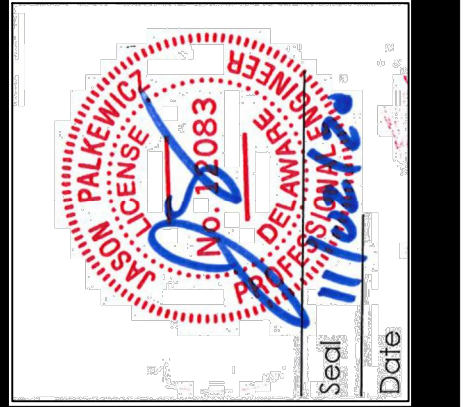
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ROBERT & CAROL MIHALCIK
TM 234-2.00-1.06
DB 2523/189
PLAT 67/118
ZONED: AR-1



234-200-1.10
49.04 ACRES +/-
SWM

solutions
LANDSCAPE ARCHITECTURE

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NO.	DATE	DESCRIPTION
1	11/2/20	REVISIONS PER AGENCY REVIEW LETTER, DATED 10/28/20.

PRELIMINARY PLAT PLAN C
for
CARDINAL GROVE
INDIAN RIVER HUNDRED
SUSSEX COUNTY, DELAWARE

Date:	6/26/20
Job Number:	G 19076
Scale:	1"=50'
Drawn By:	ML
Designed By:	DP
Approved By:	J.P.

Sheet No.: **5**
File Name: 19076-prelim-plat

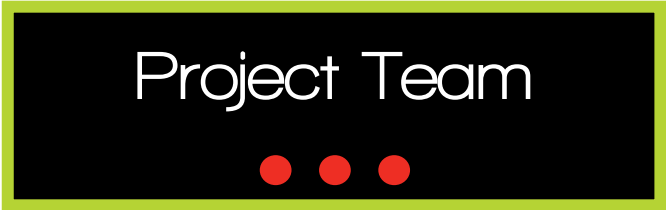
Cardinal Grove

Project Reference Material

AR-1 Cluster



January 2021



APPLICANT/DEVELOPER: **18898 Beaver Dam Road, LLC**

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Rehoboth Beach, DE 19971
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Email: tgreen@schellbrothers.com

CIVIL ENGINEER/
LAND PLANNER

Solutions IPEM LLC
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ATTORNEY:

Baird Mandalas Brockstedt, LLC
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Resumes:

Jason Palkewicz, PE

Cardinal Grove



I. Executive Summary

Cardinal Grove is a proposed 49.04 acre Cluster Subdivision composed of 98 single-family detached homes on individual lots. The site is located on the West side of Beaver Dam Road adjacent to the existing Ocean Meadows residential community. The land is currently zoned AR-1.

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

The proposed community provides 98 homes on roads within private rights-of-way with curb and gutter with sidewalk on one side, streetlights and preserved wooded and wetland areas. The project contains a total of 26.12 +/- acres (53%) of interconnected open space.

A centrally located recreation facility is provided which includes a pool and bathhouse. A trail connects the sidewalks to the proposed DelDOT multi-modal path. A school bus stop, central mail facility and emergency interconnection to Ocean Meadows will also be provided.

Proposed Density and Calculations:

Allowable Homes Calculation (AR-1 Cluster):

2.0 homes/acre

$49.04 \times 2.0 = 98$ homes

Proposed Homes:

98 Homes

Actual Density:

$98 / 49.04 = 2.0$ homes/acre

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

Project Overview

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

A boundary topographic survey for the property was prepared by Solutions IPEM, LLC. The total area of the property is 49.04 +/- acres. Wetlands areas were flagged and field located as part of the survey.

B. Overview of Current Site Conditions

The property for the proposed Cardinal Grove community is located West of Beaver Dam Road, adjacent to the Ocean Meadows community. The proposed development is in the vicinity of the residential communities of Heron Bay, Ocean Meadows, Ridings at Rehoboth, Oak Crest Farm and Coastal Club.

Areas that should be preserved were determined to be non-tidal wetlands, areas along Bundicks Branch as well as the woods adjacent to and within the non-tidal wetlands.

The property is located within flood Zone X, (areas determined to be outside the 0.2% annual chance floodplain), and Zone A, (special flood hazard areas subject to inundation by the 1% annual chance flood) per map number 10005C Panel 0330J, map revised January 6, 2005. The site is located within areas of good and fair groundwater recharge potential.

Areas that should be preserved were determined to be non-tidal wetlands, areas along Bundicks Branch as well as the woods adjacent to and within the non-tidal wetlands and flood Zone A.

C. Land Plan and Amenities

The land plan takes into account:

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

The resultant plan has:

- A 30' landscaped buffer (primarily existing woods).
- Proposed lots are more than 50' from the perimeter of the site.
- The lots are a minimum of 50' from the non-tidal wetlands.
- Sidewalks one side of the road along with an anticipated trail connecting to the proposed DeIDOT multi-modal path.
- A 50' buffer from Bundicks Branch.
- An agricultural setback of 50' to TM 334-10, P 56.

- Main recreation facility including:
 - Pool
 - Bathhouse
- Streetlights.
- Community mailbox cluster.
- School bus stop.
- An efficient stormwater management system that acts as an amenity.
- Large tracks of open space
 - Open Space Required (30%) = 14.72 acres
 - Contiguous Open Space Required (30% of Required Open Space) = 4.42 acres
 - Contiguous Open Space Provided = 19.9 acres

D. DeIDOT Improvements

A series of discussions were held with DeIDOT officials concerning area roadway improvements related to Cardinal Grove specifically with regard to off-site transportation improvements and frontage improvements. The site is located within the recently created Henlopen Transportation Improvement District (TID). As such the developer will be entering into an infrastructure recoupment agreement with the County and DeIDOT, including the required per lot fee. Entrance improvements are anticipated to include turn lanes into the development.

E. Preliminary Land Use Service (PLUS)

A concept plan for Cardinal Grove was presented to PLUS in June 24, 2020. A response letter was provided to PLUS which addressed their comments point by point.

F. Sanitary Sewer Planning Area

The Cardinal Grove community is anticipated to be served by Sussex County. The site is located within the Tier 2 – Sussex County Planning Area and Tier 3 – Coordinated CPCN Area. A Sewer Service Concept Evaluation (SSCE) has been received from Sussex County.

II. Compliance with Applicable Regulations

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

The project is located within the AR-1 zone. The site is being developed with residential lots lies within the AR-1 zone and will meet the requirements of the AR-1 Cluster as existed at the time of application.

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

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

- Recreation facilities such as pool and bathhouse are provided.
- Sidewalks and a connection to the multi modal path are provided.
- No wetlands are impacted.
- There are no wellhead protection areas on the property.
- The site is within the fair groundwater recharge area.

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

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

Conditional Uses: Cardinal Grove is not applying for any conditional uses.

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

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

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

Single Family Lots -

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

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

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

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

(3) A forested buffer area with a minimum width of 30 feet shall be provided for lots abutting an agricultural area. The site does not abut agricultural uses. However, a 30' buffer is provided to the adjacent properties.

(4) Dwellings located within 50 feet of an existing residential development shall provide adequate transition in density or shall provide a thirty-foot buffer meeting the standards below and maintained by a designated entity. No lots within the proposed community are located closer than 50' from adjacent properties. This would provide a minimum of 60' from the adjacent property to any adjacent property line.

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

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

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

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

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

(a) [3] The open space meets the requirements of the County Code. The required open space (30% of site) is 14.7 acres, 26.1 acres have been provided. Of the required open space (14.7 acres), 30% (4.4 acres) is required to be on one contiguous tract of land (separated by water and up to one street). The project provided 19.9 acres of contiguous open space. The open space tract is located along the wetlands and waterway. The sidewalk system is proposed to be connect to the DeIDOT multi-modal system as well as the adjacent Ocean Meadows community.

(a) [4] A minimum 25' buffer is provided around the existing non-tidal wetlands as well as a 50' buffer to the branch.

(a) [5] Stormwater management shall be provided per DNREC and Sussex Conservation District. Recharge or structurally equivalent BMPs shall be provided.

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

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

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

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

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

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

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

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

Chapter 99-9 (C)

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

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

- a. The Developer has taken great effort to utilize the additional land as open space. The proposed location of storm water management facilities was also based on extensive soils borings and a soil report.
- b. Forested non-tidal wetlands have been preserved.
- c. A minimum 30' landscaped buffer has been provided adjacent to all surrounding property lines.
- d. The proposed lots within the community are a minimum of 50' from the outbounds of the property.

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

- a. A minimum of 50' is provided between the proposed lots and wetlands.

- b. All of the proposed lots are located within flood Zone X (unshaded), areas determined to be outside the 0.2% annual chance floodplain.

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

- a. There are no known historic sites.
- b. The roadway system, stormwater features and lots were designed in such a way to minimize impacts/disturbance of steep slopes.

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

- a. Large tracts of open space are being persevered including wooded areas, wetlands, buffers and flood zone.
- b. Views of the existing wooded wetlands are preserved and are viewable from the lots and through open space adjacent to the roadways.

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

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

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

- a. Screening of objectionable features on the site from adjacent properties and roadways shall be provided utilizing the required 30’ landscaped buffer around the perimeter of the site or existing forested areas and storm water management facilities where those exist.
- b. The proposed lots within the community are a minimum of 50’ from the outbounds of the property.

7. *“Provision for water supply.”*

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

8. *“Provision for sewage disposal.”*

- a. The Cardinal Grove community wastewater service is intended to be provided by Sussex County.

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

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

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

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

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

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

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

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

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

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

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

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

15. "Effect on schools, public buildings, and community facilities."

- a. Cardinal Grove will have no adverse effect on schools, public buildings and community facilities as demonstrated by the PLUS comments.
- b. Community amenities will include a pool and bathhouse. In addition, Cardinal Grove includes several open space areas for other active and passive uses.

16. "Effect on area roadways and public transportation."

- a. A series of discussions were held with DelDOT officials concerning area roadway improvements related to Cardinal Grove specifically with regard to off-site transportation improvements and frontage improvements. The site is located within the recently created Henlopen Transportation Improvement District (TID). As such the developer will be entering into an infrastructure recoupment agreement with the County and DelDOT, including the required per lot fee. Entrance improvements are anticipated to include turn lanes into the development.

17. "Compatibility with Other Land Uses."

- a. The project is relatively adjacent to other residential cluster communities of Coastal Club, Ridings at Rehoboth and Ocean Meadows, thus being compatible in density, home style and land use.

18. "Effect on Area Waterways."

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

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

Chapter 4 Future Land Use:

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

- The proposed land plan addresses environmental concerns.
 - o Greater than 20% of the site is set aside as open space.
 - o 30' perimeter landscape buffer.
- Single-family homes are permitted.
- The proposed density of 1.99 du/ac is in compliance with the 2 du/ac as appropriate in this location.
- Central water and sewer will be available to the site.

Chapter 5 Conservation:

The proposed community complies with the Conservation section as follows:

- The site complies with surface water runoff requirements.
- There are no well head protection areas nor excellent ground recharge areas within the proposed site.
- Wetlands will be preserved.
- No lots are proposed within the existing wetlands.
- No flood zones exist on the proposed lots.
- Central water and sewer will be available to the site.

Chapter 6 Recreation and Open Space:

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

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

Chapter 7 Utilities:

The proposed community complies with the Utilities section as follows:

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

Chapter 8 Housing:

The proposed community complies with the Housing section as follows:

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

Chapter 9 Economic Development:

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

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

Chapter 10 Historic Preservation:

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

- There are no known historic sites located on the site.

Chapter 12 Community Design:

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

- The proposed community is a cluster subdivision, which is widely used in AR-1 zoning.
- Street lighting will be provided.
- Sidewalks are proposed on one side of the roadways.
- The lot sizes within the cluster make rear garages impossible and side loads very unlikely.
- The narrower right-of-way allows for homes to be placed closer to the road.
- The proposed homes will be limited to 42' in height.
- No variances to the required setbacks are proposed.
- Although no direct connection of walking trails or bicycle paths to the existing adjacent communities is possible, the community will connect to multi-modal paths within DeIDOT's right-of-way.
- The entrance to the community will be landscaped.
- Cross walks will be provided.
- Landscape/forested buffers will be provided along the perimeter.
- Utilities are proposed to be underground.
- Street signage will be provided throughout the community.

Chapter 13 Mobility Element:

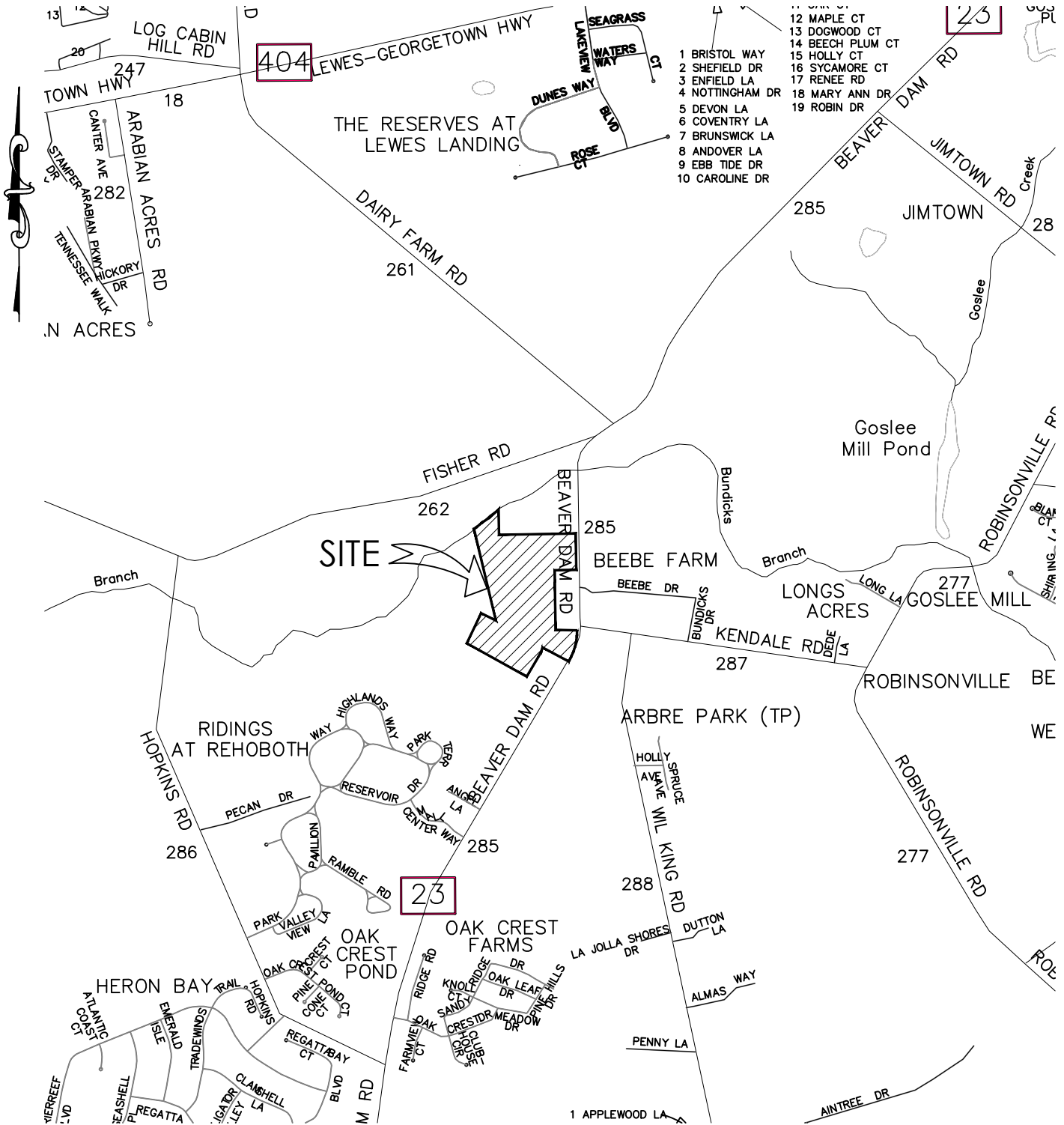
The proposed community complies with the Mobility Element section as follows:

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

III. Conclusion

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

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



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VICINITY MAP
CARDINAL GROVE
 SUSSEX COUNTY, DELAWARE

Drawn:	ML
Scale:	N.T.S.
Date:	7/28/20
Job No:	G19076



July 29, 2020

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

RE: PLUS review 2020-06-01; Cardinal Grove

Dear Mrs. Holland;

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

Thank you for meeting with State agency planners on June 24, 2020 to discuss the Cardinal Grove project. According to the information received you are seeking review of a proposed 98-unit subdivision on 49.04 acres along Beaver Dam Road in Level 4 in Sussex County.

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

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

Strategies for State Policies and Spending

As presented this project represents a major residential development with a Level 4 area according to the 2015 Strategies for State Policies and Spending. Investment Level 4 indicates where State investments will support agricultural preservation, natural resource protection, and the continuation of the rural nature of these areas. New development activities and suburban development are not supported in Investment Level 4 areas. These areas are comprised of prime

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

We do recognize that this parcel is part of the proposed Henlopen TID, which has not been finalized by the County and the State; however because this parcel is in a Level 4 area, the Office of State Planning cannot support development of the property.

Response: Understood.

Code Requirements/Agency Permitting Requirements

Department of Transportation – Contact Bill Brockenbrough 760-2109

- The site access on Beaver Dam Road (Delaware Route 23) must be designed in accordance with DelDOT's Development Coordination Manual, which is available at <http://www.deldot.gov/Business/subdivisions/index.shtml?dc=changes>.
- Pursuant to Section 1.3 of the Manual, a Pre-Submittal Meeting is required before plans are submitted for review. The form needed to request the meeting and guidance on what will be covered there and how to prepare for it is located at https://www.deldot.gov/Business/subdivisions/pdfs/Meeting_Request_Form.pdf?08022017.
- Section 1.7 of the Manual addresses fees that are assessed for the review of development proposals. DelDOT anticipates collecting the Initial Stage Fee when the record plan is submitted for review and the Construction Stage Fee when construction plans are submitted for review.
- Per Section 2.2.2.1 of the Manual, Traffic Impact Studies (TIS) are warranted for developments generating more than 500 vehicle trip ends per day or 50 vehicle trip ends per hour in any hour of the day. From the PLUS application, the total daily trips are estimated at 950 vehicle trip ends per day. Using the 10th edition of the Institute of Transportation Engineers' Trip Generation Manual, DelDOT estimates this number at 1,021 and the weekday morning and evening peak hour trip ends at 74 and 100, respectively.

Section 2.2.2.2 of the Development Coordination Manual provides that for developments generating less than 2000 vehicle trip ends per day and less than 200 vehicle trip ends per hour in any hour of the day, DelDOT may accept an Area Wide Study (AWS) Fee in lieu of the TIS if the local government does not require a TIS. The AWS Fee is calculated as \$10 per daily trip or, in this case, \$10,210. AWS Fees are used to fund traffic studies, not to build improvements.

DelDOT anticipates requiring the developer to improve Beaver Dam Road, from the north limit of their north frontage to the south limit of their south frontage, to meet DelDOT's Major Collector Road standards, which include 12-foot lanes and 8-foot shoulders. DelDOT has also identified one off-site improvement toward which they

would require the developer to contribute: improvement of Kendale Road (Sussex Road 287) to provide a second westbound lane approaching Beaver Dam Road. DelDOT would further require the developer to enter a signal agreement for the intersection of Beaver Dam and Kendale Roads.

- The subject development is located within the boundaries of the proposed Henlopen Transportation Improvement District (TID). Section 2.4 of the Manual addresses TIDs and Section 2.4.2.8 specifically addresses infrastructure fees that are paid by developers within a TID. The Henlopen TID is still being created and the specific fees that would be associated with it have not been established but when the TID is adopted by DelDOT and Sussex County, payment of the infrastructure fee would be required in place of contributions toward off-site improvements. As necessary, the applicant may contact Ms. Sarah Coakley, a Principal Planner in DelDOT's Statewide and Regional Planning Section for more information with regard to the TID. Ms. Coakley may be reached at (302) 760-2236 or Sarah.Coakley@delaware.gov.
- As necessary, in accordance with Section 3.2.5 and Figure 3.2.5-a of the Manual, DelDOT will require dedication of right-of-way along the site's frontage on Beaver Dam Road. By this regulation, this dedication is to provide a minimum of 40 feet of right-of-way from the physical centerline. The following right-of-way dedication note is required, **"An X-foot wide right-of-way is hereby dedicated to the State of Delaware, as per this plat."**
- In accordance with Section 3.2.5.1.2 of the Manual, DelDOT will require the establishment of a 15-foot wide permanent easement across the property frontage. The location of the easement shall be outside the limits of the ultimate right-of-way. The easement area can be used as part of the open space calculation for the site. The following note is required, **"A 15-foot wide permanent easement is hereby established for the State of Delaware, as per this plat."**
- Referring to Section 3.4.2.1 of the Manual, the following items, among other things, are required on the Record Plan:
 - A Traffic Generation Diagram. See Figure 3.4.2-a for the required format and content.
 - Depiction of all existing entrances within 450 feet of the entrance on Beaver Dam Road.
 - Notes identifying the type of off-site improvements, agreements (signal, letter) contributions and when the off-site improvements are warranted.
- Section 3.5 of the Manual provides DelDOT's requirements with regard to connectivity. The requirements in Sections 3.5.1 through 3.5.3 shall be followed for all development

projects having access to state roads or proposing DeIDOT maintained public streets for subdivisions. DeIDOT recommends that the developer contact the developer or the homeowners association for the Estates at Cedar Grove and, if they are amenable, provide a bicycle and pedestrian path linking the cul-de-sac near the front of that development to the collector street entering the subject development.

- Section 3.5.4.2 of the Manual addresses requirements for Shared Use Paths (SUP) and sidewalks. For projects in Level 3 and 4 Investment Areas, installation of paths or sidewalks along the frontage on State-maintained roads is at DeIDOT's discretion. DeIDOT anticipates requiring the developer to build a SUP along both sections of their frontage on Beaver Dam Road.
- Section 3.5.4.4 of the Manual addresses requirements for accessways. Accessways are paths that connect subdivision streets to a sidewalk or SUP. DeIDOT anticipates requiring an accessway to the SUP along the site frontage near Lot 20.
- In accordance with Section 3.8 of the Manual, storm water facilities, excluding filter strips and bioswales, shall be located a minimum of 20 feet from the ultimate State right-of-way along Beaver Dam Road.
- In accordance with Section 5.2.9 of the Manual, the Auxiliary Lane Worksheet should be used to determine whether auxiliary lanes are warranted at the site entrances and how long those lanes should be. The worksheet can be found at <http://www.deldot.gov/Business/subdivisions/index.shtml>.
- In accordance with Section 5.4 of the Manual, sight distance triangles are required and shall be established in accordance with American Association of State Highway and Transportation Officials (AASHTO) standards. A spreadsheet has been developed to assist with this task. It can be found at <http://www.deldot.gov/Business/subdivisions/index.shtml>.
- In accordance with Section 5.14 of the Manual, all existing utilities must be shown on the plan and a utility relocation plan will be required for any utilities that need to be relocated.

Response: The developer will continue to coordinate with DeIDOT regarding final frontage improvements, off-site improvements, final entrance locations, and cost sharing. Record and Entrance Plans will be submitted to DeIDOT in accordance with the latest DeIDOT regulations.

Department of Natural Resources and Environmental Control – Contact Michael Tholstrup 735-3352

Wetlands

- Statewide Wetlands Mapping Project (SWMP) maps indicate the presence of forested freshwater wetlands in the forested area of the property. The PLUS application indicates that the wetlands have been delineated and that development will avoid the delineated

wetlands. Project plans also indicate that the developer proposes a wetland buffer of 50 feet.

- A permit from the US Army Corps of Engineers will be required if project plans are amended and wetland fill is proposed. In certain circumstances, additional certifications from the state are required as a part of the Army Corps of Engineers permit process.

Stormwater Management and Hydric Soils

- For projects greater than 5,000 square feet, a detailed sediment and stormwater plan will be required prior to any land disturbing activity taking place on the site.
- Based on soil maps, hydric soils are present at the southern portion of the proposed project area. Hydric soils are also present in the northeastern and northwestern corners of the property where no construction activities are proposed. DNREC reviewers discourage building on hydric soils because they are an important source of water storage. The loss of this water storage function through excavation, filling, or grading of intact native hydric soils increases the probability for more frequent drainage and flooding events.
- A stormwater management pond is proposed within the area of hydric soils. Siting a stormwater management pond within hydric soils is not considered an environmentally acceptable practice by DNREC and will likely increase the potential for future flooding impacts, while increasing nutrient and bacterial pollutant discharge to ground and surface waters.
- There have been 2 drainage complaints reported to DNREC associated with adjacent parcels to the west of his project parcel.
- The applicant must contact the Sussex Conservation District to schedule a pre-application meeting to discuss the sediment and erosion control and stormwater management components of the plan as soon as practicable. The applicant / consultant should submit the Stormwater Assessment Study to the Sussex Conservation District and schedule a project application meeting prior to moving forward with the stormwater and site design. The assessment should account for the 25 acres of recently removed forest cover. The site topography, soils mapping, pre and post development runoff, and proposed method(s) and location(s) of stormwater management should be brought to the meeting for discussion. The plan review and approval as well as construction inspection will be coordinated through the Sussex Conservation District.

Open Space

- A nutrient management plan is required under the Delaware Nutrient Management law (3 Del. Chapter 22) for all persons or entities who apply nutrients to lands or areas of open space in excess of 10 acres. This project's open space may exceed this 10-acre threshold.
- Please contact the Delaware Nutrient Management Program at (302) 739-4811 for further information concerning compliance requirements, or view additional information here: <http://dda.delaware.gov/nutrients/index.shtml>

Floodplain

- A portion of the parcel, outside of the proposed development footprint, is situated within a Zone A floodplain for Bundicks Branch. The proposed site plan does not show any development activity within the mapped floodplain, which is located on the northwestern portion of the parcel.
- The applicant must comply with the local floodplain ordinance and regulations applicable to development or construction within the floodplain.

Forest and Habitat

- The northwestern portion of the project is located within the Love Creek Natural Area. A "Natural Area" is defined by the law is an area of land or water, or of both land and water, whether in public or private ownership, which either retains or has reestablished its natural character (although it need not be undisturbed), or has unusual flora or fauna, or has biotic, geological, scenic, or archaeological features of scientific or educational value.
- The entire forested area (including those areas already logged) is mapped as part of the Delaware Ecological Network. This network links large blocks of ecologically significant natural areas and natural corridors to allow the movement of wildlife and plant life between them, which create an *interconnecting network of natural lands* across the landscape. Large natural areas are usually more effective than small areas for protecting aquifers and watersheds, sustaining viable populations of forest species, and providing core habitat and escape-cover for a multitude of vertebrate species.
- The proposed application states that a 25-acre section of the forested area has been logged and cleared and that a 50-foot buffer will be maintained around the mapped wetlands. The current forest boundary is unknown/unclear from the application.

Water Quality and TMDLs

- This project is located within in the *low nutrient reduction zone* of the greater Inland Bays watershed of the [Rehoboth Bay](#). A [Total Maximum Daily Load](#) (TMDL) is the maximum amount of a pollutant allowed to enter a waterbody so that the waterbody will meet and continue to meet water quality standards. The TMDL for the *low reduction zone* of the Inland Bays watershed calls for 40 percent reduction in nitrogen and phosphorus from baseline conditions. The TMDL also calls for a 40 percent reduction (17 percent for marine waters) in bacteria from baseline conditions.

Response: The developer will comply with all County and State requirements regarding wetlands, open space, flood zone, etc.

State Historic Preservation Office – Contact Carlton Hall 736-7400

- The Delaware SHPO does not recommend development in Level 4 areas. Soils are mostly moderate to well drained and prime farmland and some of the parcel is within the range of favorable distance to Bundicks Branch. There are comparable prehistoric sites nearby. Archaeological Site S07901, researchers were unable to follow out the site extent due to

trees/forest, so it may extend south or west into the parcel. Historic potential is low to moderate. Prehistoric archaeological potential is moderate to high.

- If any project or development proceeds, the developer should be aware of the Unmarked Human Burials and Human Skeletal Remains Law (Del. C. Title 7, Ch. 54).
- If there is federal involvement, in the form of licenses, permits, or funds, the federal agency, often through its client, is responsible for complying with Section 106 of the National Historic Preservation Act (36 CFR 800) and must consider their project's effects on any known or potential cultural or historic resources. For further information on the Section 106 process please review the Advisory Council on Historic Preservation's website at: www.achp.gov
- If there are any questions, inquiries, or concerns, feel free to contact the Delaware State Historic Preservation Office for assistance at 302-736-7400.

Response: Noted.

Department of Agriculture – Contact: Milton Melendez 698-4534

- The proposed project is adjacent to a property protected through the State's Agricultural Lands Preservation Program (Hopkins Covered District S-95-07-042 Parcel 334-10.00-56.00). Therefore, the activities conducted on this preserved property are protected by the agricultural use protections outlined in Title 3, Del. C., Chapter 9. These protections effect adjoining developing properties. The 300-foot notification requirement affects all new deeds in a subdivision located in whole or part within 300 feet of an Agricultural District/Easement. Please take note of these restrictions as follows:

§ 910. Agricultural use protections.

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

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

This property is located in the vicinity of an established Agricultural Preservation District in which normal agricultural uses and activities have been afforded the highest priority use status. It can be anticipated that such agricultural uses and activities may now or in the future involve noise,

dust, manure and other odors, the use of agricultural chemicals and nighttime farm operations. The use and enjoyment of this property is expressly conditioned on acceptance of any annoyance or inconvenience which may result from such normal agricultural uses and activities."

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

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

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

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

Response: Noted.

Sussex County Housing – Contact: Brandy Nauman 855-7779

- Sussex County endeavors to promote non-discrimination and affordable housing whenever possible throughout the County. In this regard, the developer and associated financial institutions are encouraged to provide and finance affordable housing opportunities to Sussex County residents in all new developments, and affirmatively market those affordable housing units to diverse populations.
- For questions about opportunities available for affordable housing projects within Sussex County, please consult Sussex County's "Affordable Housing Support Policy". The policy along with other resources are available on the County's Affordable & Fair

Housing Resource Center website: www.sussexcountyde.gov/affordable-and-fair-housing-resource-center. The County's Community Development & Housing Department can advise about existing affordable housing opportunities in Sussex County and the appropriate County Department to contact regarding specific development issues concerning future affordable housing projects within Sussex County.

- The Community Development & Housing Department can also explain and assist with any financial support or incentives that may be available to a project from federal, state and county sources, as well as private funding sources that also promote affordable housing in Sussex County.
- Please understand that all residential projects, including Affordable Housing Projects are subject to the applicable provisions of the Sussex County Subdivision and Zoning Codes, and the approval processes set forth in those Codes.

Response: Noted.

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

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





Sincerely,

Solutions, IP&EM



Jason Palkewicz, PE



-  INVESTMENT LEVEL 2
-  INVESTMENT LEVEL 3
-  INVESTMENT LEVEL 4
-  OUT OF PLAY

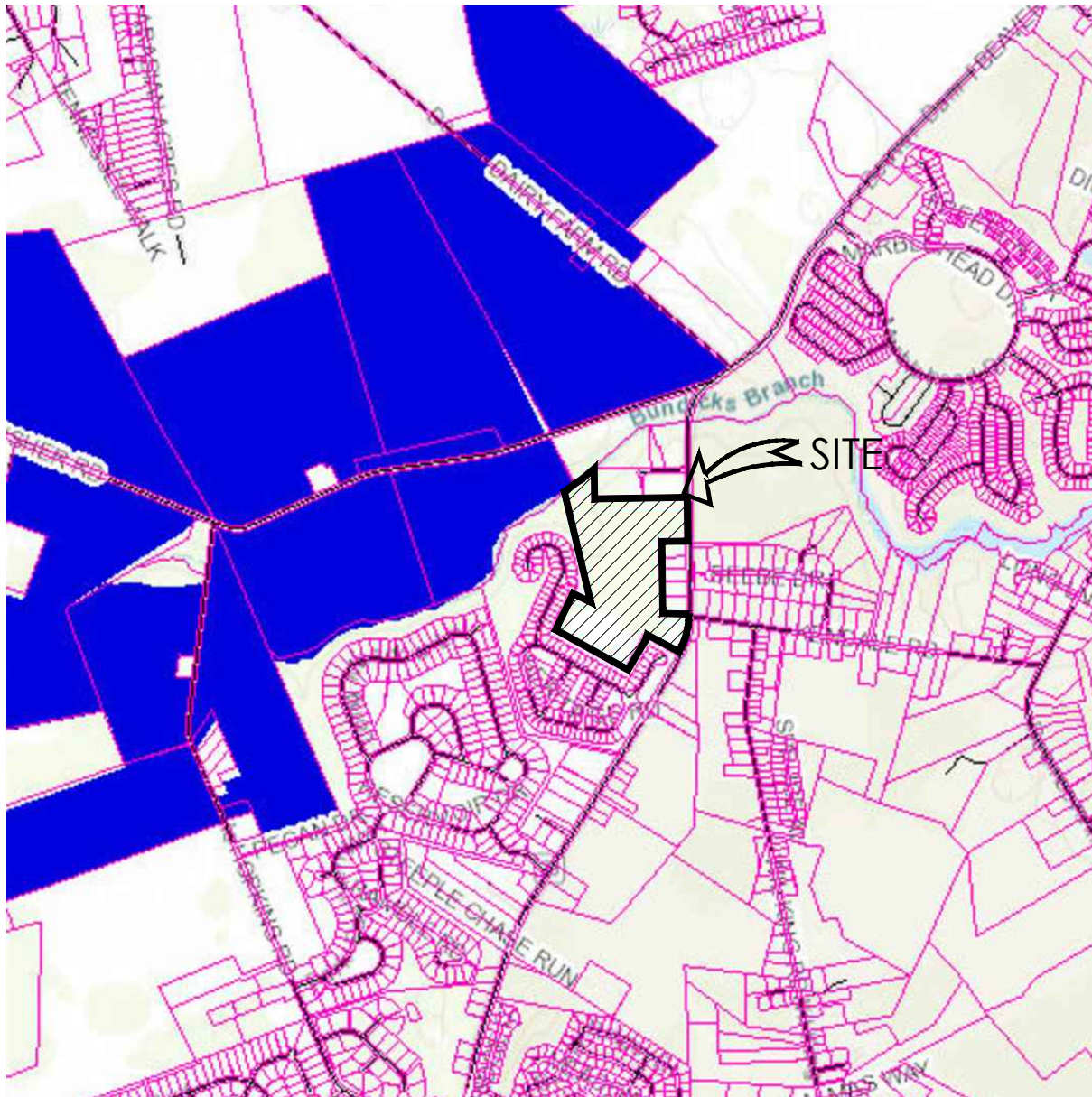
NOTE:
IMAGE TAKEN FROM
DELAWARE STATE STRATEGIES
2020 INTERACTIVE MAP.



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STATE SPENDING STRATEGIES
CARDINAL GROVE
SUSSEX COUNTY, DELAWARE

Drawn:	ML
Scale:	N.T.S.
Date:	7/28/20
Job No:	G19076



 AGRICULTURAL EASEMENT

NOTE:
IMAGE TAKEN FROM THE SUSSEX
COUNTY ON-LINE MAPPER
(PRINTED 8/12/20)



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DEVELOPED & PROTECTED LANDS

CARDINAL GROVE

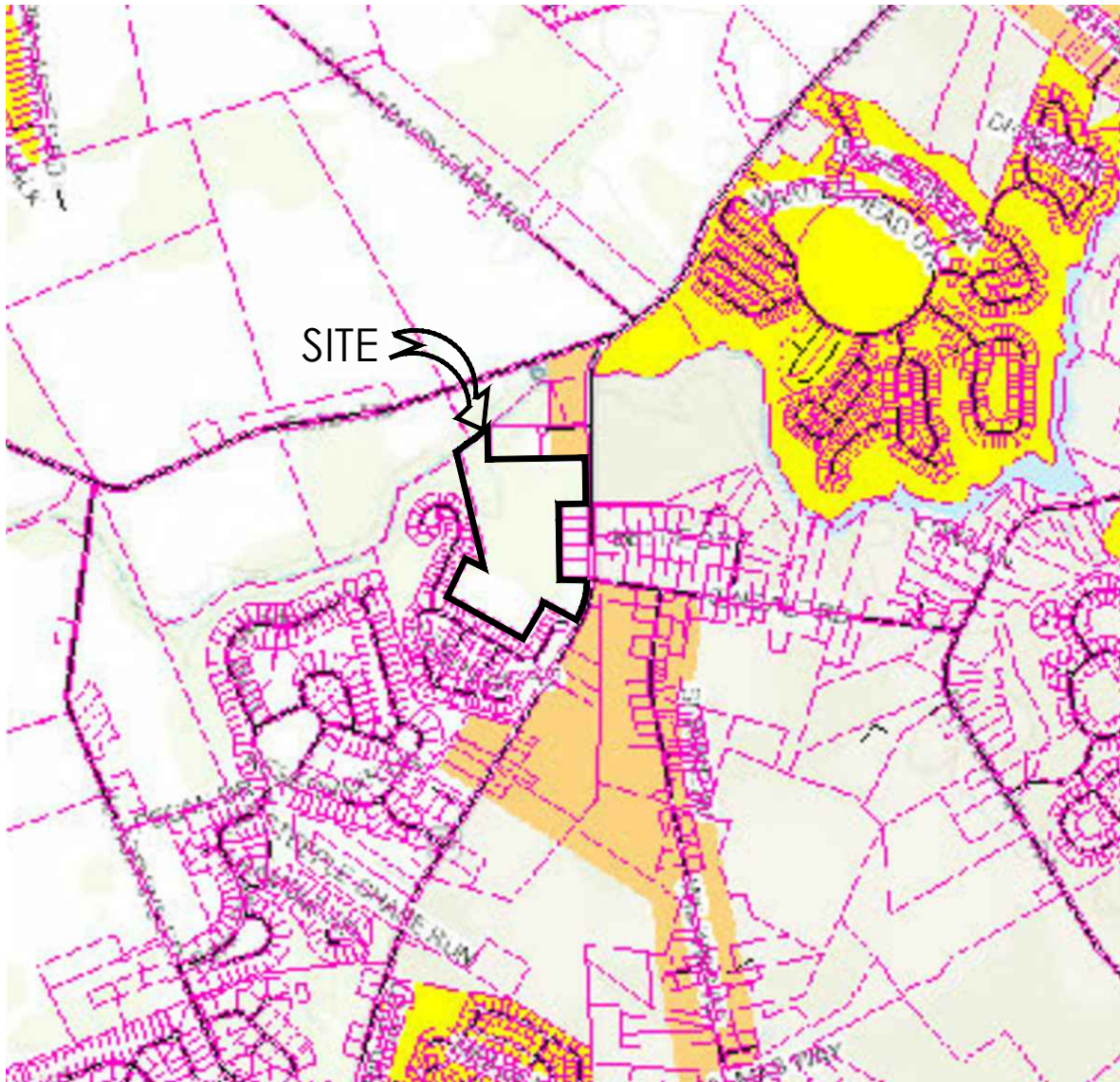
SUSSEX COUNTY, DELAWARE

Drawn: ML

Scale: N.T.S.

Date: 7/28/20

Job No: G19076



AGRICULTURAL - AR-1



MEDIUM RESIDENTIAL - MR



HIGH DENSITY RESIDENTIAL - HR-1

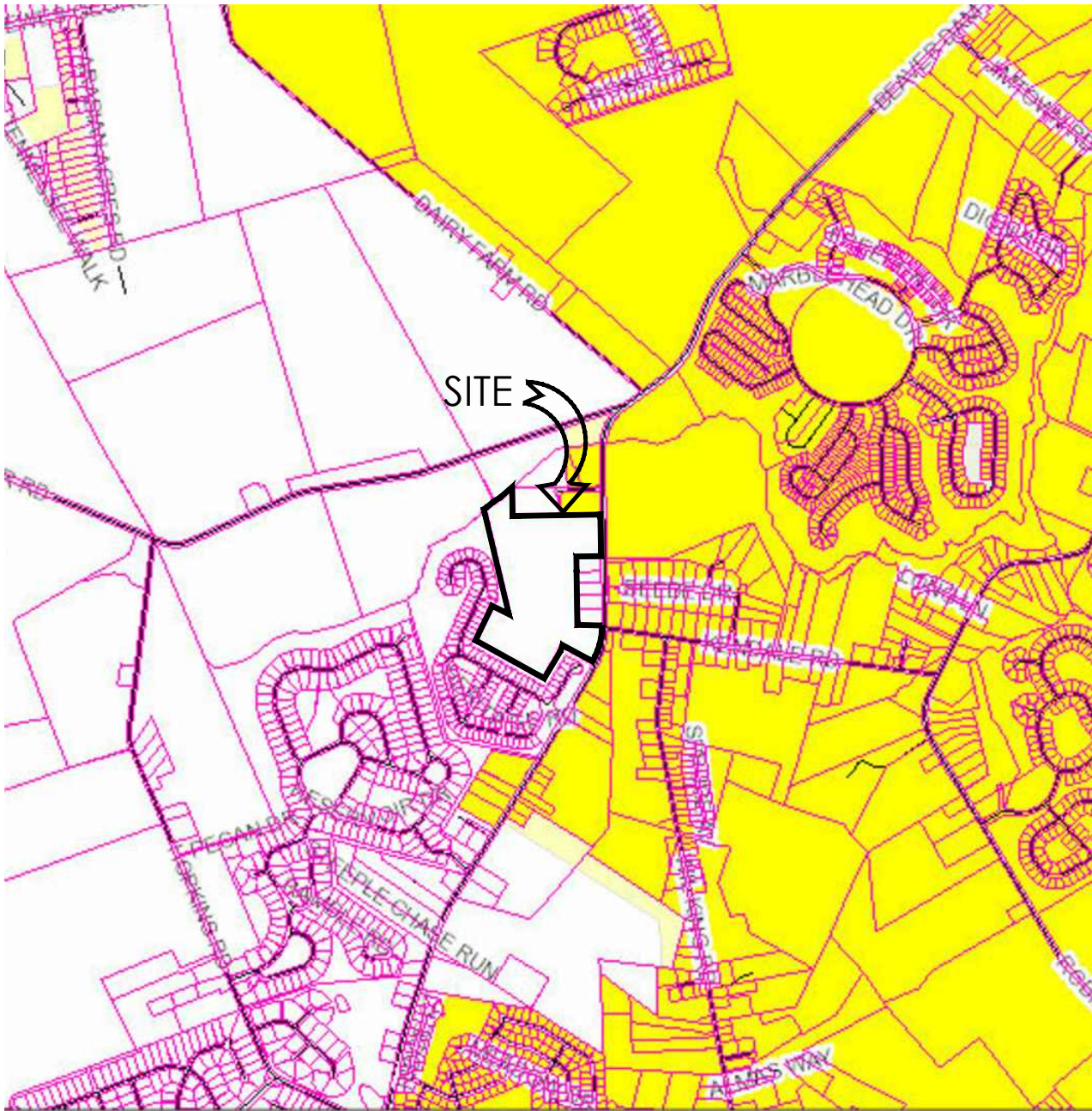
NOTE:
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SUSSEX COUNTY, DELAWARE
ZONING MAP.



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ZONING MAP
CARDINAL GROVE
SUSSEX COUNTY, DELAWARE

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LOW DENSITY



COASTAL AREA

NOTE:
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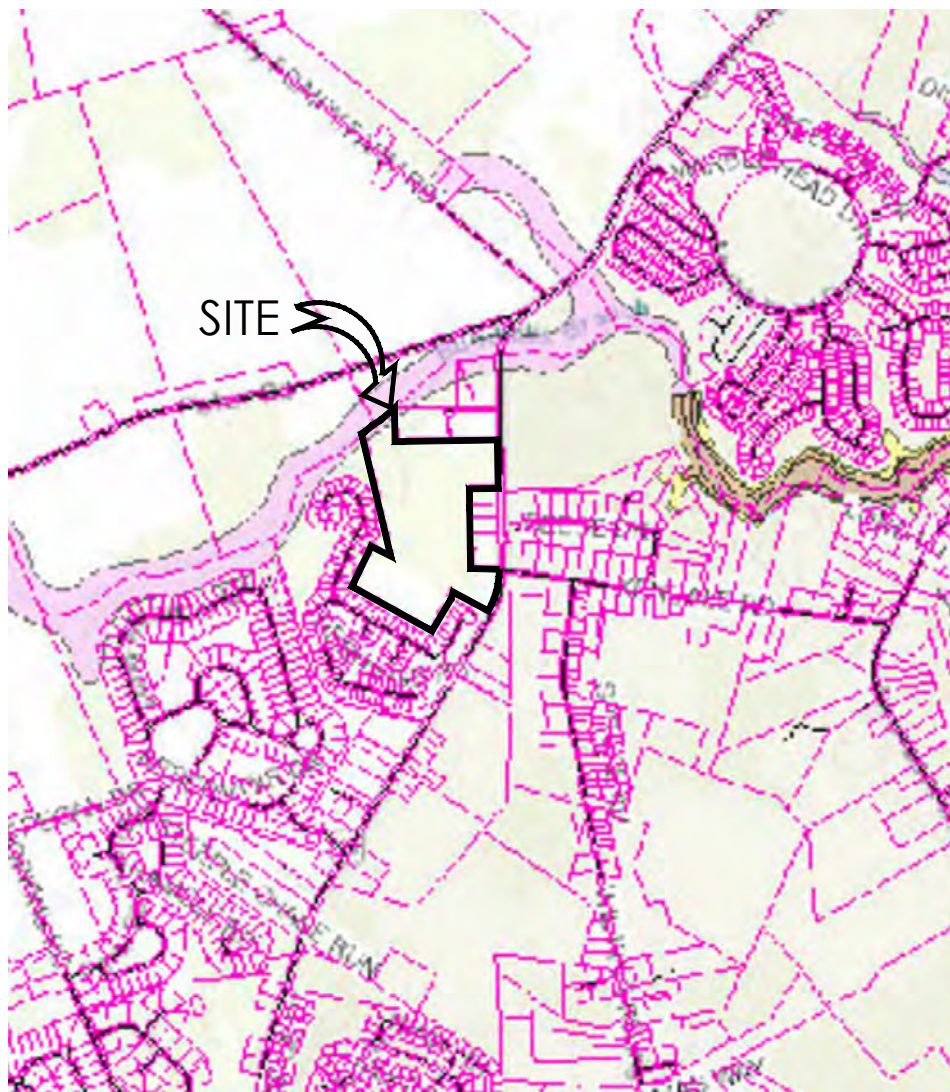
FUTURE LAND USE
CARDINAL GROVE
 SUSSEX COUNTY, DELAWARE

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Scale:	N.T.S.
Date:	7/28/20
Job No:	G19076



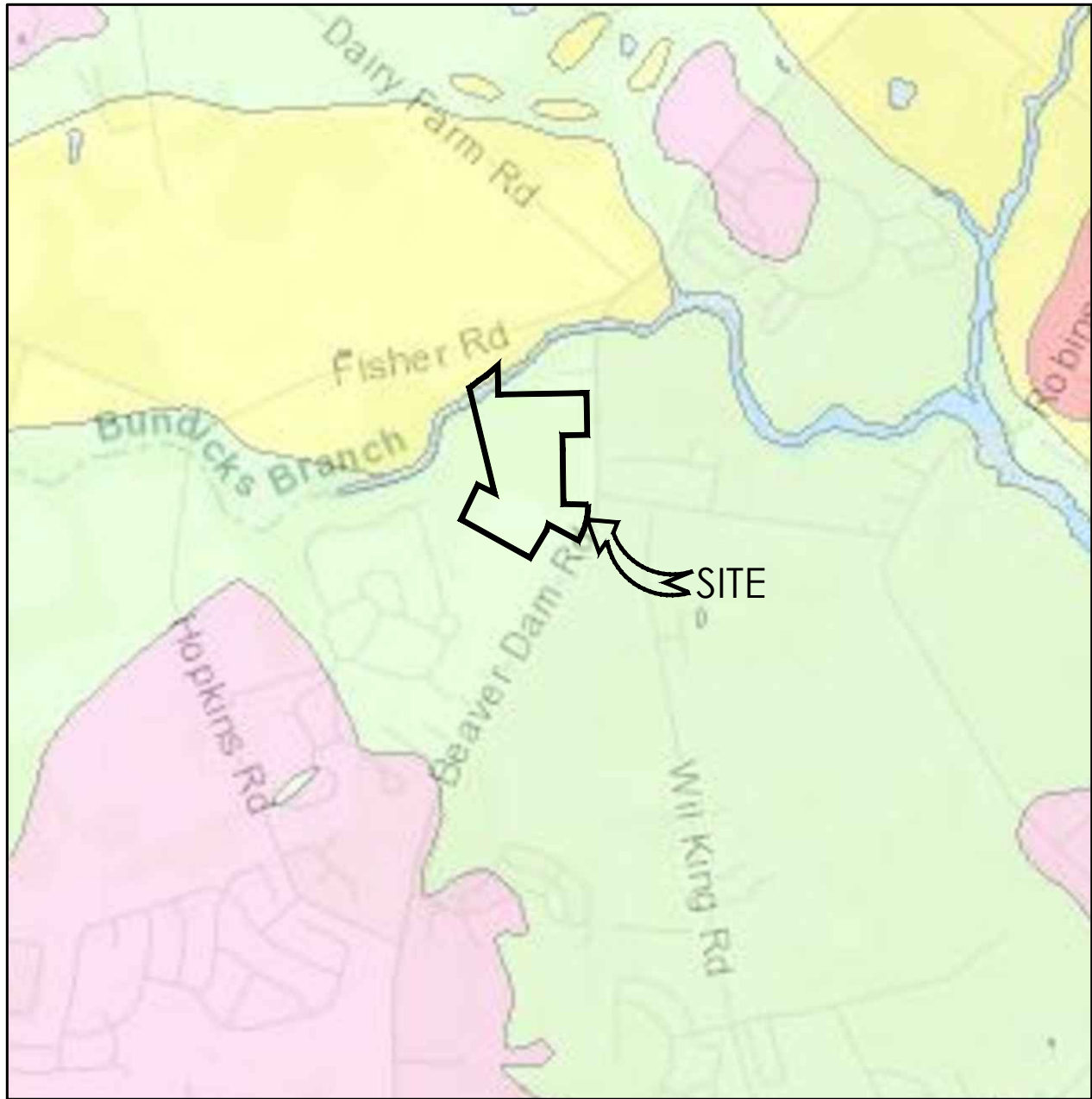
NOTE:
IMAGE TAKEN FROM GOOGLE
EARTH (IMAGE DATE JUNE
2018).





 solutions Environmental Engineering & Construction	303 North Bedford Street Georgetown, DE 19947 T. 302.297.9215 www.solutionsipem.com Copyright © 2018	VICINITY MAP CARDINAL GROVE SUSSEX COUNTY, DELAWARE	Drawn: ML
			Scale: N.T.S.
			Date: 7/28/20
			Job No: G19076



PROPERTY IS LOCATED IN ZONE A (SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD) AND ZONE X (AREAS DETERMINED TO OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN) PER FIRM MAP NUMBER 10005C0330J, MAP REVISED JANUARY 6, 2005.

 solutions Engineering & Construction	303 North Bedford Street Georgetown, DE 19947 T. 302.297.9215 www.solutionsipem.com Copyright © 2018	FLOOD MAP CARDINAL GROVE SUSSEX COUNTY, DELAWARE	Drawn: ML
			Scale: N.T.S.
			Date: 7/28/20
			Job No: G19076



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

NOTE:
IMAGE TAKEN FROM THE
DELAWARE GEOLOGICAL SURVEY



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GROUNDWATER RECHARGE MAP
CARDINAL GROVE
SUSSEX COUNTY, DELAWARE

Drawn:	ML
Scale:	N.T.S.
Date:	7/28/20
Job No:	G19076



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY

PHILADELPHIA DISTRICT CORPS OF ENGINEERS
WANAMAKER BUILDING, 100 PENN SQUARE EAST
PHILADELPHIA, PENNSYLVANIA 19107-3390

APR 21 2020

Regulatory Branch
Application Section I

SUBJECT: CENAP-OP-R 2020-227-23 (PJD)
Project Name: Cardinal Grove – McQuaide Property SX
Latitude/Longitude: 38.717253° N /-75.208838° W

Edward M. Launay
Environmental Resources, Incorporated
38173 DuPont Boulevard
Post Office Box 169
Selbyville, Delaware 19975

Dear Mr. Launay:

The plan identified on the following page depicts all delineated waterways and wetlands on the subject site that may be jurisdictional under Section 404 of the Clean Water Act and/or Section 10 of the Rivers and Harbor Act.

Pursuant to Section 10 of the Rivers and Harbors Act and Section 404 of the Clean Water Act, a Department of the Army permit is required for work or structures in navigable waters of the United States and the discharge of dredged or fill material into waters of the United States including adjacent wetlands. Any proposal to perform the above activities within any waters of the United States requires the prior approval of this office.

This preliminary determination has been conducted to identify the location(s) of wetlands and waters that may be waters of the United States for the particular site identified in this request. This determination may not be valid for the wetland conservation provisions of the Food Security Act of 1985, as amended. If you or your tenant are U.S. Department of Agriculture (USDA) program participants, or anticipate participating in USDA programs, you should request a certified wetland determination from the local office of the Natural Resources Conservation Service prior to starting work.

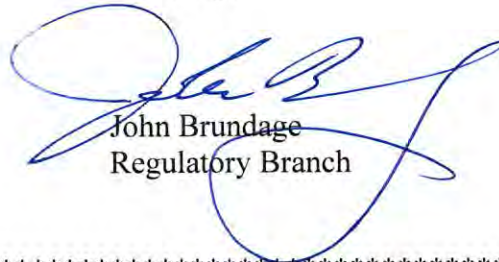
This preliminary jurisdictional determination is non-binding and indicates that there may be waters of the United States, including wetlands on the parcel. Pursuant to Federal Regulations at 33 C.F.R. 331.2, preliminary JDs are advisory in nature and may not be appealed (see attached Notification of Appeal Form - Enclosure 1). However, the applicant retains the right to request an approved jurisdictional determination, which may be appealed. Also enclosed (Enclosure 2) is a copy of the Preliminary Jurisdictional Determination Form signed by the applicant or his agent agreeing to accept a preliminary jurisdictional determination. Please be aware that for purposes of computation of impacts, compensatory mitigation requirements, and

other resource protection measures, a permit decision made on the basis of a preliminary JD will treat all waters and wetlands that would be affected in any way by the permitted activity as if they are jurisdictional waters of the U.S.

This letter is valid for a period of five (5) years. However, this preliminary jurisdictional determination is issued in accordance with current Federal regulations and is based upon the existing site conditions and information provided by you in your application. This office reserves the right to reevaluate and modify the preliminary jurisdictional determination at any time should the existing site conditions or Federal regulations change, or should the information provided by you prove to be false, incomplete or inaccurate.

If you have any questions regarding this matter, please contact me at (302) 736-9764, by email at john.g.brundage@usace.army.mil or by writing to the above address.

Sincerely,


John Brundage
Regulatory Branch

SUBJECT PROPERTY: Cardinal Grove, aka McQuaide Property, located at Tax Map 2-34-2.00, Parcel 1.10, Beaver Dam Road, Indian River Hundred, Sussex County, Delaware.

SURVEY DESCRIPTION: Plan prepared by Solutions, LLC, dated March 14, 2020, and titled: Boundary of Waters and Wetlands of the United States, Subject to the United States Corps of Engineers Regulatory Program of the Lands of 18898 Beaver Dam Road LLC, Indian River Hundred, Sussex County, Delaware, one sheet.

Enclosures



OVER 100 YEARS OF SUPERIOR SERVICE

Artesian Water Company ▲ Artesian Wastewater Management ▲ Artesian Utility Development ▲ Artesian Water Pennsylvania
▲ Artesian Water Maryland ▲ Artesian Wastewater Maryland

January 7, 2021

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

RE: Cardinal Grove Subdivision Ability to Serve Letter

With reference to your request concerning Water and Wastewater Service (collectively, "Service") for the proposed Cardinal Grove Subdivision Project on Beaver Dam Road in Indian River Hundred, Sussex County, Delaware known as Tax Parcel Number 234-2.00-1.10 (the "Property"), please be advised as follows:

Subject to the following conditions, Artesian Water Company, Inc. and Artesian Wastewater Management, Inc. (collectively, "Artesian") are willing and able to provide Service to the Property that meets all applicable State of Delaware, Delaware Department of Natural Resources and Environmental Control, and Sussex County standards. Artesian currently has the water Certificate of Public Convenience and Necessity ("CPCN") from the Delaware Public Service Commission (the "Commission"). The property owner must provide Artesian with a signed petition requesting wastewater service that Artesian could use to seek CPCN approval from the Commission and Sussex County. CPCNs are necessary before Artesian can provide Service at the Property. If granted the wastewater CPCN, Artesian will provide Service in accordance with Artesian's Commission approved tariffs, as amended from time to time.

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

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

Yours very truly,

ARTESIAN WATER COMPANY, INC.

A handwritten signature in black ink, appearing to read "Adam Gould".

Adam Gould
Manager of Systems Planning and Design

Jason Palkewicz, Professional Engineer

CEO

EDUCATION

BE, Environmental Eng., 1995
Hofstra University

MS, Civil Eng., 1999
University of Toledo

REGISTRATIONS

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

MEMBERSHIPS

- LEED, AP

PROFESSIONAL SUMMARY

Mr. Palkewicz is a Professional Engineer and Project Manager with licenses in Maryland, Virginia and Delaware, with over 20 years of experience successfully overseeing all phases of planning, engineering and survey projects for government and private-sector clients. He is a highly skilled team leader, detail oriented with the ability to solve problems with limited resources while never losing sight of the big picture.

SPECIAL PROJECT EXPERIENCE

- **Pot-Nets Bayside, Sussex County, DE** – Provided design and permitting drawings for the rehabilitation and replacement of approximately 10,000 lf of vinyl marina bulkhead including dozens of piers, hundreds of piles and two boat launching facilities.
- **Pelican Point, Sussex County, DE** – Prepared construction drawings and plats for a 379 unit residential along Rte 5 outside of Long Neck. Plans included roadway, grading, sediment and erosion control, potable water, gravity sanitary sewer and sanitary pump station
- **Seagull Square, University of Salisbury, MD** – The civil engineer project manager for this mixed use public/private development consisting of approximately 600 student beds and 23,000 s.f. of Main Street style retail. Worked with the developer, State and City to acquire City sewer and water services to the site. Negotiated with MDSHA to gain access from Business Route 13, including easement abandonment, right-of-way plats and intersection improvements. LEED responsibilities included the Sustainable Site portion of the accreditation.
- **Headwater Cove, Sussex County, DE** – Prepared construction drawings and plats for a 163 unit residential subdivision on Dorman Road. Plans included roadway, grading, sediment and erosion control, potable water, gravity sanitary sewer and sanitary pump station.