

PLANNING & ZONING COMMISSION

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Sussex County

DELAWARE
sussexcountyde.gov
302-855-7878 T
302-854-5079 F
JANELLE CORNWELL, AICP
DIRECTOR

PLANNING AND ZONING AND COUNTY COUNCIL INFORMATION SHEET

Planning Commission Public Hearing Date February 18th, 2021.

Application: (2019-24) Stratus Estates

Applicant: Fusco Properties, LP
P.O. Box 665
New Castle, DE 19720

Owner: Fusco Properties, LP
P.O. Box 665
New Castle, DE 19720

Site Location: Located on the northwest corner of Cool Spring Road (S.C.R. 290) and Stockley Road (S.C.R. 280).

Current Zoning: Agricultural Residential (AR-1) (w/ a portion of parcel 33.00 zoned General Residential (GR))

Proposed Use: 226 Single-Family Lots

Comprehensive Land
Use Plan Reference: Low Density Area (w/ a portion of parcel 33.00 being Existing Development Area)

Councilmatic
District: Mr. Burton

School District: Cape Henlopen School District

Fire District: Milton Fire District

Sewer: Private, On-Site

Water: Private, On-Site

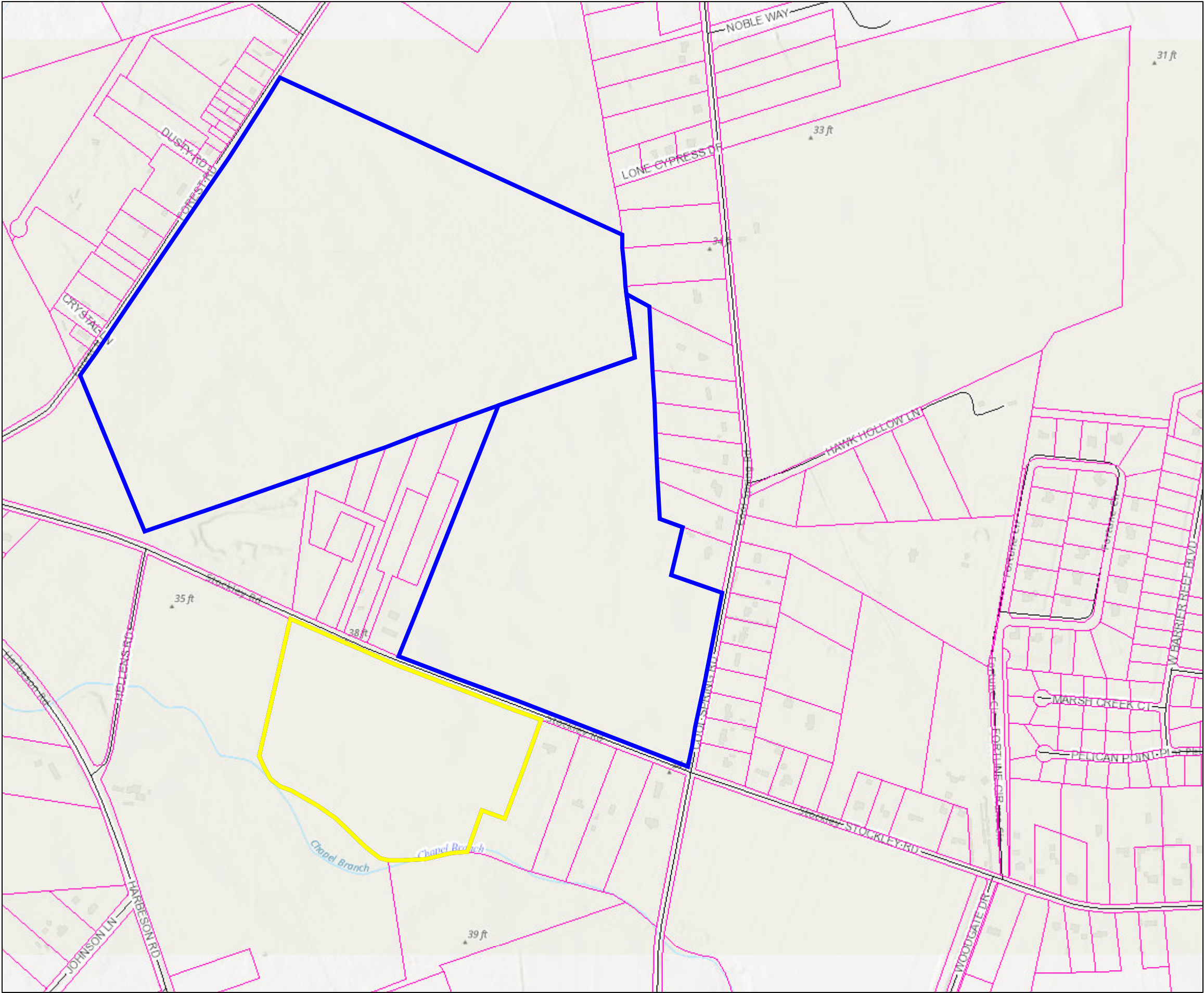
Site Area: 187.93 acres +/-

Tax Map ID.: 234-5.00-30.00 & 33.00





Sussex County



PIN:	234-5.00-30.00
Owner Name	FUSCO PROPERTIES LP
Book	3149
Mailing Address	200 AIRPORT RD
City	NEW CASTLE
State	DE
Description	NS/RT 280
Description 2	COR W/RT 290
Description 3	FX
Land Code	

- polygonLayer**

Override 1

polygonLayer

Override 1

 - Tax Parcels
 - Streets
 - County Boundaries

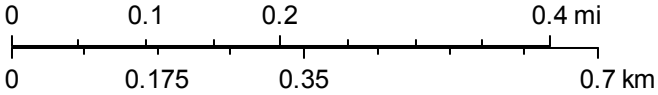
Flood Zones 2018

 - 0.2 PCT ANNUAL CHANCE FLOOD HAZARD
 - A
 - AE
 - AO
 - OPEN WATER
 - VE

Tax Ditch Segments

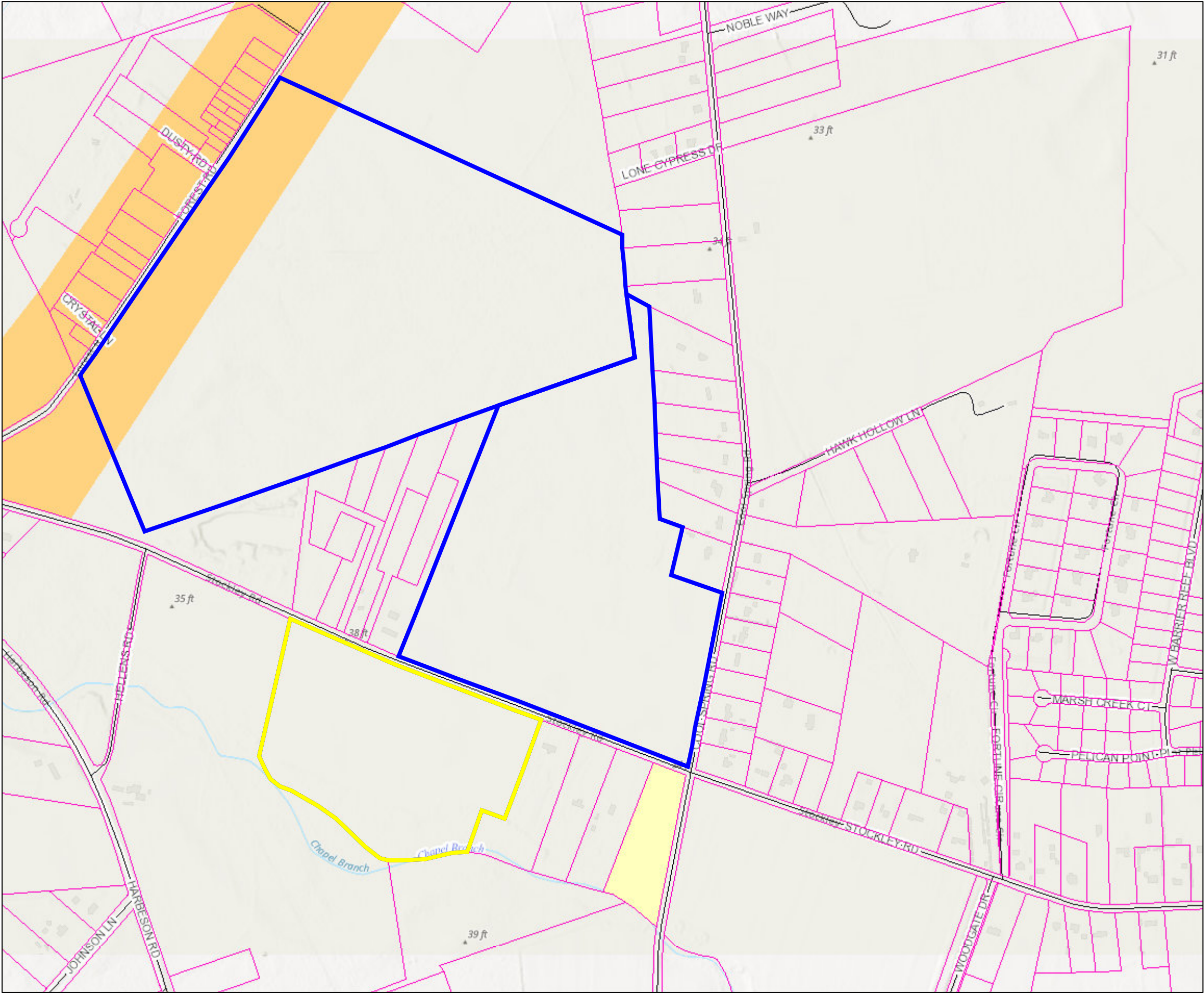
 - Tax Ditch Channel
 - Pond Feature
 - Special Access ROW
 - Extent of Right-of-Way
 - Approx. Watershed Boundary
 - Major Rivers

1:9,028





Sussex County

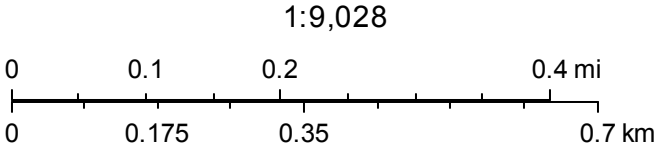


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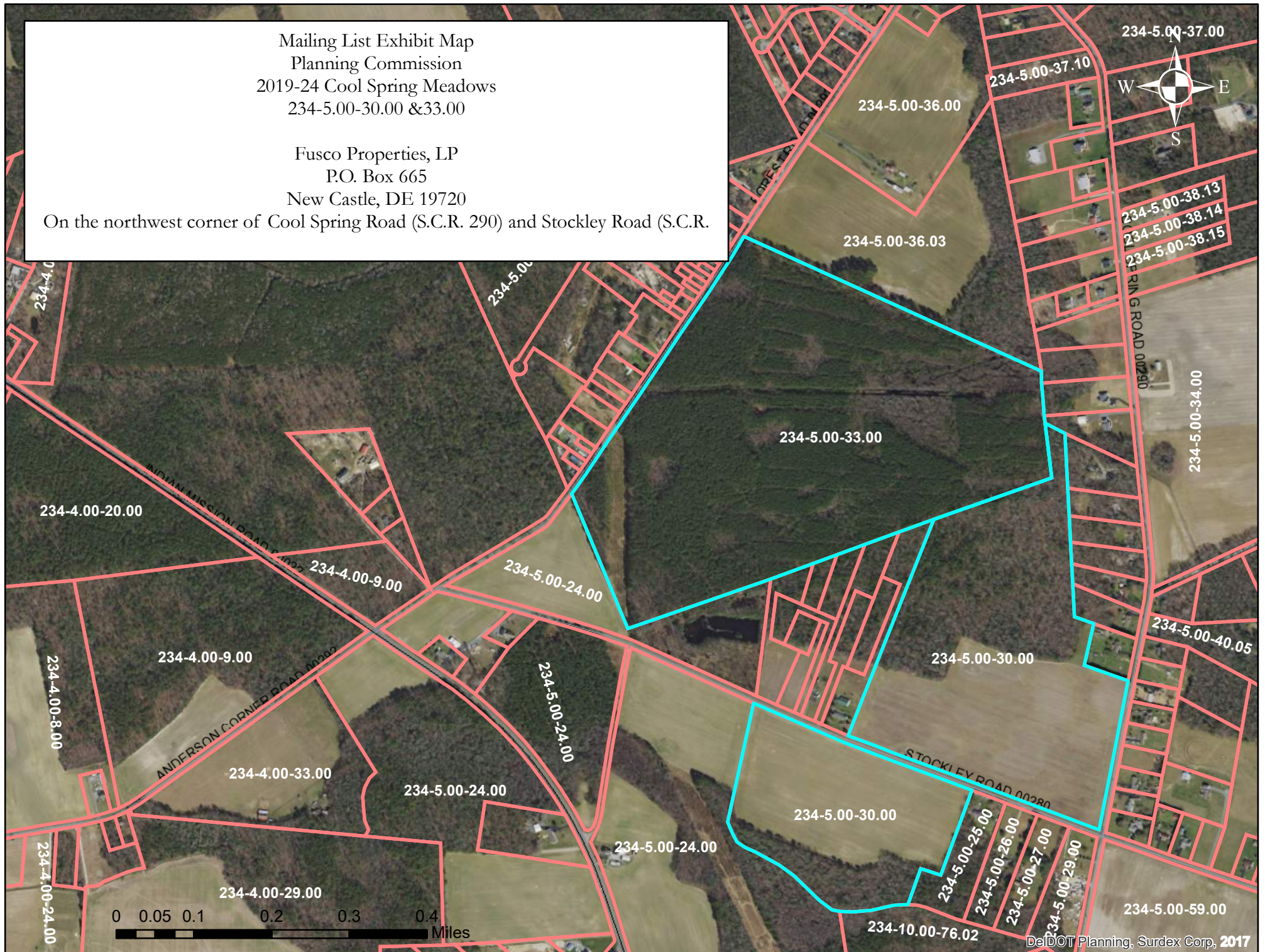
Override 1
- Tax Parcels
- Streets



Mailing List Exhibit Map
Planning Commission
2019-24 Cool Spring Meadows
234-5.00-30.00 & 33.00

Fusco Properties, LP
P.O. Box 665
New Castle, DE 19720

On the northwest corner of Cool Spring Road (S.C.R. 290) and Stockley Road (S.C.R.



Revised - updated 1/28/21

2019-24

File #: ~~2019-12~~

Pre-App Date: ~~2-1-2020~~

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

RECEIVED

JAN 28 2021

SUSSEX COUNTY
PLANNING & ZONING

Type of Application: (please check applicable)

Standard: ☐

Cluster: ☒

Coastal Area: ☐

Location of Subdivision:

NW Corner of SCR 290 (Cool Spring Road) and SCR 280 (Stockley Road)

Proposed Name of Subdivision:

Stratus Estates (fina Cool Spring Meadows)

Tax Map #: 235-5.00-30.00 Total Acreage: 187.93

Zoning: AR-1 Density: 1.21 Minimum Lot Size: 7,500 Number of Lots: 226

Open Space Acres: 139.27

Water Provider: Artesian Sewer Provider: Artesian

Applicant Information

Applicant Name: Fusco Properties, LP

Applicant Address: PO Box 655

City: New Castle State: DE Zip Code: 19720

Phone #: (302) 328-6251 E-mail: frankie@fuscomanagement.com

Owner Information

Owner Name: Same as applicant

Owner Address:

City: State: Zip Code:

Phone #: E-mail:

Agent/Attorney/Engineer Information

Agent/Attorney/Engineer Name: The Kercher Group, Inc.

Agent/Attorney/Engineer Address: 37385 Rehoboth Ave. Ext, Unit 11

City: Rehoboth Beach State: DE Zip Code: 19971

Phone #: (302) 854-9063 E-mail: kts@kerchergroup.com



Check List for Sussex County Major Subdivision Applications

The following shall be submitted with the application

☒ **Completed Application**

☒ **Provide ten (10) copies of the Site Plan or Survey of the property and a PDF (via e-mail)**

- Plan shall show the existing conditions, setbacks, roads, floodplain, wetlands, topography, proposed lots, landscape plan, etc. **Per Subdivision Code 99-22, 99-23 & 99-24**
- Provide compliance with Section 99-9.
- Deed or Legal description, copy of proposed deed restrictions, soil feasibility study

☒ **Provide Fee \$500.00**

☐ **Optional - Additional information for the Commission to consider** (ex. photos, exhibit books, etc.) If provided submit seven (7) copies and they shall be submitted a minimum of ten (10) days prior to the Planning Commission meeting.

☒ **Please be aware that Public Notice will be sent to property owners within 200 feet of the subject site and County staff will come out to the subject site, take photos and place a sign on the site stating the date and time of the Public Hearings for the application.**

☐ **PLUS Response Letter** (if required) ☐ **Environmental Assessment & Public Facility Evaluation Report** (if within Coastal Area)

☐ **51% of property owners consent if applicable**

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

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

Signature of Applicant/Agent/Attorney

David L. Hoff, Esq.

David L. Hoff, Esq.
David L. Hoff, Esq.

Signature of Owner

Date: 1/28/2021

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: _____



STATE OF DELAWARE
EXECUTIVE DEPARTMENT
OFFICE OF STATE PLANNING COORDINATION

August 21, 2019

RECEIVED

SEP 11 2019

SUSSEX COUNTY
PLANNING & ZONING

Mr. John Murray
The Kercher Group, Inc.
37385 Rehoboth Ave. Unit #11
Rehoboth Beach, DE 19971

RE: PLUS review 2019-07-04; Cool Spring Meadows

Dear Mr. Murray:

Thank you for meeting with State agency planners on July 24, 2019 to discuss the Cool Spring Meadows project. According to the information received you are seeking review of a 226 unit subdivision on 187.93 acres along Stockley 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

This project represents land development that will result in 226 residential units in an Investment 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.

From a fiscal responsibility perspective, development of this site is likewise inappropriate. The cost of providing services to development in rural areas is an inefficient and wasteful use of the State's fiscal resources. The project as proposed will bring new residents to an area where the State has no plans to invest in infrastructure upgrades or additional services. These residents will need access to such services and infrastructure as schools, police, and transportation. To provide some examples, the State government funds 100% of road maintenance and drainage improvements for the transportation system, 100% of school transportation and paratransit services, up to 80% of school construction costs, and 100% of the cost of police protection in the unincorporated portion of Sussex County where this development is proposed. Over the longer term, the unseen negative ramifications of this development will become even more evident as the community matures and the cost of maintaining infrastructure and providing services increases.

Because the development is inconsistent with the *Strategies for State Policies and Spending*, the State does not support this proposed development.

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

Code Requirements/Agency Permitting Requirements

Department of Transportation – Contact Bill Brockenbrough 760-2109

- The site access on Stockley Road (Sussex Road 280) 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 P.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 P.5 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 2,158 vehicle trip ends per day. DelDOT calculates a higher number, 2,201 vehicle trip ends per day, but regardless the warrant for a TIS is met.

In April 2006 (See attached letters.) DelDOT commented to the County on its review of a TIS for an earlier plan to develop these lands. The letter includes a numbered list of off-site improvements and contributions toward off-site improvements that DelDOT recommended be required of the development.

Some of the listed items apply to locations that would not be included in a TIS done today because DelDOT regulations have changed. Following is a list of off-site improvements and contributions toward off-site improvements that DelDOT finds should be required of the developer. If the County or the developer would prefer to restart the TIS process with current data, DelDOT would be amenable to that. Alternatively, DelDOT recommends that the following items be required:

- The developer should improve Stockley Road from Cool Spring Road (Sussex Road 290) to Forest Road (Sussex Road 292) in order to meet DelDOT local road standards as nearly as possible. Local road standards include two eleven-foot travel lanes and two five-foot shoulders. The developer should provide a bituminous concrete overlay to the existing travel lanes, at DelDOT's discretion. DelDOT should analyze the existing travel lanes' pavement section and recommend an overlay thickness to the developer's engineer if necessary.
- The developer should improve Cool Spring Road from Stockley Road to the north limit of the site frontage in order to meet DelDOT local road standards as nearly as possible. Local road standards include two eleven-foot travel lanes and two five-foot shoulders. The developer should provide a bituminous concrete overlay to the existing travel lanes, at DelDOT's discretion. DelDOT should analyze the existing travel lanes' pavement section and recommend an overlay thickness to the developer's engineer if necessary.
- The developer should enter into a traffic signal agreement with DelDOT for the intersection of Delaware Route 5 and Forest Road.
- 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 Stockley Road and Cool Spring Road. By this regulation, this dedication is to provide a minimum of 30 feet of right-of-way from the physical centerline along both roads. The following right-of-way dedication note is required, **"An X-foot wide right-of-way is hereby dedicated to the State of Delaware, as per this plat."**
- In accordance with Section 3.2.5.1.2 of the Manual, DelDOT will require the establishment of a 15-foot wide permanent easement across the property frontage on Stockley Road and Cool Spring Road. The location of the easement shall be outside the

limits of the ultimate right-of-way. The easement area can be used as part of the open space calculation for the site. The following note is required, **"A 15-foot wide permanent easement is hereby established for the State of Delaware, as per this plat."**

- Referring to Section 3.4.2.1 of the Manual, the following items, among other things, are required on the Record Plan:
 - A Traffic Generation Diagram. See Figure 3.4.2-a for the required format and content.
 - Depiction of all existing entrances within 600 feet of the entrances on Stockley 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 Goldenrod Drive be extended to the property line as a stub street.
- Section 3.5.4.2 of the Manual addresses requirements for shared-use paths and sidewalks. For projects in Level 1 and 2 Investment Areas, installation of paths or sidewalks along the frontage on State-maintained roads is required. DelDOT anticipates requiring the developer to build Shared Use Paths along their frontage on both Stockley Road and Cool Spring Road.
- Section 3.5.4.4 of the Manual addresses access-ways, essentially shared-use paths connecting subdivision streets either to each other or to the road on which the property fronts. DelDOT anticipates requiring the developer to build one access-way from Goldenrod Drive to Stockley Road near Lot 16 and another from Monarch Avenue to Cool Spring Road near Lot 99.
- Referring to Section 3.5.5 of the Manual, existing and proposed transit stops and associated facilities as required by the Delaware Transit Corporation (DTC) or DelDOT shall be shown on the Record Plan.
- 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 Stockley Road and Cool Spring Road.
- In accordance with Section 5.2.9 of the Manual, the Auxiliary Lane Worksheet should be

used to determine whether auxiliary lanes are warranted at the site entrances and how long those lanes should be. The worksheet can be found at <http://www.deldot.gov/Business/subdivisions/index.shtml>.

- In accordance with Section 5.14 of the Manual, all existing utilities must be shown on the plan and a utility relocation plan will be required for any utilities that need to be relocated.

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

Wastewater Disposal

- The DNREC Groundwater Discharge Large Systems Section will need to be notified where the developer intends to send the wastewater. The PLUS application states that a new community system will not be located on this site.

Floodplain and Sea Level Rise

- Chapel Branch runs through the southeast corner of the site. This site is situated upstream of the mapped floodplain for Chapel Branch,
- The unmapped floodplain area should be avoided, and floodplain analysis and mapping could be required.

Water Quality

- DNREC mapping indicates presence of wetlands and hydric soils (Hurlock) which encompass a large portion of the subject parcel.
- Increased impervious cover from development and removal of forest cover will increase the potential for future flooding concerns.
- Green-technology stormwater management is highly recommended. Efforts to mitigate for impervious cover (pervious pavers) should also be implemented where applicable.
- To protect the function and integrity of wetlands, a minimum 100-foot buffer should be left intact around the perimeter.
- Avoid disturbance and filling of wetlands.

Forest Preservation

- DNREC mapping indicates presence of forested wetlands which encompass a large portion of the subject parcel.

- The site plan should be designed to allow for the preservation of as much of this wooded area as feasible, with special consideration for preservation given to large, mature trees. Leaving a forest intact is usually more beneficial to the existing wildlife and is preferred to clearing.
- To reduce impacts to nesting birds and other wildlife species that utilize forests for breeding, we recommend that clearing not occur April 1st to July 31st.
- Low spillage lights (those that reflect light directly downward onto the illuminated area) should be used on roads and homes within 750 feet of the forested wetlands on site. Fluorescent and mercury vapor lighting should not be used.
- Contact the Division of Fish and Wildlife for assistance in identifying, preserving, and managing the existing forest on-site. For technical assistance or to schedule a site visit please contact Katie Kadlubar, Kathryn.Kadlubar@delaware.gov.

State Historic Preservation Office – Contact Carlton Hall 736-7404

- The Delaware SHPO does not support development in a Level 4 area.
- There are no known archaeological sites or known National Register listed or eligible properties on the parcel. However, the soils are a mix of well-and poorly drained areas. Poorly drained areas could have been a source for plant and animal resources. There is moderate potential for archaeological resources to be present and our office recommends an archaeological survey of the project area. If there are any questions, inquiries, or concerns, feel free to contact the Delaware State Historic Preservation Office for assistance at 302-736-7400.
- 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). Prior to any demolition or ground-disturbing activities, the developer should hire an archaeological consultant to examine the parcel for archaeological resources, including unmarked human burials or human skeletal remains, to avoid those sites or areas.
- If there is federal involvement, in the form of licenses, permits, or funds, the federal agency, often through its client, is responsible for complying with Section 106 of the National Historic Preservation Act (36 CFR 800) and must consider their project's effects on any known or potential cultural or historic resources. For further information on the Section 106 process please review the Advisory Council on Historic Preservation's website at: www.achp.gov

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

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

Fire Protection Water Requirements:

- Where a water distribution system is proposed for single-family dwellings it shall be capable of delivering at least 500 gpm for 1-hour duration, at 20-psi residual pressure. Fire hydrants with 1000 feet spacing on centers are required.
- The infrastructure for fire protection water shall be provided, including the size of water mains.

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. Additionally, where trees are to be situated adjacent to travel roads in the subdivision, some forethought should be exercised regarding how future growth of the trees may affect fire department travel throughout the subdivision.
- 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, such as Point Lane and Bayberry Drive, 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.

Gas Piping and System Information:

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

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”
- Name of Water Supplier
- Proposed Use

- National Fire Protection Association (NFPA) Construction Type Maximum Height of Buildings (including number of stories)
- Provide Road Names, even for County Roads

Sussex County – Contact Rob Davis 302-855-7820

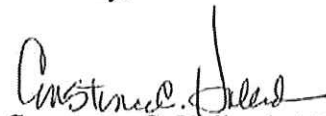
- Sussex County does not expect to provide sanitary sewer service within the area proposed for the 226-unit subdivision. The Sussex County Engineering Department recommends the project receive wastewater service from Artesian Utilities as proposed.

In addition to the comments above our office has received a letter from Brandy Nauman, Sussex County Housing Coordinator & Fair Housing Compliance Officer. A copy of that letter is enclosed with this letter.

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,



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

CC: Sussex County

Enclosure
Attachment

BRANDY BENNETT NAUMAN
HOUSING COORDINATOR &
FAIR HOUSING COMPLIANCE OFFICER
(302) 855-7777 T
(302) 854-5397 F
bnauman@sussexcountyde.gov



Sussex County
DELAWARE
sussexcountyde.gov

July 22, 2019

Mr. John Murray
The Kercher Group, Inc.
37385 Rehoboth Ave., Unit #11
Rehoboth Beach, DE 19971

RE: Cool Spring Meadows – PLUS Review (PLUS 2019-07-04)

Dear Mr. Murray,

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.

On behalf of Sussex County, we look forward to cooperating with you and your project as it moves forward.

Thank you,

Brandy B. Nauman
*Housing Coordinator &
Fair Housing Compliance Officer*



COUNTY ADMINISTRATIVE OFFICES WEST COMPLEX
22215 DUPONT BOULEVARD | PO BOX 589
GEORGETOWN, DELAWARE 19947



April 19, 2006

Mr. Todd J. Sammons
Project Engineer
DelDOT Division of Planning
P.O. Box 778
Dover, DE 19903

RE: Agreement No. 1294
Traffic Impact Study Review Services
Task No. 91 – Cool Spring Meadows

Dear Mr. Sammons,

McCormick Taylor has completed its review of the Traffic Impact Study (TIS) for the development of Cool Spring Meadows prepared by Orth-Rodgers and Associates, Inc., dated January 19, 2006. This review was assigned as Task Number 91. Orth-Rodgers and Associates, Inc. prepared the report in a manner generally consistent with DelDOT's *Rules and Regulations for Subdivision Streets*.

The TIS evaluates the impacts of the development of Cool Spring Meadows in Sussex County, Delaware. The proposed development would consist of 233 single-family detached houses. This development is located on the both sides of Stockley Road (Sussex Road 280), west of Cool Spring Road (Sussex Road 290). Two access points on Stockley Road are proposed to create a four-way intersection, and one access point is proposed on Cool Spring Road creating a t-intersection. Construction is expected to be complete by 2010.

There are currently no active DelDOT projects within the study area.

Based on our review, we have the following comments and recommendations:

One intersection exhibits level of service deficiencies without the implementation of physical roadway and/or traffic control improvements: the intersection of US Route 9 (Lewes-Georgetown Highway) and Cool Spring Road. This intersection is expected to exhibit level of service deficiencies in the 2010 afternoon and summer Saturday peak hours with and without the development, and in the 2010 morning peak hour with the development.

Should the County choose to approve the proposed development, the following items should be incorporated into the site design and reflected on the record plan. All applicable agreements (i.e., letter agreements for off-site improvements and traffic signal agreements) should be executed prior to entrance plan approval for the proposed development.

1. The developer should improve Stockley Road from Forest Road (Sussex Road 292) to Cool Spring Road in order to meet DelDOT local road standards as nearly as possible. Local road standards include two eleven-foot travel lanes and two five-foot shoulders. The developer should provide a bituminous concrete overlay to the existing travel lanes, at DelDOT's discretion. DelDOT should analyze the existing travel lanes' pavement section and recommend an overlay thickness to the developer's engineer if necessary.
2. The developer should improve Cool Spring Road from Stockley Road to Forest Road in order to meet DelDOT local road standards as nearly as possible. Local road standards include two eleven-foot travel lanes and two five-foot shoulders. The developer should provide a bituminous concrete overlay to the existing travel lanes, at DelDOT's discretion. DelDOT should analyze the existing travel lanes' pavement section and recommend an overlay thickness to the developer's engineer if necessary.
3. The developer should enter into a traffic signal agreement with DelDOT for the intersection of US Route 9 and Cool Spring Road. The agreement should include pedestrian signals, crosswalks, and interconnection at DelDOT's discretion. Due to the fact that an active railroad line is aligned diagonally through the intersection, any traffic signal agreement should also include active railroad warning devices and railroad-highway traffic signal interconnection at DelDOT's discretion.
4. The following bicycle and pedestrian improvements should be included:
 - a) A minimum of a five-foot bicycle lane should be striped along the Stockley Road and Cool Spring Road site frontage (in addition to any required turn lanes) in order to facilitate safe and unimpeded bicycle travel.
 - b) A fifteen-foot wide permanent easement should be established across the property frontage for a future ten-foot wide multi-use path.
 - c) Regulatory/warning signage should be added to any forthcoming plans to this project in order to alert motorists to the presence of bicycle traffic.
 - d) Utility covers should be moved outside of the designated bicycle lane or be flush with the pavement.
 - e) Internal sidewalks to promote walking as a viable transportation alternative should be constructed.
 - f) An ADA compliant crosswalk should be considered at the opposing access points along Stockley Road.

Please note that this review generally focuses on capacity and level of service issues; additional safety and operational issues will be further addressed through DelDOT's subdivision review process.



Additional details on our review of the TIS are attached. Please contact me at (302) 738-0203 or through e-mail at mluszcz@mtmail.biz if you have any questions concerning this review.

Sincerely,

McCormick Taylor, Inc.

A handwritten signature in black ink that reads "Mark Luszcz".

Mark Luszcz, P.E., PTOE, AICP
Associate

Enclosure

General Information

Report date: January 19, 2006

Prepared by: Orth-Rodgers & Associates, Inc.

Prepared for: Ocean Atlantic Agency

Tax parcel: 2-34-5.00-30.00, 2-34-5.00-33.00

Generally consistent with DelDOT's Rules and Regulations for Subdivision Streets: Yes

Project Description and Background

Description: Development of 233 single-family detached houses

Location: Site is located on either side of Stockley Road, west of Cool Spring Road in Sussex County, Delaware

Amount of land to be developed: approximately 207 acres

Land use approval(s) needed: Subdivision Review

Proposed completion date: 2010

Proposed access locations: Two access points on Stockley Road are proposed to create a four-way intersection, and one access point is proposed on Cool Spring Road creating a t-intersection.

Livable Delaware

(Source: Delaware Strategies for State Policies and Spending, July 2004)

Location with respect to the Strategies for State Policies and Spending Map of Delaware:

The proposed Cool Springs Meadow Development is located within Investment Level 4.

Description of Investment Level 4:

Areas located within Investment Level 4 are predominantly agricultural; contain agribusiness activities, farm complexes and small settlements that are often found at historic crossroads. These areas contain undeveloped natural areas, including forestland and recreational parks, however may have scattered single-family detached residential homes located within them.

Transportation facilities and services will be preserved by the state while they continue to manage the transportation system in a manner that will support the preservation of the natural environment. The state will limit its investments in water and wastewater systems to existing public health, safety and environmental risks and discourage accommodating further development. In addition, the state will limit continued development of areas within Investment Level 4 to those that enhance agriculture and protect water supplies, preserve critical habitat and maintain existing education and public safety services. Although residential development is not desirable in Investment Level 4, conservation design techniques (protecting large portions of existing open space and farmland while clustering development on a smaller portion of the parcel and using environmentally friendly design innovations) can be utilized in some cases to help ensure that developments are compatible with the rural character and natural resources present in the area. However, it is the state's general intent to discourage additional development in Investment Level 4 areas that are unrelated to the areas' needs by limiting infrastructure investment.

Proposed Development's Compatibility with Livable Delaware:

The proposed Cool Spring Meadows Development falls within Investment Level 4. Residential development is generally not desirable in Investment Level 4. Developments within Investment Level 4 areas should focus on protection of large portions of existing open space and farmland on a site while clustering development on a smaller portion of the parcel. This proposed development would be developed using the cluster option under that zoning and therefore would be compatible with Livable Delaware. However, it should be noted that conservation design techniques should be utilized to ensure that the development is compatible with the rural character and natural resources present in the area.

Comprehensive Plans

Sussex County Comprehensive Plan: (*Source: 2003 Sussex County Comprehensive Plan Update*) The Sussex County Comprehensive Plan indicates that the parcel of land for the proposed development is in a Low Density Area. The purpose of the Low Density Area is to provide for a full range of agricultural activities and to protect agricultural lands as one of the County's most valuable natural resources from the depreciating effect of objectionable, hazardous and unsightly uses. Although this area is intended primarily for agricultural use, low density residential development is permitted. Density guidelines state that the minimum lot size in a Low Density Area is 20,000 square feet (about 0.46 acres).

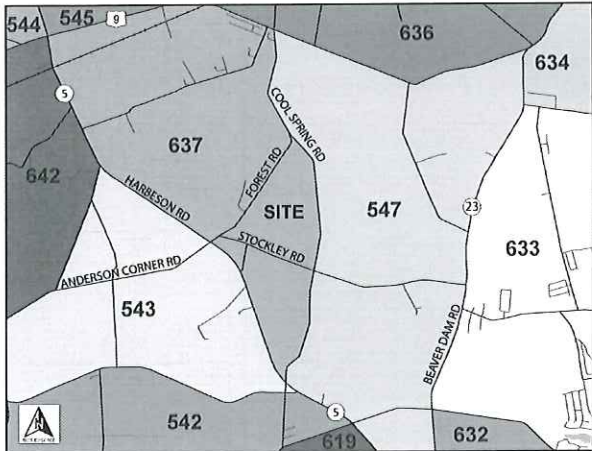
Public water and wastewater systems are not planned for low density areas therefore the proposed development will use on-site septic systems or private wastewater treatment systems. Improvements to local roads will be limited to safety considerations and emergency evacuation.

Proposed Development's Compatibility with Comprehensive Plans: Since the average density of this proposed development would be approximately 1.12 dwelling units/acre (close to an average 0.89 acre lots sizes), this development would most likely be compatible with the Sussex County Comprehensive Plan.

Transportation Analysis Zone

Transportation Analysis Zones (TAZ) where development would be located:
637 (Peninsula Code TAZ)

TAZ Boundaries:



Current employment estimate for TAZ: 36 in 2005
Future employment estimate for TAZ: 39 in 2010
Current population estimate for TAZ: 841 in 2005
Future population estimate for TAZ: 938 in 2010
Current household estimate for TAZ: 351 in 2005
Future household estimate for TAZ: 397 in 2010
Relevant committed developments in the

TAZ: Beaver Creek (The Villages)

Would the addition of committed developments to current estimates exceed future projections: Yes

Would the addition of committed developments and the proposed development to current estimates exceed future projections: Yes

Relevant Projects in the DelDOT Capital Transportation Program (2005-2010)

There are currently no active DelDOT projects within the study area.

Trip Generation

Trip generation for the proposed development was computed using comparable land uses and equations contained in Trip Generation, Seventh Edition, published by the Institute of Transportation Engineers (ITE). The following land uses were utilized to estimate the amount of new traffic generated for this development:

- Single-Family Detached Houses (ITE Land Use Code 210)

Table 1.
COOL SPRING MEADOWS TRIP GENERATION

Land Use	AM Peak Hour			PM Peak Hour			Saturday Mid-Day		
	In	Out	Total	In	Out	Total	In	Out	Total
233 Residential Single-Family Detached Houses	43	130	173	145	85	230	118	100	218
TOTAL TRIPS	43	130	173	145	85	230	118	100	218

Overview of TIS

Intersections examined:

- 1) Stockley Road (Sussex Road 280) & Site Access
- 2) Cool Spring Road (Sussex Road 290) & Site Access
- 3) Cool Spring Road & Stockley Road
- 4) Cool Spring Road & Forest Road (Sussex Road 292)
- 5) Forest Road & Stockley Road
- 6) Cool Spring Road & Delaware Route 5 (Sussex Road 22)*
- 7) Cool Spring Road & US Route 9 (Sussex Road 18)*
- 8) Forest Road/Anderson Corner Road (Sussex Road 292) & Delaware Route 5*
- 9) Stockley Road & Beaver Dam Road (Sussex Road 23)*

The asterisks (*) indicate intersections for which Saturday conditions were analyzed.

Conditions examined:

- 1) 2005 existing conditions
- 2) 2010 without Cool Spring Meadows Development
- 3) 2010 with Cool Spring Meadows Development

Peak hours evaluated: Weekday morning and evening peak hours, Saturday mid-day.

Committed developments considered:

- 1) Heron Bay (352 Single Family Houses)
- 2) Beaver Creek
 - a. The Meadows (102 Single-Family Houses)
 - b. The Trails (170 Single-Family Houses)
 - c. The Villages (400 Single-Family Houses, 50 Condominiums, 50,000 Square Feet of General Retail)
- 3) Stonewater Creek
 - a. Phase 1-9 (712 Single-Family Houses)
 - b. Phase 10-13 (360 Single-Family Houses)
- 4) Oak Crest Pond (26 Single-Family Houses)
- 5) Oak Crest Farm (96 Single-Family Houses)

Intersection Descriptions

1) Stockley Road & Site Access:

Type of Control: Proposed two-way stop-controlled intersection

Northbound approach: (Site Access) stop-controlled shared left/through/right-turn lane

Southbound approach: (Site Access) stop-controlled shared left/through/right-turn lane

Eastbound approach: (Stockley Road) one shared left/through/right-turn lane

Westbound approach: (Stockley Road) one shared left/through/right-turn lane

2) Cool Spring Road & Site Access:

Type of Control: Proposed T-intersection

Northbound approach: (Cool Spring Road) one shared left-turn/through lane

Southbound approach: (Cool Spring Road) one shared through/right-turn lane

Eastbound approach: (Site Access) stop-controlled shared left/right-turn lane

3) Cool Spring Road & Stockley Road:

Type of Control: Two-way stop-controlled intersection

Northbound approach: (Cool Spring Road) stop-controlled shared left/through/right-turn lane

Southbound approach: (Cool Spring Road) stop-controlled shared left/through/right-turn lane

Eastbound approach: (Stockley Road) one shared left/through/right-turn lane

Westbound approach: (Stockley Road) one shared left/through/right-turn lane

4) Cool Spring Road & Forest Road:

Type of Control: Stop-controlled T-intersection

Northbound approach: (Cool Spring Road) one shared left-turn/through lane

Southbound approach: (Cool Spring Road) one shared through/right-turn lane

Eastbound approach: (Forest Road) stop-controlled shared left/right-turn lane

5) Forest Road & Stockley Road:

Type of Control: Stop-controlled T-intersection

Northbound approach: (Stockley Road) stop-controlled shared left-turn/right-turn lane

Eastbound approach: (Forest Road) one shared through/right-turn lane

Westbound approach: (Forest Road) one shared through/left-turn lane

6) Cool Spring Road & Delaware Route 5:

Type of Control: Two-way stop-controlled intersection

Northbound approach: (Delaware Route 5) one shared left-turn/through/right-turn lane

Southbound approach: (Delaware Route 5) one shared left-turn/through/right-turn lane

Eastbound approach: (Cool Spring Road) stop controlled shared left-turn/through lane and one yield controlled channelized right-turn lane

Westbound approach: (Cool Spring Road) one stop controlled shared left-turn/through lane and one yield controlled channelized right-turn lane

7) Cool Spring Road & US Route 9:

Type of Control: Two-way stop-controlled intersection

Northbound approach: (Cool Spring Road) stop-controlled shared left-turn/through/right-turn lane

Southbound approach: (Cool Spring Road) stop-controlled shared left-turn/through/right-turn lane

Eastbound approach: (US Route 9) one shared left-turn/through/right-turn lane

Westbound approach: (US Route 9) one shared left-turn/through/right-turn lane

Note: There is an active railroad line aligned diagonally through this intersection, as described below.

8) Forest Road/Anderson Corner Road & Delaware Route 5:

Type of Control: Two-way stop-controlled intersection

Northbound approach: (Delaware Route 5) one shared left-turn/through/right-turn lane

Southbound approach: (Delaware Route 5) one shared left-turn/through/right-turn lane

Eastbound approach: (Anderson Corner Road) stop-controlled shared left-turn/through/right-turn lane

Westbound approach: (Forest Road) stop-controlled shared left-turn/through/right-turn lane

9) Stockley Road & Beaver Dam Road:

Type of Control: Stop-controlled T-intersection

Northbound approach: (Beaver Dam Road) one shared left-turn/through lane

Southbound approach: (Beaver Dam Road) one shared through/right-turn lane

Eastbound approach: (Stockley Road) stop-controlled shared left/right-turn lane

At-Grade Railroad Crossing Description

Location: At the intersection of US Route 9 and Cool Spring Road:

Rail Line: This east-west active rail line is a Class III line called the Delaware Coastline line. It is owned by the Delaware Transit Corporation (DTC) and extends from Georgetown to Lewes, Delaware. Trains over the line are operated by the Delaware Coast Line Railroad.

Northbound approach: (Cool Spring Road) one shared left/through/right-turn lane with appropriate pavement markings and signage.

Southbound approach: (Cool Spring Road) one shared left/through/right-turn lane with appropriate pavement markings and signage.

Eastbound approach: (US Route 9) one through lane with appropriate pavement markings, signage and warning flashers

Westbound approach: (US Route 9) one through lane with appropriate pavement markings, signage and warning flashers

Description: This is an at-grade crossing of an active rail line that serves about 1 train/week of about 5 cars in length running through the intersection of US Route 9 and Cool Spring Road at a 35 degree angle. The trains along the rail line generally have a speed of approximately 15 MPH in this area. The crossing is currently equipped with pavement markings and railroad crossing signs at the stop signs on the northbound and southbound approaches of Cool Spring Road. On US Route 9, pavement markings, signing, and side-mounted warning flashers are present, but there are no gates. Traffic volumes at the intersection are expected to increase in the next few years due to the development in the area. Without improvements, the intersection is expected to operate at a level of service F in the AM, PM and Saturday peak hour with and without the development.

Transit, Pedestrian, and Bicycle Facilities

Existing transit service: None.

Planned transit service: In an email from David Dooley from DelDOT dated March 8, 2006, he stated that no transit routes are proposed in the area. Pedestrian and bicycle mobility access should be enhanced so that should transit be expanded to serve these developments in the future, pedestrian access to the frontage road would make transit trips more viable.

Existing bicycle and pedestrian facilities: The *Delaware Kent and Sussex Counties Bicycle Touring Map* designates Delaware Route 5 as a bike route; therefore a five-foot minimum shoulder must be maintained along any property frontage.

Planned bicycle and pedestrian facilities: In a letter dated November 14, 2005, Anthony Aglio from DelDOT commented that Livable Delaware's updated State Strategies for Spending Map indicates the site is located in an Investment Level 4 area, where the existing transportation network should preserve the natural environment. Per Livable Delaware's recommendations residential developments such as this are not encouraged in Investment Level 4 areas. However, should the development be approved, he requested the following improvements be incorporated into the project to facilitate bicycle and pedestrian transportation:

- a) Striped five-foot bicycle lanes with five-foot shoulders (in addition to any required turn lanes) along the Stockley Road and Cool Spring Road site frontages.
- b) An ADA compliant crosswalk should be considered at the opposing access points along Stockley Road.
- c) Internal sidewalks to promote walking as a viable transportation alternative.

Previous Comments

All comments from DelDOT's Scoping Letter dated May 27, 2005 were addressed in the Final TIS submission except for the following:

- In regards to compliance with DelDOT, AASHTO and MUTCD standards for geometry and traffic control devices, no evaluation was performed for the study intersections.
- In regards to compliance with DelDOT, AASHTO and MUTCD standards for geometry and traffic control devices, no evaluation was performed for Stockley Road from Delaware Route 23 to Forest Road, Cool Spring Road from Delaware Route 5 to US Route 9 and Forest Road from Delaware Route 5 to Cool Spring Road.
- No correspondence was present indicating that Mr. Mark Harbeson was contacted with regard to the Delaware Route 24 corridor project.

All comments from DelDOT's letter dated August 5, 2005 were addressed in the Final TIS submission.

All comments from DelDOT's Preliminary TIS Letter dated September 13, 2005 were addressed in the Final TIS submission.

General HCS Analysis Comments

(see table footnotes on the following pages for specific comments)

- 1) The TIS used the existing truck percentage for all approaches in all future cases. McCormick Taylor used the greater of either the existing truck percentage or 2% for all future cases.

Table 2
PEAK HOUR LEVELS OF SERVICE (LOS)
based on Traffic Impact Study for Cool Spring Meadows Development
Report dated January 19, 2006
Prepared by Orth-Rodgers & Associates, Inc.

Unsignalized Intersection ¹ Two-Way Stop Control	LOS per TIS		LOS per McCormick Taylor	
	Weekday AM	Weekday PM	Weekday AM	Weekday PM
2010 With Development				
Northbound Site Access	A (9.3)	A (9.8)	A (9.3)	A (9.8)
Southbound Site Access	A (9.7)	A (10.0)	A (9.7)	A (10.0)
Eastbound Stockley Road - Left	A (7.5)	A (7.5)	A (7.5)	A (7.5)
Westbound Stockley Road - Left	A (7.3)	A (7.5)	A (7.3)	A (7.5)

¹ For unsignalized analyses, the numbers in parentheses following levels of service are average delay per vehicle, measured in seconds. For signalized analyses, those numbers are X-critical, a composite volume-to-capacity ratio.

Table 3
PEAK HOUR LEVELS OF SERVICE (LOS)
based on Traffic Impact Study for Cool Spring Meadows Development
Report dated January 19, 2006
Prepared by Orth-Rodgers & Associates, Inc.

Unsignalized Intersection ² One-Way Stop Control	LOS per TIS		LOS per McCormick Taylor	
	Weekday AM	Weekday PM	Weekday AM	Weekday PM
Cool Spring Road & Site Access				
2010 With Development				
Northbound Cool Spring Road - Left	A (7.3)	A (7.5)	A (7.3)	A (7.5)
Eastbound Site Access	A (9.3)	A (9.8)	A (9.3)	A (9.8)

² For unsignalized analyses, the numbers in parentheses following levels of service are average delay per vehicle, measured in seconds. For signalized analyses, those numbers are X-critical, a composite volume-to-capacity ratio.

Table 4
PEAK HOUR LEVELS OF SERVICE (LOS)
based on Traffic Impact Study for Cool Spring Meadows Development
Report dated January 19, 2006
Prepared by Orth-Rodgers & Associates, Inc.

Unsignalized Intersection ³ Two-Way Stop Control Stockley Road & Cool Spring Road	LOS per TIS		LOS per McCormick Taylor	
	Weekday AM	Weekday PM	Weekday AM	Weekday PM
2005 Existing				
Northbound Cool Spring Road	A (9.3)	A (9.6)	A (9.3)	A (9.6)
Southbound Cool Spring Road	A (9.9)	A (10.0)	A (9.9)	A (10.0)
Eastbound Stockley Road - Left	A (7.5)	A (7.3)	A (7.5)	A (7.3)
Westbound Stockley Road - Left	A (7.3)	A (7.3)	A (7.3)	A (7.3)
2010 Without Development				
Northbound Cool Spring Road	A (9.6)	B (10.2)	A (9.6)	B (10.2)
Southbound Cool Spring Road	B (10.3)	B (10.7)	B (10.3)	B (10.7)
Eastbound Stockley Road - Left	A (7.6)	A (7.4)	A (7.6)	A (7.4)
Westbound Stockley Road - Left	A (7.3)	A (7.5)	A (7.3)	A (7.5)
2010 With Development				
Northbound Cool Spring Road	B (10.1)	B (10.9)	B (10.1)	B (10.9)
Southbound Cool Spring Road	B (11.0)	B (11.4)	B (11.0)	B (11.4)
Eastbound Stockley Road - Left	A (7.7)	A (7.5)	A (7.7)	A (7.5)
Westbound Stockley Road - Left	A (7.4)	A (7.5)	A (7.4)	A (7.5)

³ For unsignalized analyses, the numbers in parentheses following levels of service are average delay per vehicle, measured in seconds. For signalized analyses, those numbers are X-critical, a composite volume-to-capacity ratio.

Table 5
PEAK HOUR LEVELS OF SERVICE (LOS)
based on Traffic Impact Study for Cool Spring Meadows Development
Report dated January 19, 2006
Prepared by Orth-Rodgers & Associates, Inc.

Unsignalized Intersection ⁴ One-Way Stop Control	LOS per TIS		LOS per McCormick Taylor	
	Weekday AM	Weekday PM	Weekday AM	Weekday PM
Forest Road & Cool Spring Road				
2005 Existing				
Northbound Cool Spring Road - Left	A (7.4)	A (7.4)	A (7.4)	A (7.4)
Eastbound Forest Road	A (9.2)	A (9.2)	A (9.2)	A (9.2)
2010 Without Development				
Northbound Cool Spring Road - Left	A (7.4)	A (7.4)	A (7.4)	A (7.4)
Eastbound Forest Road	A (9.3)	A (9.4)	A (9.3)	A (9.4)
2010 With Development				
Northbound Cool Spring Road - Left	A (7.5)	A (7.6)	A (7.5)	A (7.6)
Eastbound Forest Road	A (9.8)	B (10.2)	A (9.8)	B (10.2)

⁴ For unsignalized analyses, the numbers in parentheses following levels of service are average delay per vehicle, measured in seconds. For signalized analyses, those numbers are X-critical, a composite volume-to-capacity ratio.

Table 6
PEAK HOUR LEVELS OF SERVICE (LOS)
based on Traffic Impact Study for Cool Spring Meadows Development
Report dated January 19, 2006
Prepared by Orth-Rodgers & Associates, Inc.

Unsignalized Intersection ⁵ One-Way Stop Control	LOS per TIS		LOS per McCormick Taylor	
	Weekday AM	Weekday PM	Weekday AM	Weekday PM
2005 Existing				
Northbound Stockley Road	A (9.2)	A (9.3)	A (9.2)	A (9.3)
Westbound Forest Road - Left	A (7.4)	A (7.4)	A (7.4)	A (7.4)
2010 Without Development				
Northbound Stockley Road	A (9.5)	A (9.6)	A (9.5)	A (9.6)
Westbound Forest Road - Left	A (7.4)	A (7.5)	A (7.4)	A (7.5)
2010 With Development				
Northbound Stockley Road	A (9.7)	A (10.0)	A (9.7)	A (10.0)
Westbound Forest Road - Left	A (7.5)	A (7.6)	A (7.5)	A (7.6)

⁵ For unsignalized analyses, the numbers in parentheses following levels of service are average delay per vehicle, measured in seconds. For signalized analyses, those numbers are X-critical, a composite volume-to-capacity ratio.

Table 7
PEAK HOUR LEVELS OF SERVICE (LOS)
based on Traffic Impact Study for Cool Spring Meadows Development
Report dated January 19, 2006
Prepared by Orth-Rodgers & Associates, Inc.

Unsignalized Intersection ⁶ Two-Way Stop Control	LOS per TIS			LOS per McCormick Taylor		
	Weekday AM	Weekday PM	Saturday Mid-Day	Weekday AM	Weekday PM	Saturday Mid-Day
2005 Existing						
Northbound Delaware Route 5 - Left	A (7.6)	A (7.6)	A (7.6)	A (7.6)	A (7.6)	A (7.6)
Southbound Delaware Route 5 - Left	A (7.7)	A (7.6)	A (7.6)	A (7.7)	A (7.6)	A (7.6)
Eastbound Cool Spring Road	B (10.9)	B (11.6)	B (11.3)	B (10.9)	B (11.6)	B (11.3)
Westbound Cool Spring Road	B (11.0)	B (11.2)	B (10.9)	B (11.0)	B (11.2)	B (10.9)
2010 Without Development						
Northbound Delaware Route 5 - Left	A (7.8)	A (7.8)	A (7.8)	A (7.8)	A (7.8)	A (7.8)
Southbound Delaware Route 5 - Left	A (7.8)	A (7.9)	A (7.9)	A (7.8)	A (7.9)	A (7.9)
Eastbound Cool Spring Road	B (12.5)	B (13.9)	B (13.6)	B (12.5)	B (13.9)	B (13.6)
Westbound Cool Spring Road	B (12.4)	B (13.4)	B (13.6)	B (12.5)	B (13.4)	B (13.6)
2010 With Development						
Northbound Delaware Route 5 - Left	A (7.8)	A (7.8)	A (7.8)	A (7.8)	A (7.8)	A (7.8)
Southbound Delaware Route 5 - Left	A (7.8)	A (7.9)	A (7.9)	A (7.8)	A (7.9)	A (7.9)
Eastbound Cool Spring Road	B (12.5)	B (14.1)	B (13.7)	B (12.5)	B (14.1)	B (13.7)
Westbound Cool Spring Road	B (12.6)	B (13.7)	B (13.8)	B (12.6)	B (13.7)	B (13.8)

⁶ For unsignalized analyses, the numbers in parentheses following levels of service are average delay per vehicle, measured in seconds. For signalized analyses, those numbers are X-critical, a composite volume-to-capacity ratio.

Table 8
PEAK HOUR LEVELS OF SERVICE (LOS)
based on Traffic Impact Study for Cool Spring Meadows Development
Report dated January 19, 2006
Prepared by Orth-Rodgers & Associates, Inc.

Unsignalized Intersection ⁷ Two-Way Stop Control	LOS per TIS			LOS per McCormick Taylor ⁸		
	Weekday AM	Weekday PM	Saturday Mid-Day	Weekday AM	Weekday PM	Saturday Mid-Day
2005 Existing						
Northbound Cool Spring Road	B (13.5)	C (17.3)	C (24.9)	B (13.5)	C (17.3)	C (24.9)
Southbound Cool Spring Road	C (17.2)	C (20.4)	D (29.3)	C (17.2)	C (20.4)	D (29.3)
Eastbound US Route 9 - Left	A (8.1)	A (8.5)	A (9.1)	A (8.1)	A (8.5)	A (9.1)
Westbound US Route 9 - Left	A (8.3)	A (8.5)	A (9.2)	A (8.3)	A (8.5)	A (9.2)
2010 Without Development						
Northbound Cool Spring Road	D (30.4)	F (52.4)	F (375.5)	D (31.4)	F (56.2)	F (451.3)
Southbound Cool Spring Road	D (25.6)	D (34.0)	F (76.9)	D (25.9)	E (35.5)	F (90.6)
Eastbound US Route 9 - Left	A (8.5)	A (9.5)	B (10.4)	A (8.5)	A (9.5)	B (10.6)
Westbound US Route 9 - Left	A (9.0)	A (9.1)	B (10.9)	A (9.1)	A (9.2)	B (11.1)
2010 With Development						
Northbound Cool Spring Road	E (50.0)	F (128.0)	F (*)	F (53.0)	F (150.9)	F (1237)
Southbound Cool Spring Road	D (27.9)	E (45.4)	F (132.7)	D (28.5)	E (48.9)	F (159.7)
Eastbound US Route 9 - Left	A (8.5)	A (9.5)	B (10.4)	A (8.5)	A (9.5)	B (10.6)
Westbound US Route 9 - Left	A (9.1)	A (9.3)	B (11.4)	A (9.1)	A (9.5)	B (11.6)

Signalized Intersection ⁷ US Route 9 & Cool Spring Road	LOS per TIS			LOS per McCormick Taylor ⁹		
	Weekday AM	Weekday PM	Saturday Mid-Day	Weekday AM	Weekday PM	Saturday Mid-Day
2010 With Development	B (0.59)	B (0.76)	B (0.88)	B (0.60)	B (0.77)	C (0.93)

⁷ For unsignalized analyses, the numbers in parentheses following levels of service are average delay per vehicle, measured in seconds. For signalized analyses, those numbers are X-critical, a composite volume-to-capacity ratio.

⁸ The TIS used a minimum PHF of 0.92 on the eastbound and westbound US Route 9 approaches for all future cases. Because this is a rural Level 4 area, McCormick Taylor used a minimum PHF of 0.88 on US Route 9 for all future cases.

⁹ McCormick Taylor used 6 seconds of yellow and red time; the TIS used 5 seconds of yellow and red time.

Table 9
PEAK HOUR LEVELS OF SERVICE (LOS)
based on Traffic Impact Study for Cool Spring Meadows Development
Report dated January 19, 2006
Prepared by Orth-Rodgers & Associates, Inc.

Unsignalized Intersection ¹⁰ Two-Way Stop Control	LOS per TIS			LOS per McCormick Taylor		
	Weekday AM	Weekday PM	Saturday Mid-Day	Weekday AM	Weekday PM	Saturday Mid-Day
Anderson Corner Road/ Forest Road & Delaware Route 5						
2005 Existing						
Northbound Delaware Route 5 - Left	A (7.5)	A (7.6)	A (7.5)	A (7.5)	A (7.6)	A (7.5)
Southbound Delaware Route 5 - Left	A (7.7)	A (7.8)	A (7.7)	A (7.7)	A (7.8)	A (7.7)
Eastbound Anderson Corner Rd	B (12.2)	B (13.3)	B (11.3)	B (12.2)	B (13.3)	B (11.3)
Westbound Forest Road	B (12.6)	B (13.6)	B (11.9)	B (12.6)	B (13.6)	B (11.9)
2010 Without Development						
Northbound Delaware Route 5 - Left	A (7.7)	A (7.8)	A (7.8)	A (7.7)	A (7.8)	A (7.8)
Southbound Delaware Route 5 - Left	A (8.0)	A (8.2)	A (8.1)	A (8.0)	A (8.2)	A (8.1)
Eastbound Anderson Corner Rd	C (15.1)	C (18.9)	C (16.3)	C (15.1)	C (19.0)	C (16.3)
Westbound Forest Road	B (14.2)	C (17.1)	B (14.3)	B (14.2)	C (17.1)	B (14.4)
2010 With Development						
Northbound Delaware Route 5 - Left	A (7.8)	A (7.8)	A (7.8)	A (7.8)	A (7.8)	A (7.8)
Southbound Delaware Route 5 - Left	A (8.0)	A (8.2)	A (8.1)	A (8.0)	A (8.3)	A (8.1)
Eastbound Anderson Corner Rd	B (14.4)	C (18.3)	B (14.9)	B (14.4)	C (18.3)	B (15.0)
Westbound Forest Road	C (15.3)	C (20.9)	C (17.5)	C (15.3)	C (21.0)	C (17.5)

¹⁰ For unsignalized analyses, the numbers in parentheses following levels of service are average delay per vehicle, measured in seconds. For signalized analyses, those numbers are X-critical, a composite volume-to-capacity ratio.

Table 10
PEAK HOUR LEVELS OF SERVICE (LOS)
based on Traffic Impact Study for Cool Spring Meadows Development
Report dated January 19, 2006
Prepared by Orth-Rodgers & Associates, Inc.

Unsignalized Intersection ¹¹ One-Way Stop Control	LOS per TIS			LOS per McCormick Taylor		
	Weekday AM	Weekday PM	Saturday Mid-Day	Weekday AM	Weekday PM	Saturday Mid-Day
Stockley Road & Delaware Route 23						
2005 Existing						
Northbound Delaware Route 23 - Left	A (7.5)	A (7.9)	A (7.7)	A (7.5)	A (7.9)	A (7.7)
Eastbound Stockley Road	B (11.4)	B (12.2)	B (11.6)	B (11.4)	B (12.2)	B (11.6)
2010 Without Development						
Northbound Delaware Route 23 - Left	A (8.0)	A (8.6)	A (8.2)	A (7.9)	A (8.6)	A (8.2)
Eastbound Stockley Road	C (16.8)	C (23.7)	C (20.1)	C (15.9)	C (23.7)	C (20.3)
2010 With Development						
Northbound Delaware Route 23 - Left	A (8.1)	A (8.7)	A (8.3)	A (8.0)	A (8.7)	A (8.3)
Eastbound Stockley Road	C (18.3)	D (30.6)	C (23.8)	C (17.2)	D (30.6)	C (24.1)

¹¹ For unsignalized analyses, the numbers in parentheses following levels of service are average delay per vehicle, measured in seconds. For signalized analyses, those numbers are X-critical, a composite volume-to-capacity ratio.

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

TO: **Jamie Whitehouse**

REVIEWER: **Chris Calio**

DATE: **2/8/2021**

APPLICATION: **2019-24 Cool Spring Meadows**

APPLICANT: **Fusco Properties, LP**

FILE NO: **NCPA-5.03**

TAX MAP &
PARCEL(S): **234-5.00-30.00 & 33.00**

LOCATION: **On the northwest corner of Cool Spring Road (SCR 290) and
Stockley Road (SCR 280).**

NO. OF UNITS: **226 single family lots**

GROSS
ACREAGE: **187.93**

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

SEWER:

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

- (6). Is the project capable of being annexed into a Sussex County sanitary sewer district? **No**
- ☐ Attached is a copy of the Policy for Extending District Boundaries in a Sussex County Water and/or Sanitary Sewer District.
- (7). Is project adjacent to the Unified Sewer District? **No**
- (8). Comments: **The proposed subdivision is not in an area where the Sussex County Engineering Department has a schedule to provide sanitary sewer service.**
- (9). Is a Sewer System Concept Evaluation required? **No**
- (10). Is a Use of Existing Infrastructure Agreement Required? **No**

UTILITY PLANNING APPROVAL:



John J. Ashman
Director of Utility Planning

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

Sussex County, Delaware
Technical Advisory Committee

Comment Sheet



DATE OF REVIEW: October 2, 2019

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

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

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

RE: COOL SPRING MEADOWS (2019-24)

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

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

a. **Fire Protection Water Requirements:**

- Water distribution system capable of delivering at least 1000 gpm for 1-hour duration, at 20-psi residual pressure is required. Fire hydrants with 800 feet spacing on centers. (Assembly)
- Where a water distribution system is proposed for single-family dwellings it shall be capable of delivering at least 500 gpm for 1-hour duration, at 20-psi residual pressure. Fire hydrants with 1000 feet spacing on centers are required. (One & Two- Family Dwelling)
- Where a water distribution system is proposed for the site, the infrastructure for fire protection water shall be provided, including the size of water mains for fire hydrants and sprinkler systems.

b. **Fire Protection Features:**

➤

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 Stockley Rd 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. Bayberry and Point both exceed the 300 feet limit.
- 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

PLANNING & ZONING

JANELLE M. CORNWELL, AICP
DIRECTOR

(302) 855-7878 T
(302) 854-5079 F



Sussex County

DELAWARE
sussexcountype.gov

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NOV 19 2019

SUSSEX COUNTY
PLANNING & ZONING

Memorandum

To: Sussex County Technical Advisory Committee
From: Christin Headley, Planning Technician
Date: September 25, 2019
RE: Major Subdivision

The Sussex County Planning and Zoning Office has received one (1) application for a major subdivision that require review by the Sussex County Technical Advisory Committee. Please review the applications and provide comments back to the Planning and Zoning Office on or before **Wednesday, November 27, 2019**.

- 1.) **2019-24 – Cool Spring Meadows** - This is a cluster subdivision. The cluster subdivision is for the creation of two hundred twenty-six (226) single family lots. The property is located on the corner of Stockley Rd. and Cool Spring Rd. Tax Parcels: 234-5.00-30.00 & 234-5.00-33.00. Zoning: AR-1 (Agricultural Residential District). Owner: Fusco Properties, LP.

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 christin.headley@sussexcountype.gov.



COUNTY ADMINISTRATIVE OFFICES
2 THE CIRCLE | PO BOX 417
GEORGETOWN, DELAWARE 19947



2019-24
TM #234-5.00-30.00 & 234-5.00-33.00
Cool Spring Meadows



2019-24
TM #234-5.00-30.00 & 234-5.00-33.00
Cool Spring Meadows



United States Department of Agriculture

Natural Resources
Conservation Service

Georgetown
Service Center

21315 Berlin Road
Unit 3
Georgetown, DE
19947

Voice 302.856.3990
Fax 855.306.8272

November 19, 2019

Janelle M. Cornwell, Director
Sussex County Planning & Zoning
Sussex County Courthouse
Georgetown, DE 19947

**RE: Cool Spring Meadow
Indian River Hundred
226 Single Family Lots**

Dear Ms. Cornwell:

Soils within the delineated area on the enclosed map are:

DoA	Downer sandy loam, 0 to 2 percent slopes
FhA	Fort Mott-Henlopen complex, 0 to 2 percent slopes
HmA	Hammonton loamy sand, 0 to 2 percent slopes
HnA	Hammonton sandy loam, 0 to 2 percent slopes
HuA	Hurlock loamy sand, 0 to 2 percent slopes
HvA	Hurlock sandy loam, 0 to 2 percent slopes
IeA	Ingleside loamy sand, 0 to 2 percent slopes
KsA	Klej loamy sand, 0 to 2 percent slopes
LO	Longmarsh and Indiantown soils, frequently flooded
MmA	Mullica mucky sandy loam, 0 to 2 percent slopes
PsA	Pepperbox-Rosedale complex, 0 to 2 percent slopes
UdB	Udorthents, borrow area, 0 to 5 percent slopes

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
FhA	G1	Not limited	Not limited	Somewhat limited/not limited
HmA	Y2	Very limited	Somewhat limited	Very limited
HnA	Y2	Very limited	Somewhat limited	Very limited

HuA	R2	Very limited	Very limited	Very limited
HvA	R2	Very limited	Very limited	Very limited
IeA	Y2	Somewhat limited	Not limited	Very limited
KsA	R2	Very limited	Very limited	Very limited
LO	R3	Very limited	Very limited	Very limited
MmA	R2	Very limited	Very limited	Very limited
PsA	Y2	Very limited/Somewhat limited	Somewhat limited/not limited	Very limited
UbB	Ft	Very limited	Somewhat 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.

Ft:

Fill land - No interpretations - material too variable.

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,

A handwritten signature in blue ink, appearing to read "Thelton D. Savage".

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

TDS/bh

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NOV 19 2019

SUSSEX COUNTY
PLANNING & ZONING

Christin Headley

From: Dickerson, Troy <TDickerson@delaware.coop>
Sent: Thursday, October 3, 2019 3:33 PM
To: Christin Headley
Subject: RE: TAC Review 2019-24 Cool Spring Meadows

Categories: TAC Comments

Christin,

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

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



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From: Christin Headley <christin.headley@sussexcountyde.gov>
Sent: Wednesday, September 25, 2019 1:55 PM
To: Brad Hawkes <bhawkes@sussexcountyde.gov>; C. Daniel Parsons <dparsons@sussexcountyde.gov>; Dean Holden - Chesapeake Electric <dholden@chpk.com>; Duane T. Fox <Duane.Fox@state.de.us>; Eileen M. Butler <Eileen.Butler@state.de.us>; Jennifer Cinelli <jennifer.cinelli@state.de.us>; Jessica Watson - Sussex Conservation <Jessica.watson@state.de.us>; John J. Ashman <jashman@sussexcountyde.gov>; John Hayes - Groundwater Discharge <john.hayes@state.de.us>; John Kennel - DE Coastal Programs <john.kennel@state.de.us>; John Martin <jmartin@chpk.com>; John Martin - Watershed Stewardship <john.martin@state.de.us>; Kate Fleming - DNREC Fish & Wildlife <kate.fleming@state.de.us>; Kelley Gabbard <kgabbard@chpk.com>; Meghan Crystall - DNREC <Meghan.Crystall@state.de.us>; Michael Tholstrup - Energy & Climate <Michael.Tholstrup@state.de.us>; Mike Brady <MBRADY@sussexcountyde.gov>; Milton Melendez - Dept. of Ag <Milton.melendez@state.de.us>; Rob Davis <rdavis@sussexcountyde.gov>; Subdivision mailbox email - DelDOT <Subdivision@state.de.us>; Susan Isaacs <sisaacs@sussexcountyde.gov>; Susanne Laws - DelDOT <Susanne.Laws@state.de.us>; Terri Dukes <tdukes@sussexcountyde.gov>; Tiffany Giroux <tgiroux@chpk.com>; Dickerson, Troy <TDickerson@delaware.coop>; Vince Robertson <vrobertson@pgslegal.com>
Subject: TAC Review 2019-24 Cool Spring Meadows

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.

Please provide comments on or before Wednesday, November 25, 2019.

Please feel free to contact me with any questions.

Thanks,

Christin Headley

Christin Headley, Planning Technician
Planning & Zoning Department
2 The Circle
PO Box 417
Georgetown, DE 19947
302-855-7878
christin.headley@sussexcountyde.gov



STATE OF DELAWARE

DEPARTMENT OF TRANSPORTATION

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

JENNIFER COHAN
SECRETARY

November 25, 2019

Christin Headley
Planning Technician, Sussex County Planning & Zoning Department
Sussex County Administration Building
P.O. Box 417
Georgetown, DE 19947

SUBJECT: November T.A.C. MEETING

Dear Christin:

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

1. Subd. #2019-24, Cool Spring Meadows
Tax Map #234-5.00-30.00 & 234-5.00-33.00 Review Mgr.: Susanne Laws, See attachment

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

Sincerely,

John Andrescavage
Sussex County Reviewer
302-760-2512

Attachment

Cc: Gemez W. Norwood, South District Public Works Manager
James Argo, District Plan Reviewer
Susanne Laws, Sussex County Review Coordinator
Brian Yates, Sussex County Plan Reviewer

DEPARTMENT OF TRANSPORTATION
COMMENTS FOR
T.A.C. MEETING
OF November 2019

Lands of Fusco Properties, LP
Tax Map # 234-5.00-30.00 & 33.00
SCR 280 (Stockley Road) & SCR 292 (Forest Road)
Sussex County

#2019-24, Cool Spring Meadows

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

<http://www.deldot.gov/Business/subdivisions/index.shtml?dc=changes>
2. For all projects, any sub-station and/or wastewater facilities will be required to have access from the internal subdivision street with no direct access to the State maintained highway.
3. For all projects, a 20-foot wide buffer will be required from the edge of the stormwater management pond to the ultimate right-of-way of the County road. The ultimate right-of-way is based on the functional classification of the road.
4. Referring to the “*Development Coordination Manual*”, Chapter 3 – Record Plan Design, Section 3.2.5.1.2: Frontage Easements, a 15-foot wide permanent easement will need to be established across the property frontage. The location of the easement shall be outside the limits of the ultimate right-of-way for this road. The following note is required, “**A 15-foot wide permanent easement is hereby established for the State of Delaware, as per this plat.**”
5. Referring to the “*Development Coordination Manual*”, Chapter 3 – Record Plan Design, Section 3.2.5: Dedication of Right-Of-Way and Easements, Figure 3.2.5-a Minimum Standards for Total Roadway Right-Of-Way, the project shall be subject to dedicate right-of-way in accordance to the minimum standards.
6. Referring to the “*Development Coordination Manuals*”, Chapter 3 – Record Plan Design, Section 3.2.4.1: Subdivision Street Right-Of-Way Monuments, right-of-way monuments are recommended to be furnished and placed along the private subdivision street.
7. Referring to the “*Development Coordination Manual*”, Chapter 3 – Record Plan Design, Section 3.2.4.2; Frontage Road Right-of-Way Monumentation, concerning the right-of-way markers being placed to provide a permanent reference for re-establishing the right-

of-way and property corners along frontage roads. Due to the right-of-way dedication, show and note the property corners markers that will need to be installed.

8. Referring to the “*Development Coordination Manual*”, Chapter 3 – Record Plan Design, Section 3.5.5: Transit Facilities, transit facilities requirements shall be followed as required by DTC or DelDOT.
9. Referring to the “*Development Coordination Manual*”, under Chapter 3; Record Plan Design, Section 3.2.5.1.1 – Easements, if this development is proposing a neighborhood sign/structure, then a permanent easement shall be established at the entrance. The easement shall be located outside of any existing and/or proposed right-of-way. It will also need to be verified that the sign/structure does not pose a sight distance and/or safety hazard.
10. Metes and bounds and total areas need to be shown for any drainage easements. A minimum 20-foot wide drainage easement must be provided for storm drainage systems, open or closed, that fall outside the existing right-of-way or the drainage/utility easement. These easements shall be shown and noted on record plan.
11. Referring to the “*Development Coordination Manual*”, Chapter 3 – Record Plan Design, Section 3.5: Connectivity, connectivity requirements shall be followed for all development projects having access to state roads or proposing DelDOT maintained public road for subdivisions. Private or municipal streets should follow the local land use agency’s requirements for connectivity.
12. Referring to the “*Development Coordination Manual*”, Chapter 3 – Record Plan Design, Section 3.4.2.1: Record Plan Content, the traffic generation diagram is required. See Figure 3-4-2-a: Traffic Generation Diagram for what is required.
13. Referring to the “*Development Coordination Manual*”, Chapter 3 – Record Plan Design, Section 3.4.2: Record Plan Submittal Requirements, adjacent existing features are required to be shown in accordance with Figure 3.4.2-b.
14. It will need to be noted on the Record Plan the type of off-site improvements and when the off-site improvements are warranted for this project.
15. Referring to the “*Development Coordination Manual*”, Chapter 2 – Traffic Analysis and Improvements, it will need to be determined if a Traffic Impact Study (T.I.S.), Area-Wide Study Fee or a Traffic Operational Analysis (T.O.A.) will be required.
 - a. Per Preliminary Land Use Service Application (PLUS) review dated August 21, 2019 (PLUS Number 2019-07-04), 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 2,158 vehicle trip ends per

day. DeIDOT calculates a higher number 2,201 vehicle trip ends per day, but regardless the warrant for a TIS is met.

16. Projects in all Level area that generate 2,000-trips or greater are required to install a path/sidewalk along the property frontage.
17. Referring to the “*Development Coordination Manual*” under Chapter 5; Design Elements, Section 5.2.5 – Subdivision and Commercial Entrance Design Guidelines – Intersection Corner Radii, a separate turning template plan shall be provided to verify vehicles can safely enter/exit the entrance. The entrance shall be designed for the largest vehicle using the entrance.
18. Please check to determine if any utilities will need to be relocated as part of this project.
19. Standard General Notes have been updated and posted to the DeIDOT Website. Please begin using the new versions and look for the revision date of March and September 2019. The notes can be found at the following website under the *Guidance* tab;
<http://www.deldot.gov/Business/subdivisions/index.shtml>
20. All PLUS/TAC comments shall be addressed prior to submitting the plans for review.
 - a. Please refer to the PLUS state comments (PLUS Number 2019-07-04) dated August 21, 2019 and the PLUS state comments and developer response (PLUS Number 2005-07-13) dated August 18, 2005 for additional information. These documents has been attached to this memorandum.
21. Referring to the “*Development Coordination Manual*”, Chapter 6 – Construction Administration, Section 6.4.3: Commercial Entrances – Inspection and Acceptance, Figure 6.4.3-a: Construction Inspection Responsibilities, determine if the project is a Level 1 or Level 2 project and if an inspection agreement will be required.
22. The Auxiliary Lane Spreadsheet has been posted to the 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>
23. Referring to the “*Development Coordination Manual*” under Chapter 5; Design Elements, Section 5.4 – Sight Distance, a sight distance triangle is required. A spreadsheet has been developed to assist with this task and can be found on the following website under the *Forms* tab;
<http://www.deldot.gov/Business/subdivisions/index.shtml>
24. Please refer to the “*Development Coordination Manual*” Chapter 3; Record Plan Design,

Section 3.4.1 Commercial or Major Residential Subdivisions – Record Plan Application Process, concerning if a pre-submittal meeting is required.

25. Effective August 1, 2015, all new and resubmittals shall be uploaded via the PDCA with any fees paid online via credit card or electronic check (ACH). The design firm making the submittal must create the project in the PDCA and upload all the required items to allow DelDOT to start the review process. Our website offers more detailed information, including links to guidance about creating PDCA submittals. This information can be found at the following website under the PDCA section;

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

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

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

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

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

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

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



STATE OF DELAWARE
EXECUTIVE DEPARTMENT
OFFICE OF STATE PLANNING COORDINATION

August 21, 2019

Mr. John Murray
The Kercher Group, Inc.
37385 Rehoboth Ave. Unit #11
Rehoboth Beach, DE 19971

RE: PLUS review 2019-07-04; Cool Spring Meadows

Dear Mr. Murray:

Thank you for meeting with State agency planners on July 24, 2019 to discuss the Cool Spring Meadows project. According to the information received you are seeking review of a 226 unit subdivision on 187.93 acres along Stockley 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

This project represents land development that will result in 226 residential units in an Investment 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.

From a fiscal responsibility perspective, development of this site is likewise inappropriate. The cost of providing services to development in rural areas is an inefficient and wasteful use of the State's fiscal resources. The project as proposed will bring new residents to an area where the State has no plans to invest in infrastructure upgrades or additional services. These residents will need access to such services and infrastructure as schools, police, and transportation. To provide some examples, the State government funds 100% of road maintenance and drainage improvements for the transportation system, 100% of school transportation and paratransit services, up to 80% of school construction costs, and 100% of the cost of police protection in the unincorporated portion of Sussex County where this development is proposed. Over the longer term, the unseen negative ramifications of this development will become even more evident as the community matures and the cost of maintaining infrastructure and providing services increases.

Because the development is inconsistent with the *Strategies for State Policies and Spending*, the State does not support this proposed development.

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

Code Requirements/Agency Permitting Requirements

Department of Transportation – Contact Bill Brockenbrough 760-2109

- The site access on Stockley Road (Sussex Road 280) 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 P.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 P.5 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 2,158 vehicle trip ends per day. DelDOT calculates a higher number, 2,201 vehicle trip ends per day, but regardless the warrant for a TIS is met.

In April 2006 (See attached letters.) DelDOT commented to the County on its review of a TIS for an earlier plan to develop these lands. The letter includes a numbered list of off-site improvements and contributions toward off-site improvements that DelDOT recommended be required of the development.

Some of the listed items apply to locations that would not be included in a TIS done today because DelDOT regulations have changed. Following is a list of off-site improvements and contributions toward off-site improvements that DelDOT finds should be required of the developer. If the County or the developer would prefer to restart the TIS process with current data, DelDOT would be amenable to that. Alternatively, DelDOT recommends that the following items be required:

- The developer should improve Stockley Road from Cool Spring Road (Sussex Road 290) to Forest Road (Sussex Road 292) in order to meet DelDOT local road standards as nearly as possible. Local road standards include two eleven-foot travel lanes and two five-foot shoulders. The developer should provide a bituminous concrete overlay to the existing travel lanes, at DelDOT's discretion. DelDOT should analyze the existing travel lanes' pavement section and recommend an overlay thickness to the developer's engineer if necessary.
- The developer should improve Cool Spring Road from Stockley Road to the north limit of the site frontage in order to meet DelDOT local road standards as nearly as possible. Local road standards include two eleven-foot travel lanes and two five-foot shoulders. The developer should provide a bituminous concrete overlay to the existing travel lanes, at DelDOT's discretion. DelDOT should analyze the existing travel lanes' pavement section and recommend an overlay thickness to the developer's engineer if necessary.
- The developer should enter into a traffic signal agreement with DelDOT for the intersection of Delaware Route 5 and Forest Road.
- 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 Stockley Road and Cool Spring Road. By this regulation, this dedication is to provide a minimum of 30 feet of right-of-way from the physical centerline along both roads. The following right-of-way dedication note is required, **"An X-foot wide right-of-way is hereby dedicated to the State of Delaware, as per this plat."**
- In accordance with Section 3.2.5.1.2 of the Manual, DelDOT will require the establishment of a 15-foot wide permanent easement across the property frontage on Stockley Road and Cool Spring Road. The location of the easement shall be outside the

limits of the ultimate right-of-way. The easement area can be used as part of the open space calculation for the site. The following note is required, **“A 15-foot wide permanent easement is hereby established for the State of Delaware, as per this plat.”**

- Referring to Section 3.4.2.1 of the Manual, the following items, among other things, are required on the Record Plan:
 - A Traffic Generation Diagram. See Figure 3.4.2-a for the required format and content.
 - Depiction of all existing entrances within 600 feet of the entrances on Stockley 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 Goldenrod Drive be extended to the property line as a stub street.
- Section 3.5.4.2 of the Manual addresses requirements for shared-use paths and sidewalks. For projects in Level 1 and 2 Investment Areas, installation of paths or sidewalks along the frontage on State-maintained roads is required. DelDOT anticipates requiring the developer to build Shared Use Paths along their frontage on both Stockley Road and Cool Spring Road.
- Section 3.5.4.4 of the Manual addresses access-ways, essentially shared-use paths connecting subdivision streets either to each other or to the road on which the property fronts. DelDOT anticipates requiring the developer to build one access-way from Goldenrod Drive to Stockley Road near Lot 16 and another from Monarch Avenue to Cool Spring Road near Lot 99.
- Referring to Section 3.5.5 of the Manual, existing and proposed transit stops and associated facilities as required by the Delaware Transit Corporation (DTC) or DelDOT shall be shown on the Record Plan.
- 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 Stockley Road and Cool Spring Road.
- In accordance with Section 5.2.9 of the Manual, the Auxiliary Lane Worksheet should be

used to determine whether auxiliary lanes are warranted at the site entrances and how long those lanes should be. The worksheet can be found at <http://www.deldot.gov/Business/subdivisions/index.shtml>.

- In accordance with Section 5.14 of the Manual, all existing utilities must be shown on the plan and a utility relocation plan will be required for any utilities that need to be relocated.

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

Wastewater Disposal

- The DNREC Groundwater Discharge Large Systems Section will need to be notified where the developer intends to send the wastewater. The PLUS application states that a new community system will not be located on this site.

Floodplain and Sea Level Rise

- Chapel Branch runs through the southeast corner of the site. This site is situated upstream of the mapped floodplain for Chapel Branch,
- The unmapped floodplain area should be avoided, and floodplain analysis and mapping could be required.

Water Quality

- DNREC mapping indicates presence of wetlands and hydric soils (Hurlock) which encompass a large portion of the subject parcel.
- Increased impervious cover from development and removal of forest cover will increase the potential for future flooding concerns.
- Green-technology stormwater management is highly recommended. Efforts to mitigate for impervious cover (pervious pavers) should also be implemented where applicable.
- To protect the function and integrity of wetlands, a minimum 100-foot buffer should be left intact around the perimeter.
- Avoid disturbance and filling of wetlands.

Forest Preservation

- DNREC mapping indicates presence of forested wetlands which encompass a large portion of the subject parcel.

- The site plan should be designed to allow for the preservation of as much of this wooded area as feasible, with special consideration for preservation given to large, mature trees. Leaving a forest intact is usually more beneficial to the existing wildlife and is preferred to clearing.
- To reduce impacts to nesting birds and other wildlife species that utilize forests for breeding, we recommend that clearing not occur April 1st to July 31st.
- Low spillage lights (those that reflect light directly downward onto the illuminated area) should be used on roads and homes within 750 feet of the forested wetlands on site. Fluorescent and mercury vapor lighting should not be used.
- Contact the Division of Fish and Wildlife for assistance in identifying, preserving, and managing the existing forest on-site. For technical assistance or to schedule a site visit please contact Katie Kadlubar, Kathryn.Kadlubar@delaware.gov.

State Historic Preservation Office – Contact Carlton Hall 736-7404

- The Delaware SHPO does not support development in a Level 4 area.
- There are no known archaeological sites or known National Register listed or eligible properties on the parcel. However, the soils are a mix of well-and poorly drained areas. Poorly drained areas could have been a source for plant and animal resources. There is moderate potential for archaeological resources to be present and our office recommends an archaeological survey of the project area. If there are any questions, inquiries, or concerns, feel free to contact the Delaware State Historic Preservation Office for assistance at 302-736-7400.
- 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). Prior to any demolition or ground-disturbing activities, the developer should hire an archaeological consultant to examine the parcel for archaeological resources, including unmarked human burials or human skeletal remains, to avoid those sites or areas.
- If there is federal involvement, in the form of licenses, permits, or funds, the federal agency, often through its client, is responsible for complying with Section 106 of the National Historic Preservation Act (36 CFR 800) and must consider their project's effects on any known or potential cultural or historic resources. For further information on the Section 106 process please review the Advisory Council on Historic Preservation's website at: www.achp.gov

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

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

Fire Protection Water Requirements:

- Where a water distribution system is proposed for single-family dwellings it shall be capable of delivering at least 500 gpm for 1-hour duration, at 20-psi residual pressure. Fire hydrants with 1000 feet spacing on centers are required.
- The infrastructure for fire protection water shall be provided, including the size of water mains.

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. Additionally, where trees are to be situated adjacent to travel roads in the subdivision, some forethought should be exercised regarding how future growth of the trees may affect fire department travel throughout the subdivision.
- 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, such as Point Lane and Bayberry Drive, 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.

Gas Piping and System Information:

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

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”
- Name of Water Supplier
- Proposed Use

- National Fire Protection Association (NFPA) Construction Type Maximum Height of Buildings (including number of stories)
- Provide Road Names, even for County Roads

Sussex County – Contact Rob Davis 302-855-7820

- Sussex County does not expect to provide sanitary sewer service within the area proposed for the 226-unit subdivision. The Sussex County Engineering Department recommends the project receive wastewater service from Artesian Utilities as proposed.

In addition to the comments above our office has received a letter from Brandy Nauman, Sussex County Housing Coordinator & Fair Housing Compliance Officer. A copy of that letter is enclosed with this letter.

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,



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

CC: Sussex County

Enclosure
Attachment

BRANDY BENNETT NAUMAN
HOUSING COORDINATOR &
FAIR HOUSING COMPLIANCE OFFICER
(302) 855-7777 T
(302) 854-5397 F
bnauman@sussexcountype.gov



Sussex County
DELAWARE
sussexcountype.gov

July 22, 2019

Mr. John Murray
The Kercher Group, Inc.
37385 Rehoboth Ave., Unit #11
Rehoboth Beach, DE 19971

RE: Cool Spring Meadows – PLUS Review (PLUS 2019-07-04)

Dear Mr. Murray,

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.sussexcountype.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.

On behalf of Sussex County, we look forward to cooperating with you and your project as it moves forward.

Thank you,

Brandy B. Nauman
*Housing Coordinator &
Fair Housing Compliance Officer*



COUNTY ADMINISTRATIVE OFFICES WEST COMPLEX
22215 DUPONT BOULEVARD | PO BOX 589
GEORGETOWN, DELAWARE 19947

April 19, 2006

Mr. Todd J. Sammons
Project Engineer
DelDOT Division of Planning
P.O. Box 778
Dover, DE 19903

RE: Agreement No. 1294
Traffic Impact Study Review Services
Task No. 91 – Cool Spring Meadows

Dear Mr. Sammons,

McCormick Taylor has completed its review of the Traffic Impact Study (TIS) for the development of Cool Spring Meadows prepared by Orth-Rodgers and Associates, Inc., dated January 19, 2006. This review was assigned as Task Number 91. Orth-Rodgers and Associates, Inc. prepared the report in a manner generally consistent with DelDOT's *Rules and Regulations for Subdivision Streets*.

The TIS evaluates the impacts of the development of Cool Spring Meadows in Sussex County, Delaware. The proposed development would consist of 233 single-family detached houses. This development is located on the both sides of Stockley Road (Sussex Road 280), west of Cool Spring Road (Sussex Road 290). Two access points on Stockley Road are proposed to create a four-way intersection, and one access point is proposed on Cool Spring Road creating a T-intersection. Construction is expected to be complete by 2010.

There are currently no active DelDOT projects within the study area.

Based on our review, we have the following comments and recommendations:

One intersection exhibits level of service deficiencies without the implementation of physical roadway and/or traffic control improvements: the intersection of US Route 9 (Lewes-Georgetown Highway) and Cool Spring Road. This intersection is expected to exhibit level of service deficiencies in the 2010 afternoon and summer Saturday peak hours with and without the development, and in the 2010 morning peak hour with the development.

Should the County choose to approve the proposed development, the following items should be incorporated into the site design and reflected on the record plan. All applicable agreements (i.e., letter agreements for off-site improvements and traffic signal agreements) should be executed prior to entrance plan approval for the proposed development.

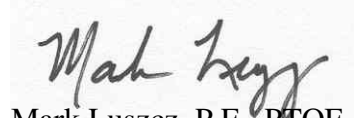
1. The developer should improve Stockley Road from Forest Road (Sussex Road 292) to Cool Spring Road in order to meet DelDOT local road standards as nearly as possible. Local road standards include two eleven-foot travel lanes and two five-foot shoulders. The developer should provide a bituminous concrete overlay to the existing travel lanes, at DelDOT's discretion. DelDOT should analyze the existing travel lanes' pavement section and recommend an overlay thickness to the developer's engineer if necessary.
2. The developer should improve Cool Spring Road from Stockley Road to Forest Road in order to meet DelDOT local road standards as nearly as possible. Local road standards include two eleven-foot travel lanes and two five-foot shoulders. The developer should provide a bituminous concrete overlay to the existing travel lanes, at DelDOT's discretion. DelDOT should analyze the existing travel lanes' pavement section and recommend an overlay thickness to the developer's engineer if necessary.
3. The developer should enter into a traffic signal agreement with DelDOT for the intersection of US Route 9 and Cool Spring Road. The agreement should include pedestrian signals, crosswalks, and interconnection at DelDOT's discretion. Due to the fact that an active railroad line is aligned diagonally through the intersection, any traffic signal agreement should also include active railroad warning devices and railroad-highway traffic signal interconnection at DelDOT's discretion.
4. The following bicycle and pedestrian improvements should be included:
 - a) A minimum of a five-foot bicycle lane should be striped along the Stockley Road and Cool Spring Road site frontage (in addition to any required turn lanes) in order to facilitate safe and unimpeded bicycle travel.
 - b) A fifteen-foot wide permanent easement should be established across the property frontage for a future ten-foot wide multi-use path.
 - c) Regulatory/warning signage should be added to any forthcoming plans to this project in order to alert motorists to the presence of bicycle traffic.
 - d) Utility covers should be moved outside of the designated bicycle lane or be flush with the pavement.
 - e) Internal sidewalks to promote walking as a viable transportation alternative should be constructed.
 - f) An ADA compliant crosswalk should be considered at the opposing access points along Stockley Road.

Please note that this review generally focuses on capacity and level of service issues; additional safety and operational issues will be further addressed through DelDOT's subdivision review process.

Additional details on our review of the TIS are attached. Please contact me at (302) 738-0203 or through e-mail at mluszcz@mtmail.biz if you have any questions concerning this review.

Sincerely,

McCormick Taylor, Inc.

A handwritten signature in black ink, appearing to read "Mark Luszcz", is written over a light gray rectangular background.

Mark Luszcz, P.E., PTOE, AICP
Associate

Enclosure

General Information

Report date: January 19, 2006

Prepared by: Orth-Rodgers & Associates, Inc.

Prepared for: Ocean Atlantic Agency

Tax parcel: 2-34-5.00-30.00, 2-34-5.00-33.00

Generally consistent with DelDOT's Rules and Regulations for Subdivision Streets: Yes

Project Description and Background

Description: Development of 233 single-family detached houses

Location: Site is located on either side of Stockley Road, west of Cool Spring Road in Sussex County, Delaware

Amount of land to be developed: approximately 207 acres

Land use approval(s) needed: Subdivision Review

Proposed completion date: 2010

Proposed access locations: Two access points on Stockley Road are proposed to create a four-way intersection, and one access point is proposed on Cool Spring Road creating a t-intersection.

Livable Delaware

(Source: Delaware Strategies for State Policies and Spending, July 2004)

Location with respect to the Strategies for State Policies and Spending Map of Delaware:

The proposed Cool Springs Meadow Development is located within Investment Level 4.

Description of Investment Level 4:

Areas located within Investment Level 4 are predominantly agricultural; contain agribusiness activities, farm complexes and small settlements that are often found at historic crossroads. These areas contain undeveloped natural areas, including forestland and recreational parks, however may have scattered single-family detached residential homes located within them.

Transportation facilities and services will be preserved by the state while they continue to manage the transportation system in a manner that will support the preservation of the natural environment. The state will limit its investments in water and wastewater systems to existing public health, safety and environmental risks and discourage accommodating further development. In addition, the state will limit continued development of areas within Investment Level 4 to those that enhance agriculture and protect water supplies, preserve critical habitat and maintain existing education and public safety services. Although residential development is not desirable in Investment Level 4, conservation design techniques (protecting large portions of existing open space and farmland while clustering development on a smaller portion of the parcel and using environmentally friendly design innovations) can be utilized in some cases to help ensure that developments are compatible with the rural character and natural resources present in the area. However, it is the state's general intent to discourage additional development in Investment Level 4 areas that are unrelated to the areas' needs by limiting infrastructure investment.

Proposed Development's Compatibility with Livable Delaware:

The proposed Cool Spring Meadows Development falls within Investment Level 4. Residential development is generally not desirable in Investment Level 4. Developments within Investment Level 4 areas should focus on protection of large portions of existing open space and farmland on a site while clustering development on a smaller portion of the parcel. This proposed development would be developed using the cluster option under that zoning and therefore would be compatible with Livable Delaware. However, it should be noted that conservation design techniques should be utilized to ensure that the development is compatible with the rural character and natural resources present in the area.

Comprehensive Plans

Sussex County Comprehensive Plan: *(Source: 2003 Sussex County Comprehensive Plan Update)* The Sussex County Comprehensive Plan indicates that the parcel of land for the proposed development is in a Low Density Area. The purpose of the Low Density Area is to provide for a full range of agricultural activities and to protect agricultural lands as one of the County's most valuable natural resources from the depreciating effect of objectionable, hazardous and unsightly uses. Although this area is intended primarily for agricultural use, low density residential development is permitted. Density guidelines state that the minimum lot size in a Low Density Area is 20,000 square feet (about 0.46 acres).

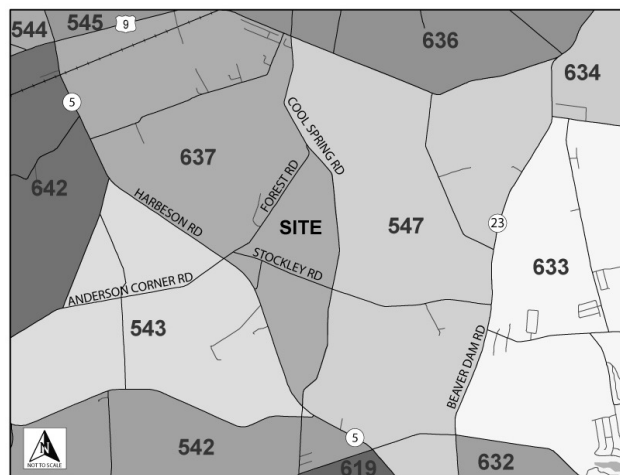
Public water and wastewater systems are not planned for low density areas therefore the proposed development will use on-site septic systems or private wastewater treatment systems. Improvements to local roads will be limited to safety considerations and emergency evacuation.

Proposed Development's Compatibility with Comprehensive Plans: Since the average density of this proposed development would be approximately 1.12 dwelling units/acre (close to an average 0.89 acre lots sizes), this development would most likely be compatible with the Sussex County Comprehensive Plan.

Transportation Analysis Zone

Transportation Analysis Zones (TAZ) where development would be located:
637 (Peninsula Code TAZ)

TAZ Boundaries:



Current employment estimate for TAZ: 36
in 2005

Future employment estimate for TAZ: 39
in 2010

Current population estimate for TAZ: 841
in 2005

Future population estimate for TAZ: 938
in 2010

Current household estimate for TAZ: 351
in 2005

Future household estimate for TAZ: 397 in
2010

Relevant committed developments in the

TAZ: Beaver Creek (The Villages)

Would the addition of committed developments to current estimates exceed future projections: Yes

Would the addition of committed developments and the proposed development to current estimates exceed future projections: Yes

Relevant Projects in the DelDOT Capital Transportation Program (2005-2010)

There are currently no active DelDOT projects within the study area.

Trip Generation

Trip generation for the proposed development was computed using comparable land uses and equations contained in Trip Generation, Seventh Edition, published by the Institute of Transportation Engineers (ITE). The following land uses were utilized to estimate the amount of new traffic generated for this development:

- Single-Family Detached Houses (ITE Land Use Code 210)

Table 1.
COOL SPRING MEADOWS TRIP GENERATION

Land Use	AM Peak Hour			PM Peak Hour			Saturday Mid-Day		
	In	Out	Total	In	Out	Total	In	Out	Total
233 Residential Single-Family Detached Houses	43	130	173	145	85	230	118	100	218
TOTAL TRIPS	43	130	173	145	85	230	118	100	218

Overview of TIS

Intersections examined:

- 1) Stockley Road (Sussex Road 280) & Site Access
- 2) Cool Spring Road (Sussex Road 290) & Site Access
- 3) Cool Spring Road & Stockley Road
- 4) Cool Spring Road & Forest Road (Sussex Road 292)
- 5) Forest Road & Stockley Road
- 6) Cool Spring Road & Delaware Route 5 (Sussex Road 22)*
- 7) Cool Spring Road & US Route 9 (Sussex Road 18)*
- 8) Forest Road/Anderson Corner Road (Sussex Road 292) & Delaware Route 5*
- 9) Stockley Road & Beaver Dam Road (Sussex Road 23)*

The asterisks (*) indicate intersections for which Saturday conditions were analyzed.

Conditions examined:

- 1) 2005 existing conditions
- 2) 2010 without Cool Spring Meadows Development
- 3) 2010 with Cool Spring Meadows Development

Peak hours evaluated: Weekday morning and evening peak hours, Saturday mid-day.

Committed developments considered:

- 1) Heron Bay (352 Single Family Houses)
- 2) Beaver Creek
 - a. The Meadows (102 Single-Family Houses)
 - b. The Trails (170 Single-Family Houses)
 - c. The Villages (400 Single-Family Houses, 50 Condominiums, 50,000 Square Feet of General Retail)
- 3) Stonewater Creek
 - a. Phase 1-9 (712 Single-Family Houses)
 - b. Phase 10-13 (360 Single-Family Houses)
- 4) Oak Crest Pond (26 Single-Family Houses)
- 5) Oak Crest Farm (96 Single-Family Houses)

Intersection Descriptions

1) Stockley Road & Site Access:

Type of Control: Proposed two-way stop-controlled intersection

Northbound approach: (Site Access) stop-controlled shared left/through/right-turn lane

Southbound approach: (Site Access) stop-controlled shared left/through/right-turn lane

Eastbound approach: (Stockley Road) one shared left/through/right-turn lane

Westbound approach: (Stockley Road) one shared left/through/right-turn lane

2) Cool Spring Road & Site Access:

Type of Control: Proposed T-intersection

Northbound approach: (Cool Spring Road) one shared left-turn/through lane

Southbound approach: (Cool Spring Road) one shared through/right-turn lane

Eastbound approach: (Site Access) stop-controlled shared left/right-turn lane

3) Cool Spring Road & Stockley Road:

Type of Control: Two-way stop-controlled intersection

Northbound approach: (Cool Spring Road) stop-controlled shared left/through/right-turn lane

Southbound approach: (Cool Spring Road) stop-controlled shared left/through/right-turn lane

Eastbound approach: (Stockley Road) one shared left/through/right-turn lane

Westbound approach: (Stockley Road) one shared left/through/right-turn lane

4) Cool Spring Road & Forest Road:

Type of Control: Stop-controlled T-intersection

Northbound approach: (Cool Spring Road) one shared left-turn/through lane

Southbound approach: (Cool Spring Road) one shared through/right-turn lane

Eastbound approach: (Forest Road) stop-controlled shared left/right-turn lane

5) Forest Road & Stockley Road:

Type of Control: Stop-controlled T-intersection

Northbound approach: (Stockley Road) stop-controlled shared left-turn/right-turn lane

Eastbound approach: (Forest Road) one shared through/right-turn lane

Westbound approach: (Forest Road) one shared through/left-turn lane

6) Cool Spring Road & Delaware Route 5:

Type of Control: Two-way stop-controlled intersection

Northbound approach: (Delaware Route 5) one shared left-turn/through/right-turn lane

Southbound approach: (Delaware Route 5) one shared left-turn/through/right-turn lane

Eastbound approach: (Cool Spring Road) stop controlled shared left-turn/through lane and one yield controlled channelized right-turn lane

Westbound approach: (Cool Spring Road) one stop controlled shared left-turn/through lane and one yield controlled channelized right-turn lane

7) Cool Spring Road & US Route 9:

Type of Control: Two-way stop-controlled intersection

Northbound approach: (Cool Spring Road) stop-controlled shared left-turn/through/right-turn lane

Southbound approach: (Cool Spring Road) stop-controlled shared left-turn/through/right-turn lane

Eastbound approach: (US Route 9) one shared left-turn/through/right-turn lane

Westbound approach: (US Route 9) one shared left-turn/through/right-turn lane

Note: There is an active railroad line aligned diagonally through this intersection, as described below.

8) Forest Road/Anderson Corner Road & Delaware Route 5:

Type of Control: Two-way stop-controlled intersection

Northbound approach: (Delaware Route 5) one shared left-turn/through/right-turn lane

Southbound approach: (Delaware Route 5) one shared left-turn/through/right-turn lane

Eastbound approach: (Anderson Corner Road) stop-controlled shared left-turn/through/right-turn lane

Westbound approach: (Forest Road) stop-controlled shared left-turn/through/right-turn lane

9) Stockley Road & Beaver Dam Road:

Type of Control: Stop-controlled T-intersection

Northbound approach: (Beaver Dam Road) one shared left-turn/through lane

Southbound approach: (Beaver Dam Road) one shared through/right-turn lane

Eastbound approach: (Stockley Road) stop-controlled shared left/right-turn lane

At-Grade Railroad Crossing Description

Location: At the intersection of US Route 9 and Cool Spring Road:

Rail Line: This east-west active rail line is a Class III line called the Delaware Coastline line. It is owned by the Delaware Transit Corporation (DTC) and extends from Georgetown to Lewes, Delaware. Trains over the line are operated by the Delaware Coast Line Railroad.

Northbound approach: (Cool Spring Road) one shared left/through/right-turn lane with appropriate pavement markings and signage.

Southbound approach: (Cool Spring Road) one shared left/through/right-turn lane with appropriate pavement markings and signage.

Eastbound approach: (US Route 9) one through lane with appropriate pavement markings, signage and warning flashers

Westbound approach: (US Route 9) one through lane with appropriate pavement markings, signage and warning flashers

Description: This is an at-grade crossing of an active rail line that serves about 1 train/week of about 5 cars in length running through the intersection of US Route 9 and Cool Spring Road at a 35 degree angle. The trains along the rail line generally have a speed of approximately 15 MPH in this area. The crossing is currently equipped with pavement markings and railroad crossing signs at the stop signs on the northbound and southbound approaches of Cool Spring Road. On US Route 9, pavement markings, signing, and side-mounted warning flashers are present, but there are no gates. Traffic volumes at the intersection are expected to increase in the next few years due to the development in the area. Without improvements, the intersection is expected to operate at a level of service F in the AM, PM and Saturday peak hour with and without the development.

Transit, Pedestrian, and Bicycle Facilities

Existing transit service: None.

Planned transit service: In an email from David Dooley from DelDOT dated March 8, 2006, he stated that no transit routes are proposed in the area. Pedestrian and bicycle mobility access should be enhanced so that should transit be expanded to serve these developments in the future, pedestrian access to the frontage road would make transit trips more viable.

Existing bicycle and pedestrian facilities: The *Delaware Kent and Sussex Counties Bicycle Touring Map* designates Delaware Route 5 as a bike route; therefore a five-foot minimum shoulder must be maintained along any property frontage.

Planned bicycle and pedestrian facilities: In a letter dated November 14, 2005, Anthony Aglio from DelDOT commented that Livable Delaware's updated State Strategies for Spending Map indicates the site is located in an Investment Level 4 area, where the existing transportation network should preserve the natural environment. Per Livable Delaware's recommendations residential developments such as this are not encouraged in Investment Level 4 areas. However, should the development be approved, he requested the following improvements be incorporated into the project to facilitate bicycle and pedestrian transportation:

- a) Striped five-foot bicycle lanes with five-foot shoulders (in addition to any required turn lanes) along the Stockley Road and Cool Spring Road site frontages.
- b) An ADA compliant crosswalk should be considered at the opposing access points along Stockley Road.
- c) Internal sidewalks to promote walking as a viable transportation alternative.

Previous Comments

All comments from DelDOT's Scoping Letter dated May 27, 2005 were addressed in the Final TIS submission except for the following:

- In regards to compliance with DelDOT, AASHTO and MUTCD standards for geometry and traffic control devices, no evaluation was performed for the study intersections.
- In regards to compliance with DelDOT, AASHTO and MUTCD standards for geometry and traffic control devices, no evaluation was performed for Stockley Road from Delaware Route 23 to Forest Road, Cool Spring Road from Delaware Route 5 to US Route 9 and Forest Road from Delaware Route 5 to Cool Spring Road.
- No correspondence was present indicating that Mr. Mark Harbeson was contacted with regard to the Delaware Route 24 corridor project.

All comments from DelDOT's letter dated August 5, 2005 were addressed in the Final TIS submission.

All comments from DelDOT's Preliminary TIS Letter dated September 13, 2005 were addressed in the Final TIS submission.

General HCS Analysis Comments

(see table footnotes on the following pages for specific comments)

- 1) The TIS used the existing truck percentage for all approaches in all future cases. McCormick Taylor used the greater of either the existing truck percentage or 2% for all future cases.

Table 2
PEAK HOUR LEVELS OF SERVICE (LOS)
based on Traffic Impact Study for Cool Spring Meadows Development
Report dated January 19, 2006
Prepared by Orth-Rodgers & Associates, Inc.

Unsignalized Intersection ¹ Two-Way Stop Control	LOS per TIS		LOS per McCormick Taylor	
	Weekday AM	Weekday PM	Weekday AM	Weekday PM
2010 With Development				
Northbound Site Access	A (9.3)	A (9.8)	A (9.3)	A (9.8)
Southbound Site Access	A (9.7)	A (10.0)	A (9.7)	A (10.0)
Eastbound Stockley Road - Left	A (7.5)	A (7.5)	A (7.5)	A (7.5)
Westbound Stockley Road - Left	A (7.3)	A (7.5)	A (7.3)	A (7.5)

¹ For unsignalized analyses, the numbers in parentheses following levels of service are average delay per vehicle, measured in seconds. For signalized analyses, those numbers are X-critical, a composite volume-to-capacity ratio.

Table 3
PEAK HOUR LEVELS OF SERVICE (LOS)
based on Traffic Impact Study for Cool Spring Meadows Development
Report dated January 19, 2006
Prepared by Orth-Rodgers & Associates, Inc.

Unsignalized Intersection ² One-Way Stop Control	LOS per TIS		LOS per McCormick Taylor	
	Weekday AM	Weekday PM	Weekday AM	Weekday PM
2010 With Development				
Northbound Cool Spring Road - Left	A (7.3)	A (7.5)	A (7.3)	A (7.5)
Eastbound Site Access	A (9.3)	A (9.8)	A (9.3)	A (9.8)

² For unsignalized analyses, the numbers in parentheses following levels of service are average delay per vehicle, measured in seconds. For signalized analyses, those numbers are X-critical, a composite volume-to-capacity ratio.

Table 4
PEAK HOUR LEVELS OF SERVICE (LOS)
based on Traffic Impact Study for Cool Spring Meadows Development
Report dated January 19, 2006
Prepared by Orth-Rodgers & Associates, Inc.

Unsignalized Intersection ³ Two-Way Stop Control Stockley Road & Cool Spring Road	LOS per TIS		LOS per McCormick Taylor	
	Weekday AM	Weekday PM	Weekday AM	Weekday PM
2005 Existing				
Northbound Cool Spring Road	A (9.3)	A (9.6)	A (9.3)	A (9.6)
Southbound Cool Spring Road	A (9.9)	A (10.0)	A (9.9)	A (10.0)
Eastbound Stockley Road - Left	A (7.5)	A (7.3)	A (7.5)	A (7.3)
Westbound Stockley Road - Left	A (7.3)	A (7.3)	A (7.3)	A (7.3)
2010 Without Development				
Northbound Cool Spring Road	A (9.6)	B (10.2)	A (9.6)	B (10.2)
Southbound Cool Spring Road	B (10.3)	B (10.7)	B (10.3)	B (10.7)
Eastbound Stockley Road - Left	A (7.6)	A (7.4)	A (7.6)	A (7.4)
Westbound Stockley Road - Left	A (7.3)	A (7.5)	A (7.3)	A (7.5)
2010 With Development				
Northbound Cool Spring Road	B (10.1)	B (10.9)	B (10.1)	B (10.9)
Southbound Cool Spring Road	B (11.0)	B (11.4)	B (11.0)	B (11.4)
Eastbound Stockley Road - Left	A (7.7)	A (7.5)	A (7.7)	A (7.5)
Westbound Stockley Road - Left	A (7.4)	A (7.5)	A (7.4)	A (7.5)

³ For unsignalized analyses, the numbers in parentheses following levels of service are average delay per vehicle, measured in seconds. For signalized analyses, those numbers are X-critical, a composite volume-to-capacity ratio.

Table 5
PEAK HOUR LEVELS OF SERVICE (LOS)
based on Traffic Impact Study for Cool Spring Meadows Development
Report dated January 19, 2006
Prepared by Orth-Rodgers & Associates, Inc.

Unsignalized Intersection ⁴ One-Way Stop Control	LOS per TIS		LOS per McCormick Taylor	
	Weekday AM	Weekday PM	Weekday AM	Weekday PM
2005 Existing				
Northbound Cool Spring Road - Left	A (7.4)	A (7.4)	A (7.4)	A (7.4)
Eastbound Forest Road	A (9.2)	A (9.2)	A (9.2)	A (9.2)
2010 Without Development				
Northbound Cool Spring Road - Left	A (7.4)	A (7.4)	A (7.4)	A (7.4)
Eastbound Forest Road	A (9.3)	A (9.4)	A (9.3)	A (9.4)
2010 With Development				
Northbound Cool Spring Road - Left	A (7.5)	A (7.6)	A (7.5)	A (7.6)
Eastbound Forest Road	A (9.8)	B (10.2)	A (9.8)	B (10.2)

⁴ For unsignalized analyses, the numbers in parentheses following levels of service are average delay per vehicle, measured in seconds. For signalized analyses, those numbers are X-critical, a composite volume-to-capacity ratio.

Table 6
PEAK HOUR LEVELS OF SERVICE (LOS)
based on Traffic Impact Study for Cool Spring Meadows Development
Report dated January 19, 2006
Prepared by Orth-Rodgers & Associates, Inc.

Unsignalized Intersection ⁵ One-Way Stop Control	LOS per TIS		LOS per McCormick Taylor	
	Weekday AM	Weekday PM	Weekday AM	Weekday PM
Forest Road & Stockley Road				
2005 Existing				
Northbound Stockley Road	A (9.2)	A (9.3)	A (9.2)	A (9.3)
Westbound Forest Road - Left	A (7.4)	A (7.4)	A (7.4)	A (7.4)
2010 Without Development				
Northbound Stockley Road	A (9.5)	A (9.6)	A (9.5)	A (9.6)
Westbound Forest Road - Left	A (7.4)	A (7.5)	A (7.4)	A (7.5)
2010 With Development				
Northbound Stockley Road	A (9.7)	A (10.0)	A (9.7)	A (10.0)
Westbound Forest Road - Left	A (7.5)	A (7.6)	A (7.5)	A (7.6)

⁵ For unsignalized analyses, the numbers in parentheses following levels of service are average delay per vehicle, measured in seconds. For signalized analyses, those numbers are X-critical, a composite volume-to-capacity ratio.

Table 7
PEAK HOUR LEVELS OF SERVICE (LOS)
based on Traffic Impact Study for Cool Spring Meadows Development
Report dated January 19, 2006
Prepared by Orth-Rodgers & Associates, Inc.

Unsignalized Intersection ⁶ Two-Way Stop Control	LOS per TIS			LOS per McCormick Taylor		
Cool Spring Road & Delaware Route 5	Weekday AM	Weekday PM	Saturday Mid-Day	Weekday AM	Weekday PM	Saturday Mid-Day
2005 Existing						
Northbound Delaware Route 5 - Left	A (7.6)	A (7.6)	A (7.6)	A (7.6)	A (7.6)	A (7.6)
Southbound Delaware Route 5 - Left	A (7.7)	A (7.6)	A (7.6)	A (7.7)	A (7.6)	A (7.6)
Eastbound Cool Spring Road	B (10.9)	B (11.6)	B (11.3)	B (10.9)	B (11.6)	B (11.3)
Westbound Cool Spring Road	B (11.0)	B (11.2)	B (10.9)	B (11.0)	B (11.2)	B (10.9)
2010 Without Development						
Northbound Delaware Route 5 - Left	A (7.8)	A (7.8)	A (7.8)	A (7.8)	A (7.8)	A (7.8)
Southbound Delaware Route 5 - Left	A (7.8)	A (7.9)	A (7.9)	A (7.8)	A (7.9)	A (7.9)
Eastbound Cool Spring Road	B (12.5)	B (13.9)	B (13.6)	B (12.5)	B (13.9)	B (13.6)
Westbound Cool Spring Road	B (12.4)	B (13.4)	B (13.6)	B (12.5)	B (13.4)	B (13.6)
2010 With Development						
Northbound Delaware Route 5 - Left	A (7.8)	A (7.8)	A (7.8)	A (7.8)	A (7.8)	A (7.8)
Southbound Delaware Route 5 - Left	A (7.8)	A (7.9)	A (7.9)	A (7.8)	A (7.9)	A (7.9)
Eastbound Cool Spring Road	B (12.5)	B (14.1)	B (13.7)	B (12.5)	B (14.1)	B (13.7)
Westbound Cool Spring Road	B (12.6)	B (13.7)	B (13.8)	B (12.6)	B (13.7)	B (13.8)

⁶ For unsignalized analyses, the numbers in parentheses following levels of service are average delay per vehicle, measured in seconds. For signalized analyses, those numbers are X-critical, a composite volume-to-capacity ratio.

Table 8
PEAK HOUR LEVELS OF SERVICE (LOS)
based on Traffic Impact Study for Cool Spring Meadows Development
Report dated January 19, 2006
Prepared by Orth-Rodgers & Associates, Inc.

Unsignalized Intersection ⁷ Two-Way Stop Control	LOS per TIS			LOS per McCormick Taylor ⁸		
US Route 9 & Cool Spring Road	Weekday AM	Weekday PM	Saturday Mid-Day	Weekday AM	Weekday PM	Saturday Mid-Day
2005 Existing						
Northbound Cool Spring Road	B (13.5)	C (17.3)	C (24.9)	B (13.5)	C (17.3)	C (24.9)
Southbound Cool Spring Road	C (17.2)	C (20.4)	D (29.3)	C (17.2)	C (20.4)	D (29.3)
Eastbound US Route 9 - Left	A (8.1)	A (8.5)	A (9.1)	A (8.1)	A (8.5)	A (9.1)
Westbound US Route 9 - Left	A (8.3)	A (8.5)	A (9.2)	A (8.3)	A (8.5)	A (9.2)
2010 Without Development						
Northbound Cool Spring Road	D (30.4)	F (52.4)	F (375.5)	D (31.4)	F (56.2)	F (451.3)
Southbound Cool Spring Road	D (25.6)	D (34.0)	F (76.9)	D (25.9)	E (35.5)	F (90.6)
Eastbound US Route 9 - Left	A (8.5)	A (9.5)	B (10.4)	A (8.5)	A (9.5)	B (10.6)
Westbound US Route 9 - Left	A (9.0)	A (9.1)	B (10.9)	A (9.1)	A (9.2)	B (11.1)
2010 With Development						
Northbound Cool Spring Road	E (50.0)	F (128.0)	F (*)	F (53.0)	F (150.9)	F (1237)
Southbound Cool Spring Road	D (27.9)	E (45.4)	F (132.7)	D (28.5)	E (48.9)	F (159.7)
Eastbound US Route 9 - Left	A (8.5)	A (9.5)	B (10.4)	A (8.5)	A (9.5)	B (10.6)
Westbound US Route 9 - Left	A (9.1)	A (9.3)	B (11.4)	A (9.1)	A (9.5)	B (11.6)

Signalized Intersection ⁷	LOS per TIS			LOS per McCormick Taylor ⁹		
US Route 9 & Cool Spring Road	Weekday AM	Weekday PM	Saturday Mid-Day	Weekday AM	Weekday PM	Saturday Mid-Day
2010 With Development	B (0.59)	B (0.76)	B (0.88)	B (0.60)	B (0.77)	C (0.93)

⁷ For unsignalized analyses, the numbers in parentheses following levels of service are average delay per vehicle, measured in seconds. For signalized analyses, those numbers are X-critical, a composite volume-to-capacity ratio.

⁸ The TIS used a minimum PHF of 0.92 on the eastbound and westbound US Route 9 approaches for all future cases. Because this is a rural Level 4 area, McCormick Taylor used a minimum PHF of 0.88 on US Route 9 for all future cases.

⁹ McCormick Taylor used 6 seconds of yellow and red time; the TIS used 5 seconds of yellow and red time.

Table 9
PEAK HOUR LEVELS OF SERVICE (LOS)
based on Traffic Impact Study for Cool Spring Meadows Development
Report dated January 19, 2006
Prepared by Orth-Rodgers & Associates, Inc.

Unsignalized Intersection ¹⁰ Two-Way Stop Control	LOS per TIS			LOS per McCormick Taylor		
Anderson Corner Road/ Forest Road & Delaware Route 5	Weekday AM	Weekday PM	Saturday Mid-Day	Weekday AM	Weekday PM	Saturday Mid-Day
2005 Existing						
Northbound Delaware Route 5 - Left	A (7.5)	A (7.6)	A (7.5)	A (7.5)	A (7.6)	A (7.5)
Southbound Delaware Route 5 - Left	A (7.7)	A (7.8)	A (7.7)	A (7.7)	A (7.8)	A (7.7)
Eastbound Anderson Corner Rd	B (12.2)	B (13.3)	B (11.3)	B (12.2)	B (13.3)	B (11.3)
Westbound Forest Road	B (12.6)	B (13.6)	B (11.9)	B (12.6)	B (13.6)	B (11.9)
2010 Without Development						
Northbound Delaware Route 5 - Left	A (7.7)	A (7.8)	A (7.8)	A (7.7)	A (7.8)	A (7.8)
Southbound Delaware Route 5 - Left	A (8.0)	A (8.2)	A (8.1)	A (8.0)	A (8.2)	A (8.1)
Eastbound Anderson Corner Rd	C (15.1)	C (18.9)	C (16.3)	C (15.1)	C (19.0)	C (16.3)
Westbound Forest Road	B (14.2)	C (17.1)	B (14.3)	B (14.2)	C (17.1)	B (14.4)
2010 With Development						
Northbound Delaware Route 5 - Left	A (7.8)	A (7.8)	A (7.8)	A (7.8)	A (7.8)	A (7.8)
Southbound Delaware Route 5 - Left	A (8.0)	A (8.2)	A (8.1)	A (8.0)	A (8.3)	A (8.1)
Eastbound Anderson Corner Rd	B (14.4)	C (18.3)	B (14.9)	B (14.4)	C (18.3)	B (15.0)
Westbound Forest Road	C (15.3)	C (20.9)	C (17.5)	C (15.3)	C (21.0)	C (17.5)

¹⁰ For unsignalized analyses, the numbers in parentheses following levels of service are average delay per vehicle, measured in seconds. For signalized analyses, those numbers are X-critical, a composite volume-to-capacity ratio.

Table 10
PEAK HOUR LEVELS OF SERVICE (LOS)
based on Traffic Impact Study for Cool Spring Meadows Development
Report dated January 19, 2006
Prepared by Orth-Rodgers & Associates, Inc.

Unsignalized Intersection ¹¹ One-Way Stop Control	LOS per TIS			LOS per McCormick Taylor		
Stockley Road & Delaware Route 23	Weekday AM	Weekday PM	Saturday Mid-Day	Weekday AM	Weekday PM	Saturday Mid-Day
2005 Existing						
Northbound Delaware Route 23 - Left	A (7.5)	A (7.9)	A (7.7)	A (7.5)	A (7.9)	A (7.7)
Eastbound Stockley Road	B (11.4)	B (12.2)	B (11.6)	B (11.4)	B (12.2)	B (11.6)
2010 Without Development						
Northbound Delaware Route 23 - Left	A (8.0)	A (8.6)	A (8.2)	A (7.9)	A (8.6)	A (8.2)
Eastbound Stockley Road	C (16.8)	C (23.7)	C (20.1)	C (15.9)	C (23.7)	C (20.3)
2010 With Development						
Northbound Delaware Route 23 - Left	A (8.1)	A (8.7)	A (8.3)	A (8.0)	A (8.7)	A (8.3)
Eastbound Stockley Road	C (18.3)	D (30.6)	C (23.8)	C (17.2)	D (30.6)	C (24.1)

¹¹ For unsignalized analyses, the numbers in parentheses following levels of service are average delay per vehicle, measured in seconds. For signalized analyses, those numbers are X-critical, a composite volume-to-capacity ratio.



STATE OF DELAWARE
EXECUTIVE DEPARTMENT
OFFICE OF
STATE PLANNING COORDINATION

August 18, 2005

Mr. Chris Hudson
Ocean Atlantic Associates
4101 Highway One
Rehoboth Beach, DE 19971

RE: PLUS review – PLUS 2005-07-13; Cool Spring Meadows

Dear Mr. Hudson:

Thank you for meeting with State agency planners on August 3, 2005 to discuss the proposed plans for the Cool Spring Meadows project to be located between the intersection of Forest Road and Stockley Road and Cool Spring Road and Stockley Road.

According to the information received, you are seeking site plan approval for a cluster development of 233 single family residential units on 215.23 acres located in Level 4.

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 Sussex.

Executive Summary

The following section includes some site specific highlights from the agency comments found in this letter. This summary is provided for your convenience and reference. The full text of this letter represents the official state response to this project. ***Our office notes that the applicants are responsible for reading and responding to this letter and all comments contained within it in their entirety.***

State Strategies/Project Location

- This project is proposed for an Investment Level 4 area according to the 2004 *Strategies for State Policies and Spending*. This project is also located outside of a designated growth area in relevant municipal and county certified Comprehensive Plans. 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.

Natural and Cultural Resources

- This project impacts all three layers of the Livable Delaware Green Infrastructure area established under Governor Minner's Executive Order #61.
- As proposed, this project would remove and fragment forest that is part of a large contiguous forest tract and may reduce the habitat value of the entire forest stretch.

The following are a complete list of comments received by State agencies:

Office of State Planning Coordination – Contact: Ann Marie Townshend 739-3090

This project represents a major land development that will result in 233 residential units in an Investment Level 4 area according to the 2004 *Strategies for State Policies and Spending*. This project is also located outside of a designated growth area in relevant municipal and county certified comprehensive plans. 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.

From a fiscal responsibility perspective, development of this site is likewise inappropriate. The cost of providing services to development in rural areas is an inefficient and wasteful use of the State's fiscal resources. The project as proposed is likely to bring more than 580 new residents to an area where the State has no plans to invest in infrastructure upgrades or additional services. These residents will need access to such services and infrastructure as schools, police, and transportation. To provide some examples, the State government funds 100% of road maintenance and drainage improvements for the transportation system, 100% of school transportation and paratransit services, up to 80% of school construction costs, and about 90% of the cost of police protection in the unincorporated portion of Sussex County where this development is proposed. Over the longer term, the unseen negative ramifications of this development will become even more evident as the community matures and the cost of maintaining infrastructure and providing services increases.

Because the development is inconsistent with the *Strategies for State Policies and Spending*, the State is opposed to this proposed subdivision.

Division of Historic and Cultural Affairs (DHCA)– Contact: Alice Guerrant 739-5685

The DHCA does not approve of this development because it is in State Investment Level 4 and will result in a loss of the historic agricultural and silvicultural landscape in this area and probably in the loss of archaeological sites, as well as producing adverse noise and visual effects on nearby late-19th-century and early-20th-century farmsteads and houses.

There is nothing known within the parcel. There are two properties within sight of the open part of this parcel (S-2916 and S-2918). Beers Atlas of 1868 shows the C.S. Layton House and the S.P. Martin House (probably a tenant house) within the parcel possibly. The USGS maps from 1917 and 1918 for this area show no houses remaining in the parcel. There may be archaeological resources relating to these two houses. There are also areas of high and medium potential for prehistoric-period archaeological sites.

If this project proceeds, DHCA would appreciate the opportunity of checking the area to see if in fact any sites exist and to learn something about their location and character prior to any ground-disturbing activity.

Department of Transportation – Contact: Bill Brockenbrough 760-2109

Ocean Atlantic Associates, seeks to develop 233 single-family detached houses on an approximately 215.23-acre assemblage of parcels (Tax Parcels 2-34-5.00-30.00 and 2-34-5.00-33.00). The land is located on both sides of Stockley Road (Sussex Road 280), with frontage on Cool Spring Road (Sussex Road 290) and Forest Road (Sussex Road 292) north of Stockley Road. The land is zoned AR-1 and would be developed under the County's cluster development option. A traffic impact study is in progress

This development is proposed for an area designated as Level 4 under the *Strategies for State Policies and Spending*. The *Strategies for State Policies and Spending* have deemed the type of development being proposed inappropriate for this area. As part of our commitment to support the *Strategies*, DelDOT refrains from participating in the cost of any road improvements needed to support this development and is opposed to any road improvements that will substantially increase the transportation system capacity in this area. DelDOT will only support taking the steps necessary to preserve the existing transportation infrastructure and make whatever safety and drainage related improvements are deemed appropriate and necessary. The intent is to preserve the open space, agricultural lands, natural habitats and forestlands that are typically found in Level 4 Areas while avoiding the creation of isolated development areas that cannot be served

effectively or efficiently by public transportation, emergency responders, and other public services.

DelDOT strongly supports new development in and around existing towns and municipalities and in areas designated as growth zones in approved Comprehensive Plans. We encourage the use of transfer of development rights where this growth management tool is available.

If this development proposal is approved, notwithstanding inconsistencies with the relevant plans and policies, DelDOT will provide technical review and comments.

**The Department of Natural Resources and Environmental Control – Contact:
Kevin Coyle 739-9071**

This project is proposed for an Investment Level 4 area as defined by the *Strategies for State Policies and Spending* and is also located outside of a designated growth area in the relevant municipal and county certified comprehensive plans. According to the *Strategies* this project is inappropriate in this location. In Investment Level 4 areas, the State's investments and policies, from DNREC's perspective, should retain the rural landscape and preserve open spaces and farmlands. Open space investments should emphasize the protection of critical natural habitat and wildlife to support a diversity of species, and the protection of present and future water supplies. Open space investments should also provide for recreational activities, while helping to define growth areas. Additional state investments in water and wastewater systems should be limited to existing or imminent public health, safety or environmental risks only, with little provision for additional capacity to accommodate further development.

With continued development in Investment Level 4 areas, the State will have a difficult, if not impossible, time attaining water quality (e.g., TMDLs) and air quality (e.g., non-attainment areas for ozone and fine particulates) goals. Present and future investments in green infrastructure, as defined in Governor Minner's Executive Order No. 61, will be threatened. DNREC strongly supports new development in and around existing towns and municipalities and in areas designated as growth zones in certified Comprehensive Plans. We encourage the use of transfer of development rights where this growth management tool is available.

This particular development certainly compromises the integrity of the State Strategies and the preservation goals inherent in many of DNREC's programs. Of particular concern are: the project impacts all three layers of the Green Infrastructure map (cropland, forest, and natural resources), and loss/fragmentation of 45 out of 141 acres of forest. While mitigating measures such as conservation design, central wastewater systems instead of individual on-site septic systems, and other best management practices may help mitigate impacts from this project, not doing the project at all is the best avenue for avoiding negative impacts. As such, this project will receive no financial, technical or other support of any kind from DNREC. Any required permits or other authorizations for

this project shall be considered in light of the project's conflict with our State growth strategies.

Green Infrastructure

Portions or all of the lands associated with this proposal are within the Livable Delaware Green Infrastructure area established under Governor Minner's Executive Order #61 that represents a network of ecologically important natural resource lands of special state conservation interest.

Green infrastructure is defined as Delaware's natural life support system of parks and preserves, woodlands and wildlife areas, wetlands and waterways, productive agricultural and forest land, greenways, cultural, historic and recreational sites and other natural areas all with conservation value. Preserving Delaware's Green Infrastructure network will support and enhance biodiversity and functional ecosystems, protect native plant and animal species, improve air and water quality, prevent flooding, lessen the disruption to natural landscapes, provide opportunities for profitable farming and forestry enterprises, limit invasive species, and foster ecotourism.

Voluntary stewardship by private landowners is essential to green infrastructure conservation in Delaware, since approximately 80 percent of the State's land base is in private hands. It is in that spirit of stewardship that the Department appeals to the landowner and development team to protect sensitive resources through an appropriate site design.

Soils

According to the soil survey update, over half of the soils on subject parcel are wetland associated (hydric) Hurlock or Mullica soils. These soils have severe limitations for development.

Wetlands

Statewide Wetland Mapping Project (SWMP) maps indicate the presence of palustrine wetlands on this parcel. Development activities should be avoided in the northeastern portion of the property as it holds majority of the wetlands on site.

These wetlands provide water quality benefits, attenuate flooding and provide important habitat for plants and wildlife. Vegetated buffers of no less than 100 feet should be employed from the edge of the wetland complex. The developer should note that both DNREC and Army Corps of Engineers discourage allowing lot lines to contain wetlands to minimize potential cumulative impacts resulting from unauthorized and/or illegal activities and disturbances that can be caused by homeowners.

Wetland Permitting Information

Impacts to palustrine wetlands are regulated by the Army Corps of Engineers through Section 404 of the Clean Water Act. In addition, individual 404 permits and certain Nationwide Permits from the Army Corps of Engineers also require 401 Water Quality Certification from the DNREC Wetland and Subaqueous Land Section and Coastal Zone Federal Consistency Certification from the DNREC Division of Soil and Water Conservation, Delaware Coastal Programs Section. Each of these certifications represents a separate permitting process.

Because there is strong evidence that federally regulated wetlands exist on site, a wetland delineation, in accordance with the methodology established by the Corps of Engineers Wetlands Delineation Manual, (Technical Report Y-87-1) should be conducted. Once complete, this delineation should be verified Corps of Engineers through the Jurisdictional Determination process.

To find out more about permitting requirements, the applicant is encouraged to attend a Joint Permit Process Meeting. These meetings are held monthly and are attended by federal and state resource agencies responsible for wetland permitting. Contact Denise Rawding at (302) 739-4691 to schedule a meeting.

Impervious Cover

Since residential development significantly increases the amount of impervious cover - leading to large volumes of contaminant-laden runoff which ultimately drain into streams or waterways - the applicant is strongly urged to pursue both natural and constructed Best Management Practices (BMPs) to reduce such impacts. Reducing the amount of impervious surfaces by planting more trees and/or the use of pervious paving surfaces ("pavers") in lieu of asphalt or concrete, are examples of ways to reduce such impacts. Research has consistently shown that once a watershed exceeds a threshold of 10 percent imperviousness, water and habitat quality irreversibly decline.

ERES Waters

This project is located adjacent to receiving waters of Inland Bays designated as waters having Exceptional Recreational or Ecological Significance (ERES). ERES waters are recognized as special assets of the State, and shall be protected and/ or restored, to the maximum extent practicable, to their natural condition. Provisions in Section 11.5 of Delaware's "Surface Water Quality Standards" (as amended August 11, 1999), specify that all designated ERES waters and receiving tributaries develop a "pollution control strategy" to reduce non-point sources of nutrient runoff through implementation of Best Management Practices (BMPs). Best Management Practices as defined in subsection 11.5(e) of this section, expressly authorizes the Department to provide standards for controlling the addition of pollutants and reducing them to the greatest degree practicable, or where attainable, a standard requiring no discharge of pollutants.

TMDLs

Total Maximum Daily Loads (TMDLs) for nitrogen and phosphorus have been promulgated through regulation for the Inland Bays Watershed. A TMDL is the maximum level of pollution allowed for a given pollutant below which a “water quality limited water body” can assimilate and still meet water quality standards to the extent necessary to support use goals such as, swimming, fishing, drinking water and shell fish harvesting. Although TMDLs are required by federal law, states develop and implement standards to support these desired use goals. This project is located in the low reduction area requiring a 40 percent reduction in both nitrogen and phosphorus.

Wastewater, Open Space and Compliance with TMDLs through the PCS

Significant nitrogen and phosphorus loading reductions must be realized from all sources, including community onsite wastewater systems. The Department has developed performance standards for on-site wastewater treatment and disposal systems that have been presented as a part of the proposed Pollution Control Strategy (PCS). Upon promulgation of the proposed PCS regulation, new and existing wastewater disposal systems will be required to significantly reduce nitrogen and phosphorus loading in the Inland Bays watershed and meet “performance standards.” The standards would require (where applicable) nitrogen and phosphorus loading not exceed average annual discharge concentration levels of 5 and 2 mg/l for nitrogen and phosphorus, respectively.

The proposed Pollution Control Strategy would also require the completion of a nutrient budget for the proposed project in order to estimate how nutrient loads will change with the development of the parcel. The applicant should be made aware that the inclusion of stormwater management, wastewater treatment, buffers and wetlands as metrics for open space calculations, may understate the actual nutrient runoff as calculated from the nutrient budget.

Currently, we request that in order to verify your project’s compliance with specified TMDL loading rates, a full nutrient budget be calculated. Please contact Lyle Jones of Watershed Section at 739-4590 for the acceptable protocol.

Water Supply

Should an on-site public well be needed, it must be located at least 150 feet from the outermost boundaries of the project. The Division of Water Resources will consider applications for the construction of on-site wells provided the wells can be constructed and located in compliance with all requirements of the Regulations Governing the Construction and Use of Wells. A well construction permit must be obtained prior to constructing any wells.

Should dewatering points be needed during any phase of construction, a dewatering well construction permit must be obtained from the Water Supply Section prior to construction of the well points. In addition, a water allocation permit will be needed if the pumping rate will exceed 50,000 gallons per day at any time during operation.

All well permit applications must be prepared and signed by licensed water well contractors, and only licensed well drillers may construct the wells. Please factor in the necessary time for processing the well permit applications into the construction schedule. Dewatering well permit applications typically take approximately four weeks to process, which allows the necessary time for technical review and advertising.

Should you have any questions concerning these comments, please contact Rick Rios at 302-739-9944.

Sediment and Erosion Control/Stormwater Management

A detailed sediment and stormwater plan will be required prior to any land disturbing activity taking place on the site. The plan review and approval as well as construction inspection will be coordinated through **Sussex Conservation District**. Contact Jessica Watson at (302) 856-7219 for details regarding submittal requirements and fees.

As of April 11, 2005, stormwater best management practices must also consider water quality as well as quantity in impaired water bodies.

Drainage

The Drainage Section requests all existing ditches on the property be checked for function and cleaned if needed prior to the construction of homes. Wetland permits may be required before cleaning ditches.

The Drainage Section requests that all precautions be taken to ensure the project does not hinder any off site drainage upstream of the project or create any off site drainage problems downstream by the release of on site storm water.

The Drainage Section strongly recommends any drainage conveyance between two parcels within a subdivision be dedicated as a drainage easement and such easement be designated as passive open space, not owned by individual landowners. The easement should be of sufficient width to allow for future drainage maintenance as described below.

- Along an open ditch or swale, the Drainage Section recommends a maintenance equipment zone of 25 feet measured from the top of bank on the maintenance side, and a 10-foot setback zone measured from top of bank on the non-maintenance side. These zones should be maintained as buffers to aid in the reduction of sediment and nutrients entering into the drainage conveyance.

Grasses, forbs and sedges planted within these zones should be native species, selected for their height, ease of maintenance, erosion control, and nutrient uptake capabilities. Trees and shrubs planted within the maintenance zone should be native species spaced to allow for drainage maintenance at maturity. Trees should not be planted within 5 feet of the top of ditch to avoid future blockages from roots.

- Along a stormwater pipe, the Drainage Section recommends a maintenance equipment zone of 15 feet on each side of the pipe as measured from the pipe centerline. This zone should be maintained as buffers to aid in the reduction of sediment and nutrients entering into the drainage conveyance. Grasses, forbs and sedges planted within these zones should be native species selected for their height, ease of maintenance, erosion control, and nutrient uptake capabilities. Trees and shrubs planted within the maintenance zone should be spaced to allow for drainage maintenance at maturity.

The Drainage Section recommends any drainage/utility easement owned by a individual landowner should not have structures, decks, buildings, sheds, kennels, fences or trees within the drainage easement to allow for future drainage maintenance.

Forests

According to 2002 aerial photos there is a large forested area within this parcel that is a component of a contiguous stretch of forest. Large contiguous stretches of forest like this not only provide important water and air quality benefits, but provide important habitat for many wildlife species that depend on interior forest. Clearing portions of the forest within the parcel may reduce the habitat value of the entire forest stretch. Invasive species such as Multiflora rose, Japanese honeysuckle or autumn olive can quickly inhabit edges and displace native species. Once established, invasive species are hard to eradicate. Furthermore, the Department discourages the removal of trees for stormwater and/or wastewater facilities.

Forested areas on-site set aside for conservation purposes should be placed into a permanent conservation easement or other binding protection. These areas should be clearly marked and delineated so that residents understand their importance and so that homeowner activities do not infringe upon these areas.

Open Space

PLUS materials indicate that 88.15 acres are proposed for open space. In areas set aside for passive open space, the developer is encouraged to consider establishment of additional forested areas or meadow-type grasses. Once established, these ecosystems provide increased water infiltration into groundwater, decreased run-off into surface water, air quality improvements, and require much less maintenance than traditional turf

grass, an important consideration if a homeowners association will take over responsibility for maintenance of community open spaces.

Open space containing forest and/or wetlands should be placed into a permanent conservation easement or other permanent protection mechanism. Conservation areas should also be demarked to avoid infringement by homeowners.

Rare Species

Delaware Natural Heritage Program staff have not surveyed this parcel, so it is unknown if there are any state-rare or federally listed plants, animals or natural communities at or adjacent to this project site. Their program botanist and zoologist requests the opportunity to survey the forested and wetland resources which could potentially be impacted by the project. Their observations would allow the program to make more informed comments on this project and would allow the applicant the opportunity to reduce potential impacts to rare species. Please contact Bill McAvoy or Kitt Heckscher at (302) 653-2880 to set up a site visit.

Potential Hunting Issue

Because the project parcel is part of a larger forest block, legal hunting activities may take place on adjacent properties. Hunting within 100 yards of a dwelling is prohibited and the applicant may want to contact adjacent landowners to determine if this is going to be an issue. In effect, the adjacent landowner will be losing 100 yards of their property for hunting if there is not a buffer between lot lines and the adjacent property line.

Nuisance Waterfowl

Stormwater management ponds that remain in the site plan may attract waterfowl like resident Canada geese and mute swans. High concentrations of waterfowl in ponds create water-quality problems, leave droppings on lawn and paved areas and can become aggressive during the nesting season. Short manicured lawns around ponds provide an attractive habitat for these species. We recommend native plantings of tall grasses, wildflowers, shrubs, and trees at the edge and within a buffer area (50 feet) around the perimeter. Waterfowl do not feel safe when they can not see the surrounding area for possible predators. These plantings should be completed as soon as possible as it is easier to deter geese when there are only a few than it is to remove them once they become plentiful. The Division of Fish and Wildlife does not provide goose control services, and if problems arise, residents or the home-owners association will have to accept the burden of dealing with these species (e.g., permit applications, costs, securing services of certified wildlife professionals). Solutions can be costly and labor intensive; however, with proper landscaping, monitoring, and other techniques, geese problems can be minimized.

Solid Waste

Each Delaware household generates approximately 3,600 pounds of solid waste per year. On average, each new house constructed generates an additional 10,000 pounds of construction waste. Due to Delaware's present rate of growth and the impact that growth will have on the state's existing landfill capacity, the applicant is requested to be aware of the impact this project will have on the State's limited landfill resources and, to the extent possible, take steps to minimize the amount of construction waste associated with this development.

Air Quality

Once complete, vehicle emissions associated with this project are estimated to be 17.9 tons (35,763.1 pounds) per year of VOC (volatile organic compounds), 14.8 tons (29,609.4 pounds) per year of NO_x (nitrogen oxides), 10.9 tons (21,846.4 pounds) per year of SO₂ (sulfur dioxide), 1.0 ton (1,944.7 pounds) per year of fine particulates and 1,495.8 tons (2,991,535.1 pounds) per year of CO₂ (carbon dioxide).

However if this project is in a level 4 area, mobile emission calculations should be increased by 118 pounds for VOC emissions for each mile outside the designated growth areas per household unit; by 154 pounds for NO_x; and by 2 pounds for particulate emissions. A typical development of 100 units that is planned 10 miles outside the growth areas will have additional 59 tons per year of VOC emissions, 77 tons per year of NO_x emissions and 1 ton per year of particulate emissions versus the same development built in a growth area (level 1,2 or 3).

Emissions from area sources associated with this project are estimated to be 7.2 tons (14,424.9 pounds) per year of VOC (volatile organic compounds), 0.8 ton (1,587.2 pounds) per year of NO_x (nitrogen oxides), 0.7 ton (1,317.1 pounds) per year of SO₂ (sulfur dioxide), 0.8 ton (1,699.7 pounds) per year of fine particulates and 29.2 tons (58,475.2 pounds) per year of CO₂ (carbon dioxide).

Emissions from electrical power generation associated with this project are estimated to be 2.9 tons (5,717.0 pounds) per year of NO_x (nitrogen oxides), 9.9 tons (19,885.2 pounds) per year of SO₂ (sulfur dioxide) and 1,466.5 tons (2,933,059.9 pounds) per year of CO₂ (carbon dioxide).

	VOC	NO _x	SO ₂	PM _{2.5}	CO ₂
Mobile	17.9	14.8	10.9	1.0	1495.8
Residential	7.2	0.8	0.7	0.8	29.2
Electrical Power		2.9	9.9		1466.5
TOTAL	25.1	18.5	21.5	1.8	2991.5

For this project the electrical usage via electric power plant generation alone totaled to produce an additional 2.9 tons of nitrogen oxides per year and 9.9 tons of sulfur dioxide per year.

A significant method to mitigate this impact would be to require the builder to construct Energy Star qualified homes. Every percentage of increased energy efficiency translates into a percent reduction in pollution. Quoting from their webpage, <http://www.energystar.gov/>:

“ENERGY STAR qualified homes are independently verified to be at least 30% more energy efficient than homes built to the 1993 national Model Energy Code or 15% more efficient than state energy code, whichever is more rigorous. These savings are based on heating, cooling, and hot water energy use and are typically achieved through a combination of:

building envelope upgrades,
high performance windows,
controlled air infiltration,
upgraded heating and air conditioning systems,
tight duct systems and
upgraded water-heating equipment.”

The DNREC energy office is in the process of training builders in making their structures more energy efficient. The Energy Star Program is excellent way to save on energy costs and reduce air pollution. We highly recommend this project development and other residential proposals increase the energy efficiency of their homes.

It is also recommended that the home builders offer geothermal and photo voltaic energy options. Applicable vehicles should use retrofitted diesel engines during construction. The development should provide tie-ins to the nearest bike paths and links to mass transport system, and fund a lawnmower exchange program for their new occupants.

State Fire Marshal's Office – Contact: Duane Fox 302-856-5298

These comments are intended for informational use only and do not constitute any type of approval from the Delaware State Fire Marshal's Office. At the time of formal submittal, the applicant shall provide; completed application, fee, and three sets of plans depicting the following in accordance with the Delaware State Fire Prevention Regulation (DSFPR):

a. **Fire Protection Water Requirements:**

- Water distribution system capable of delivering at least 1000 gpm for 1-hour duration, at 20-psi residual pressure is required. Fire hydrants with 800 feet spacing on centers. (Assembly)

- Where a water distribution system is proposed for single family dwellings it shall be capable of delivering at least 500 gpm for 1-hour duration, at 20-psi residual pressure. Fire hydrants with 1000 feet spacing on centers are required. (One & Two- Family Dwelling)
- Where a water distribution system is proposed for the site, the infrastructure for fire protection water shall be provided, including the size of water mains for fire hydrants and sprinkler systems.

b. **Fire Protection Features:**

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

c. **Accessibility**

- All premises which the fire department may be called upon to protect in case of fire, and which are not readily accessible from public roads, shall be provided with suitable gates and access roads, and fire lanes so that all buildings on the premises are accessible to fire apparatus. This means that the access road to the subdivision from Stockley Road and Cool Spring 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.delawarestatefiremarshal.com, technical services link, plan review, applications or brochures.

Department of Agriculture - Contact: Milton Melendez 698-4500

The proposed development is in an area designated as Level 4 under the *Strategies for State Policies and Spending*. The *Strategies* and the Sussex County Comprehensive Plan do not support this type of isolated development in this area. The intent of these plans is to preserve the agricultural lands, forestlands, recreational uses, and open spaces that are preferred uses in Level 4 areas. The Department of Agriculture opposes the proposed development which conflicts with the preferred land uses, making it more difficult for agriculture and forestry to succeed, and increases the cost to the public for services and facilities.

The Department of Agriculture opposes this project because it negatively impacts those land uses that are the backbone of Delaware's resource industries - agriculture, forestry, horticulture - and the related industries they support. **The Department of Agriculture and the Department of Natural Resource and Environmental Control, along with other partners developed the State's "Green Infrastructure" Investment Strategy. This strategy identifies high-value cropland, forestland and natural resource lands for preservation and conservation. This proposed development site is designated as high value cropland, forestland and natural resource lands on the Green Infrastructure Investment Strategy. In other words, in addition to their location in a rural area, due to their soil quality and other significant factors, these lands have been further designated by the State for conservation and preservation.**

Furthermore, often new residents of developments like this one, with little understanding or appreciation for modern agriculture and forestry, find their own lifestyles in direct conflict with the demands of these industries. Often these conflicts result in compromised health and safety; one example being decreased highway safety with farm equipment and cars competing on rural roads. The crucial economic, environmental and open space benefits of agriculture and forestry are compromised by such development. We oppose the creation of isolated development areas that are inefficient in terms of the full range of public facilities and services funded with public dollars. Public investments in areas such as this are best directed to agricultural and forestry preservation.

The Delaware Department of Agriculture supports growth which expands and builds on existing urban areas and growth zones in approved State, county and local plans. Where additional land preservation can occur through the use of transfer of development rights, and other land use measures, we will support these efforts and work with developers to implement these measures. If this project is approved we will work with the developers to minimize impacts to the agricultural and forestry industries.

Public Service Commission - Contact: Andrea Maucher 739-4247

Any expansion of natural gas or installation of a closed propane system must fall within Pipeline Safety guidelines. Contact: Malak Michael at (302) 739-4247.

Application notes "Tidewater – CPCN request is in process." No Application for the subject parcels has been filed by Tidewater; however, Artesian has a CPCN Application pending before the Commission that includes parcel no, 234-5.00-30.00.

Delaware State Housing Authority – Contact Karen Horton 739-4263

This proposal is to develop 233 units on 215 acres located on both sides of Stockley Road, between Forrest Road and Cool Spring Road, east of Andersons Corner. According to the *State Strategies Map*, the proposal is located in an Investment Level 4. As a general planning practice, DSHA encourages residential development in areas where residents will have proximity to services, markets, and employment opportunities such as Investment Level 1 and 2 areas outlined in the *State Strategies Map*. The proposal is located in an area targeted for agricultural and natural resource protection, and therefore inconsistent with where the State would like to see new residential development.

Sussex County – Contact: Richard Kautz 855-7878

The application should note that within the site there is a 400 foot deep zone of General Residential fronting along Forest Road (Road 292). Concerning the site design, this is one of the first projects to locate all lots with direct access to open space.

This fiscal year Sussex County will be considering implementation of a Source Water Protection Program required by the State. Depending on the requirements adopted by the

County Council this project might be affected. Any well location should insure that the wellhead protection area is entirely on site.

Because this project is an AR-1 Cluster subdivision, the developer must include in the application a plan for the management of all open space. Also, the developer must document for the Planning and Zoning Commission how the proposed development: provides for a total environment and design which are superior to that which would be allowed under the standard lot option; preserves the natural environment and historic or archeological resources; and, will not have an adverse effect on any of the items included under Ordinance Number 1152 (County Code 99-9C). These issues can be addressed by including in the application an explanation of how the developer plans to mitigate the issues raised by the State agencies.

The Sussex County Engineer Comments:

The project proposes to develop using a private central community wastewater system. We recommend that the wastewater system be operated under a long-term contract with a capable wastewater utility that meets TMDL limits for Delaware's Inland Bays. In addition, we recommend they have a wastewater utility provider prior to approving the project. The proposed project is located outside of the Inland Bays Planning area where Sussex County expects to provide sewer service. Sussex County requires design and construction of the collection and transmission system to meet Sussex County sewer standards and specifications. A review and approval of the treatment and disposal system by the Sussex County Engineering Department is also required and plan review fees may apply. Disposal fields should not be counted as open space. Wastewater disposal fields should be clearly identified on recorded plots and separated from lot area.

If Sussex County ever provides sewer service, it is required that the treatment system be abandoned and a direct connection made to the County system at the developers and/or homeowners association expense.

Submission and approval of a sewer Concept Plan is not required.

For question regarding these comments, contact Rob Davis, Sussex County Engineering Department at (302) 855-7820.

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.

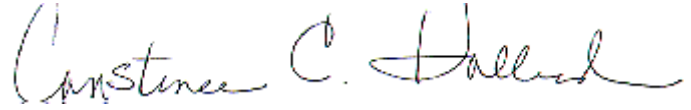
PLUS 2005-07-13

August 19, 2005

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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 dark ink, reading "Constance C. Holland". The signature is fluid and cursive, with the first name "Constance" being more prominent than the last name "Holland".

Constance C. Holland, AICP
Director

CC: Sussex County



Constance C. Holland, AICP
Director, Office of State Planning Coordination
State of Delaware
122 William Penn Street, Suite 302
Haslet Building, Third Floor
Dover, DE 19901

13 November 2006

Via: Email
& U.S. Mail

RE: PLUS review – PLUS 2005-07-13; Cool Spring Meadows

Dear Ms. Holland,

In regard to the above referenced project and pursuant to your comment letter dated 18 August 05, please find the following point by point response in blue for your review.

Executive Summary

The following section includes some site specific highlights from the agency comments found in this letter. This summary is provided for your convenience and reference. The full text of this letter represents the official state response to this project. ***Our office notes that the applicants are responsible for reading and responding to this letter and all comments contained within it in their entirety.***

State Strategies/Project Location

- This project is proposed for an Investment Level 4 area according to the 2004 *Strategies for State Policies and Spending*. This project is also located outside of a designated growth area in relevant municipal and county certified Comprehensive Plans. 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.

❖ Comments acknowledged.

Natural and Cultural Resources

- This project impacts all three layers of the Livable Delaware Green Infrastructure area established under Governor Minner's Executive Order #61.
- As proposed, this project would remove and fragment forest that is part of a large contiguous forest tract and may reduce the habitat value of the entire forest stretch.

- ❖ **Over 2/3 of the proposed development occurs in the non- wooded areas. The remaining 1/3 is positioned in the southern most section of forested area (north of Stockley Road) where the designer will attempt to limit street and infrastructure grading so as to disturb as few trees as possible. The continuity of the remaining forested area should not be compromised.**

element design group
34634 bay crossing blvd. suite a lewes, de 19958
p 302.645.0777 f 302.645.0177 info@elementdg.com



The following are a complete list of comments received by State agencies:

Office of State Planning Coordination – Contact: Ann Marie Townshend 739-3090

This project represents a major land development that will result in 233 residential units in an Investment Level 4 area according to the *2004 Strategies for State Policies and Spending*. This project is also located outside of a designated growth area in relevant municipal and county certified comprehensive plans. 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.

From a fiscal responsibility perspective, development of this site is likewise inappropriate. The cost of providing services to development in rural areas is an inefficient and wasteful use of the State's fiscal resources. The project as proposed is likely to bring more than 580 new residents to an area where the State has no plans to invest in infrastructure upgrades or additional services. These residents will need access to such services and infrastructure as schools, police, and transportation. To provide some examples, the State government funds 100% of road maintenance and drainage improvements for the transportation system, 100% of school transportation and paratransit services, up to 80% of school construction costs, and about 90% of the cost of police protection in the unincorporated portion of Sussex County where this development is proposed. Over the longer term, the unseen negative ramifications of this development will become even more evident as the community matures and the cost of maintaining infrastructure and providing services increases.

Because the development is inconsistent with the *Strategies for State Policies and Spending*, the State is opposed to this proposed subdivision.

❖ **Comments acknowledged.**

Division of Historic and Cultural Affairs (DHCA)– Contact: Alice Guerrant 739-5685

The DHCA does not approve of this development because it is in State Investment Level 4 and will result in a loss of the historic agricultural and silvicultural landscape in this area and probably in the loss of archaeological sites, as well as producing adverse noise and visual effects on nearby late-19th-century and early-20th-century farmsteads and houses.

There is nothing known within the parcel. There are two properties within sight of the open part of this parcel (S-2916 and S-2918). Beers Atlas of 1868 shows the C.S. Layton House and the S.P. Martin House (probably a tenant house) within the parcel possibly. The USGS maps from 1917 and 1918 for this area show no houses remaining in the parcel. There may be archaeological resources relating to these two houses. There are also areas of high and medium potential for prehistoric-period archaeological sites.

element design group
34634 bay crossing blvd. suite a lewes, de 1995B
p 302.645.0777 f 302.645.0177 info@elementdg.com



If this project proceeds, DHCA would appreciate the opportunity of checking the area to see if in fact any sites exist and to learn something about their location and character prior to any ground-disturbing activity.

❖ **Comments acknowledged.**

Department of Transportation – Contact: Bill Brockenbrough 760-2109

Ocean Atlantic Associates, seeks to develop 233 single-family detached houses on an approximately 215.23-acre assemblage of parcels (Tax Parcels 2-34-5.00-30.00 and 2-34-5.00-33.00). The land is located on both sides of Stockley Road (Sussex Road 280), with frontage on Cool Spring Road (Sussex Road 290) and Forest Road (Sussex Road 292) north of Stockley Road. The land is zoned AR-1 and would be developed under the County's cluster development option. A traffic impact study is in progress

This development is proposed for an area designated as Level 4 under the *Strategies for State Policies and Spending*. The *Strategies for State Policies and Spending* have deemed the type of development being proposed inappropriate for this area. As part of our commitment to support the *Strategies*, DelDOT refrains from participating in the cost of any road improvements needed to support this development and is opposed to any road improvements that will substantially increase the transportation system capacity in this area. DelDOT will only support taking the steps necessary to preserve the existing transportation infrastructure and make whatever safety and drainage related improvements are deemed appropriate and necessary. The intent is to preserve the open space, agricultural lands, natural habitats and forestlands that are typically found in Level 4 Areas while avoiding the creation of isolated development areas that cannot be served effectively or efficiently by public transportation, emergency responders, and other public services.

DelDOT strongly supports new development in and around existing towns and municipalities and in areas designated as growth zones in approved Comprehensive Plans. We encourage the use of transfer of development rights where this growth management tool is available.

If this development proposal is approved, notwithstanding inconsistencies with the relevant plans and policies, DelDOT will provide technical review and comments.

❖ **Comments acknowledged.**

The Department of Natural Resources and Environmental Control – Contact: Kevin Coyle 739-9071

This project is proposed for an Investment Level 4 area as defined by the *Strategies for State Policies and Spending* and is also located outside of a designated growth area in the relevant municipal and county certified comprehensive plans. According to the

element design group
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Strategies this project is inappropriate in this location. In Investment Level 4 areas, the State's investments and policies, from DNREC's perspective, should retain the rural landscape and preserve open spaces and farmlands. Open space investments should emphasize the protection of critical natural habitat and wildlife to support a diversity of species, and the protection of present and future water supplies. Open space investments should also provide for recreational activities, while helping to define growth areas. Additional state investments in water and wastewater systems should be limited to existing or imminent public health, safety or environmental risks only, with little provision for additional capacity to accommodate further development. With continued development in Investment Level 4 areas, the State will have a difficult, if not impossible, time attaining water quality (e.g., TMDLs) and air quality (e.g., nonattainment areas for ozone and fine particulates) goals. Present and future investments in green infrastructure, as defined in Governor Minner's Executive Order No. 61, will be threatened. DNREC strongly supports new development in and around existing towns and municipalities and in areas designated as growth zones in certified Comprehensive Plans. We encourage the use of transfer of development rights where this growth management tool is available.

This particular development certainly compromises the integrity of the State Strategies and the preservation goals inherent in many of DNREC's programs. Of particular concern are: the project impacts all three layers of the Green Infrastructure map (cropland, forest, and natural resources), and loss/fragmentation of 45 out of 141 acres of forest. While mitigating measures such as conservation design, central wastewater systems instead of individual on-site septic systems, and other best management practices may help mitigate impacts from this project, not doing the project at all is the best avenue for avoiding negative impacts. As such, this project will receive no financial, technical or other support of any kind from DNREC. Any required permits or other authorizations for this project shall be considered in light of the project's conflict with our State growth strategies.

- ❖ **Comments acknowledged. The designer/developer has attempted to utilize the BMP's as outlined by DNREC – clusters of smaller lots, central wastewater, large wetland buffers and green technology BMP's for stormwater management.**

Green Infrastructure

Portions or all of the lands associated with this proposal are within the Livable Delaware Green Infrastructure area established under Governor Minner's Executive Order #61 that represents a network of ecologically important natural resource lands of special state conservation interest.

Green infrastructure is defined as Delaware's natural life support system of parks and preserves, woodlands and wildlife areas, wetlands and waterways, productive agricultural and forest land, greenways, cultural, historic and recreational sites and other natural areas all with conservation value. Preserving Delaware's Green Infrastructure network will support and enhance biodiversity and functional ecosystems, protect native plant and

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animal species, improve air and water quality, prevent flooding, lessen the disruption to natural landscapes, provide opportunities for profitable farming and forestry enterprises, limit invasive species, and foster ecotourism.

Voluntary stewardship by private landowners is essential to green infrastructure conservation in Delaware, since approximately 80 percent of the State's land base is in private hands. It is in that spirit of stewardship that the Department appeals to the landowner and development team to protect sensitive resources through an appropriate site design.

❖ **Comments acknowledged.**

Soils

According to the soil survey update, over half of the soils on subject parcel are wetland associated (hydric) Hurlock or Mullica soils. These soils have severe limitations for development.

❖ **Comments acknowledged. The designer is working with a environmental and geotechnical consultant to evaluate the soils for use in wastewater treatment, stormwater management and structural support.**

Wetlands

Statewide Wetland Mapping Project (SWMP) maps indicate the presence of palustrine wetlands on this parcel. Development activities should be avoided in the northeastern portion of the property as it holds majority of the wetlands on site.

These wetlands provide water quality benefits, attenuate flooding and provide important habitat for plants and wildlife. Vegetated buffers of no less than 100 feet should be employed from the edge of the wetland complex. The developer should note that both DNREC and Army Corps of Engineers discourage allowing lot lines to contain wetlands to minimize potential cumulative impacts resulting from unauthorized and/or illegal activities and disturbances that can be caused by homeowners.

❖ **An environmental wetlands assessment has been performed. This site is being designed with a minimum 25' buffer zones from all potential jurisdictional wetlands. It is our intent to maximize the buffer zones where feasible.**

Wetland Permitting Information

Impacts to palustrine wetlands are regulated by the Army Corps of Engineers through Section 404 of the Clean Water Act. In addition, individual 404 permits and certain Nationwide Permits from the Army Corps of Engineers also require 401 Water Quality Certification from the DNREC Wetland and Subaqueous Land Section and Coastal Zone Federal Consistency Certification from the DNREC Division of Soil and Water

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Conservation, Delaware Coastal Programs Section. Each of these certifications represents a separate permitting process.

Because there is strong evidence that federally regulated wetlands exist on site, a wetland delineation, in accordance with the methodology established by the Corps of Engineers Wetlands Delineation Manual, (Technical Report Y-87-1) should be conducted. Once complete, this delineation should be verified Corps of Engineers through the Jurisdictional Determination process.

To find out more about permitting requirements, the applicant is encouraged to attend a Joint Permit Process Meeting. These meetings are held monthly and are attended by federal and state resource agencies responsible for wetland permitting. Contact Denise Rawding at (302) 739-4691 to schedule a meeting.

❖ See comment above.

Impervious Cover

Since residential development significantly increases the amount of impervious cover - leading to large volumes of contaminant-laden runoff which ultimately drain into streams or waterways - the applicant is strongly urged to pursue both natural and constructed Best Management Practices (BMPs) to reduce such impacts. Reducing the amount of impervious surfaces by planting more trees and/or the use of pervious paving surfaces (“pavers”) in lieu of asphalt or concrete, are examples of ways to reduce such impacts. Research has consistently shown that once a watershed exceeds a threshold of 10 percent imperviousness, water and habitat quality irreversibly decline.

❖ Comment acknowledged. Supplemental planting and use of pavers for cul-de-sac’s and driveways are emphasized in the design process.

ERES Waters

This project is located adjacent to receiving waters of Inland Bays designated as waters having Exceptional Recreational or Ecological Significance (ERES). ERES waters are recognized as special assets of the State, and shall be protected and/ or restored, to the maximum extent practicable, to their natural condition. Provisions in Section 11.5 of Delaware’s “Surface Water Quality Standards” (as amended August 11, 1999), specify that all designated ERES waters and receiving tributaries develop a “pollution control strategy” to reduce non-point sources of nutrient runoff through implementation of Best Management Practices (BMPs). Best Management Practices as defined in subsection 11.5(e) of this section, expressly authorizes the Department to provide standards for controlling the addition of pollutants and reducing them to the greatest degree practicable, or where attainable, a standard requiring no discharge of pollutants.

❖ Comments acknowledged.

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TMDLs

Total Maximum Daily Loads (TMDLs) for nitrogen and phosphorus have been promulgated through regulation for the Inland Bays Watershed. A TMDL is the maximum level of pollution allowed for a given pollutant below which a “water quality limited water body” can assimilate and still meet water quality standards to the extent necessary to support use goals such as, swimming, fishing, drinking water and shell fish harvesting. Although TMDLs are required by federal law, states develop and implement standards to support these desired use goals. This project is located in the low reduction area requiring a 40 percent reduction in both nitrogen and phosphorus.

❖ **Mr. Lyle Jones will be contacted during the final design phase for information pertaining to the TMDLs.**

Wastewater, Open Space and Compliance with TMDLs through the PCS

Significant nitrogen and phosphorus loading reductions must be realized from all sources, including community onsite wastewater systems. The Department has developed performance standards for on-site wastewater treatment and disposal systems that have been presented as a part of the proposed Pollution Control Strategy (PCS). Upon promulgation of the proposed PCS regulation, new and existing wastewater disposal systems will be required to significantly reduce nitrogen and phosphorus loading in the Inland Bays watershed and meet “performance standards.” The standards would require (where applicable) nitrogen and phosphorus loading not exceed average annual discharge concentration levels of 5 and 2 mg/l for nitrogen and phosphorus, respectively.

The proposed Pollution Control Strategy would also require the completion of a nutrient budget for the proposed project in order to estimate how nutrient loads will change with the development of the parcel. The applicant should be made aware that the inclusion of stormwater management, wastewater treatment, buffers and wetlands as metrics for open space calculations, may understate the actual nutrient runoff as calculated from the nutrient budget.

Currently, we request that in order to verify your project’s compliance with specified TMDL loading rates, a full nutrient budget be calculated. Please contact Lyle Jones of Watershed Section at 739-4590 for the acceptable protocol.

❖ **Mr. Lyle Jones will be contacted during the final design phase for information pertaining to the TMDLs.**

Water Supply

Should an on-site public well be needed, it must be located at least 150 feet from the outermost boundaries of the project. The Division of Water Resources will consider applications for the construction of on-site wells provided the wells can be constructed and located in compliance with all requirements of the Regulations Governing the

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Construction and Use of Wells. A well construction permit must be obtained prior to constructing any wells.

Should dewatering points be needed during any phase of construction, a dewatering well construction permit must be obtained from the Water Supply Section prior to construction of the well points. In addition, a water allocation permit will be needed if the pumping rate will exceed 50,000 gallons per day at any time during operation.

All well permit applications must be prepared and signed by licensed water well contractors, and only licensed well drillers may construct the wells. Please factor in the necessary time for processing the well permit applications into the construction schedule. Dewatering well permit applications typically take approximately four weeks to process, which allows the necessary time for technical review and advertising. Should you have any questions concerning these comments, please contact Rick Rios at 302-739-9944.

❖ **Comments acknowledged.**

Sediment and Erosion Control/Stormwater Management

A detailed sediment and stormwater plan will be required prior to any land disturbing activity taking place on the site. The plan review and approval as well as construction inspection will be coordinated through **Sussex Conservation District**. Contact Jessica Watson at (302) 856-7219 for details regarding submittal requirements and fees.

As of April 11, 2005, stormwater best management practices must also consider water quality as well as quantity in impaired water bodies.

❖ **All stormwater management practices will meet the requirements of the Sussex Conservation District (SCD) and DNREC. A detailed report with narrative will accompany the Stormwater Management and Erosion & Sediment Control Plans submitted to SCD. A meeting will be set up with SCD to discuss outfalls and predevelopment drainage areas.**

Drainage

The Drainage Section requests all existing ditches on the property be checked for function and cleaned if needed prior to the construction of homes. Wetland permits may be required before cleaning ditches.

The Drainage Section requests that all precautions be taken to ensure the project does not hinder any off site drainage upstream of the project or create any off site drainage problems downstream by the release of on site storm water.

The Drainage Section strongly recommends any drainage conveyance between two parcels within a subdivision be dedicated as a drainage easement and such easement be designated as passive open space, not owned by individual landowners. The easement should be of sufficient width to allow for future drainage maintenance as described

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below.

- Along an open ditch or swale, the Drainage Section recommends a maintenance equipment zone of 25 feet measured from the top of bank on the maintenance side, and a 10-foot setback zone measured from top of bank on the nonmaintenance side. These zones should be maintained as buffers to aid in the reduction of sediment and nutrients entering into the drainage conveyance. Grasses, forbs and sedges planted within these zones should be native species, selected for their height, ease of maintenance, erosion control, and nutrient uptake capabilities. Trees and shrubs planted within the maintenance zone should be native species spaced to allow for drainage maintenance at maturity. Trees should not be planted within 5 feet of the top of ditch to avoid future blockages from roots.
- Along a stormwater pipe, the Drainage Section recommends a maintenance equipment zone of 15 feet on each side of the pipe as measured from the pipe centerline. This zone should be maintained as buffers to aid in the reduction of sediment and nutrients entering into the drainage conveyance. Grasses, forbs and sedges planted within these zones should be native species selected for their height, ease of maintenance, erosion control, and nutrient uptake capabilities. Trees and shrubs planted within the maintenance zone should be spaced to allow for drainage maintenance at maturity.

The Drainage Section recommends any drainage/utility easement owned by a individual landowner should not have structures, decks, buildings, sheds, kennels, fences or trees within the drainage easement to allow for future drainage maintenance.

❖ **Comments acknowledged. The designer will contact Brooks Cahall from the Drainage Division to verify if tax ditches exist on the site. If they do exist the appropriate measures will be taken at the direction of the Division.**

Forests

According to 2002 aerial photos there is a large forested area within this parcel that is a component of a contiguous stretch of forest. Large contiguous stretches of forest like this not only provide important water and air quality benefits, but provide important habitat for many wildlife species that depend on interior forest. Clearing portions of the forest within the parcel may reduce the habitat value of the entire forest stretch. Invasive species such as Multiflora rose, Japanese honeysuckle or autumn olive can quickly inhabit edges and displace native species. Once established, invasive species are hard to eradicate. Furthermore, the Department discourages the removal of trees for stormwater and/or wastewater facilities.

Forested areas on-site set aside for conservation purposes should be placed into a permanent conservation easement or other binding protection. These areas should be clearly marked and delineated so that residents understand their importance and so that homeowner activities do not infringe upon these areas.

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- ❖ **Over 2/3 of the proposed development occurs in the non- wooded areas. The remaining 1/3 is positioned in the southern most section of forested area (north of Stockley Road) where the designer will attempt to limit street and infrastructure grading so as to disturb as few trees as possible. The continuity of the remaining forested area should not be compromised.**

Open Space

PLUS materials indicate that 88.15 acres are proposed for open space. In areas set aside for passive open space, the developer is encouraged to consider establishment of additional forested areas or meadow-type grasses. Once established, these ecosystems provide increased water infiltration into groundwater, decreased run-off into surface water, air quality improvements, and require much less maintenance than traditional turf grass, an important consideration if a homeowners association will take over responsibility for maintenance of community open spaces.

Open space containing forest and/or wetlands should be placed into a permanent conservation easement or other permanent protection mechanism. Conservation areas should also be demarked to avoid infringement by homeowners.

- ❖ **Comments acknowledged.**

Rare Species

Delaware Natural Heritage Program staff have not surveyed this parcel, so it is unknown if there are any state-rare or federally listed plants, animals or natural communities at or adjacent to this project site. Their program botanist and zoologist requests the opportunity to survey the forested and wetland resources which could potentially be impacted by the project. Their observations would allow the program to make more informed comments on this project and would allow the applicant the opportunity to reduce potential impacts to rare species. Please contact Bill McAvoy or Kitt Heckscher at (302) 653-2880 to set up a site visit.

- ❖ **The designer/developer will initiate the appropriate visits with Department personnel during the final design phase of the project.**

Potential Hunting Issue

Because the project parcel is part of a larger forest block, legal hunting activities may take place on adjacent properties. Hunting within 100 yards of a dwelling is prohibited and the applicant may want to contact adjacent landowners to determine if this is going to be an issue. In effect, the adjacent landowner will be losing 100 yards of their property for hunting if there is not a buffer between lot lines and the adjacent property line.

- ❖ **Comments acknowledged.**

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Nuisance Waterfowl

Stormwater management ponds that remain in the site plan may attract waterfowl like resident Canada geese and mute swans. High concentrations of waterfowl in ponds create water-quality problems, leave droppings on lawn and paved areas and can become aggressive during the nesting season. Short manicured lawns around ponds provide an attractive habitat for these species. We recommend native plantings of tall grasses, wildflowers, shrubs, and trees at the edge and within a buffer area (50 feet) around the perimeter. Waterfowl do not feel safe when they can not see the surrounding area for possible predators. These plantings should be completed as soon as possible as it is easier to deter geese when there are only a few than it is to remove them once they become plentiful. The Division of Fish and Wildlife does not provide goose control services, and if problems arise, residents or the home-owners association will have to accept the burden of dealing with these species (e.g., permit applications, costs, securing services of certified wildlife professionals). Solutions can be costly and labor intensive; however, with proper landscaping, monitoring, and other techniques, geese problems can be minimized.

❖ **Comments acknowledged.**

Solid Waste

Each Delaware household generates approximately 3,600 pounds of solid waste per year. On average, each new house constructed generates an additional 10,000 pounds of construction waste. Due to Delaware's present rate of growth and the impact that growth will have on the state's existing landfill capacity, the applicant is requested to be aware of the impact this project will have on the State's limited landfill resources and, to the extent possible, take steps to minimize the amount of construction waste associated with this development.

❖ **Comments acknowledged.**

Air Quality

Once complete, vehicle emissions associated with this project are estimated to be 17.9 tons (35,763.1 pounds) per year of VOC (volatile organic compounds), 14.8 tons (29,609.4 pounds) per year of NOx (nitrogen oxides), 10.9 tons (21,846.4 pounds) per year of SO2 (sulfur dioxide), 1.0 ton (1,944.7 pounds) per year of fine particulates and 1,495.8 tons (2,991,535.1 pounds) per year of CO2 (carbon dioxide).

However if this project is in a level 4 area, mobile emission calculations should be increased by 118 pounds for VOC emissions for each mile outside the designated growth areas per household unit; by 154 pounds for NOx; and by 2 pounds for particulate emissions. A typical development of 100 units that is planned 10 miles outside the growth areas will have additional 59 tons per year of VOC emissions, 77 tons per year of NOx emissions and 1 ton per year of particulate emissions versus the

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same development built in a growth area (level 1,2 or 3).

Emissions from area sources associated with this project are estimated to be 7.2 tons (14,424.9 pounds) per year of VOC (volatile organic compounds), 0.8 ton (1,587.2 pounds) per year of NO_x (nitrogen oxides), 0.7 ton (1,317.1 pounds) per year of SO₂ (sulfur dioxide), 0.8 ton (1,699.7 pounds) per year of fine particulates and 29.2 tons (58,475.2 pounds) per year of CO₂ (carbon dioxide).

Emissions from electrical power generation associated with this project are estimated to be 2.9 tons (5,717.0 pounds) per year of NO_x (nitrogen oxides), 9.9 tons (19,885.2 pounds) per year of SO₂ (sulfur dioxide) and 1,466.5 tons (2,933,059.9 pounds) per year of CO₂ (carbon dioxide).

	VOC	NO _x	SO ₂	PM2.5	CO ₂
Mobile	17.9	14.8	10.9	1.0	1495.8
Residential	7.2	0.8	0.7	0.8	29.2
Electrical Power		2.9	9.9		1466.5
TOTAL	25.1	18.5	21.5	1.8	
2991.5					

For this project the electrical usage via electric power plant generation alone totaled to produce an additional 2.9 tons of nitrogen oxides per year and 9.9 tons of sulfur dioxide per year.

A significant method to mitigate this impact would be to require the builder to construct Energy Star qualified homes. Every percentage of increased energy efficiency translates into a percent reduction in pollution. Quoting from their webpage, <http://www.energystar.gov/>:

“ENERGY STAR qualified homes are independently verified to be at least 30% more energy efficient than homes built to the 1993 national Model Energy Code or 15% more efficient than state energy code, whichever is more rigorous. These savings are based on heating, cooling, and hot water energy use and are typically achieved through a combination of:

building envelope upgrades,
high performance windows,
controlled air infiltration,
upgraded heating and air conditioning systems,
tight duct systems and
upgraded water-heating equipment.”

The DNREC energy office is in the process of training builders in making their structures more energy efficient. The Energy Star Program is excellent way to save on energy costs and reduce air pollution. We highly recommend this project development and other residential proposals increase the energy efficiency of their homes.

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It is also recommended that the home builders offer geothermal and photo voltaic energy options. Applicable vehicles should use retrofitted diesel engines during construction. The development should provide tie-ins to the nearest bike paths and links to mass transport system, and fund a lawnmower exchange program for their new occupants.

❖ **Comments acknowledged.**

State Fire Marshal's Office – Contact: Duane Fox 302-856-5298

These comments are intended for informational use only and do not constitute any type of approval from the Delaware State Fire Marshal's Office. At the time of formal submittal, the applicant shall provide; completed application, fee, and three sets of plans depicting the following in accordance with the Delaware State Fire Prevention Regulation (DSFPR):

a. Fire Protection Water Requirements:

- Water distribution system capable of delivering at least 1000 gpm for 1-hour duration, at 20-psi residual pressure is required. Fire hydrants with 800 feet spacing on centers. (Assembly)
- Where a water distribution system is proposed for single family dwellings it shall be capable of delivering at least 500 gpm for 1-hour duration, at 20-psi residual pressure. Fire hydrants with 1000 feet spacing on centers are required. (One & Two- Family Dwelling)
- Where a water distribution system is proposed for the site, the infrastructure for fire protection water shall be provided, including the size of water mains for fire hydrants and sprinkler systems.

b. Fire Protection Features:

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

c. Accessibility

- All premises which the fire department may be called upon to protect in case of fire, and which are not readily accessible from public roads, shall be provided with suitable gates and access roads, and fire lanes so that all buildings on the premises are accessible to fire apparatus. This means that the access road to the subdivision from Stockley Road and Cool Spring 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.

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- 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.delawarestatefiremarshal.com, technical services link, plan review, applications or brochures.

❖ **Comments acknowledged.**

Department of Agriculture - Contact: Milton Melendez 698-4500

The proposed development is in an area designated as Level 4 under the *Strategies for State Policies and Spending*. The *Strategies* and the Sussex County Comprehensive Plan do not support this type of isolated development in this area. The intent of these plans is to preserve the agricultural lands, forestlands, recreational uses, and open spaces that are

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preferred uses in Level 4 areas. The Department of Agriculture opposes the proposed development which conflicts with the preferred land uses, making it more difficult for agriculture and forestry to succeed, and increases the cost to the public for services and facilities. The Department of Agriculture opposes this project because it negatively impacts those land uses that are the backbone of Delaware's resource industries - agriculture, forestry, horticulture - and the related industries they support.

The Department of Agriculture and the Department of Natural Resource and Environmental Control, along with other partners developed the State's "Green Infrastructure" Investment Strategy. This strategy identifies high-value cropland, forestland and natural resource lands for preservation and conservation. This proposed development site is designated as high value cropland, forestland and natural resource lands on the Green Infrastructure Investment Strategy. In other words, in addition to their location in a rural area, due to their soil quality and other significant factors, these lands have been further designated by the State for conservation and preservation.

Furthermore, often new residents of developments like this one, with little understanding or appreciation for modern agriculture and forestry, find their own lifestyles in direct conflict with the demands of these industries. Often these conflicts result in compromised health and safety; one example being decreased highway safety with farm equipment and cars competing on rural roads. The crucial economic, environmental and open space benefits of agriculture and forestry are compromised by such development. We oppose the creation of isolated development areas that are inefficient in terms of the full range of public facilities and services funded with public dollars. Public investments in areas such as this are best directed to agricultural and forestry preservation.

The Delaware Department of Agriculture supports growth which expands and builds on existing urban areas and growth zones in approved State, county and local plans. Where additional land preservation can occur through the use of transfer of development rights, and other land use measures, we will support these efforts and work with developers to implement these measures. If this project is approved we will work with the developers to minimize impacts to the agricultural and forestry industries.

❖ **Comments acknowledged.**

Public Service Commission - Contact: Andrea Maucher 739-4247

Any expansion of natural gas or installation of a closed propane system must fall within Pipeline Safety guidelines. Contact: Malak Michael at (302) 739-4247.

Application notes "Tidewater – CPCN request is in process." No Application for the subject parcels has been filed by Tidewater; however, Artesian has a CPCN Application pending before the Commission that includes parcel no, 234-5.00-30.00.

❖ **The developer is coordinating with the two utilities listed above to determine the best source for wastewater treatment and water supply.**

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Delaware State Housing Authority – Contact Karen Horton 739-4263

This proposal is to develop 233 units on 215 acres located on both sides of Stockley Road, between Forrest Road and Cool Spring Road, east of Andersons Corner.

According to the *State Strategies Map*, the proposal is located in an Investment Level 4.

As a general planning practice, DSHA encourages residential development in areas where residents will have proximity to services, markets, and employment opportunities such as Investment Level 1 and 2 areas outlined in the State Strategies Map. The proposal is located in an area targeted for agricultural and natural resource protection, and therefore inconsistent with where the State would like to see new residential development.

❖ **Comments acknowledged.**

Sussex County – Contact: Richard Kautz 855-7878

The application should note that within the site there is a 400 foot deep zone of General Residential fronting along Forest Road (Road 292). Concerning the site design, this is one of the first projects to locate all lots with direct access to open space.

This fiscal year Sussex County will be considering implementation of a Source Water Protection Program required by the State. Depending on the requirements adopted by the County Council this project might be affected. Any well location should insure that the wellhead protection area is entirely on site.

Because this project is an AR-1 Cluster subdivision, the developer must include in the application a plan for the management of all open space. Also, the developer must document for the Planning and Zoning Commission how the proposed development: provides for a total environment and design which are superior to that which would be allowed under the standard lot option; preserves the natural environment and historic or archeological resources; and, will not have an adverse effect on any of the items included under Ordinance Number 1152 (County Code 99-9C). These issues can be addressed by including in the application an explanation of how the developer plans to mitigate the issues raised by the State agencies.

The Sussex County Engineer Comments:

The project proposes to develop using a private central community wastewater system. We recommend that the wastewater system be operated under a long-term contract with a capable wastewater utility that meets TMDL limits for Delaware's Inland Bays. In addition, we recommend they have a wastewater utility provider prior to approving the project. The proposed project is located outside of the Inland Bays Planning area where Sussex County expects to provide sewer service. Sussex County requires design and construction of the collection and transmission system to meet Sussex County sewer standards and specifications. A review and approval of the treatment and disposal system by the Sussex County Engineering Department is also required and plan review fees may apply. Disposal fields should not be counted as open space. Wastewater disposal fields should be clearly identified on recorded plots and separated from lot area.

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If Sussex County ever provides sewer service, it is required that the treatment system be abandoned and a direct connection made to the County system at the developers and/or homeowners association expense.

Submission and approval of a sewer Concept Plan is not required.

For question regarding these comments, contact Rob Davis, Sussex County Engineering Department at (302) 855-7820.

❖ **Comments acknowledged.**

Upon your review of the above, should you have any questions or require additional information, please do not hesitate to contact this office at 302.645.0777. Thank you.

Sincerely,
Element Design Group

Douglas M. Warner, PE

Cc: Sussex County Council
Mark Chura, OAA (w/enc.), File

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p 302.645.0777 f 302.645.0177 info@elementdg.com



DELAWARE HEALTH AND SOCIAL SERVICES
Division of Public Health

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

October 1, 2019

Ms. Christin Headley
Sussex County Planning & Zoning Commission
PO Box 417
Georgetown, DE 19947

Re: Sussex County Technical Advisory Committee

Dear Ms. Headley:

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

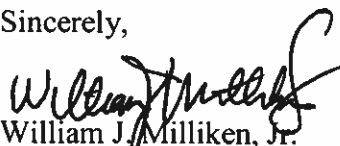
1. Application: **2019-24-Cool Spring Meadows**

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

Planning & Zoning Commission
2019-24

STRATUS ESTATES - CLUSTER SUBDIVISION

David C. Hutt, Esq.
Morris James LLP

Planning & Zoning Commission
February 18, 2021

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 - a. Location Map (close up and greater area)
 - b. 2020 State Strategies Map
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 - d. Sussex County Zoning Map
 - e. Sussex County Surrounding Communities Map
 - f. 1992 Aerial Map
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 - l. Wellhead Protection Area
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STRATUS ESTATES (f/k/a Cool Spring Meadows) Project Information

Owner: Fusco Properties, LP
Developer: Fusco Properties, LP
Engineer: The Kercher Group, Inc.

Project Description

Physical Location: Located at the Northwest corner of SCR 290 (Cool Spring Road) and SCR 280 (Stockley Road)
Tax Parcel #: 234-5.00-30.00
Acreage: 187.93 Acres
Current Zoning: AR-1
Proposed: AR-1 (Cluster Development)
Current Land Use: Agriculture
Proposed Land Use: Residential Community

Proposed Units

Single Family Lots: 226 Lots

AR-1 Proposed Zoning Requirements

Front Yard Setback: 25 FT
Corner: 15 FT
Side Yard Setback: 10 FT
Rear Yard Setback: 10 FT
Minimum Lot Area: 7,500 SQFT.
Minimum Lot Width: 60 FT
Minimum Lot Depth: 100 FT
Maximum Building Height: 42 FT

Proposed Land Use Areas

Single Family Lots: 40.89 Acres (21.76%)
Right of Way: 7.77 Acres (4.13%)
Wetlands: 21.93 Acres (15.75%)
Other SWM/Open Space: 117.34 Acres (58.36%)

Utility Provider

Water Artesian
Sewer Artesian

TAB “1”

EXECUTIVE SUMMARY

1. Land Use & Zoning

- A. Stratus Estates (f/k/a Cool Spring Meadows), a Cluster Subdivision.
- B. The property is located on the Northeast corner of Stockley Road and Cool Spring Road.
- C. The Owner of the property is Fusco Properties, LP.
- D. The property is currently zoned Agricultural Residential (AR-1).
- E. The proposed application is a request for a Cluster Subdivision.
- F. The property is located in the Level 4 Area of the 2015 & 2020 State Strategies Map.
- G. The property is located within the Low Density Area on the 2019 Comprehensive Plan.

2. Land Utilization

- A. The total acreage of the property is 187.93 acres of land.
- B. The proposed community is designed for 226 single-family lots on 40.89 acres with 117.34 acres of stormwater management/open space, 7.77 acres of right-of-way and 21.93 acres of wetlands.
- C. The applicant requests a Cluster Subdivision.
- D. The number of units proposed is 226 single family lots with a site density of 1.20 units/acre.
- E. The access for the proposed community off Stockley Road.
- F. The property has 21.93 acres of wetlands located on site. The wetlands will remain undisturbed and be protected by a 50' buffer.
- G. As proposed, the community will have active and passive open space.
 - 1. North Side:
 - a. Pool;
 - b. Clubhouse;
 - c. Tot lot;

- d. Sidewalks (both sides of the streets);
- e. Walking trail in the woods (¼ mile to ½ mile); and
- f. Bus Stop.

2. South Side:

- a. Sidewalks (both sides of the streets); and
- b. Tot lot.

H. The project was presented to PLUS on July 24, 2019 and comments were received from the Office of State Planning on August 21, 2019. A response was filed to those comments on December 2, 2019.

3. Environmental

- A. The property contains 21.93 acres of wetlands.
- B. The property contains 126.37 acres of existing woods (8.24 acres on the south and 118.13 acres on the north). As proposed on the preliminary plan, none of the woods on the south will be disturbed and 14.33 acres on the north side of Stockley Road will be removed.
- C. The property is not located within a Wellhead Protection Area.
- D. The property is located in a Fair Groundwater Recharge Area.

4. Traffic

- A. The developer will make the improvements outlined in the PLUS report.
- B. The developer will work closely with DelDOT regarding the entrance on Stockley Road and will meet DelDOT road design standards for the entrance and DelDOT required improvements.

5. Civil Engineering

- A. The internal roads will be privately maintained and will meet Sussex County Design Standards.
- B. Drinking water and fire protection water will be provided by Artesian Water Company, Inc.
- C. Sanitary Sewer service will be provided by Artesian Water Company, Inc.

- D. The stormwater management system will meet all State, County and Conservation District requirements through a combination of Best Management Practice (BMP) and Best Available Technologies (BAT). The project consist of some infiltration practices as well as traditional wet detention ponds.
- E. The project is within the Cape Henlopen School District.
- F. Fire Protection will be provided by the Milton Fire Company.
- G. Electricity will be provided by Delaware Electric Co-operative.

6. County Code Compliance

- A. Preliminary Land Use Service Response Letter (December 2, 2019).
- B. Sussex County Code, Chapter 115, Article IV (Agricultural Residential Districts)
 - 1. Sussex County Code, Chapter 99-9C Summary Response.
 - 2. Sussex County Code, Chapter 115-25, E. Design Requirements for Cluster Development.
 - 3. Sussex County Code, Chapter 115-25, F. (3) Planning and Zoning Requirements.

TAB “2”

File #: _____
Pre-App Date: _____

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: ☒

Coastal Area: _____

Location of Subdivision:

NW Corner of SCR 290 (Cool Spring Road) and SCR 280 (Stockley Road)

Proposed Name of Subdivision:

Stratus Estates (fna Cool Spring Meadows)

Tax Map #: 235-5.00-30.00

Total Acreage: 187.93

Zoning: AR-1

Density: 1.21

Minimum Lot Size: 7,500

Number of Lots: 226

Open Space Acres: 139.27

Water Provider: Artesian

Sewer Provider: Artesian

Applicant Information

Applicant Name: Fusco Properties, LP

Applicant Address: PO Box 655

City: New Castle

State: DE

Zip Code: 19720

Phone #: (302) 328-6251

E-mail: frankie@fuscomanagement.com

Owner Information

Owner Name: Same as applicant

Owner Address: _____

City: _____

State: _____

Zip Code: _____

Phone #: _____

E-mail: _____

Agent/Attorney/Engineer Information

Agent/Attorney/Engineer Name: The Kercher Group, Inc.

Agent/Attorney/Engineer Address: 37385 Rehoboth Ave. Ext, Unit 11

City: Rehoboth Beach

State: DE

Zip Code: 19971

Phone #: (302) 854-9063

E-mail: kts@kerchergroup.com



Check List for Sussex County Major Subdivision Applications

The following shall be submitted with the application

☒ **Completed Application**

☒ **Provide ten (10) copies of the Site Plan or Survey of the property and a PDF (via e-mail)**

- Plan shall show the existing conditions, setbacks, roads, floodplain, wetlands, topography, proposed lots, landscape plan, etc. **Per Subdivision Code 99-22, 99-23 & 99-24**
- Provide compliance with Section 99-9.
- Deed or Legal description, copy of proposed deed restrictions, soil feasibility study

☒ **Provide Fee \$500.00**

☐ **Optional - Additional information for the Commission to consider** (ex. photos, exhibit books, etc.) If provided submit seven (7) copies and they shall be submitted a minimum of ten (10) days prior to the Planning Commission meeting.

☒ **Please be aware that Public Notice will be sent to property owners within 200 feet of the subject site and County staff will come out to the subject site, take photos and place a sign on the site stating the date and time of the Public Hearings for the application.**

☐ **PLUS Response Letter** (if required) ☐ **Environmental Assessment & Public Facility Evaluation Report** (if within Coastal Area)

☐ **51% of property owners consent if applicable**

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

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

Signature of Applicant/Agent/Attorney



*David C. Hunt, Esquire
Morgan James LLP*

Signature of Owner

Date: 1/28/2021

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: _____

File #: 2019-24
201910446
201910448

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

RECEIVED

SEP 11 2019

SUSSEX COUNTY
PLANNING & ZONING

Type of Application: (please check applicable)

Standard: ☐

Cluster: ☒

ESDDOZ: ☐

Location of Subdivision:

NW Corner of SCR 290 (Cool Spring Road) and SCR 280 (Stockley Road)

Proposed Name of Subdivision:

Cool Spring Meadows

Tax Map #: 234-5.00-30.0 & 33.0

Total Acreage: 187.93

Zoning: AR

Density: 1.2

Minimum Lot Size: 7,500

Number of Lots: 226

Open Space Acres: 106.81

Water Provider: Artesian

Sewer Provider: Artesian

Applicant Information

Applicant Name: Fusco Properties, LP

Applicant Address: P.O. Box 665

City: New Castle

State: DE

Zip Code: 19720

Phone #: 302.328.6251

E-mail: frankie@fuscomanagement.com

Owner Information

Owner Name: Fusco Properties, LP

Owner Address: P.O. Box 665

City: New Castle

State: DE

Zip Code: 19720

Phone #: 302.328.6251

E-mail: frankie@fuscomanagement.com

Agent/Attorney/Engineer Information

Agent/Attorney/Engineer Name: The Kercher Group, Inc.

Agent/Attorney/Engineer Address: 37385 Rehoboth Ave., Unit #11

City: Rehoboth Beach

State: DE

Zip Code: 19971

Phone #: 302.854.9063

E-mail: jom@kerchergroup.com



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: 08/05/19

Signature of Owner



Date: 08/05/19

For office use only:

Date Submitted: 9/11/19

Staff accepting application: CEA

Location of property: _____

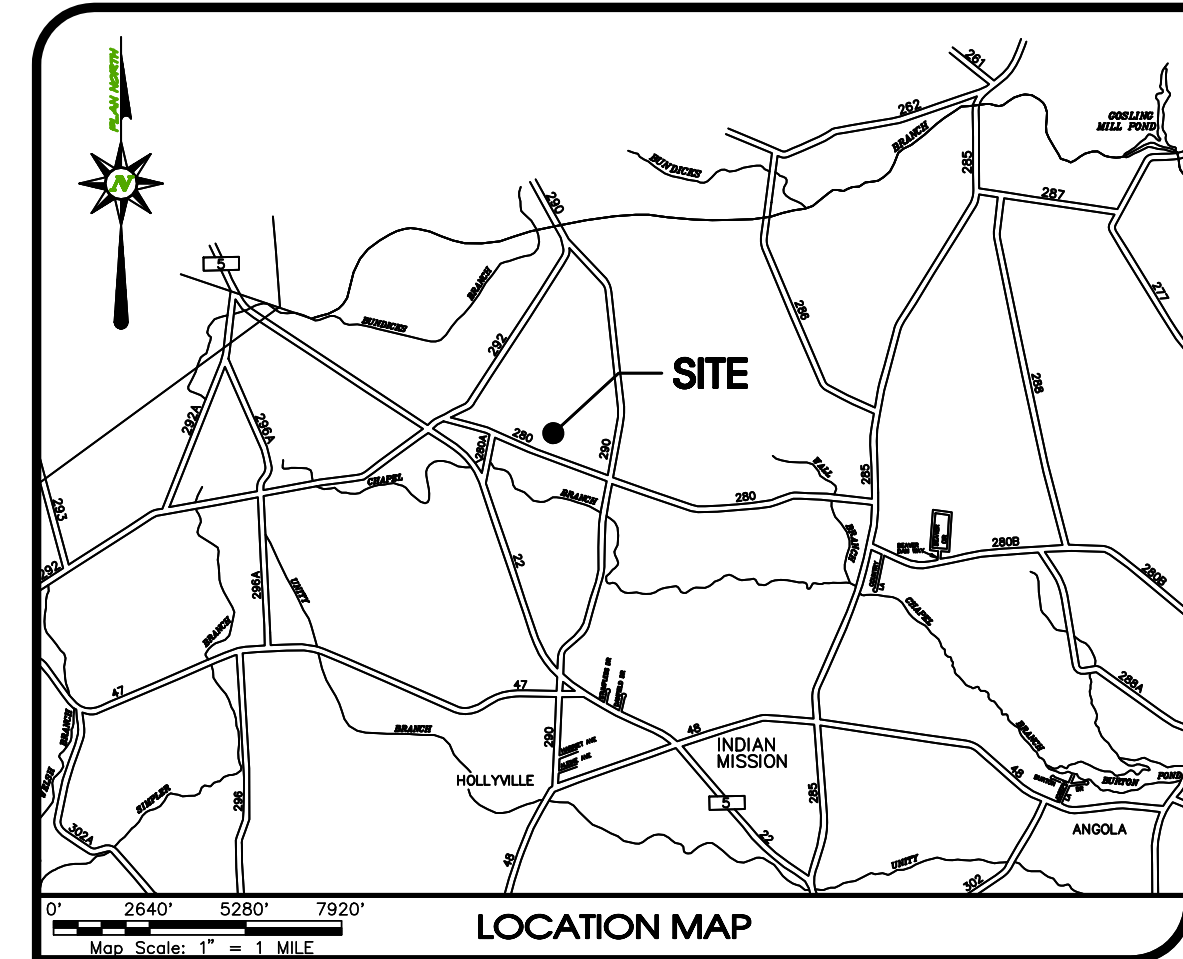
Fee: \$500.00 Check #: 55-136

Application & Case #: 2019 10441 & 2019 10448

Date of PC Hearing: _____

Recommendation of PC Commission: _____

TAB “3”



PLAN LEGEND

- SUPPLEMENTAL CONTOUR (1' INTERVAL)
- INDEX CONTOUR (5' INTERVAL)
- EXISTING PROPERTY BOUNDARY
- EXISTING ADJACENT PROPERTY BOUNDARY
- EXISTING RIGHT-OF-WAY
- EXISTING WETLANDS LIMITS
- EXISTING TREE LINE
- EXISTING EDGE OF PAVEMENT
- EXISTING CENTERLINE
- EXISTING PAINT STRIPING
- EXISTING SOIL SERIES LIMITS
- EXISTING PERMANENT EASEMENT
- PROPOSED LOTLINE
- PROPOSED RIGHT-OF-WAY
- PROPOSED CENTERLINE
- PROPOSED BUILDING RESTRICTION LINE
- PROPOSED UTILITY EASEMENT
- PROPOSED WETLAND BUFFER
- PROPOSED CONCRETE SIDEWALK
- PROPOSED P.C.C. CURB
- PROPOSED STREET LIGHT

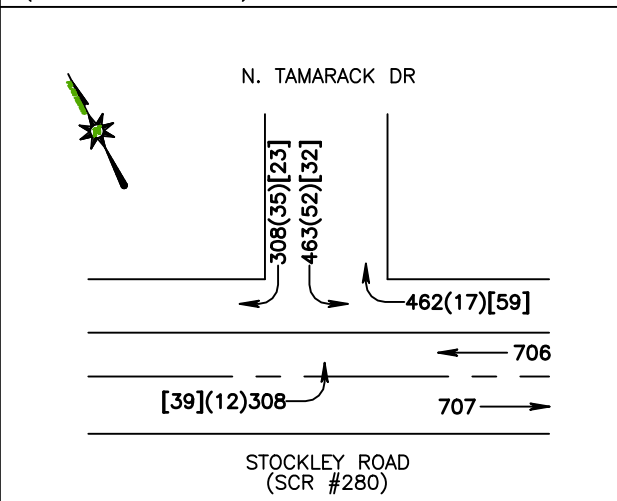
SITE DATA and ZONING SCHEDULE

TAX PARCEL NO.:	234-5.00-30.00	
PROPERTY ADDRESS:	STOCKLEY ROAD LEWES, DE 19958	
EXISTING SITE USE:	AGRICULTURE/WOODLANDS	
PROPOSED SITE USE:	226-LOT, SINGLE-FAMILY DWELLING CLUSTER SUBDIVISION	
ZONING DISTRICT:	AR-1 (AGRICULTURE/RESIDENTIAL)	
GROSS PROPERTY AREA:	187.93 Ac.	
DEDICATED R.O.W. AREA:	0.00 Ac.	
NET PROPERTY AREA:	187.93 Ac.	
INVESTMENT LEVEL AREA:	4	
PROPOSED DENSITY:	1.21 Units per Ac.	
EXISTING FORESTED AREA:	126.37 Ac.	
PROPOSED FORESTED AREA REMOVAL:	14.33 Ac.	
PROPOSED FORESTED AREA TO REMAIN:	112.04 Ac.	
ORDINANCE ITEM	REQUIREMENT:	PROVIDED:
MINIMUM LOT AREA	7,500 Sq. Ft.	7,625 Sq. Ft. (MIN.)
MINIMUM LOT WIDTH	60 Ft.	60 Ft.
MINIMUM LOT DEPTH	100 Ft.	125 Ft.
MINIMUM SETBACKS:		
FRONT	25 Ft.	25 Ft.
SIDE	10 Ft.	10 Ft.
REAR	10 Ft.	10 Ft.
CORNER	15 Ft.	15 Ft.
MAXIMUM BUILDING HEIGHT	42 Ft.	3 Stories (42 Ft.)
SEWER SERVICE	ARTESIAN	
WATER SERVICE	ARTESIAN	
PROPERTY OWNER		
FUSCO PROPERTIES P.O. BOX 665 NEW CASTLE, DE 19720 302.328.6251 302.328.6332		

PROPERTY AREA	
LOT AREA:	40.89 Ac. (21.76%)
RIGHT-OF-WAY AREA:	7.77 Ac. (4.13%)
OPEN SPACE AREA (INCLUDING WETLANDS, BUFFER):	139.27 Ac. (74.11%)
TOTAL AREA:	187.93 Ac.

OPEN SPACE BREAKDOWN	
PR. 30' LANDSCAPE/FORESTED BUFFER:	6.37 Ac. (4.57%)
PR. 50' WETLAND BUFFER:	10.40 Ac. (7.47%)
PR. 15' PERMANENT EASEMENT:	1.52 Ac. (1.09%)
PR. ACCESS EASEMENT:	0.06 Ac. (0.04%)
PR. PASSIVE OPEN SPACE (INCLUDING STORMWATER MANAGEMENT):	98.99 Ac. (71.08%)
EXISTING NON-TIDAL WETLANDS:	21.93 Ac. (15.73%)
TOTAL OPEN SPACE:	139.27 Ac.

TRIP GENERATION - STOCKLEY ROAD (SCR #280) - NORTH TAMARACK DRIVE (FULL MOVEMENT)



TRAFFIC GENERATION DIAGRAM

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

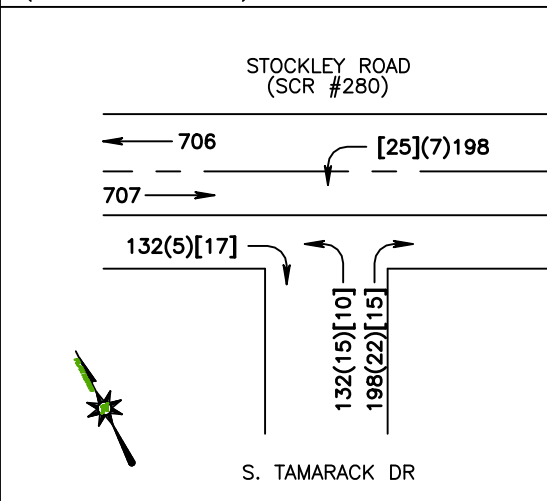
ROAD TRAFFIC DATA:

FUNCTIONAL CLASSIFICATION - S280 (STOCKLEY ROAD) - LOCAL
POSTED SPEED LIMIT - 50 MPH
ADT = 1,413 TRIPS (FROM 2018 DELDOT TRAFFIC SUMMARY)
10-YR PROJECTED ADT = 1,639 TRIPS
10-YR PROJECTED ADT + SITE ADT = 3,180 TRIPS
TRAFFIC PATTERN GROUP - 7 (FROM 2018 DELDOT TRAFFIC SUMMARY)
PEAK HOUR = 14% x 3,180 = 446 TRIPS

SITE TRIPS GENERATED:

SOURCE: ITE TRIP GENERATION MANUAL 10th EDITION
159 SINGLE FAMILY DETACHED UNITS (210)
ONE ENTRANCE - FULL MOVEMENT (DESIGN VEHICLE: SU-30)
WEEKDAY ADT = 1,541 TRIPS (770 IN/771 OUT)
AM PEAK 7:00-9:00 = 118 TRIPS (29 IN/71 OUT)
PM PEAK 4:00-6:00 = 155 TRIPS (98 IN/57 OUT)
SATURDAY PEAK = 146 TRIPS (79 IN/67 OUT)
SATURDAY ADT = 1,478 (739 IN/739 OUT)
TOTAL ADT FOR SUBDIVISION (WEEKDAY) = 1,541 TRIPS
DIRECTIONAL DISTRIBUTION:
40% TO AND FROM THE WEST: 616 TRIPS (47 A.M. PEAK) [62 P.M. PEAK]
60% TO AND FROM THE EAST: 925 TRIPS (69 A.M. PEAK) [61 P.M. PEAK]
5% TRUCKS & BUSES x 446 = 23

TRIP GENERATION - STOCKLEY ROAD (SCR #280) - SOUTH TAMARACK DRIVE (FULL MOVEMENT)



TRAFFIC GENERATION DIAGRAM

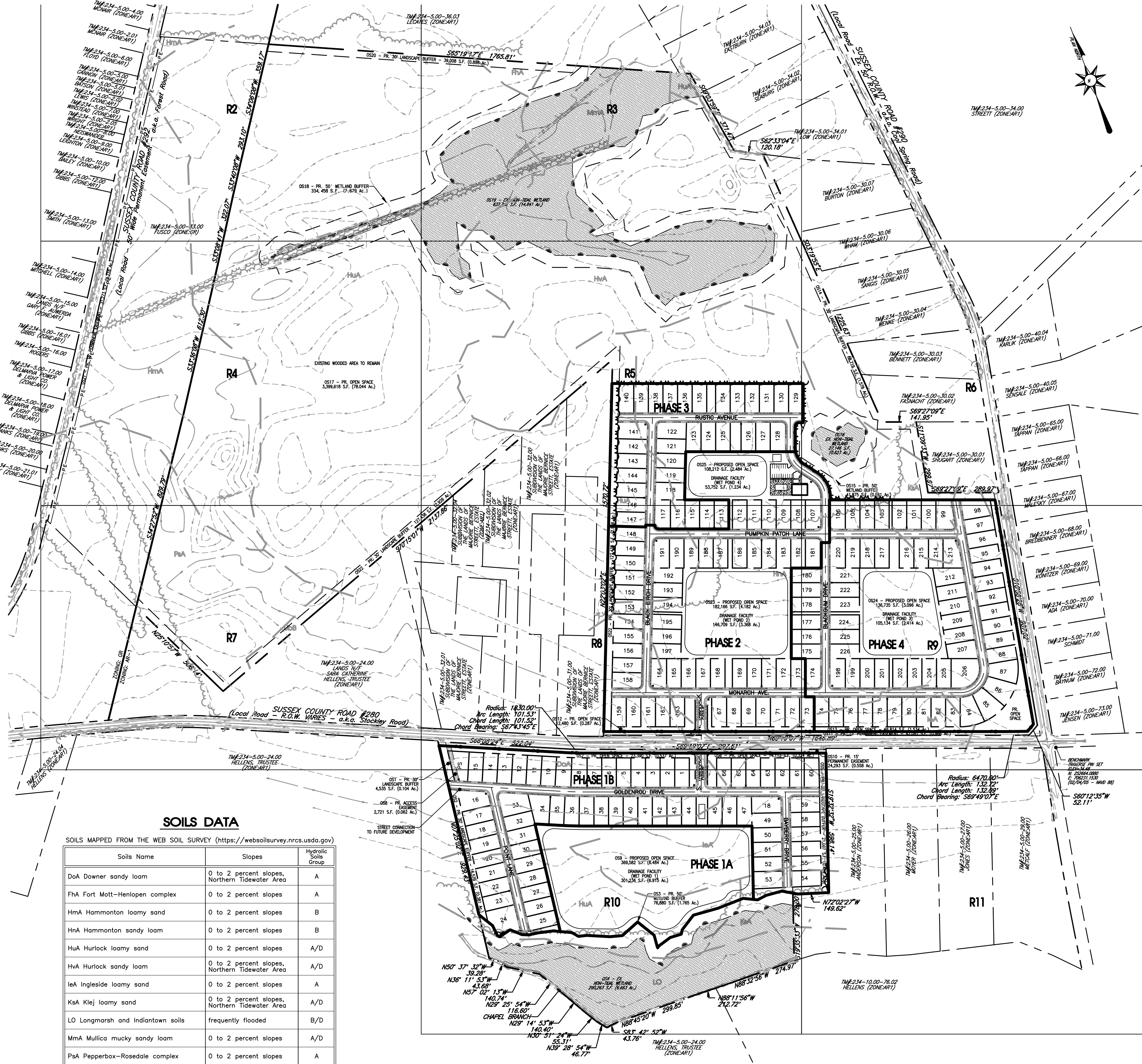
TRIPS PER DAY (VEHICLES IN A.M.) [P.M. PEAK HOUR]

ROAD TRAFFIC DATA:

FUNCTIONAL CLASSIFICATION - S280 (STOCKLEY ROAD) - LOCAL
POSTED SPEED LIMIT - 50 MPH
ADT = 1,413 TRIPS (FROM 2018 DELDOT TRAFFIC SUMMARY)
10-YR PROJECTED ADT = 1,639 TRIPS
10-YR PROJECTED ADT + SITE ADT = 2,299 TRIPS
TRAFFIC PATTERN GROUP - 7 (FROM 2018 DELDOT TRAFFIC SUMMARY)
PEAK HOUR = 14% x 2,299 = 322 TRIPS

SITE TRIPS GENERATED:

SOURCE: ITE TRIP GENERATION MANUAL 10th EDITION
67 SINGLE FAMILY DETACHED UNITS (210)
ONE ENTRANCE - FULL MOVEMENT (DESIGN VEHICLE: SU-30)
WEEKDAY ADT = 660 TRIPS (330 IN/330 OUT)
AM PEAK 7:00-9:00 = 49 TRIPS (12 IN/37 OUT)
PM PEAK 4:00-6:00 = 67 TRIPS (42 IN/25 OUT)
SATURDAY PEAK = 62 TRIPS (33 IN/29 OUT)
SATURDAY ADT = 634 (317 IN/317 OUT)
TOTAL ADT FOR SUBDIVISION (WEEKDAY) = 660 TRIPS
DIRECTIONAL DISTRIBUTION:
40% TO AND FROM THE WEST: 264 TRIPS (20 A.M. PEAK) [27 P.M. PEAK]
60% TO AND FROM THE EAST: 396 TRIPS (29 A.M. PEAK) [40 P.M. PEAK]
5% TRUCKS & BUSES x 322 = 17



SOILS DATA

Soils Name	Slopes	Hydrologic Soil Group
DoA Downer sandy loam	0 to 2 percent slopes, Northern Tidewater Area	A
FhA Fort Mott-Henlopen complex	0 to 2 percent slopes	A
HmA Hammon ton loamy sand	0 to 2 percent slopes	B
HnA Hammon ton sandy loam	0 to 2 percent slopes	B
HuA Hurlock loamy sand	0 to 2 percent slopes	A/D
HvA Hurlock sandy loam	0 to 2 percent slopes, Northern Tidewater Area	A/D
IeA Ingleside loamy sand	0 to 2 percent slopes	A
KsA Kie loamy sand	0 to 2 percent slopes, Northern Tidewater Area	A/D
LO Longmarsh and Indiantown soils	frequently flooded	B/D
MmA Mullica mucky sandy loam	0 to 2 percent slopes	A/D
PaA Pepperbox-Rosedale complex	0 to 2 percent slopes	A

GENERAL NOTES

- THE PROJECT SITE IS KNOWN AS STRATUS ESTATES (FNA COOL SPRING MEADOWS), (T.P. 2-34-5, PARCELS 30), AND IS LOCATED AT THE NORTHWEST CORNER OF THE SUSSEX COUNTY ROAD 280 AND NEAR HARBORVIEW CORSECTIOIN NEAR HARBORVIEW, DELAWARE.
- THE BOUNDARY AND EXISTING CONDITIONS SHOWN WERE OBTAINED FROM A SURVEY TITLED "BOUNDARY AND IMPROVEMENT LOCATION SURVEY PLAN FOR THE PROPERTY KNOWN AS 'LANDS OF GLATFELTER PULP WOOD COMPANY', TAX MAP PARCELS 2-34-5.00-30.00, PREPARED BY MERESTONE CONSULTANTS, INC., DATED MAY 19, 2005, DECEMBER 9, 2004 AND FROM A SURVEY TITLED "BOUNDARY AND TOPOGRAPHY PLAN FOR THE PROPERTY KNOWN AS 'LANDS OF FRANCIS HENRY PRETTYMAN', TAX MAP PARCEL 2-35-5.00-30.00, PREPARED BY MCCRONE, INC., DATED FEBRUARY 4, 2005.
- THE WETLAND DELINEATIONS SHOWN WERE OBTAINED FROM THE FOLLOWING SURVEYS:
 - "WETLAND DELINEATION PLAN" FOR THE PROPERTY KNOWN AS "LANDS OF GLATFELTER PULP WOOD COMPANY", TAX MAP PARCELS 2-34-5.00-30.00, PREPARED BY MERESTONE CONSULTANTS, INC., DATED MAY 19, 2005.
 - "WETLAND DELINEATION PLAN" FOR THE PROPERTY KNOWN AS "LANDS OF FRANCIS HENRY PRETTYMAN", TAX MAP PARCEL 2-34-5.00-30.00, PREPARED BY MERESTONE CONSULTANTS, INC., DATED MAY 19, 2005.
 - "BOUNDARY AND TOPOGRAPHY PLAN" FOR THE PROPERTY KNOWN AS "LANDS OF FRANCIS HENRY PRETTYMAN", TAX MAP PARCEL 2-34-5.00-30.00, PREPARED BY MCCRONE, INC., DATED FEBRUARY 4, 2005.
- INFORMATION SHOWN ON THESE SHEETS IS ONLY ACCURATE TO THE EXTENT OF THE SURVEYS PREPARED BY THE PROPERTY OWNERS WITHIN THIS SUBDIVISION OR BOTH. THE STATE ASSUMES NO RESPONSIBILITY FOR THE FUTURE MAINTENANCE OF THESE STREETS.
- A BOUNDARY DISCREPANCY EXISTS BETWEEN THE VARIOUS SURVEYS USED TO CREATE THESE PLANS, THE KERCHER GROUP, INC. ASSUMES NO LIABILITY FOR THE ACCURACY OF THE OVERALL BOUNDARY, AS PREPARED BY THE ABOVE-MENTIONED ORGANIZATIONS.
- MAINTENANCE OF THE STREETS WITHIN THIS SUBDIVISION WILL BE THE RESPONSIBILITY OF THE DEVELOPER. THE PROPERTY OWNERS WITHIN THIS SUBDIVISION OR BOTH, THE STATE ASSUMES NO RESPONSIBILITY FOR THE FUTURE MAINTENANCE OF THESE STREETS.
- ALL PROPOSED STORMWATER MANAGEMENT FACILITIES, BUFFERS AND OPEN SPACE ARE TO BE MAINTAINED BY THE DEVELOPER UNTIL SUCH TIME AS A HOMEOWNERS ASSOCIATION CAN PROVIDE FOR SAID MAINTENANCE.
- ALL LOTS SHALL HAVE ACCESS FROM THE INTERNAL SUBDIVISION STREETS AND DIRECT ACCESS TO SCR 280 ROAD. SCR 280 WILL NOT BE PERMITTED, EACH LOT WILL BE PERMITTED TO HAVE ONLY ONE ACCESS POINT TO SERVE THE ENTIRE PARCEL. HORSESHOE DRIVEWAYS WILL NOT BE PERMITTED.
- THIS PLAN DOES NOT VERIFY TO THE LOCATION AND/OR EXISTENCE OF EASEMENTS OR RIGHT-OF-WAYS CROSSING SUBJECT PROPERTY AS NO TITLE SEARCH WAS PROVIDED.
- THE CONTRACTOR SHALL ENSURE THAT ALL NECESSARY PERMITS AND APPROVALS HAVE BEEN OBTAINED PRIOR TO COMMENCEMENT OF ANY SITE CONSTRUCTION ACTIVITIES.
- ALL CONTRACTORS WORKING ON THIS PROJECT SHALL BE RESPONSIBLE FOR ENSURING THAT ALL CONSTRUCTION ACTIVITIES RELATED TO THIS PROJECT ARE PERFORMED IN ACCORDANCE WITH ALL O.S.H.A. (OCCUPATIONAL SAFETY AND HEALTH) ADMINISTRATION AND HURDLEMAN STANDARDS.
- ALL CONTRACTORS WORKING ON THIS PROJECT SHALL COMPLY WITH THE REQUIREMENTS OF THE DELAWARE EROSION AND SEDIMENT CONTROL HANDBOOK, LATEST EDITION.
- CONSTRUCTION MATERIALS AND PROCEDURES SHALL FOLLOW SUSSEX COUNTY SPECIFICATIONS AND STANDARD DRAWINGS, LATEST EDITION.
- EXISTING SUBSURFACE UTILITY INFORMATION INDICATED IS BASED UPON VISUAL FIELD INSPECTION BY MERESTONE CONSULTANTS, INC. AND MCCRONE, INC. SUCH INFORMATION CONCERNING THE SIZE, LOCATION, DEPTH, QUANTITY, ETC. OF SUBSURFACE UTILITIES IS APPROXIMATE IN NATURE AND HAS BEEN OBTAINED AS AN AID IN THE PROJECT DESIGN. THE INFORMATION PROVIDED IS REPRESENTATIVE OF SUBSURFACE CONDITIONS ONLY AT LOCATIONS AND DEPTHS WHERE SUCH INFORMATION WAS OBTAINED. THERE IS NO EXPRESSED OR IMPLIED AGREEMENT THAT UTILITY SIZE, LOCATION, DEPTH, QUANTITY, ETC. AS SHOWN EXISTS BETWEEN EXPLORED LOCATIONS. ACCORDINGLY, UTILITY INFORMATION SHOWN SHOULD NOT BE RELIED UPON FOR CONSTRUCTION PURPOSES. IT IS INCUMBENT UPON THE CONTRACTOR TO VERIFY THE SIZE, LOCATION, DEPTH, QUANTITY, ETC. OF ALL UTILITIES BEFORE EXCAVATION.
- BASED ON THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) FLOOD INSURANCE RATE MAP (FIRM) 100029 0330 J, MAP NUMBER 100503030J, DATED JANUARY 6, 2005, THIS PROPERTY IS IN A ZONE "X"-UNSHADED WHICH IS AN AREA DETERMINED TO BE OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOODPLAIN.
- ALL FIRE LANES, FIRE HYDRANTS AND FIRE DEPARTMENT CONNECTIONS SHALL BE MARKED IN ACCORDANCE WITH THE DELAWARE STATE FIRE PREVENTION REGULATIONS.
- IN ACCORDANCE WITH THE DELAWARE STATE FIRE PREVENTION REGULATIONS PART V, CHAPTER 4, SECTION 4-1.1, THE DEVELOPER SHALL PROVIDE TO THE EMERGENCY DISPATCH CENTER HAVING JURISDICTION, A PLOT PLAN FOR THE PROJECT DESIGN. THE DEVELOPER SHALL ALSO ASSIGN MAINTENANCE TO ALL PROPERTIES IN A CONSECUTIVE MANOR AND HAVE PLACED THE ASSIGNED NUMBER IN A READILY VISIBLE LOCATION ON EACH HOME TO ELIMINATE CONFUSION IN THE EVENT THAT AN EMERGENCY VEHICLE IS NEEDED.
- ALL CUL-DE-SACS ARE TO HAVE A 38' PAVED RADIUS. NO PARKING PERMITTED ON CUL-DE-SACS.
- ALL SINGLE FAMILY HOMES TO BE OF WOOD FRAME CONSTRUCTION WITH A MAXIMUM BUILDING HEIGHT OF THREE STORIES, NOT TO EXCEED 42'.
- THIS PROPERTY IS LOCATED IN THE VICINITY OF LAND USED PRIMARILY FOR AGRICULTURAL PURPOSES ON WHICH NORMAL AGRICULTURAL USES AND ACTIVITIES HAVE BEEN AFFORDED THE HIGHEST PRIORITY USE STATUS. IT CAN BE ANTICIPATED THAT SUCH AGRICULTURAL USES AND ACTIVITIES MAY NOW OR IN THE FUTURE INVOLVE NOISE, DUST, MANURE AND OTHER ODORS, THE USE OF CHEMICALS AND NIGHTTIME FARM OPERATIONS. THE USE AND ENJOYMENT OF PROPERTY IS EXPRESSLY CONDITIONED ON ACCEPTANCE OF ANY ANNOYANCE OR INCONVENIENCE WHICH MAY RESULT FROM SUCH NORMAL AGRICULTURAL USES AND ACTIVITIES.
- MAINTENANCE OF THE MULTI-USE PATH SHALL BE THE RESPONSIBILITY OF THE DEVELOPER. THE PROPERTY OWNERS WITHIN THIS SUBDIVISION SHALL BE RESPONSIBLE FOR THE FUTURE MAINTENANCE OF THE MULTI-USE PATH. ARTESIAN RESOURCES AND ITS SUBSIDIARIES HEREBY HAS ACCESS TO MAINTAIN FACILITIES WITHIN THE MULTI-USE PATH.
- BLANKET EASEMENTS WITHIN ALL PRIVATE RIGHT-OF-WAYS TO BE DEDICATED TO ARTESIAN RESOURCES FOR THE MAINTENANCE AND INSPECTION OF ALL INSTALLED UTILITIES.
- THE INTERIOR STREET DESIGN SHALL BE IN ACCORDANCE WITH OR EXCEED SUSSEX COUNTY STREET DESIGN REQUIREMENTS. STREET DESIGN SHALL INCLUDE CURBS, SIDEWALK (AS DEPICTED ON THE CONSTRUCTION PLANS) AND STREETLIGHTS.
- STREET LIGHTS SHALL BE PROVIDED WITHIN THE SUBDIVISION, THE EXACT LOCATIONS WILL BE DETERMINED BY THE ELECTRICAL SUPPLIER.
- ALL PROPOSED LOT LINES SUBJECT TO EASEMENTS FOR UTILITY, STORMWATER CONSTRUCTION AND/OR MAINTENANCE, UNLESS OTHERWISE NOTED ON THE PLANS, EASEMENTS AS FOLLOWS:
 - FRONT LOT LINES - 10 FEET
 - SIDE LOT LINES - 5 FEET
 - REAR LOT LINES - 5 FEET
- ALL ENTRANCES SHALL CONFORM TO THE DELAWARE DEPARTMENT OF TRANSPORTATION'S (DELDOT'S) DEVELOPMENT COORDINATION MANUAL AND SHALL BE SUBJECT TO ITS APPROVAL.
- ALL PROPOSED LANDSCAPE BUFFERS ARE TO BE MAINTAINED BY THE OWNER/DEVELOPER UNTIL SUCH TIME AS A HOMEOWNERS ASSOCIATION CAN PROVIDE FOR SAID MAINTENANCE.
- SHRUBBERY, PLANTINGS, SIGNS AND/OR OTHER VISUAL BARRIERS THAT COULD OBSTRUCT THE SIGHT DISTANCE OF A DRIVER PREPARING TO ENTER THE ROADWAY ARE PROHIBITED WITHIN THE DEFINED DEPARTURE SIGHT TRIANGLE AREA ESTABLISHED ON THIS PLAN. IF THE ESTABLISHED DEPARTURE SIGHT TRIANGLE AREA IS OUTSIDE THE RIGHT-OF-WAY OR PROJECTS ONTO AN ADJACENT PROPERTY OWNER'S LAND, A SIGHT EASEMENT SHOULD BE ESTABLISHED AND RECORDED WITH ALL AFFECTED PROPERTY OWNERS TO MAINTAIN THE REQUIRED SIGHT DISTANCE.
- UPON COMPLETION OF THE CONSTRUCTION OF THE SIDEWALK OR SHARED-USE PATH ACROSS THIS PROJECT'S FRONTAGE AND PHYSICAL CONNECTION TO EXISTING FACILITIES, THE DEVELOPER, THE PROPERTY OWNERS OR BOTH ASSOCIATED WITH THIS PROJECT, SHALL BE RESPONSIBLE FOR REMOVING ANY EXISTING ROAD TIE-IN CONNECTIONS LOCATED ALONG ADJACENT PROPERTIES, AND RESTORE THE AREA TO GRASS. SUCH ACTIONS SHALL BE COMPLETED AT DELDOT'S DISCRETION, AND IN ACCORDANCE WITH DELDOT'S "SHARED-USE PATH AND/OR SIDEWALK TERMINATION POLICY".
- THE PROJECT IS NOT LOCATED WITHIN A WELLHEAD PROTECTION AREA AS DEFINED WITHIN CHAPTER 89 "SOURCE WATER PROTECTION" OF THE SUSSEX COUNTY CODE.
- THE PROJECT IS LOCATED IN AN AREA OF "FAIR" GROUNDWATER RECHARGE POTENTIAL AND SHALL COMPLY WITH CHAPTER 89 "SOURCE WATER PROTECTION" OF THE SUSSEX COUNTY CODE.

SUSSEX CONSERVATION DISTRICT APPROVAL

PLANNING COMMISSION CERTIFICATE

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

SECRETARY (ATTEST)

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

PRESIDENT

OWNER CERTIFICATE

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

FUSCO PROPERTIES

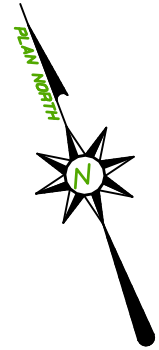
P.O. BOX 665
200 AIRPORT ROAD
NEW CASTLE, DE 19720
Phone: 302.328.6251
Fax: 302.328.6332

WETLANDS CERTIFICATION

THIS PROPERTY HAS BEEN EXAMINED BY LAUREL OAK LAND CONSULTING, LLC FOR THE PRESENCE OF WATERS OF THE UNITED STATES INCLUDING WETLANDS (SECTION 404 AND SECTION 10), STATE SUBAQUEOUS LANDS AND STATE TIDAL WETLANDS BASED ON THE CRITERIA SET FORTH BY THE REVIEWING AGENCIES IN THE FORM OF MANUALS, POLICIES AND PROCEDURES IN PLACE AT THE TIME INVESTIGATION WAS CONDUCTED. ANY OF THE ABOVE RESOURCES THAT WERE FOUND ON THE PROPERTY ARE CLEARLY MAPPED ON THIS PLAN IN ACCORDANCE WITH OUR FIELD INVESTIGATIONS AND DETAILED IN REPORTS BY LAUREL OAK LAND CONSULTING, LLC USING THEIR BEST PROFESSIONAL JUDGEMENT.

BRUCE B. BAGLEY, MS, CPSSC, CPAG, CPA
LAUREL OAK LAND CONSULTING, LLC
420 CORDEN ROAD
P.O. BOX 295
SILVER SPRING, MD 21168-0295
410.708.3854 PHONE

NO.	DATE	DESCRIPTION
1	01/09/20	LOT LINE ADJUSTMENT (PARCELS 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972



REVISIONS	
No.	DESCRIPTION
1	01/05/20 LOT LINE ADJUSTMENT (PARCEL 30.00 & 31.00)
2	07/17/20 REVISIONS PER PZ STAFF REVIEW COMMENTS (DATED 07/07/20)

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

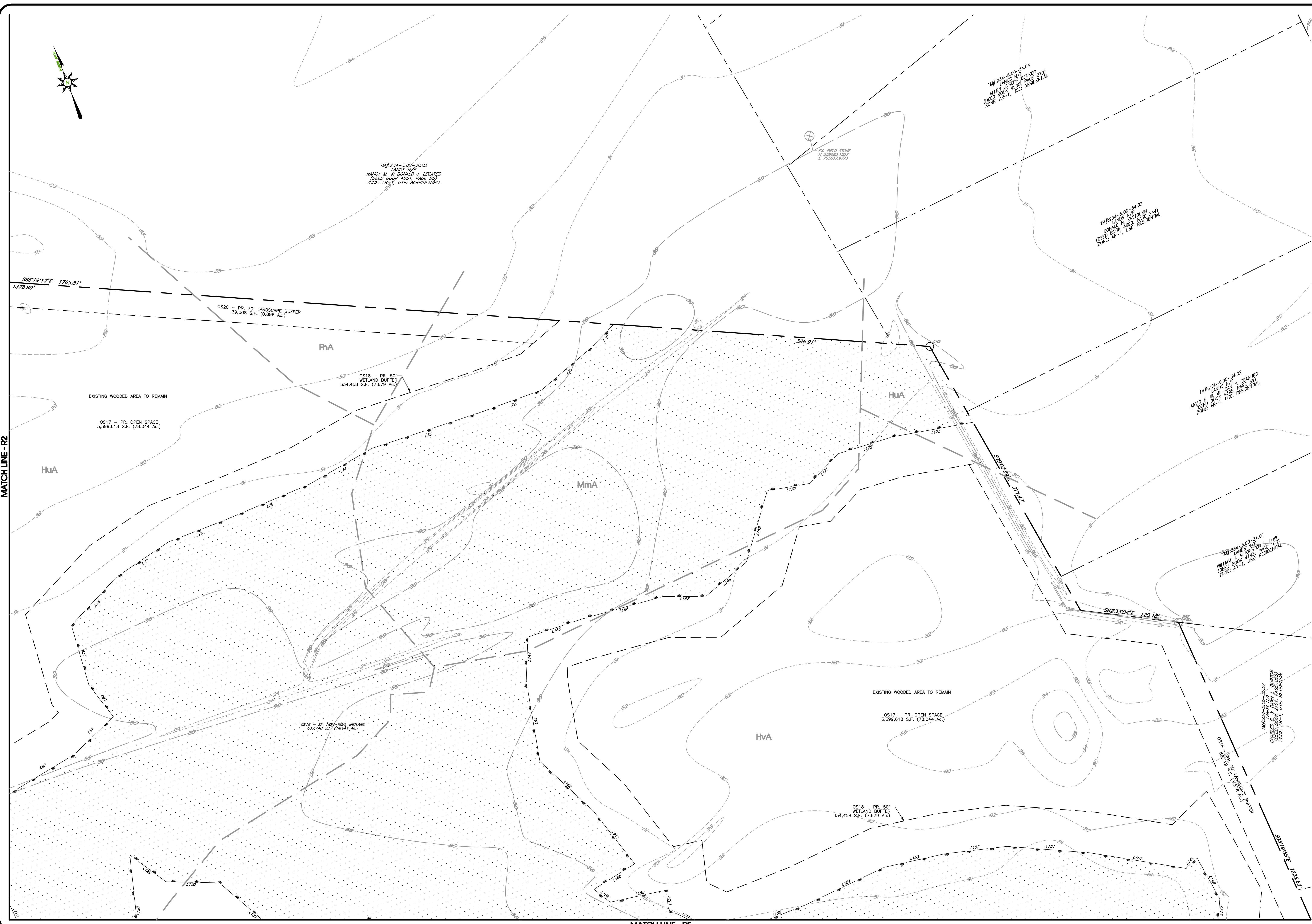
DESIGN PROFESSIONAL DATE

APPROVED BY: [Signature] DATE: [Date]
SCALE: 1" = 40'
ONLY PLANS SUBMITTED FOR REVIEW AND APPROVAL BY THE DELAWARE DEPARTMENT OF TRANSPORTATION AND HIGHWAYS ARE TO BE CONSIDERED FOR THE PURPOSES OF THE DELAWARE DEPARTMENT OF TRANSPORTATION AND HIGHWAYS. ANY REVISIONS TO THE PLAN MUST BE SUBMITTED TO THE DELAWARE DEPARTMENT OF TRANSPORTATION AND HIGHWAYS FOR REVIEW AND APPROVAL.

OWNER/APPLICANT: FUSCO PROPERTIES
NEW GROUND: 187.53 Acres
NET AREA: 187.53 Acres

PRELIMINARY PLAN (Not to be Recorded)
RECORD PLAN
STRATUS ESTATES
INDIAN RIVER HUNDRED - SUSSEX COUNTY - DELAWARE
THE KERCHER GROUP, INC.
CONSULTING • SYSTEMS • ENGINEERING
37585 REHOBOTH AVE. UNIT 11 - REHOBOTH BEACH, DELAWARE 19971
302.854.9062 (Voice) 302.854.9064 (Fax) www.kerchergroup.com

JOB No: 19-0602ES
PLAN DATE: Dec. 13, 2019
SHEET No.: R2



REVISIONS	
No.	DATE
1	01/07/20
2	01/07/20
3	01/07/20
4	01/07/20
5	01/07/20
6	01/07/20
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8	01/07/20
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97	01/07/20
98	01/07/20
99	01/07/20
100	01/07/20

DESIGN PROFESSIONAL

DATE

APPROVED BY: [Signature]

DESIGNED BY: [Signature]

DRAWN BY: [Signature]

CHECKED BY: [Signature]

SCALE: 1" = 40'

100' 50' 0'

OWNER/APPLICANT:

FUSCO PROPERTIES

NEW COAST, DE 19720

Parcel 302.258.6332

PARCEL INFORMATION:

T.P.: 234-5.00-34.00

GROSS AREA: 187.93 Acres

NET AREA: 187.93 Acres

PRELIMINARY PLAN (Not to be Recorded)

RECORD PLANS

STRATUS ESTATES

INDIAN RIVER HUNDRED - SUSSEX COUNTY - DELAWARE

THE KERCHER GROUP, INC.

CONSULTING • SYSTEMS • ENGINEERING

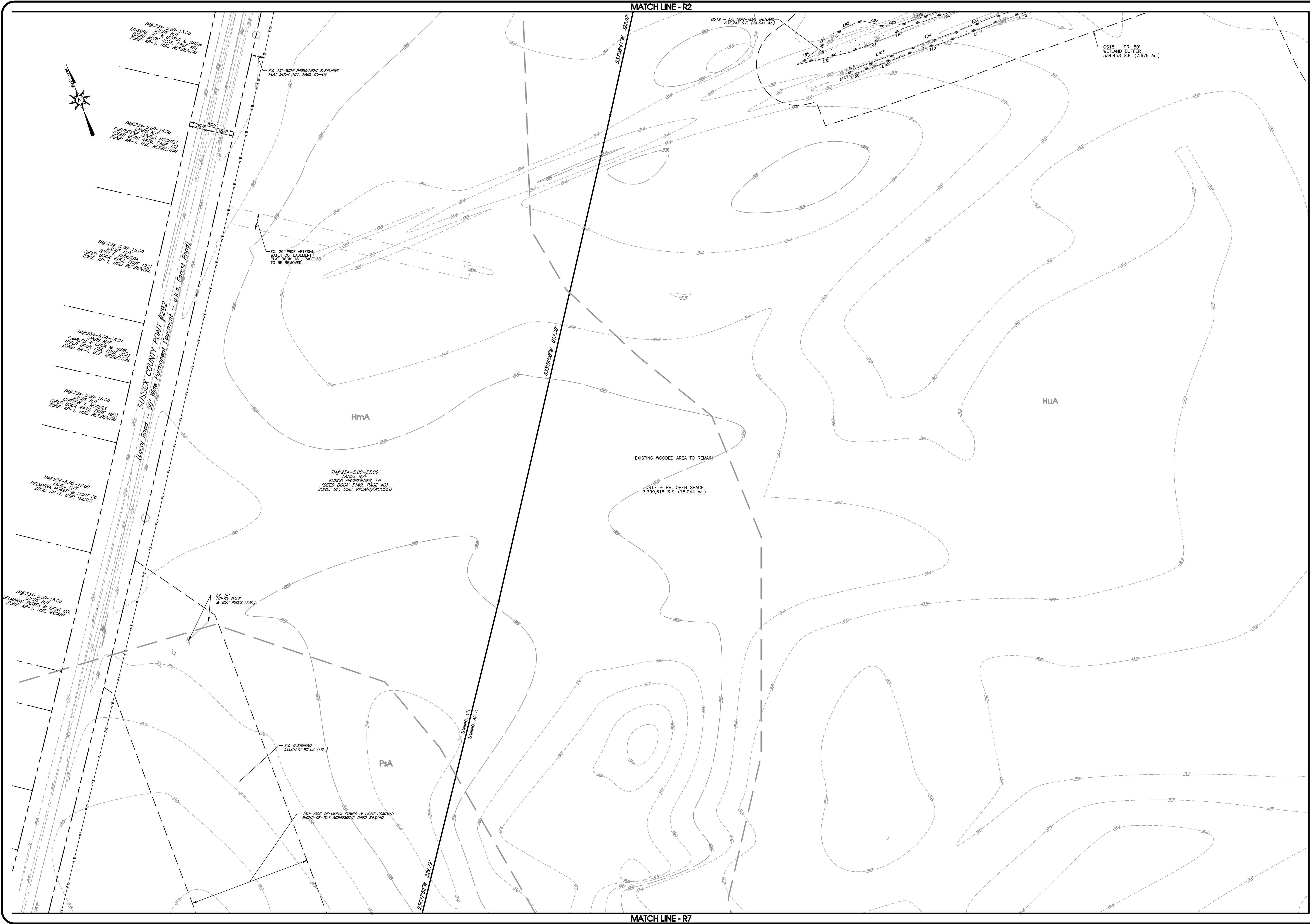
37385 REHOBOTH AVE. UNIT 11 - REHOBOTH BEACH, DELAWARE 19971

302.854.9062 (Voice) 302.854.9064 (Fax) www.kerchergroup.com

JOB No: 19-0602ES

PLAN DATE: Dec. 13, 2019

SHEET No.: R3



PRELIMINARY PLAN (Not to be Recorded)

RECORD PLAN

STRATUS ESTATES

INDIAN RIVER HUNDRED - SUSSEX COUNTY - DELAWARE

THE KERCHER GROUP, INC.

CONSULTING • SYSTEMS • ENGINEERING

37385 REHOBOTH AVE. UNIT 11 - REHOBOTH BEACH, DELAWARE 19971

302.854.9062 (Voice) 302.854.9064 (Fax) www.kerchergroup.com

OWNER/APPLICANT:

FUSCO PROPERTIES

NEW COAST, DE 19720

Phone: 302.268.6332

PARCEL INFORMATION:

TP: 234-5.00-30.00

GROSS AREA: 187.93 Acres

NET AREA: 187.53 Acres

DESIGN PROFESSIONAL:

DATE:

APPROVED BY:

DESIGNED BY:

DATE:

SCALE: 1" = 40'

100' 50' 0'

ONLY THIS INVESTIGATION & ANALYSIS REPORT, AND ANY INFORMATION CONTAINED THEREIN, IS TO BE USED FOR THE PROJECT AND NOT FOR ANY OTHER PURPOSE. THE DESIGNER ASSUMES NO LIABILITY FOR ANY ERRORS OR OMISSIONS IN THIS REPORT. THE DESIGNER'S LIABILITY IS LIMITED TO THE AMOUNT OF THE FEE PAID FOR THIS SERVICE. THE DESIGNER'S LIABILITY IS LIMITED TO THE AMOUNT OF THE FEE PAID FOR THIS SERVICE. THE DESIGNER'S LIABILITY IS LIMITED TO THE AMOUNT OF THE FEE PAID FOR THIS SERVICE.

REVISIONS

1

01/05/21

LOT LINE ADJUSTMENT (PARCEL 30.00 & 33.00)

334,458 S.F. (7.679 Ac.)

WETLAND BUFFER

OS18 - PR. 50'

OS19 - EX. NON-TIDAL WETLAND

637,748 S.F. (14.641 Ac.)

OS17 - PR. OPEN SPACE

3,399,618 S.F. (78.044 Ac.)

EXISTING WOODED AREA TO REMAIN

OS16 - PR. OPEN SPACE

3,399,618 S.F. (78.044 Ac.)

EXISTING WOODED AREA TO REMAIN

OS15 - PR. OPEN SPACE

3,399,618 S.F. (78.044 Ac.)

EXISTING WOODED AREA TO REMAIN

OS14 - PR. OPEN SPACE

3,399,618 S.F. (78.044 Ac.)

EXISTING WOODED AREA TO REMAIN

OS13 - PR. OPEN SPACE

3,399,618 S.F. (78.044 Ac.)

EXISTING WOODED AREA TO REMAIN

OS12 - PR. OPEN SPACE

3,399,618 S.F. (78.044 Ac.)

EXISTING WOODED AREA TO REMAIN

OS11 - PR. OPEN SPACE

3,399,618 S.F. (78.044 Ac.)

EXISTING WOODED AREA TO REMAIN

OS10 - PR. OPEN SPACE

3,399,618 S.F. (78.044 Ac.)

EXISTING WOODED AREA TO REMAIN

OS09 - PR. OPEN SPACE

3,399,618 S.F. (78.044 Ac.)

EXISTING WOODED AREA TO REMAIN

OS08 - PR. OPEN SPACE

3,399,618 S.F. (78.044 Ac.)

EXISTING WOODED AREA TO REMAIN

OS07 - PR. OPEN SPACE

3,399,618 S.F. (78.044 Ac.)

EXISTING WOODED AREA TO REMAIN

OS06 - PR. OPEN SPACE

3,399,618 S.F. (78.044 Ac.)

EXISTING WOODED AREA TO REMAIN

OS05 - PR. OPEN SPACE

3,399,618 S.F. (78.044 Ac.)

EXISTING WOODED AREA TO REMAIN

OS04 - PR. OPEN SPACE

3,399,618 S.F. (78.044 Ac.)

EXISTING WOODED AREA TO REMAIN

OS03 - PR. OPEN SPACE

3,399,618 S.F. (78.044 Ac.)

EXISTING WOODED AREA TO REMAIN

OS02 - PR. OPEN SPACE

3,399,618 S.F. (78.044 Ac.)

EXISTING WOODED AREA TO REMAIN

OS01 - PR. OPEN SPACE

3,399,618 S.F. (78.044 Ac.)

EXISTING WOODED AREA TO REMAIN

JOB No:

19-0602ES

PLAN DATE:

Dec. 13, 2019

SHEET No.:

R4

STRATUS ESTATES Map, Jan. 25, 2021 (2344)



REVISIONS	
No.	DATE
1	07/17/20
2	01/09/21

DESIGN PROFESSIONAL: DATE:

APPROVED BY: DRAWN BY: DATE: SCALE: 1" = 40'

OWNER/APPLICANT: FUSCO PROPERTIES, NEW CASTLE, DE 19720, Parcel: 302.268.6332

PARCEL INFORMATION: T.P.: 234-5.00-30.00, GROSS AREA: 187.93 Acres, NET AREA: 187.93 Acres

PRELIMINARY PLAT (Not to be Recorded) RECORD PLAT STRATUS ESTATES

INDIAN RIVER HUNDRED - SUSSEX COUNTY - DELAWARE

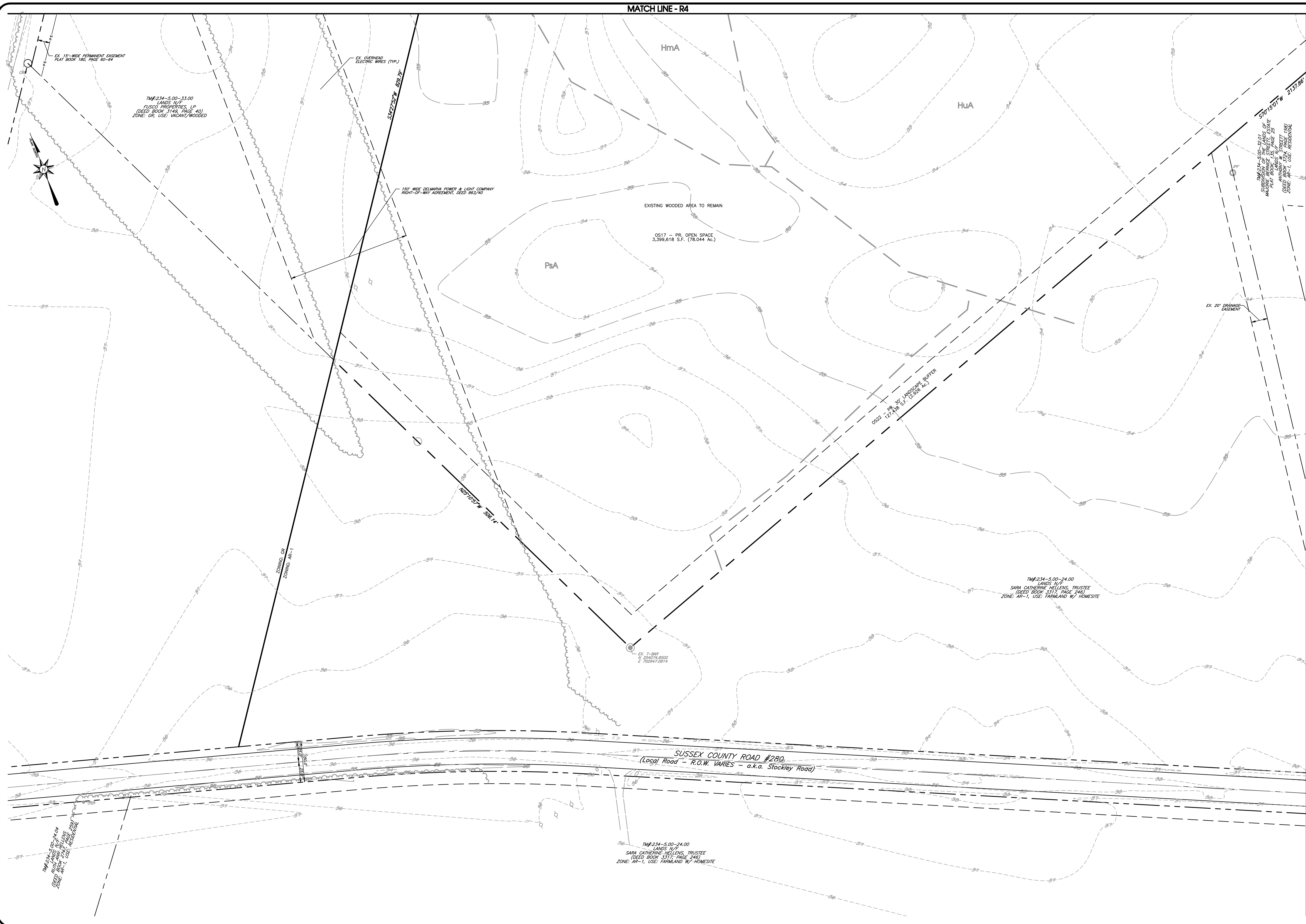
THE KERCHER GROUP, INC., CONSULTING • SYSTEMS • ENGINEERING, 37589 REHOBOTH AVE., UNIT 11 - REHOBOTH BEACH, DELAWARE 19971, 302.854.9062 (Voice), 302.854.9064 (Fax), www.kerchergroup.com

JOB No: 19-0602ES

PLAN DATE: Dec. 13, 2019

SHEET No.: R6

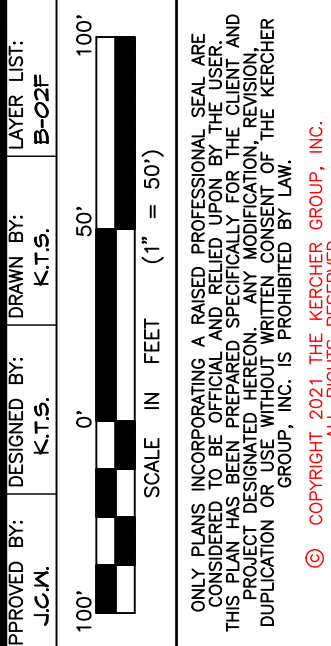
STATUS: ESTATES Map, Jan. 25, 2021 (2.5x3)

[illegible]

REVISIONS

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

DESIGN PROFESSIONAL	DATE
---------------------	------



OWNER/APPLICANT:	FUSCO PROPERTIES P.O. BOX 665 NEW CASTLE, DE 19720 Phone: 302.328.6251 Fax: 302.328.6532
PARCEL INFORMATION:	T.P.: 234—5,000—30.00 GROSS AREA: 187.93 Acres ROW DEED: 0.00 Acres NET AREA: 187.93 Acres

PRELIMINARY PLAN (Not to be Recorded)

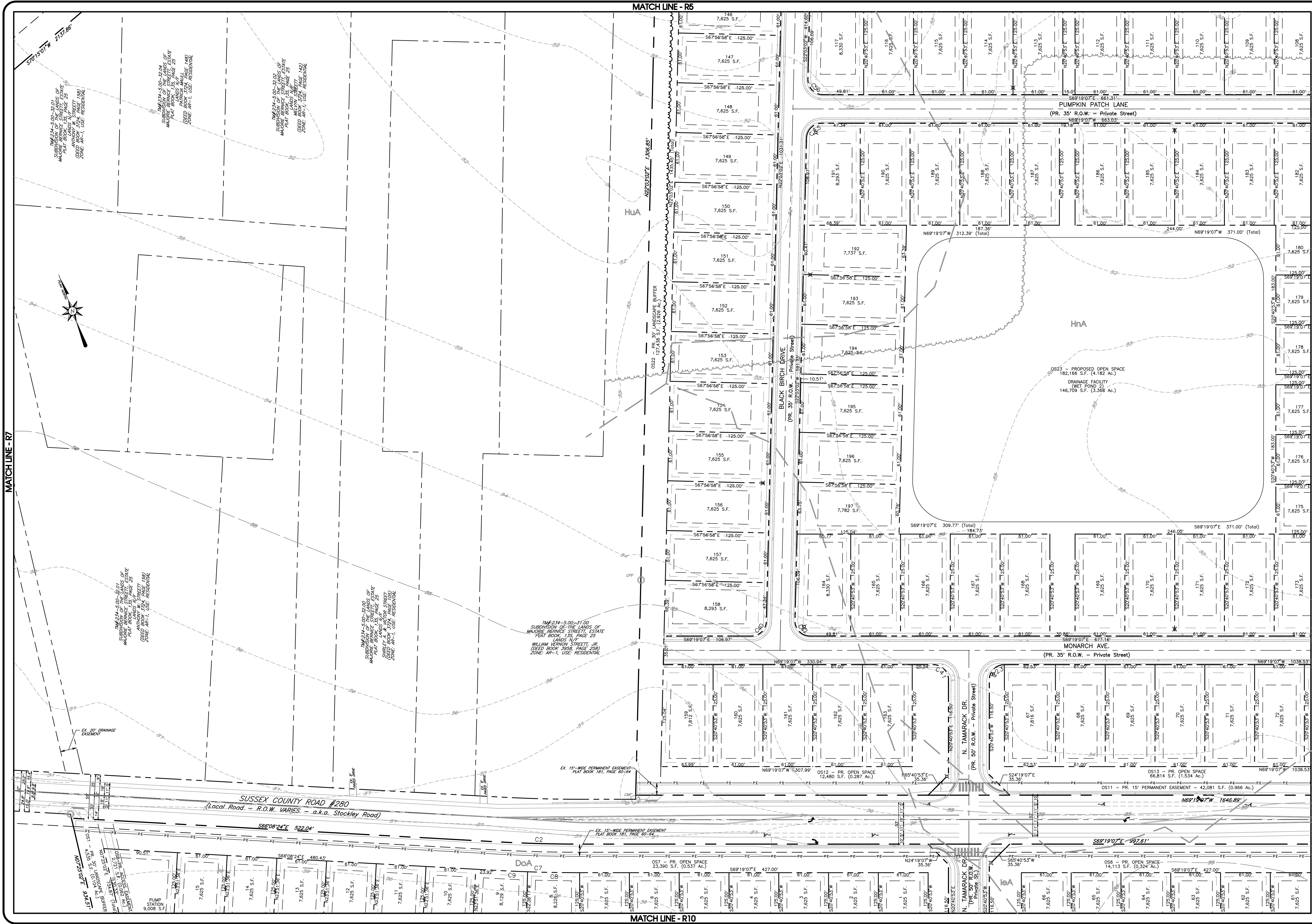
RECORD PLAN
STRATUS ESTATES

INDIAN RIVER HUNDRED - SUSSEX COUNTY - DELAWARE

THE KERCHER GROUP, INC.
CONSULTING • SYSTEMS • ENGINEERING
37295 BERGSHOT AVE. UNIT 11 - BERGSHOT, DE, 19711
302.854.9062 (Voice) www.kerchergroup.com
302.854.9062 (Fax)

KERCHER
GROUP, INC.

JOB No: 19-0602ES
PLAN DATE: Dec. 13, 2019
SHEET No.: **R7**



REVISIONS

No.	DATE	DESCRIPTION
1	07/17/20	REVISIONS PER P2 STAFF REVIEW COMMENTS (DATED 07/07/20)
2	01/09/21	LOT LINE ADJUSTMENT (PARCEL 30.00 & 33.00)
3	01/09/21	LOT LINE ADJUSTMENT (PARCEL 30.00 & 33.00)

DESIGN PROFESSIONAL

DATE

APPROVED BY: [Signature]

DATE: [Date]

OWNER/APPLICANT:

FUSCO PROPERTIES

NEW CASTLE, DE 19720

Phone: 302.854.9062

PARCEL INFORMATION:

TP: 234-5.00-30.00

GROSS AREA: 187.53 Acres

NET AREA: 187.53 Acres

PRELIMINARY PLAN (Not to be Recorded)

RECORD PLAT

STRATON ESTATES

INDIAN RIVER HUNDRED - SUSSEX COUNTY - DELAWARE

THE KERCHER GROUP, INC.

CONSULTING • SYSTEMS • ENGINEERING

37385 REHOBOTH AVE. UNIT 11 - REHOBOTH BEACH, DELAWARE 19971

302.854.9062 (Voice) 302.854.9064 (Fax) www.kerchergroup.com

JOB No:

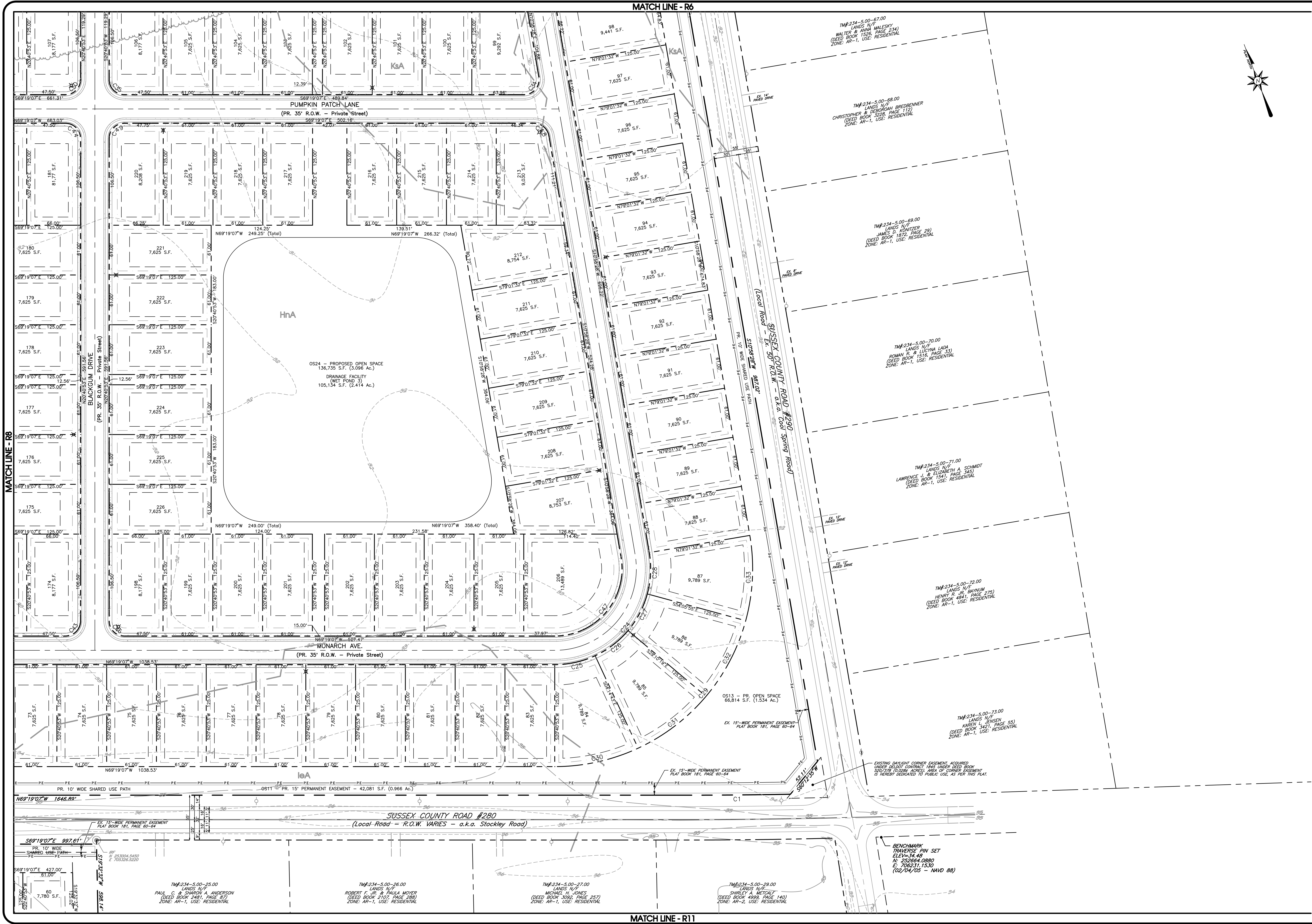
19-0602ES

PLAN DATE:

Dec. 13, 2019

SHEET No.:

R8



REVISIONS

No.	DATE	DESCRIPTION
1	07/17/20	REVISIONS PER P2 STAFF REVIEW COMMENTS (DATED 07/07/20)
2	07/28/21	LOT LINE ADJUSTMENT (PARCEL 30, 32, & 33.00)
3	07/28/21	LOT LINE ADJUSTMENT (PARCEL 30, 32, & 33.00)

DESIGN PROFESSIONAL

DATE

APPROVED BY: [Signature]

DESIGNED BY: [Signature]

DRAWN BY: [Signature]

CHECKED BY: [Signature]

SCALE: 1" = 40'

100' 50' 0'

OWNER/APPLICANT

FUSCO PROPERTIES

NEW CASTLE, DE 19720

Parcel Information:

T.P.: 234-5.00-30.00

GROSS AREA: 187.53 Acres

NET AREA: 187.53 Acres

PRELIMINARY PLAN (Not to be Recorded)

RECORD PLAN

STRATUS ESTATES

INDIAN RIVER HUNDRED - SUSSEX COUNTY - DELAWARE

THE KERCHER GROUP, INC.

CONSULTING • SYSTEMS • ENGINEERING

37585 REHOBOTH AVE. UNIT 11 - REHOBOTH BEACH, DELAWARE 19971

302.854.9062 (Voice)

302.854.9064 (Fax)

www.kerchergroup.com

JOB No:

19-0602ES

PLAN DATE:

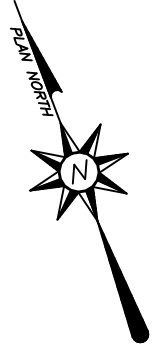
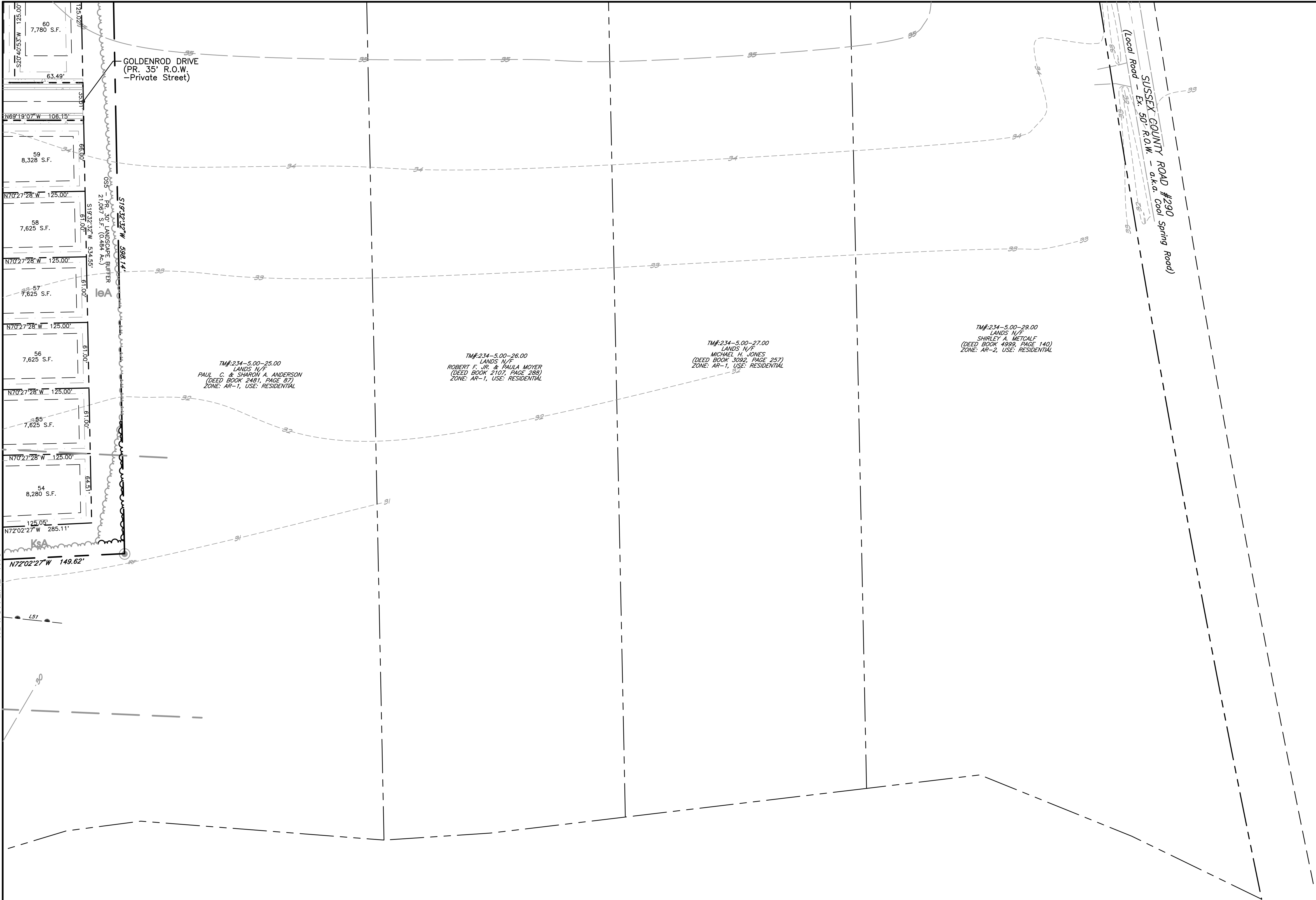
Dec. 13, 2019

SHEET No.:

R9

MATCH LINE - R10

MATCH LINE - R9



TMF-234-10.00-76.02
LANDS N/F
R. WAYNE & CAROL A. HELLENS
(DEED BOOK 2335, PAGE 345)
ZONE: AR-1, USE: VACANT-WOODED

TMF-234-5.00-25.00
LANDS N/F
PAUL C. & SHARON A. ANDERSON
(DEED BOOK 2481, PAGE 87)
ZONE: AR-1, USE: RESIDENTIAL

TMF-234-5.00-26.00
LANDS N/F
ROBERT F. III & PAULA MOYER
(DEED BOOK 2107, PAGE 288)
ZONE: AR-1, USE: RESIDENTIAL

TMF-234-5.00-27.00
LANDS N/F
MICHAEL H. JONES
(DEED BOOK 3092, PAGE 257)
ZONE: AR-1, USE: RESIDENTIAL

TMF-234-5.00-29.00
LANDS N/F
SHIRLEY A. METCALF
(DEED BOOK 4999, PAGE 140)
ZONE: AR-2, USE: RESIDENTIAL

REVISIONS	
No.	DATE
2	01/28/21 LOT LINE ADJUSTMENT (PARCEL 30.00 & 33.00)
1	07/17/20 REVISIONS PER P2 STAFF REVIEW COMMENTS (DATED 07/07/20)

APPROVED BY: [Signature]

DESIGNED BY: [Signature]

DRAWN BY: [Signature]

CHECKED BY: [Signature]

DATE: 01/28/21

SCALE: 1" = 40'

100' 50' 0'

OWNER/APPLICANT: FUSCO PROPERTIES
NEW CASTLE, DE 19720
Phone: 302.228.6332

PARCEL INFORMATION:
T.P.: 234-5.00-30.00
GROSS AREA: 187.93 Acres
NET AREA: 187.93 Acres

PRELIMINARY PLAN (Not to be Recorded)
RECORD PLAN
STRATUS ESTATES
INDIAN RIVER HUNDRED - SUSSEX COUNTY - DELAWARE

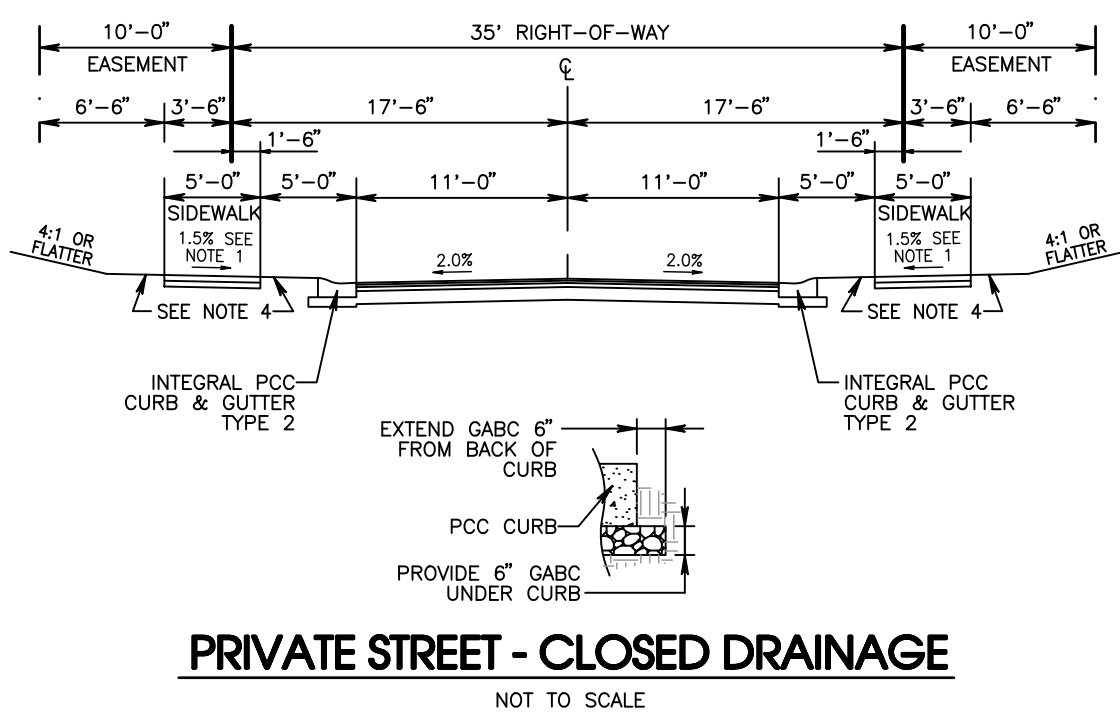
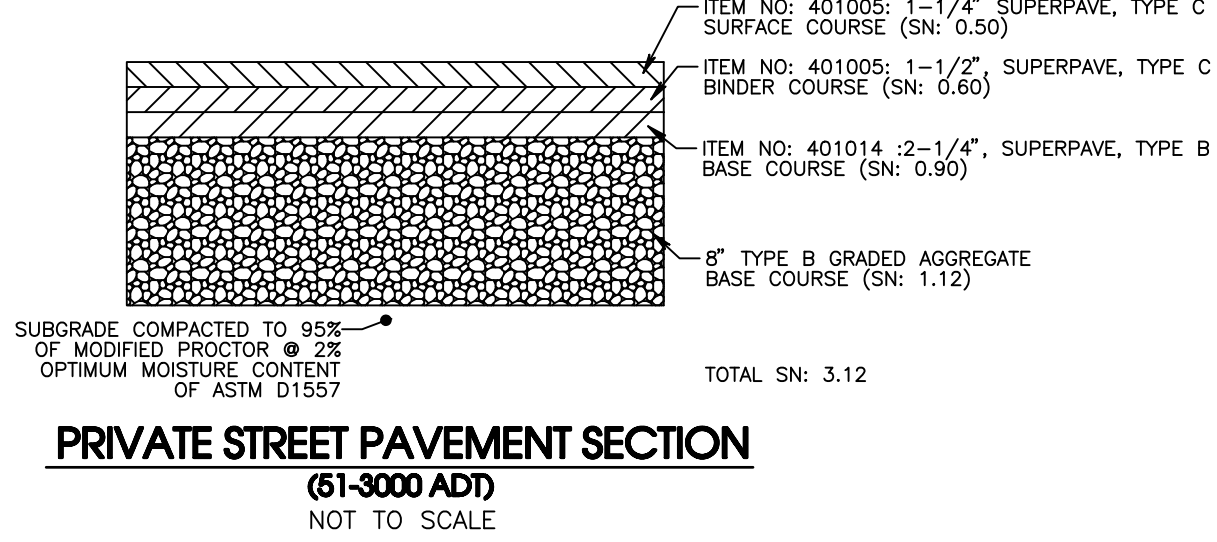
THE KERCHER GROUP, INC.
CONSULTING • SYSTEMS • ENGINEERING
37385 REHOBOTH AVE., UNIT 11 - REHOBOTH BEACH, DELAWARE 19711
302.854.9062 (Voice) 302.854.9064 (Fax) www.kerchergroup.com

JOB No: 19-0602ES
PLAN DATE: Dec. 13, 2019
SHEET No.: R11

STRATUS ESTATES Map, Jan. 25, 2021 (2:35P)

WETLAND TABLE		
SEGMENT	LENGTH	BEARING
L19	85.11'	S37° 31' 36" E
L20	33.57'	S30° 59' 21" E
L21	36° 11'	S30° 49' 1" E
L22	51.25'	S39° 00' 57" E
L23	29.20'	S69° 24' 51" E
L24	31.10'	N77° 24' 51" E
L25	35.37'	S47° 12' 27" E
L26	42.96'	S66° 24' 51" E
L27	46.56'	S81° 27' 37" E
L28	54.66'	S76° 02' 30" E
L29	62.71'	S39° 54' 07" E
L30	18.50'	18.50'
L31	37.31'	S39° 54' 07" E
L32	42.96'	S66° 24' 51" E
L33	96.11'	S66° 04' 55" E
L34	72.05'	S74° 26' 51" E
L35	59.61'	N68° 24' 01" E
L36	29.82'	S30° 36' 09" E
L37	35.37'	S47° 12' 27" E
L38	35.64'	S3° 36' 43" E
L39	50.66'	S49° 10' 00" E
L40	54.18'	N56° 20' 38" E
L41	41.72'	N74° 04' 15" E
L42	68.99'	S85° 37' 36" E
L43	59.35'	N37° 26' 23" E
L44	48.96'	N58° 12' 09" E
L45	63.72'	N58° 03' 02" E
L46	102.76'	N89° 11' 30" E
L47	63.14'	S83° 16' 56" E
L48	50.36'	N85° 13' 36" E
L49	50.61'	S84° 28' 51" E
L50	68.83'	S36° 03' 02" E
L51	67.92'	S63° 16' 47" E
L52	39.39'	N69° 24' 52" W
L53	43.39'	N69° 24' 52" W
L54	46.31'	S51° 09' 02" W
L55	67.92'	S63° 16' 47" E
L56	45.63'	N40° 53' 09" E
L57	38.45'	N22° 03' 38" E
L58	126.00'	N36° 22' 42" W
L59	42.69'	S84° 34' 23" W
L60	46.04'	S87° 27' 36" W
L61	46.86'	S39° 45' 19" W
L62	30.02'	S59° 58' 05" W
L63	49.66'	S44° 58' 00" W
L64	40.49'	S55° 53' 48" E
L65	38.39'	S65° 11' 12" W
L66	25.91'	N75° 43' 25" E
L67	44.73'	N79° 19' 46" E
L68	60.24'	S47° 09' 48" E
L69	28.64'	N78° 31' 56" E
L70	38.14'	S64° 28' 00" W
L71	80.93'	S72° 08' 18" W
L72	81.54'	N89° 19' 53" W
L73	137.37'	N87° 40' 45" W
L74	88.42'	S80° 52' 55" W
L75	110.58'	S87° 42' 06" W
L76	75.15'	S89° 44' 06" W
L77	76.68'	S76° 42' 28" W
L78	60.77'	S63° 38' 40" W
L79	76.28'	S4° 19' 13" W
L80	48.33'	S17° 15' 37" W
L81	66.33'	S60° 30' 30" W
L82	94.20'	S79° 28' 23" W
L83	110.67'	N85° 40' 00" W
L84	92.40'	N88° 52' 21" W
L85	64.67'	N88° 29' 41" W
L86	69.71'	N87° 57' 26" W
L87	84.00'	N89° 08' 00" W
L88	45.17'	N86° 58' 43" W
L89	62.61'	N87° 54' 45" W
L90	18.90'	N71° 30' 16" W
L91	29.10'	N67° 38' 57" W
L92	38.36'	S84° 56' 24" W
L93	29.86'	S65° 11' 12" W
L94	26.98'	S74° 26' 42" W
L95	67.05'	S82° 26' 39" E
L96	35.20'	N89° 08' 02" E
L97	14.58'	N76° 04' 08" E
L98	205.12'	S39° 54' 07" E
L99	21.44'	S1° 30' 19" W
L100	40.81'	S89° 29' 45" W
L101	80.28'	N89° 38' 21" W
L102	59.39'	N89° 07' 23" W
L103	69.93'	S89° 29' 45" W
L104	55.51'	N89° 19' 07" W
L105	64.88'	N89° 35' 03" W
L106	11.50'	S14° 20' 02" E
L107	4.00'	S0° 43' 36" E
L108	11.36'	S69° 43' 08" E
L109	64.85'	S89° 35' 03" E
L110	55.96'	S87° 16' 20" E
L111	63.63'	N89° 24' 02" E
L112	58.86'	S89° 36' 39" E
L113	44.86'	S89° 09' 36" E
L114	44.86'	S89° 09' 36" E
L115	62.56'	S89° 21' 54" E
L116	20.16'	N87° 18' 31" E
L117	58.84'	S89° 25' 48" E
L118	18.69'	S33° 47' 47" E
L119	76.20'	S11° 14' 32" E
L120	74.88'	S4° 04' 08" E
L121	60.24'	S64° 43' 29" E
L122	51.73'	S55° 50' 31" E
L123	37.42'	S12° 23' 15" E
L124	40.32'	S11° 21' 15" E
L125	49.67'	S87° 42' 43" E
L126	50.07'	N11° 28' 09" E
L127	28.36'	N29° 33' 30" W
L128	144.35'	N14° 22' 30" E
L129	55.09'	S39° 49' 44" E
L130	65.05'	S68° 14' 24" E
L131	129.77'	S26° 35' 50" E
L132	93.57'	N85° 07' 09" E
L133	136.59'	S47° 49' 48" E
L134	102.67'	S69° 11' 13" E
L135	104.45'	S64° 59' 37" E
L136	77.45'	S39° 54' 07" E
L137	55.32'	S6° 47' 18" E
L138	91.28'	S1° 35' 17" E
L139	74.73'	S27° 07' 43" E
L140	41.17'	N65° 28' 52" E
L141	14.64'	N65° 19' 45" E
L142	12.01'	N65° 19' 45" E
L143	14.32'	S87° 31' 45" E
L144	258.33'	S86° 24' 01" W
L145	59.69'	S83° 25' 53" E
L146	95.35'	N74° 22' 47" E
L147	105.67'	N25° 25' 12" E
L148	57.47'	N8° 28' 11" W
L149	18.75'	S65° 24' 01" W
L150	119.57'	N60° 05' 26" W
L151	100.96'	N64° 55' 00" W
L152	76.72'	N76° 08' 30" W
L153	75.63'	N81° 58' 06" W
L154	106.22'	S85° 09' 49" W
L155	105.37'	S89° 09' 25" W
L156	76.49'	N44° 09' 41" W
L157	24.46'	N14° 15' 02" E
L158	70.10'	N81° 32' 26" W
L159	26.35'	N30° 54" W
L160	58.69'	N79° 39' 04" E
L161	81.94'	N17° 21' 25" W
L162	38.96'	N26° 51' 47" W
L163	99.62'	N11° 03' 29" E
L164	69.51'	S87° 45' 25" E
L165	102.75'	S84° 49' 21" E
L166	22.43'	S89° 30' 40" E
L167	64.91'	N70° 30' 09" E
L168	80.60'	N36° 59' 25" E
L169	52.67'	N73° 15' 33" E
L170	49.81'	N64° 08' 38" E
L171	68.60'	S86° 30' 18" E
L172	68.60'	S86° 30' 18" E
L173	99.79'	S79° 35' 35" E

CURVE	RADIUS	DELTA	ARC
C1	6470.00'	1°10'11"	132.09'
C2	1830.00'	3°10'44"	101.53'
C3	18.50'	90°00'00"	29.06'
C4	1990.00'	3°10'44"	110.41'
C5	1990.00'	1°57'24"	67.98'
C6	1990.00'	1°13'20"	42.45'
C7	1865.00'	3°10'44"	103.47'
C8	1865.00'	1°57'24"	63.69'
C9	1865.00'	1°13'20"	39.78'
C10	18.50'	73°33'25"	23.75'
C11	18.50'	106°26'35"	34.37'
C12	2025.00'	3°10'44"	112.35'
C13	2025.00'	0°34'04"	20.07'
C14	2025.00'	1°42'18"	60.26'
C15	2025.00'	0°54'22"	32.02'
C16	2150.00'	3°10'44"	119.28'
C17	2150.00'	0°34'04"	21.31'
C18	2150.00'	1°42'18"	63.98'
C19	2150.00'	0°54'22"	34.00'
C20	18.50'	88°51'39"	28.69'
C21	18.50'	91°08'21"	29.43'
C22	18.50'	90°00'00"	29.06'
C23	18.50'	90°00'00"	29.06'
C24	117.50'	99°42'25"	204.47'
C25	117.50'	24°55'36"	51.12'
C26	117.50'	24°55'36"	51.12'
C27	117.50'	24°55'36"	51.12'
C28	117.50'	24°55'36"	51.12'
C29	242.50'	99°42'25"	422.00'
C30	242.50'	24°55'36"	105.50'
C31	242.50'	24°55'36"	105.50'
C32	242.50'	24°55'36"	105.50'
C33	242.50'	24°55'36"	105.50'
C34	18.50'	99°42'25"	32.19'
C35	18.50'	90°00'00"	29.06'
C36	117.50'	57°03'28"	117.01'
C37	82.50'	57°03'28"	82.16'
C38	18.50'	90°00'00"	29.06'
C39	18.50'	91°22'09"	29.50'
C40	18.50'	88°37'51"	28.62'
C41	18.50'	90°00'00"	29.06'
C42	18.50'	91°22'09"	29.50'
C43	18.50'	90°00'00"	29.06'
C44	18.50'	90°00'00"	29.06'
C45	18.50'	88°37'51"	28.62'
C46	18.50'	90°00'00"	29.06'
C47	82.50'	99°42'25"	143.57'
C48	18.50'	80°17'35"	25.93'
C49	18.50'	90°00'00"	29.06'
C50	18.50'	90°00'00"	29.06'
C51	82.50'	57°03'28"	82.16'
C52	117.50'	57°03'28"	117.01'
C53	117.50'	49°39'54"	101.85'
C54	117.50'	7°23'34"	15.16'
C55	18.50'	88°37'51"	28.62'
C56	18.50'	91°22'09"	29.50'
C57	18.50'	90°00'00"	29.06'



- NOTES:
1. 1.5% CROSS SLOPE PREFERRED. 2% MAXIMUM CROSS SLOPE, 1% MINIMUM ANY DIRECTION.
 2. PROVIDE 4\"/>
 3. SUBBASE AND SUBGRADE SHALL BE COMPACTED TO 95% OF ASTM D1557, MODIFIED PROCTOR METHOD.
 4. A 6:1 MAX. SLOPE IS REQUIRED FROM 2'-0\"/>
 5. MAINTAIN SIDEWALK CROSS SLOPE TO BACK OF CURB (TYP.).
 6. ALL CUL-DE-SACS SHALL HAVE A PAVED RADIUS OF 38'.

REVISIONS

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

DESIGN PROFESSIONAL DATE

APPROVED BY:  DATE: 10/1/2019

OWNER: FUSCO PROPERTIES

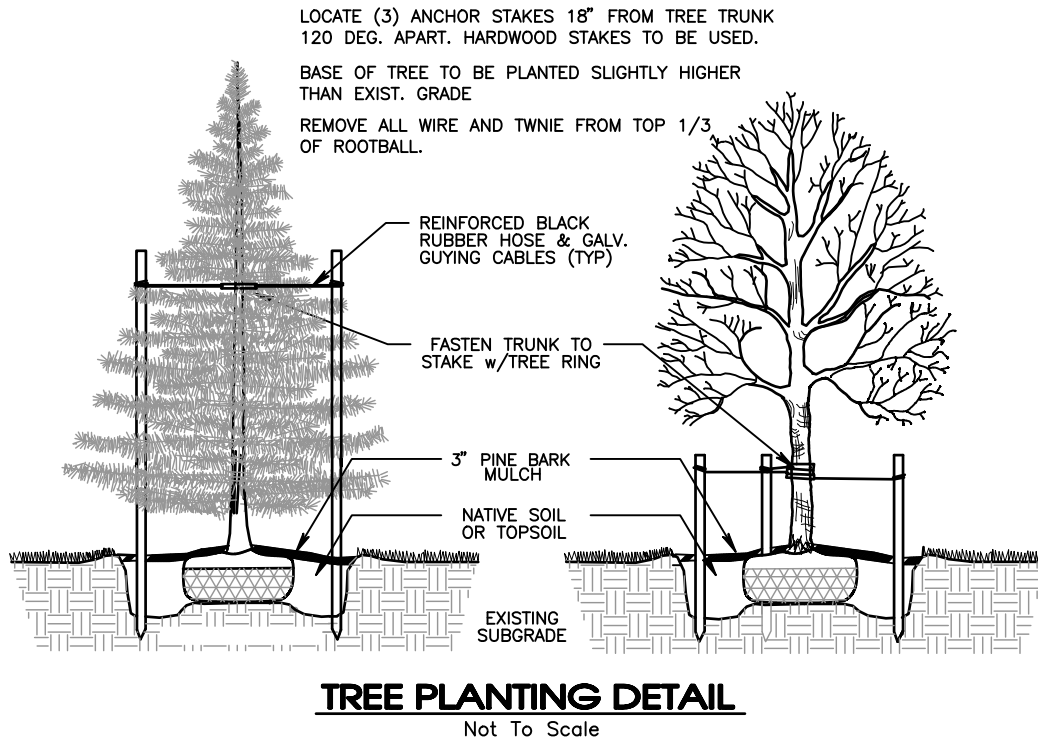
NEW COULET DE 19720

FOR: 302.258.6332



PARCEL INFORMATION:

LOCATE (3) ANCHOR STAKES 18\"/>

NOTES:



PLANTING SCHEDULE

PLAN SYMBOL	QUANTITY	BOTANICAL NAME*	COMMON NAME*	MINIMUM PLANTING HEIGHT	PLANTING SPREAD	REMARKS	
EVERGREEN TREES							
	24 (GA)	*TREES TO BE GIANT ARBORVITAE AND DOUGLAS FIR (OR SIMILAR, NATIVE EVERGREEN SPECIES). THE DEVELOPER SHALL DETERMINE WHAT SPECIES IS TO BE USED AND PROVIDE THAT INFORMATION TO THE SUSSEX COUNTY PLANNING AND ZONING DEPARTMENT PRIOR TO ANY PLANTING ACTIVITY. ALTERNATING SPECIES/TYPE (EVERGREEN/DECIDUOUS) RECOMMENDED.			4'	14.25'	1ST ROW - 10' FROM PL
	23 (DF)						2ND ROW - 20' FROM PL
	TOTAL:47						
DECIDUOUS TREES							
	35 (RW)	*TREES TO BE RED MAPLE, FLOWERING PEAR, AND WHITE ASH (OR SIMILAR, NATIVE DECIDUOUS SPECIES). THE DEVELOPER SHALL DETERMINE WHAT SPECIES IS TO BE USED AND PROVIDE THAT INFORMATION TO THE SUSSEX COUNTY PLANNING AND ZONING DEPARTMENT PRIOR TO ANY PLANTING ACTIVITY. ALTERNATING SPECIES/TYPE (EVERGREEN/DECIDUOUS) RECOMMENDED.			4'	14.25'	1ST ROW - 10' FROM PL
	35 (FP)						2ND ROW - 20' FROM PL
	35 (WA)						
TOTAL:105							

JOB No: 19-0602ES

PLAN DATE: Dec. 13, 2019

SHEET No.: R12

STRATUS ESTATES MAN, JAN 25, 2021 (2:35)

TAB “4”

LEGAL DESCRIPTION FOR LOT LINE ADJUSTMENT
TAX PARCEL. NO. 234-5.00-30.00

All that certain tract, piece or parcel of land, situate in Indian River Hundred, Sussex County, Delaware as shown and described more particularly in accordance with the "Record Plan – Lot Line Adjustment" for property known as lands of Fusco Properties, LP prepared by The Kercher Group, Inc. dated January 24, 2021 and described more particularly as follows, to wit:

South side of Sussex County Road #280 (Stockley Road)

Beginning at a point on the southerly right of way of Sussex County Road #280 (Stockley Road) at the northwesterly property corner with lands of Paul C. Anderson; thence from said Point of Beginning and along the following eighteen courses and distances: (1) South 19°-32'-32" West, 598.14 feet to a point; (2) North 72°-02'-27" West, 149.62 feet to a point; (3) South 19°-35'-33" West, 278.00 feet to a point; (4) North 88°-32'-56" West, 274.97 feet to a point; (5) North 88°-11'-56" West, 212.72 feet to a point; (6) North 88°-45'-20" West, 299.85 feet to a point; (7) South 83°-42'-52" West, 43.76 feet to a point; (8) North 39°-28'-54" West, 46.77 feet to a point; (9) North 30°-51'-24" West, 55.31 feet to a point; (10) North 29°-14'-53" West, 140.40 feet to a point; (11) North 29°-25'-54" West, 116.60 feet to a point; (12) North 57°-02'-13" West, 140.74 feet to a point; (13) North 36°-11'-53" West, 43.68 feet to a point; (14) North 50°-37'-32" West, 39.28 feet to a point; (15) North 07°-25'-02" East, 929.43 feet to a point; (16) South 66°-08'-24" East, 522.04 feet to a point; (17) a curve with a radius of 1,830.00', an arc length of 101.53 feet, a chord bearing of South 67°-43'-45" East, with a chord length of 101.52 feet to a point; (18) South 69°-19'-07" East, 997.61 feet to a point; to the point and Place of Beginning. Containing within said bounds 33.70 acres of land more or less.

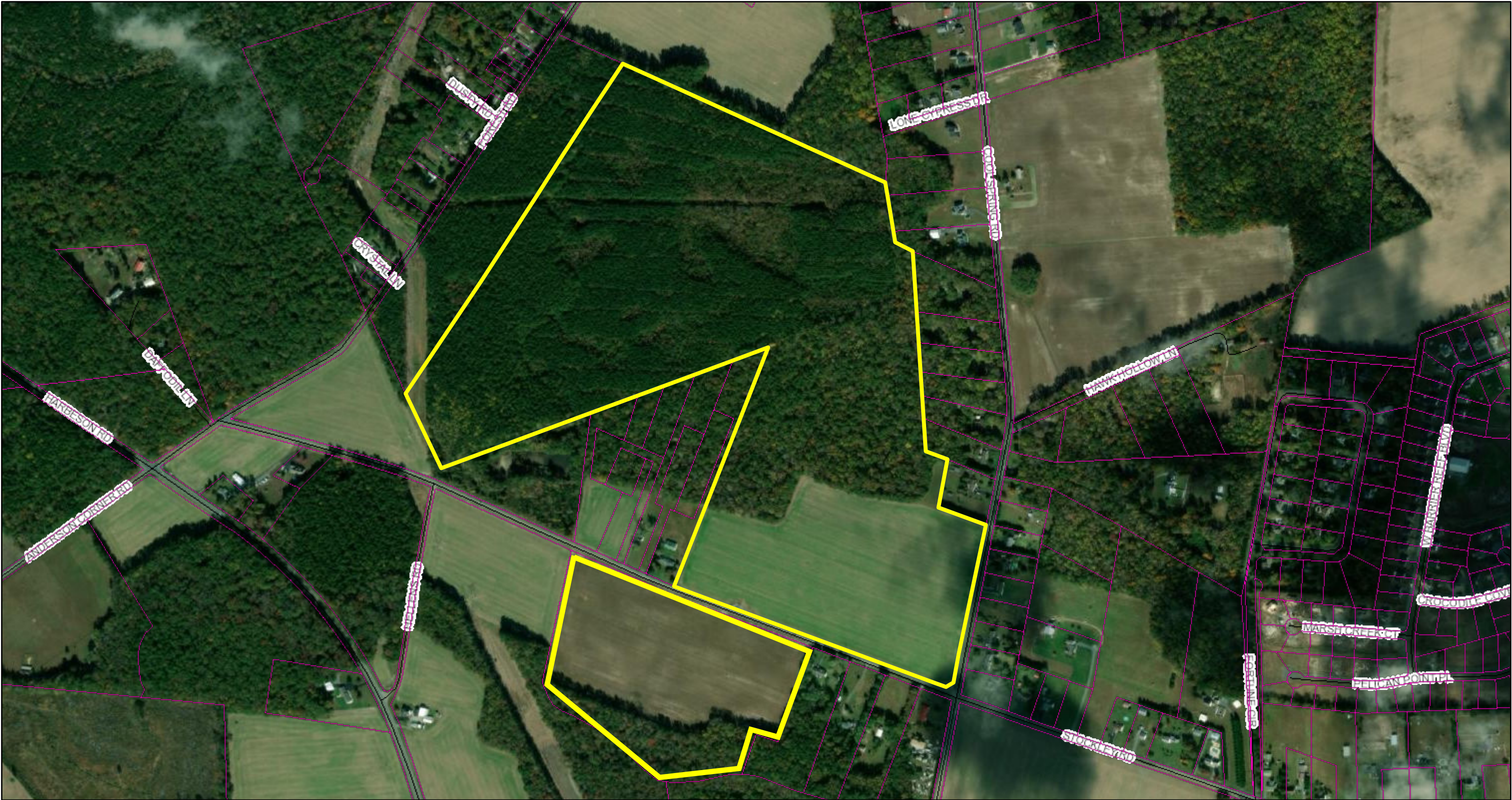
North side of Sussex County Road #280 (Stockley Road)

Beginning at a point on the northerly right of way of Sussex County Road #280 (Stockley Road) at the southeasterly property corner with lands of Majorie Bernice Streett, Estate; thence from said Point of Beginning and along the following nineteen courses and distances: (1) North 22°-03'-02" East, 1570.72 feet to a point; (2) South 72°-15'-01" West, 2137.86 feet to a point; (3) North 25°-10'-57" West, 506.14 feet to a point; (4) North 34°-27'-52" East, 829.79 feet to a point; (5) North 33°-36'-08" East, 612.30 feet to a point; (6) North 33°-08'-41" East, 322.07 feet to a point; (7) North 33°-40'-08" East, 293.10 feet to a point; (8) North 34°-06'-08" East, 359.17 feet to a point; (9) South 65°-19'-17" East, 1765.81 feet to a point; (10) South 09°-03'-59" East, 371.47 feet to a point; (11) South 62°-33'-04" East, 120.18 feet to a point; (12) South 03°-19'-55" East, 1225.63 feet to a point; (13) South 69°-27'-09" East, 141.95 feet to a point; (14) South 11°-09'-33" East, 299.97 feet to a point; (15) South 69°-27'-09" East, 289.97 feet to a point; (16) South 10°-58'-28" West, 987.02 feet to a point; (17) South 60°-12'-35" West, 52.11 feet to a point; (18) a curve with a radius of 6,470.00', an arc length of 132.72 feet, a chord bearing of South 69°-49'-07" East, with a chord length of 132.09 feet to a point; (19)






North 69°-19'-07" East, 1646.89 feet to a point; to the point and Place of Beginning.
Containing within said bounds 154.23 acres of land more or less.

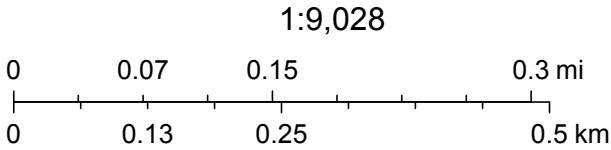
TAB “5”

Sussex County



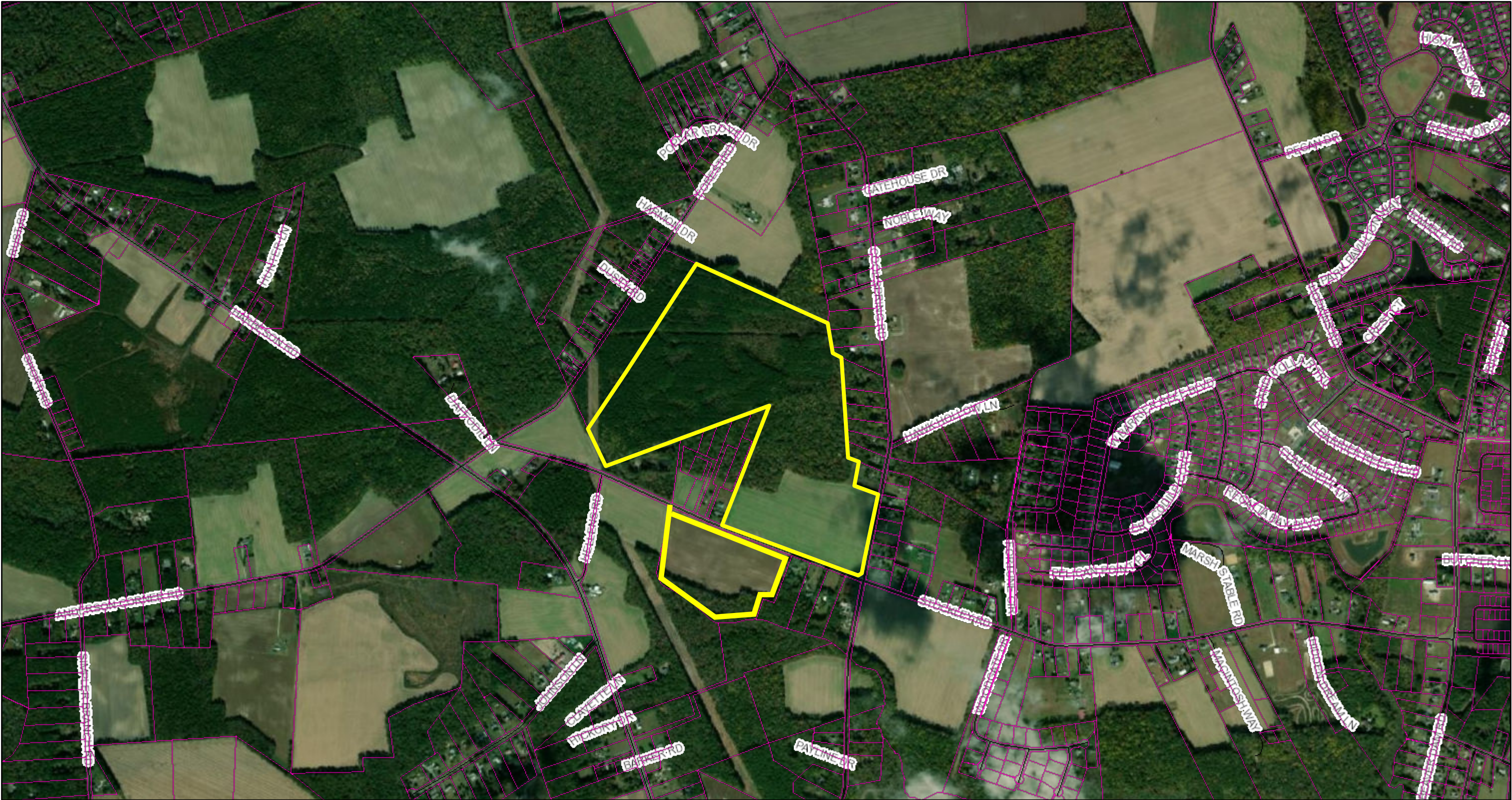
February 4, 2021

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








Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community, Delaware Department of Education, Wetland mapping is supported with funding provided by the Environmental Protection Agency., Delaware Geological Survey, DNREC, Division of Watershed

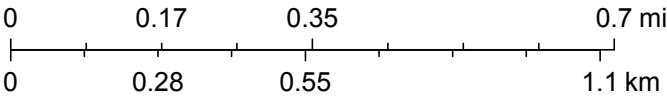
Sussex County



February 4, 2021

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

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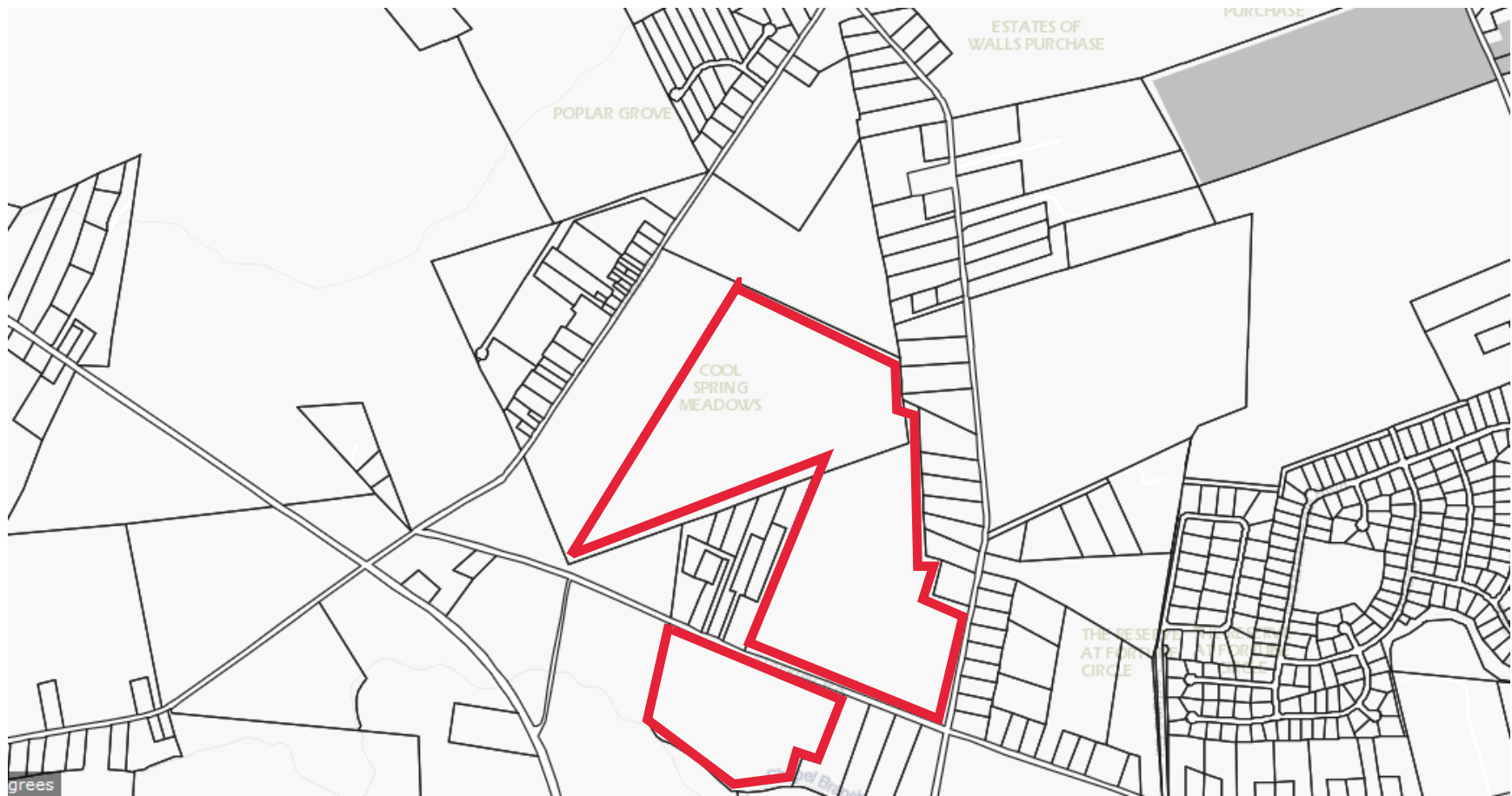


Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community, Delaware Department of Education, Wetland mapping is supported with funding provided by the Environmental Protection Agency., Delaware Geological Survey, DNREC, Division of Watershed

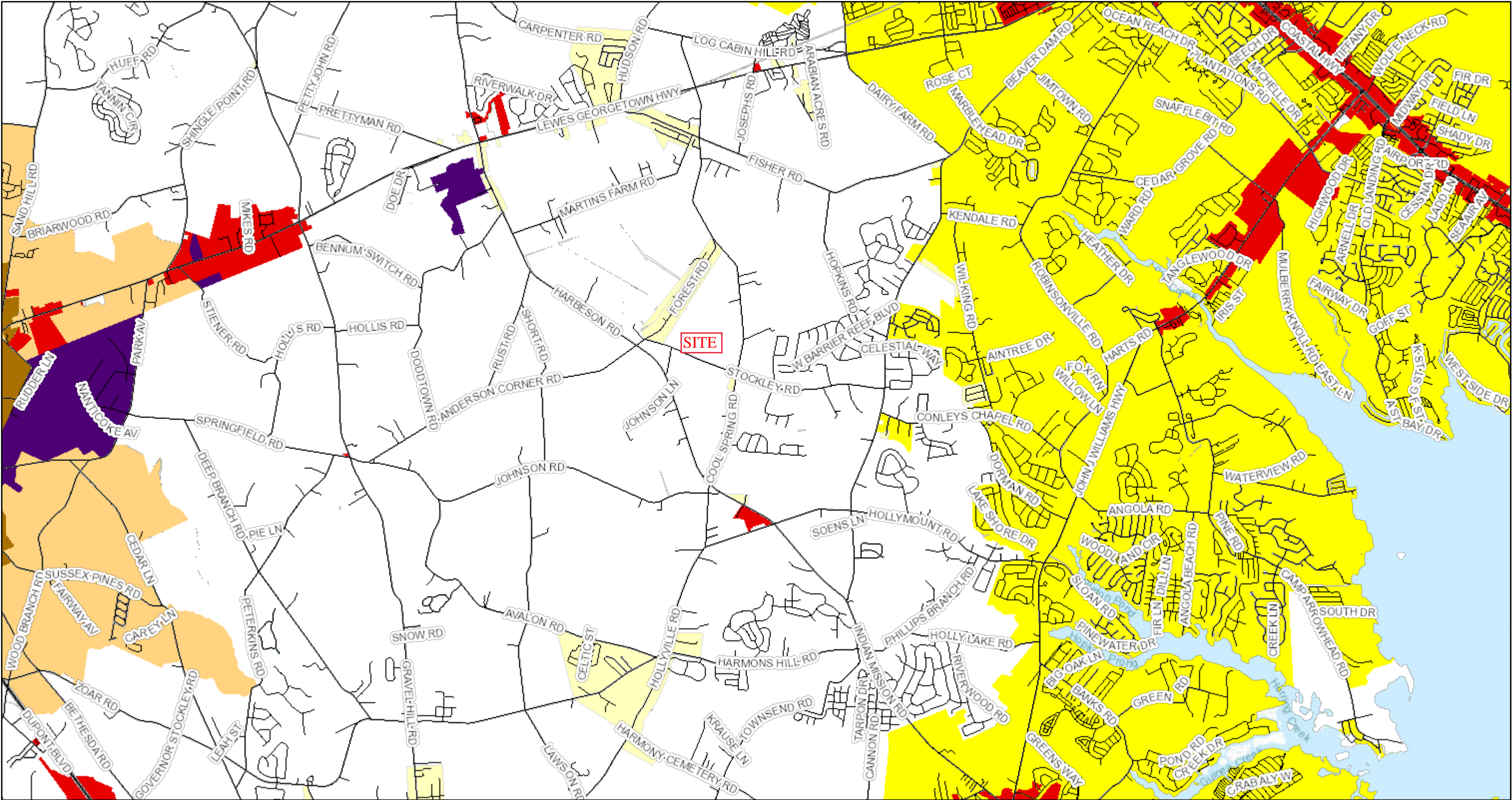
Delaware State Strategies 2020

2020 State Strategies

- 1
- 2
- 3
- 4
- Out of Play



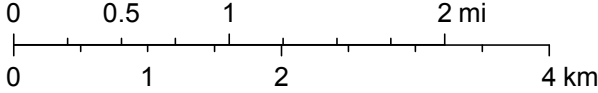
Sussex County



February 4, 2021

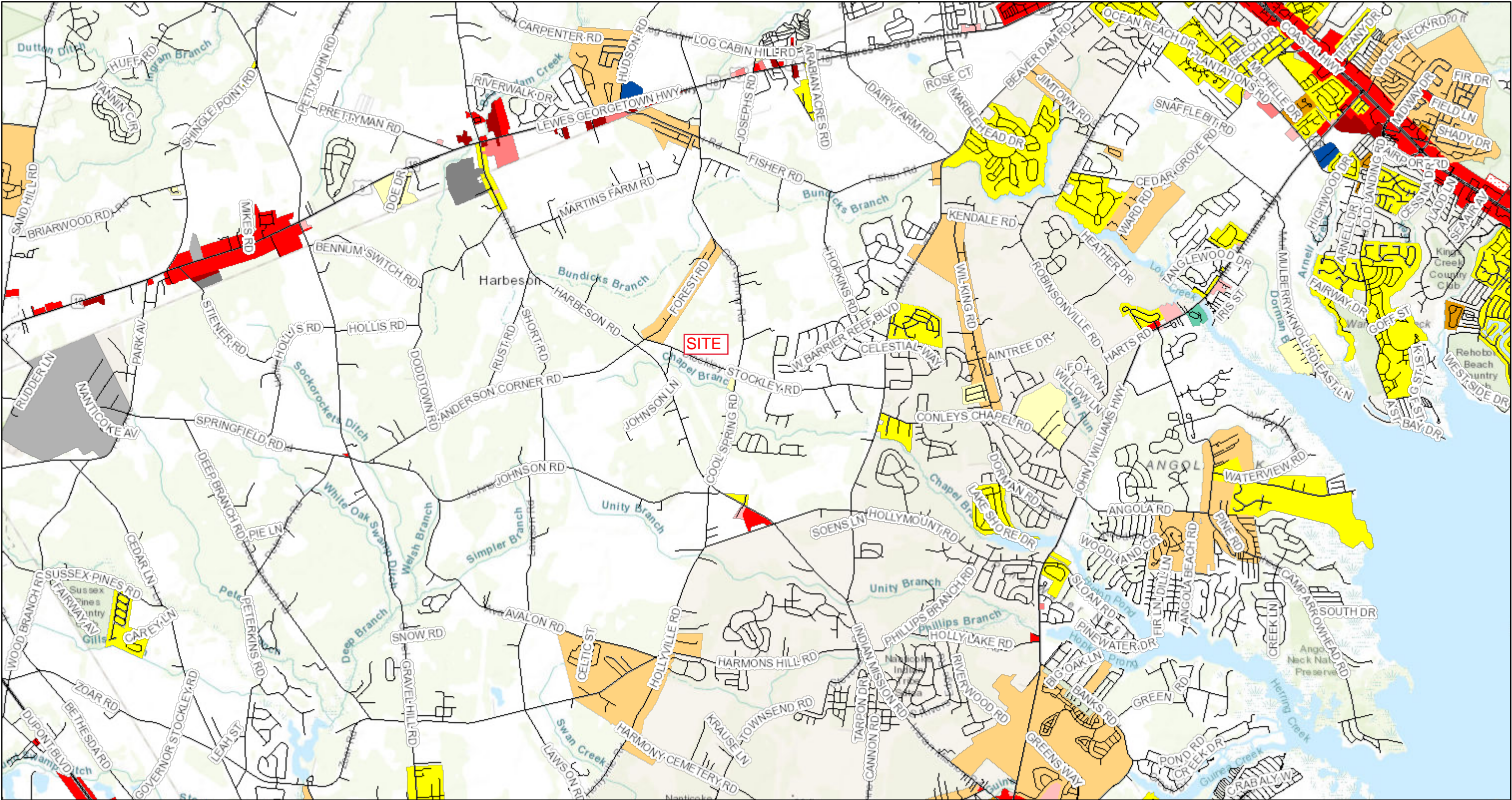
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- | | | |
|----------------------|---------------------------|----------------|
| Streets | Coastal Area | Industrial |
| County Boundaries | Commercial | Municipalities |
| 2019 Future Land Use | Developing Area | Town Center |
| Low Density | Existing Development Area | |



Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community, Sussex County Government

Sussex County



February 4, 2021

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- Streets

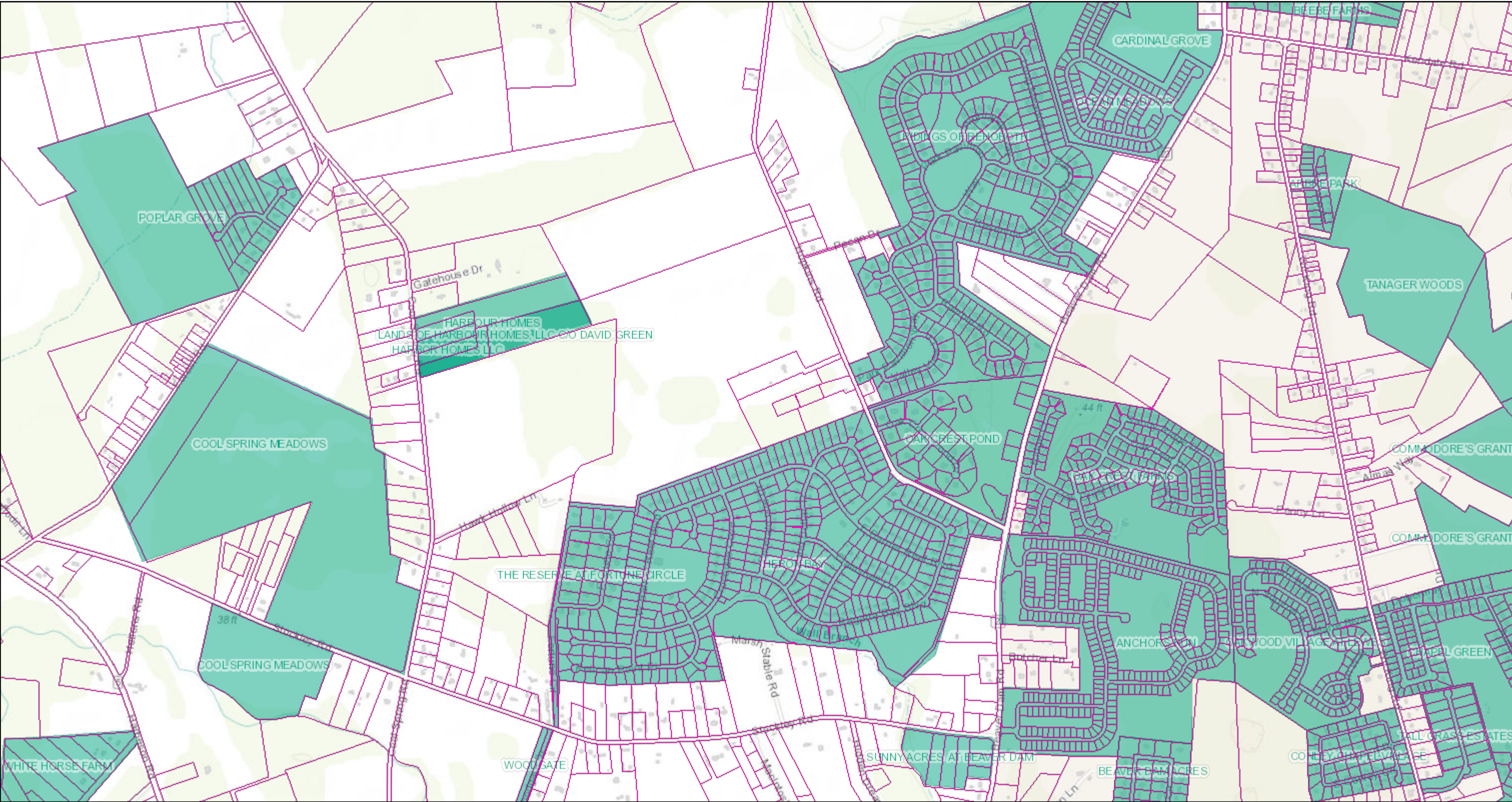
Zoning

 - Agricultural Residential - AR-1
 - Agricultural Residential - AR-2
 - Medium Residential - MR
 - General Residential - GR
 - High Density Residential - HR-1
 - High Density Residential - HR-2
 - Vacation, Retire, Resident - VRP
 - Neighborhood Business - B-1
 - Neighborhood Business - B-2
 - Business Research - B-3
 - General Commercial - C-1
 - General Commercial - C-2
 - General Commercial - C-3
 - General Commercial - C-4
 - General Commercial - C-5
 - Commercial Residential - CR-1
 - Institutional - I-1
 - Marine - M
 - Limited Industrial - LI-1
 - Light Industrial - LI-2
 - Heavy Industrial - HI-1
 - County Boundaries

0 0.5 1 2 mi
0 1 2 4 km




Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community, Sussex County, Sussex County Government

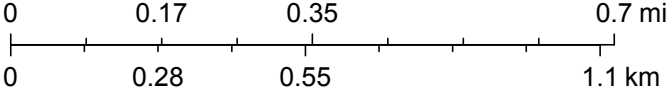
Sussex County



February 4, 2021

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-  Tax Parcels
-  County Boundaries
-  Subdivisions



Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community, Sussex County Government

3/1992



SITE

Image U.S. Geological Survey

Google Earth

Imagery Date: 3/23/1992 — 38°41'55.25" N 75°14'35.55" W elev 30 ft eye alt 11977 ft

6/2018

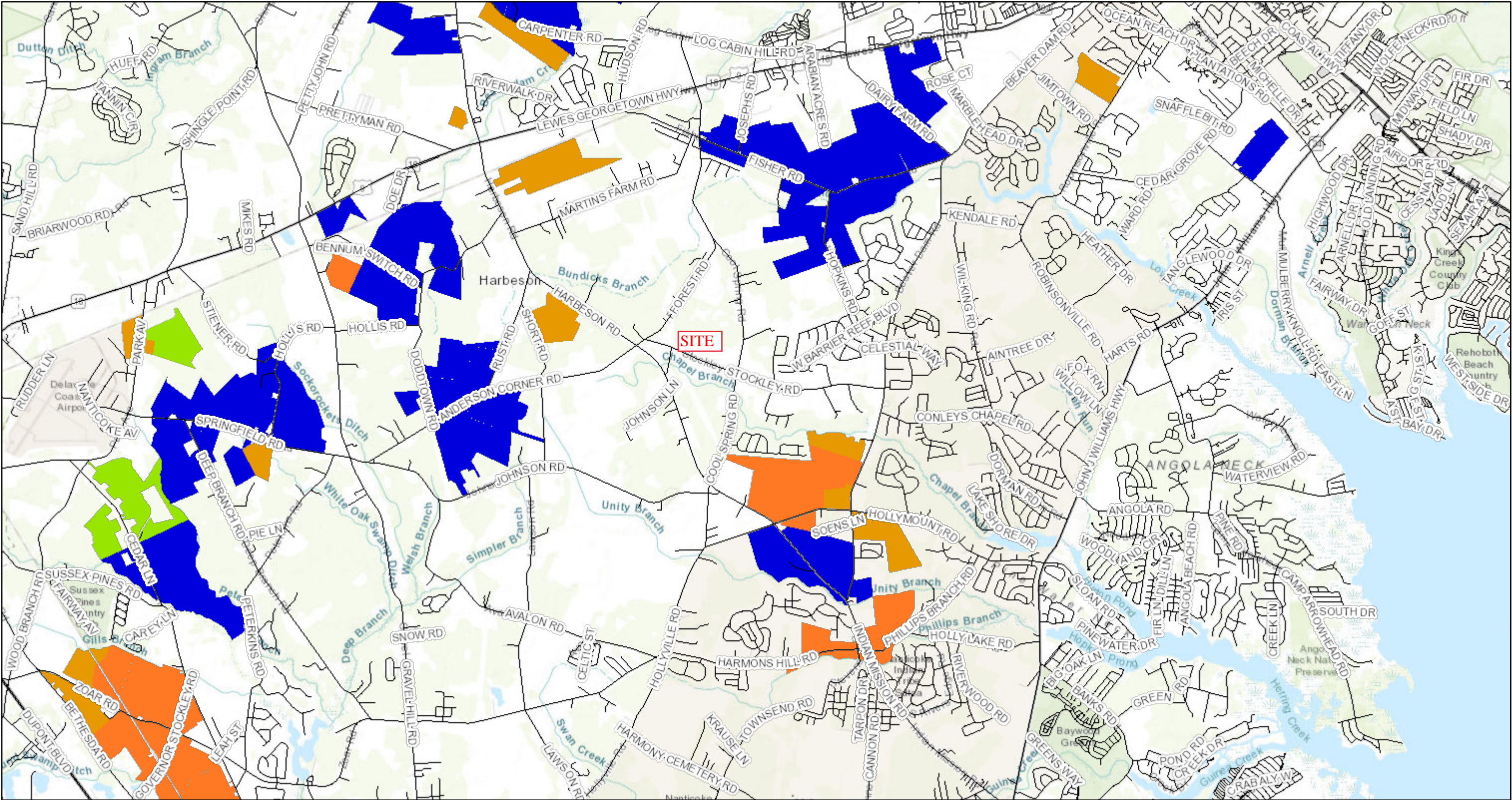


SITE

Google Earth

Imagery Date: 6/13/2018 38°41'55.25" N 75°14'35.55" W elev 30 ft eye alt 11977 ft

Sussex County



February 4, 2021

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- Streets

County Boundaries

Ag Preservation Districts

Agricultural Easement
- Agricultural District

Agricultural Expansion

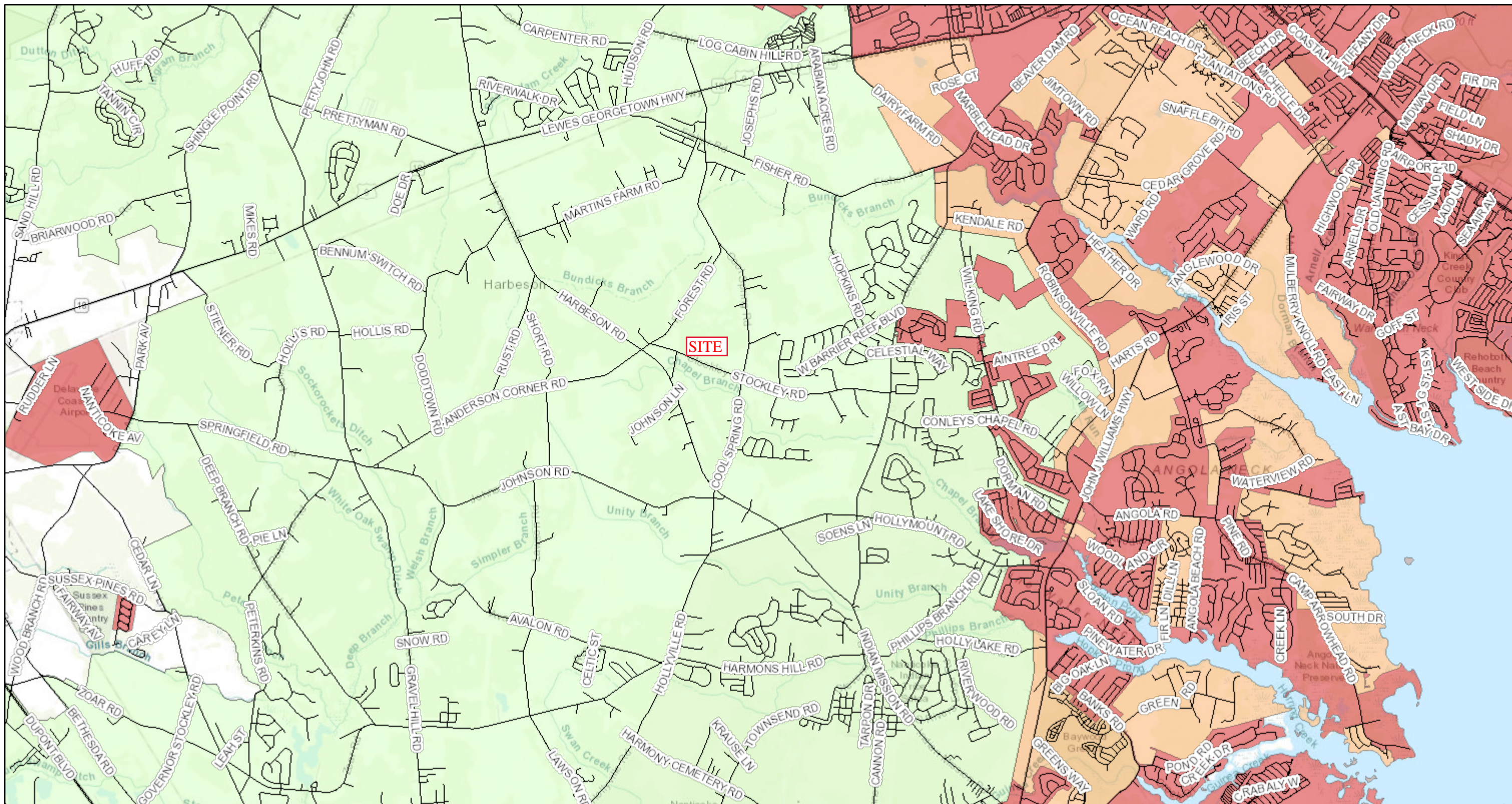
Forest Land Preservation

Forestland Preservation Area
- Forestland Preservation Easement



Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community, Sussex County Government

Sussex County



February 4, 2021

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— Streets


 County Boundaries

Sewer Tiers

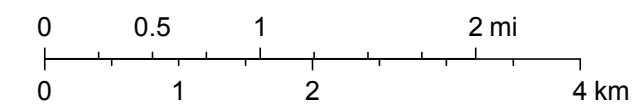
 Tier 1 - Sussex County Unified Sanitary Sewer District

 Tier 2 - Sussex County Planning Area

 Tier 3 - Coordinated CPCN Areas

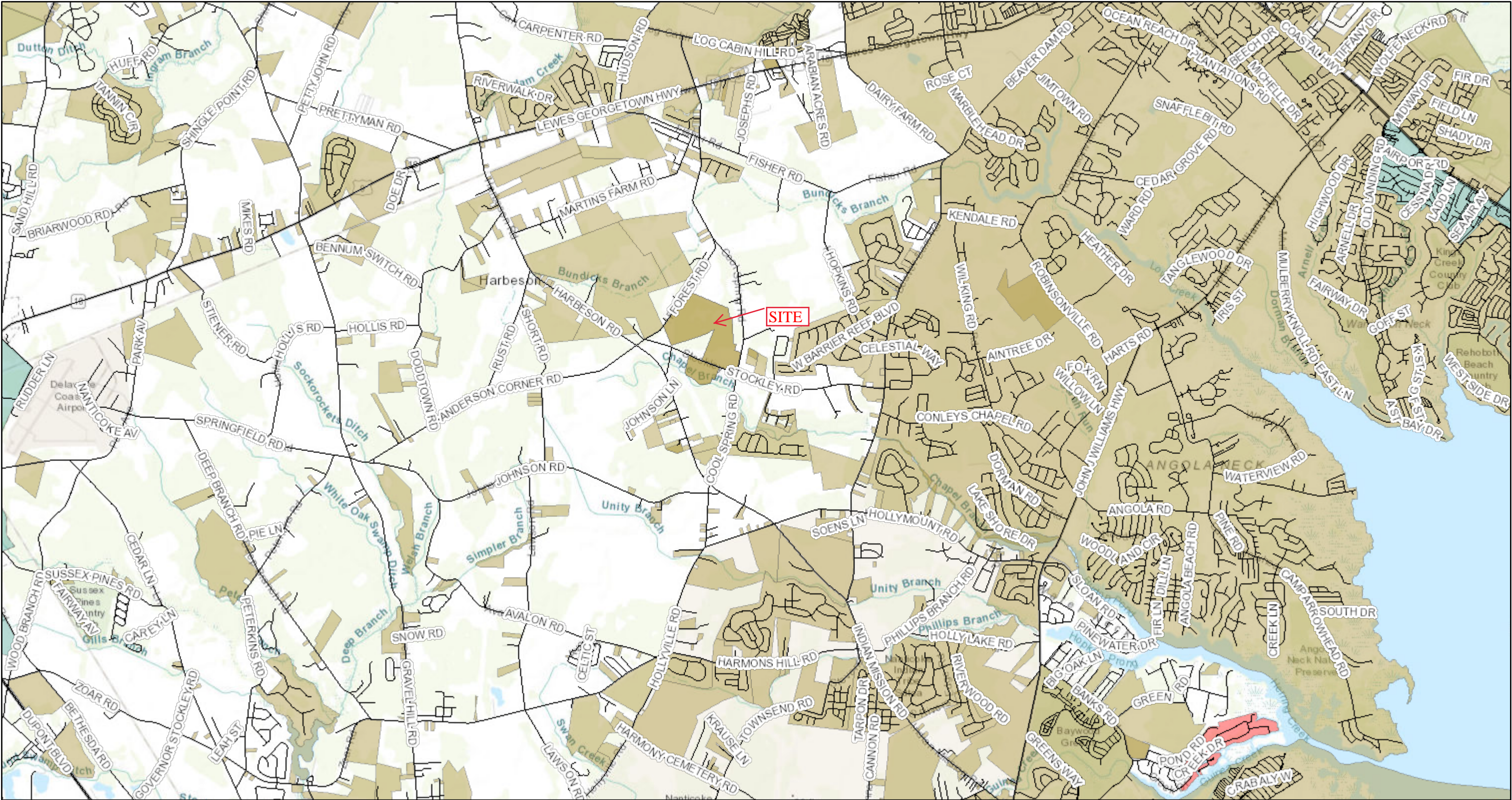
 Tier 4 - System Optional Areas

 Tier 5 - Regulated On-site Area



Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community, Sussex County Government

Sussex County



February 4, 2021

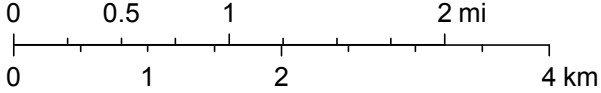
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- Streets
- County Boundaries
- Sussex County Water Districts

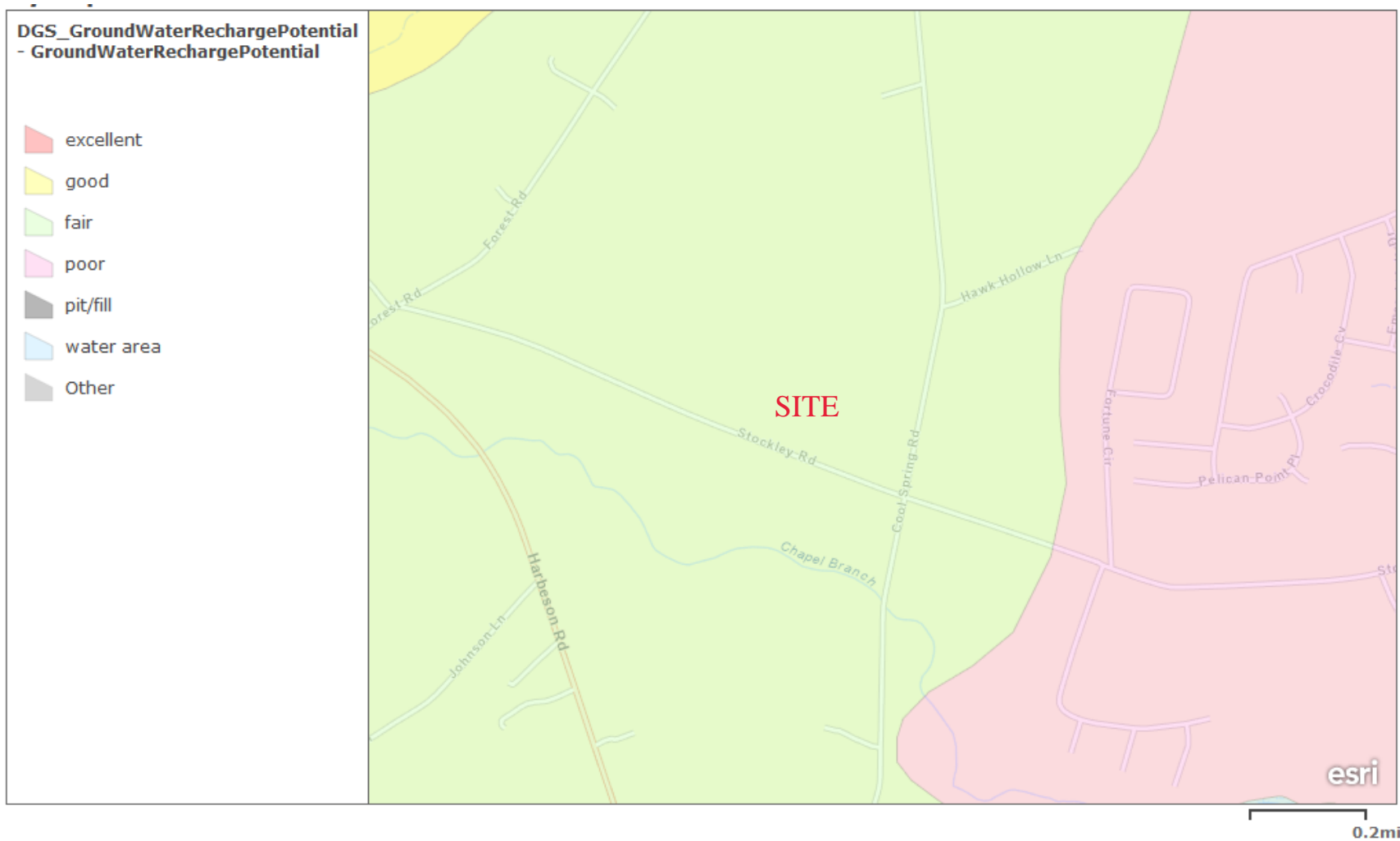
COUNTY

TOWN
- PRIVATE

TOWN



Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community, Sussex County Government



Esri Community Maps Contributors, County of Sussex, DE, Delaware FirstMap, VITA, Esri, HERE, Garmin, SafeGraph, INCREMENT P, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA



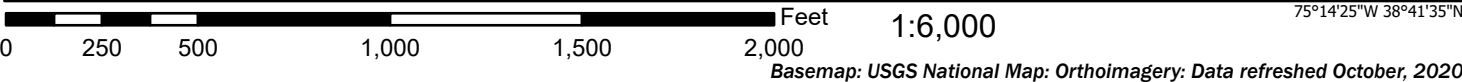
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Esri Community Maps Contributors, County of Sussex, DE, Delaware FirstMap, VITA, Esri, HERE, Garmin, SafeGraph, INCREMENT P, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA

National Flood Hazard Layer FIRMMette



75°15'2"W 38°42'3"N



Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS		Without Base Flood Elevation (BFE) Zone A, V, A99
		With BFE or Depth Zone AE, AO, AH, VE, AR
		Regulatory Floodway
OTHER AREAS OF FLOOD HAZARD		0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
		Future Conditions 1% Annual Chance Flood Hazard Zone X
		Area with Reduced Flood Risk due to Levee. See Notes. Zone X
		Area with Flood Risk due to Levee Zone D
OTHER AREAS		NO SCREEN Area of Minimal Flood Hazard Zone X
		Effective LOMRs
		Area of Undetermined Flood Hazard Zone D
GENERAL STRUCTURES		Channel, Culvert, or Storm Sewer
		Levee, Dike, or Floodwall
OTHER FEATURES		20.2 Cross Sections with 1% Annual Chance Water Surface Elevation
		17.5 Cross Sections with 1% Annual Chance Water Surface Elevation
		Coastal Transect
		Base Flood Elevation Line (BFE)
		Limit of Study
		Jurisdiction Boundary
MAP PANELS		Digital Data Available
		No Digital Data Available
		Unmapped

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 2/4/2021 at 7:22 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

TAB “6”

Compliance with Applicable Regulations

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

The project is located within the AR-1 zone and all lots being created will meet the requirements of an AR-1 Cluster Subdivision for lots using a central sewer system.

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

- The Gross Site Area is 187.93 acres which allows for a maximum density of 375.86 units.
- The proposed subdivision has only 226 units which results in a density of 1.20 units/acre.

Purpose: Stratus Estates 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 including a pool and bathhouse.
- Sidewalks and a connection to the multi-modal path are provided.
- No meaningful 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 District allows the proposed single-family cluster development.

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

Height, Area and Bulk Requirements: The following is a summary of the lot dimensions and setbacks for Stratus Estates, 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'

The Open Space Requirements for the Cluster Development Option require a minimum of 30% open space. Stratus Estates has more than double the minimum requirement as the total open space is 139.27 acres or 74.11% of the site.

II. 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 complies 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.

Only one part of the site abuts agricultural uses and a 30' buffer is provided adjacent to that property. In addition, a 30' buffer is provided to all the adjacent properties, *i.e.*, along all property boundaries.

(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.

There are lots used residentially adjacent to several of the property boundaries and a 30' buffer is provided for the entire boundary. In addition, a property owners association will be created to manage the open space and buffers and to govern and manage the community.

(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. There is a spot of "isolated wetlands" at the rear of Lot 149 that would not technically have to be qualified as wetlands. This area will be filled.

(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.

III. Statement of Compliance with Chapter 115-25, F. Review Procedures for Cluster Development

- (1) The developer shall submit an application for a cluster development in accordance with Chapter 99, Subdivision of Land, of the Sussex County Code and which shall include, at a minimum, a sketch plan showing the location and uses of all open spaces, the extent of existing wooded areas and wetlands and the location of any historical or cultural resources. The Director of Planning and Zoning may waive this requirement when the proposed development does not contain significant natural features or resources.

The appropriate application was filed.

- (2) The information submitted shall include a plan for the management of all open space.

All open space is labeled on the site plan and a property owners association is proposed to manage the open space areas.

- (3) The Planning and Zoning Commission shall determine that the following requirements are met before approving any preliminary plan and such application shall be reviewed on an expedited basis.

- (a) The cluster development sketch plan and the preliminary plan of the cluster subdivision provides for a total environment and design which are superior, and the reasonable judgment of the Planning Commission, to that which would be allowed under the regulations for the standard option. For the purposes of this subsection a proposed cluster subdivision which provides for a total environment and design which are superior to that allowed under the standard option subdivision is one which, in the reasonable judgment of the Planning Commission meets all of the following criteria:

- [1] Homes shall be clustered on the environmentally suitable portions of the tract, specifically those portions of the tract least encumbered by sensitive environmental features, including but not limited to wetlands, mature woodlands, waterways and other water bodies. This does not inhibit the development of wooded parcels.

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.

- [2] (Reserved)

[3] Required open space shall comply with the following criteria:

- [a] Required open space must meet the official definition of acceptable open space contained in §115-4.

The required open space meets the definition of acceptable open space in Sussex County Code §115-4.

- [b] Required open space must be designed to be beneficial to the residents or users of the open space. It shall not be constituted of fragmented lands with little open space value. Accordingly, 30% of all required open space shall be located on one contiguous tract of land, except that such open space may be separated by water bodies and a maximum of one street.

The project contains 78 acres of open space that is one contiguous tract of land.

- [c] If one of the following physical conditions exists adjacent to the proposed cluster development tract, at least 30% of all required open space must be adjacent to:

- [i] An existing or officially planned public park, land preserved by easement, or land preserved as open space and in municipal, County, state, or federal ownership.

Not applicable.

- [ii] Existing wetlands, waterways, wildlife corridors, or other ecology-sensitive land.

The ecologically-sensitive lands are within the 78 acres of open space that is one contiguous tract of land.

- [iii] Existing farmland and/or woodlands.

The 78 acres of open space that is one contiguous tract of land is adjacent to existing woodlands.

- [iv] If more than one of these physical features exist on adjacent properties, then one of these features will be identified and utilized to satisfy this requirement.

See answers to [iii] and [iv].

[v] If the open space is proposed to be dedicated to a municipality, a County, state, or federal agency or a homeowners' association, an agreement shall be provided, in advance, stipulating that such entity agrees in advance to accept that dedication and maintain that land for public recreation or as a nature preserve.

Not applicable.

[vi] Open space in a cluster development shall include a pedestrian trail system accessible to residents. This trail system shall connect to an adjacent trail, adjacent neighborhood, adjacent commercial area, or adjacent public open space, if any such areas exist adjacent to the proposed cluster development. Construction materials for the proposed trail shall be identified, and a typical construction detail for the proposed trail shall be shown. Trail construction materials shall be pervious in nature.

The open space meets the requirements of the County Code. The required open space (30% of site) is 56.4 acres, 139.3 acres (74.11% of the site) have been provided. The largest open space tract is contains and surrounds the wetlands on the site. The sidewalk system is proposed to be connect to the DelDOT multi-modal system.

- [4] A minimum of 25 feet of permanent setback must be maintained around the outer boundaries of all wetlands, except for tidal waters, tidal tributary streams and tidal wetlands and from the ordinary high water line of perennial nontidal rivers and nontidal streams as provided for in § 115-193B under Ordinance No. 774 where a fifty-foot permanent setback is required. No buildings or paving shall be placed within these setbacks.

A minimum 50' buffer is provided around the existing non-tidal wetlands.

- [5] Stormwater management shall be designed to promote groundwater recharge and protect groundwater quality. Natural drainage flows shall be maintained to the greatest extent possible. Drainage from rooftops shall be directed to vegetated areas or allow green technology. Stormwater detention and retention facilities should be designed to resemble natural ponds as referenced by DNREC in the National Resource Conservation Service's (NRCS) Pond Code 378,

Visual Resource Design.

Stormwater management shall be provided per DNREC and Sussex Conservation District. Recharge or structurally equivalent BMPs shall be provided.

- [6] Removal of healthy mature trees shall be limited.

Tree removal shall be limited to the areas necessary to construct the project. The proposed project greatly reduces the amount of tree removal from the previously approved project.

- [7] Scenic views that can be seen from within the tract should be preserved to the greatest extent possible.

Scenic views to wetland and wooded areas are preserved for the homeowners and passersby by limiting back-to-back lots.

- [8] The applicant for a cluster development shall illustrate that the following sequence and process was followed in the site design of the cluster project:

- [a] Identify lands that should be preserved. First, areas worthy of preservation should be mapped, including wetlands, wooded areas, waterways, other water bodies, and natural drainage areas. Then, other features that are important should be mapped, such as tree lines, scenic views, historic buildings, and prime farmland. The areas with the fewest important natural, scenic and historic features should be considered the “potential development area.”
- [b] Identify developable areas. Next, the most appropriate locations for development should be chosen to minimize the impact to the most important features mapped in the first step.
- [c] Locate roads and trails. After the developable areas are determined, a road system should be designed to serve those homes. A trail system that links homes to destinations outside of the tract should be designed.
- [d] Locate lot lines. The last step is to configure lot lines and make necessary adjustments to satisfy the various reviewing agencies’ comments.

The plan was laid out to maximize the retention of wooded

areas and preserve and protect natural facilities (wetlands and woods). The lots were primarily placed in the existing upland and open areas of the site. After that, the road and sidewalk network was determined, including sidewalks on both sides of the street and connections to DelDOT's multi-modal path. Finally, lots were established with no lot backing up directly to another lot with existing grades and drainage areas considered in the lot layout.

- [9] Sidewalks shall be required at least on one side of each street, subject to Planning and Zoning Commission approval.

Sidewalks are provided on one side of each street.

- (b) The cluster development plan will preserve the natural environment and any historic or archeological resources.

The natural environment is preserved as part of the land plan. There are no historic or archeological resources on the property.

- (c) All of the items in Ordinance Number 1152 (see § [99-9C](#)) have been addressed and approval of the cluster option for the proposed development will not have an adverse effect on any of the items to be considered. Section 99-C items are addressed herein.

- (d) The cluster development lies within a Town Center, a Developing Area or an Environmentally Sensitive Developing Area as described within the Land Use Element and as shown on the Future Land Use Plan of the adopted Sussex County Comprehensive Plan, and the proposed development complies with § [115-25B\(2\)](#), and does not exceed four dwelling units per gross acre, and the developer has proffered to Sussex County for the purpose of creating open space for preservation and/or active and/or passive recreation areas the development fee required by § [115-25B\(3\)](#). The Sussex County Council prior to the signing of a contract to purchase, shall approve all such land or conservation easement purchases which utilize monies paid to the County under the terms of this act. All such approvals by the Council shall be by a four-fifths majority vote. It is understood that the County shall control all monies and the Sussex County Land Trust will act as a recommending body and partner at the discretion of the County Council.

This application does not seek the bonus density described in this section.

- (4) The Sussex County Planning and Zoning Commission may add conditions to the approval of any cluster development to protect adjacent properties and the natural environment.

IV. 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 preserving almost 3/4 of the site.
- b. Forested non-tidal wetlands have been preserved.
- c. A minimum 30' landscaped buffer has been provided adjacent to all surrounding property lines.

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. The natural features (wetlands and woods) have been preserved in one contiguous block of open space.
- b. There are no known historic sites.

4. Preservation of open space and scenic views.

- a. A large tract of open space is being persevered including wooded areas, wetlands and buffers.
- b. Views of the existing wooded wetlands are preserved and are viewable from the lots.

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.

7. *Provision for water supply.*

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

8. *Provision for sewage disposal.*

- a. Artesian will provide wastewater service for the development.

9. *Provision for solid waste disposal.*

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

10. *Prevention of surface and groundwater pollution.*

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

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

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

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

- a. Entrance to the site shall be designed per current DelDOT standards.
- b. To promote pedestrian traffic within the development, sidewalks are provided along both sides of the community streets.
- 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 Stratus Estates 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. Stratus Estates will have not adversely effect schools, public buildings and community facilities.
- b. Community amenities will include a pool and bathhouse. In addition, Stratus Estates includes several open space areas for other active and passive uses.

16. Effect on area roadways and public transportation.

- a. A pre-submittal meeting was held with DelDOT officials concerning area roadway improvements related to Stratus Estates specifically with regard to off-site transportation improvements and frontage improvements. The entirety of Stockley Road from Forest Road to Cool Spring Road will be widened and Cool Spring Road will also be widened to Local Road Standards (11' travel lanes and 5' shoulders). In addition a 10' wide shared use path is required along the properties frontage on both Stockley Road and Cool Spring Road.

17. Compatibility with Other Land Uses.

- a. The project is in the vicinity of other residential cluster communities of Coastal Club, Ridings at Rehoboth, Ocean Meadows and Heron Bay, 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.

TAB “7”



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

August 21, 2019

Mr. John Murray
The Kercher Group, Inc.
37385 Rehoboth Ave. Unit #11
Rehoboth Beach, DE 19971

RE: PLUS review 2019-07-04; Cool Spring Meadows

Dear Mr. Murray:

Thank you for meeting with State agency planners on July 24, 2019 to discuss the Cool Spring Meadows project. According to the information received you are seeking review of a 226 unit subdivision on 187.93 acres along Stockley 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

This project represents land development that will result in 226 residential units in an Investment 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.

From a fiscal responsibility perspective, development of this site is likewise inappropriate. The cost of providing services to development in rural areas is an inefficient and wasteful use of the State's fiscal resources. The project as proposed will bring new residents to an area where the State has no plans to invest in infrastructure upgrades or additional services. These residents will need access to such services and infrastructure as schools, police, and transportation. To provide some examples, the State government funds 100% of road maintenance and drainage improvements for the transportation system, 100% of school transportation and paratransit services, up to 80% of school construction costs, and 100% of the cost of police protection in the unincorporated portion of Sussex County where this development is proposed. Over the longer term, the unseen negative ramifications of this development will become even more evident as the community matures and the cost of maintaining infrastructure and providing services increases.

Because the development is inconsistent with the *Strategies for State Policies and Spending*, the State does not support this proposed development.

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

Code Requirements/Agency Permitting Requirements

Department of Transportation - Contact BiJI Brockenbrough 760-2109

- The site access on Stockley Road (Sussex Road 280) 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 P.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 http://www.deldot.gov/Business/subdivisions/pelfs/Meeting_Request_Form.pdf?08022011.
- Section P.5 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 2,158 vehicle trip ends per day. DelDOT calculates a higher number, 2,201 vehicle trip ends per day, but regardless the warrant for a TIS is met.

In April 2006 (See attached letters.) DelDOT commented to the County on its review of a TIS for an earlier plan to develop these lands. The letter includes a numbered list of off-site improvements and contributions toward off-site improvements that DelDOT recommended be required of the development.

Some of the listed items apply to locations that would not be included in a TIS done today because DelDOT regulations have changed. Following is a list of off-site improvements and contributions toward off-site improvements that DelDOT finds should be required of the developer. If the County or the developer would prefer to restart the TIS process with current data, DelDOT would be amenable to that. Alternatively, DelDOT recommends that the following items be required:

- o The developer should improve Stockley Road from Cool Spring Road (Sussex Road 290) to Forest Road (Sussex Road 292) in order to meet DelDOT local road standards as nearly as possible. Local road standards include two eleven-foot travel lanes and two five-foot shoulders. The developer should provide a bituminous concrete overlay to the existing travel lanes, at DelDOT's discretion. DelDOT should analyze the existing travel lanes' pavement section and recommend an overlay thickness to the developer's engineer if necessary.
- o The developer should improve Cool Spring Road from Stockley Road to the north limit of the site frontage in order to meet DelDOT local road standards as nearly as possible. Local road standards include two eleven-foot travel lanes and two five-foot shoulders. The developer should provide a bituminous concrete overlay to the existing travel lanes, at DelDOT's discretion. DelDOT should analyze the existing travel lanes' pavement section and recommend an overlay thickness to the developer's engineer if necessary.
- o The developer should enter into a traffic signal agreement with DelDOT for the intersection of Delaware Route 5 and Forest Road.
- 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 Stockley Road and Cool Spring Road. By this regulation, this dedication is to provide a minimum of 30 feet of right-of-way from the physical centerline along both roads. The following right-of-way dedication note is required, **"An X-foot wide right-of-way is hereby dedicated to the State of Delaware, as per this plat."**
- In accordance with Section 3.2.5.1.2 of the Manual, DelDOT will require the establishment of a 15-foot wide permanent easement across the property frontage on Stockley Road and Cool Spring Road. The location of the easement shall be outside the

limits of the ultimate right-of-way. The easement area can be used as part of the open space calculation for the site. The following note is required, "**A 15-foot wide permanent easement is hereby established for the State of Delaware, as per this plat.**"

- Referring to Section 3.4.2.1 of the Manual, the following items, among other things, are required on the Record Plan:
 - o A Traffic Generation Diagram. See Figure 3.4.2-a for the required format and content.
 - o Depiction of all existing entrances within 600 feet of the entrances on Stockley Road.
 - o 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 Goldemod Drive be extended to the property line as a stub street.
- Section 3.5.4.2 of the Manual addresses requirements for shared-use paths and sidewalks. For projects in Level 1 and 2 Investment Areas, installation of paths or sidewalks along the frontage on State-maintained roads is required. DelDOT anticipates requiring the developer to build Shared Use Paths along their frontage on both Stockley Road and Cool Spring Road.
- Section 3.5.4.4 of the Manual addresses access-ways, essentially shared-use paths connecting subdivision streets either to each other or to the road on which the property fronts. DelDOT anticipates requiring the developer to build one access-way from Goldemod Drive to Stockley Road near Lot 16 and another from Monarch Avenue to Cool Spring Road near Lot 99.
- Referring to Section 3.5.5 of the Manual, existing and proposed transit stops and associated facilities as required by the Delaware Transit Corporation (DTC) or DelDOT shall be shown on the Record Plan.
- 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 Stockley Road and Cool Spring 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.del.dot.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.

If granted preliminary approval, a pre-submittal meeting is required by DELDOT. At this meeting, the above items will be discussed. The developer shall be required to make all required improvements.

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

Wastewater Disposal

- The DNREC Groundwater Discharge Large Systems Section will need to be notified where the developer intends to send the wastewater. The PLUS application states that a new community system will not be located on this site.

If granted preliminary approval, a central sewer system is proposed. A pump station shall be provided for this site and Artesian will maintain the system.

Floodplain and Sea Level Rise

- Chapel Branch runs through the southeast corner of the site. This site is situated upstream of the mapped floodplain for Chapel Branch,
- The unmapped floodplain area should be avoided, and floodplain analysis and mapping could be required.

If required, a floodplain analysis and mapping would be performed.

Water Quality

- DNREC mapping indicates presence of wetlands and hydric soils (Hurlock) which encompass a large portion of the subject parcel.
- Increased impervious cover from development and removal of forest cover will increase the potential for future flooding concerns.
- Green-technology stormwater management is highly recommended. Efforts to mitigate for impervious cover (pervious pavers) should also be implemented where applicable.
- To protect the function and integrity of wetlands, a minimum 100-foot buffer should be left intact around the perimeter.
- Avoid disturbance and filling of wetlands.

If granted preliminary approval, the project would be subject to approval from the Sussex Conservation District. The project will adhere to all state regulations.

Forest Preservation

- DNREC mapping indicates presence of forested wetlands which encompass a large

portion of the subject parcel.

- The site plan should be designed to allow for the preservation of as much of this wooded area as feasible, with special consideration for preservation given to large, mature trees. Leaving a forest intact is usually more beneficial to the existing wildlife and is preferred to clearing.
- To reduce impacts to nesting birds and other wildlife species that utilize forests for breeding, we recommend that clearing not occur April 1st to July 31st.
- Low spillage lights (those that reflect light directly downward onto the illuminated area) should be used on roads and homes within 750 feet of the forested wetlands on site. Fluorescent and mercury vapor lighting should not be used.
- Contact the Division of Fish and Wildlife for assistance in identifying, preserving, and managing the existing forest on-site. For technical assistance or to schedule a site visit please contact Katie Kadlubar, Kathryn.Kadlubar@delaware.gov.

The preliminary plan shows a minimal amount to tree clearing. The original approved subdivision encompassed the entire property and required a significant portion of the trees to be removed. The revised plan reflects the developers efforts to conserve these natural resources. The developer may request clearing to occur as stated above. Most lighting to be installed by the developer would typically be downward facing.

State Historic Preservation Office - Contact Carlton Hall 736-7404

- The Delaware SHPO does not support development in a Level 4 area.
- There are no known archaeological sites or known National Register listed or eligible properties on the parcel. However, the soils are a mix of well-and poorly drained areas. Poorly drained areas could have been a source for plant and animal resources. There is moderate potential for archaeological resources to be present and our office recommends an archaeological survey of the project area. If there are any questions, inquiries, or concerns, feel free to contact the Delaware State Historic Preservation Office for assistance at 302-736-7400.
- 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). Prior to any demolition or ground-disturbing activities, the developer should hire an archaeological consultant to examine the parcel for archaeological resources, including unmarked human burials or human skeletal remains, to avoid those sites or areas.
- 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

The developer would be open to allowing the State investigate the property for any

archaeological resources. It is noted that the developer shall hire an archaeological consultant to investigate potential unmarked burial site.

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

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

Fire Protection Water Requirements:

- Where a water distribution system is proposed for single-family dwellings it shall be capable of delivering at least 500 gpm for 1-hour duration, at 20-psi residual pressure. Fire hydrants with 1000 feet spacing on centers are required.
- The infrastructure for fire protection water shall be provided, including the size of water mains.

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. Additionally, where trees are to be situated adjacent to travel roads in the subdivision, some forethought should be exercised regarding how future growth of the trees may affect fire department travel throughout the subdivision.
- 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, such as Point Lane and Bayberry Drive, 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.

Gas Piping and System Information:

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

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"
- Name of Water Supplier
- Proposed Use

- National Fire Protection Association (NFPA) Construction Type Maximum Height of Buildings (including number of stories)
- Provide Road Names, even for County Roads

If granted preliminary approval, the project will be required to submit to the OSFM for their approval. The project shall adhere to the State regulations.

Sussex County - Contact Rob Davis 302-855-7820

- Sussex County does not expect to provide sanitary sewer service within the area proposed for the 226-unit subdivision. The Sussex County Engineering Department recommends the project receive wastewater service from Artesian Utilities as proposed.

If granted preliminary approval, wastewater service shall be from Artesian Utilities.

In addition to the comments above our office has received a letter from Brandy Nauman, Sussex County Housing Coordinator & Fair Housing Compliance Officer. A copy of that letter is enclosed with this letter.

If granted preliminary approval, the developer may wish to contact the County regarding affordable housing.

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.

s 0: .k

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

CC: Sussex County

Enclosure
Attachment

BRANDY BENNETT NAUMAN
HOUSING COORDINATOR &
FAIR HOUSING COMPLIANCE OFFICER
(302) 855-7777 T
(302) 854-5397 F
bnauman@sussexcountype.gov



sussex <!County
DELAWARE
sussexcountype.gov

July 22, 2019

Mr. John Murray
The Kercher Group, Inc.
37385 Rehoboth Ave., Unit #11
Rehoboth Beach, DE 19971

RE: Cool Spring Meadows-PLUS Review (PLUS 2019-07-04)

Dear Mr. Murray,

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.sussexcountype.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.

On behalf of Sussex County, we look forward to cooperating with you and your project as it moves forward.

Thank you,

Brandy B. Nauman
*Housing Coordinator &
Fair Housing Compliance Officer*



COUNTY ADMINISTRATIVE OFFICES WEST COMPLEX
22215 DUPONT BOULEVARD | PO BOX 589
GEORGETOWN, DELAWARE 19947

April 19, 2006

Mr. Todd J. Sammons
Project Engineer
DelDOT Division of Planning
P.O. Box 778
Dover, DE 19903

RE: Agreement No. 1294
Traffic Impact Study Review Services
Task No. 91 – Cool Spring Meadows

Dear Mr. Sammons,

McCormick Taylor has completed its review of the Traffic Impact Study (TIS) for the development of Cool Spring Meadows prepared by Orth-Rodgers and Associates, Inc., dated January 19, 2006. This review was assigned as Task Number 91. Orth-Rodgers and Associates, Inc. prepared the report in a manner generally consistent with DelDOT's *Rules and Regulations for Subdivision Streets*.

The TIS evaluates the impacts of the development of Cool Spring Meadows in Sussex County, Delaware. The proposed development would consist of 233 single-family detached houses. This development is located on the both sides of Stockley Road (Sussex Road 280), west of Cool Spring Road (Sussex Road 290). Two access points on Stockley Road are proposed to create a four-way intersection, and one access point is proposed on Cool Spring Road creating a t-intersection. Construction is expected to be complete by 2010.

There are currently no active DelDOT projects within the study area.

Based on our review, we have the following comments and recommendations:

One intersection exhibits level of service deficiencies without the implementation of physical roadway and/or traffic control improvements: the intersection of US Route 9 (Lewes–Georgetown Highway) and Cool Spring Road. This intersection is expected to exhibit level of service deficiencies in the 2010 afternoon and summer Saturday peak hours with and without the development, and in the 2010 morning peak hour with the development.

Should the County choose to approve the proposed development, the following items should be incorporated into the site design and reflected on the record plan. All applicable agreements (i.e., letter agreements for off-site improvements and traffic signal agreements) should be executed prior to entrance plan approval for the proposed development.

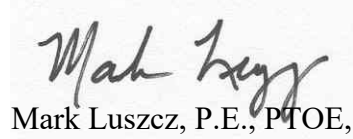
1. The developer should improve Stockley Road from Forest Road (Sussex Road 292) to Cool Spring Road in order to meet DelDOT local road standards as nearly as possible. Local road standards include two eleven-foot travel lanes and two five-foot shoulders. The developer should provide a bituminous concrete overlay to the existing travel lanes, at DelDOT's discretion. DelDOT should analyze the existing travel lanes' pavement section and recommend an overlay thickness to the developer's engineer if necessary.
2. The developer should improve Cool Spring Road from Stockley Road to Forest Road in order to meet DelDOT local road standards as nearly as possible. Local road standards include two eleven-foot travel lanes and two five-foot shoulders. The developer should provide a bituminous concrete overlay to the existing travel lanes, at DelDOT's discretion. DelDOT should analyze the existing travel lanes' pavement section and recommend an overlay thickness to the developer's engineer if necessary.
3. The developer should enter into a traffic signal agreement with DelDOT for the intersection of US Route 9 and Cool Spring Road. The agreement should include pedestrian signals, crosswalks, and interconnection at DelDOT's discretion. Due to the fact that an active railroad line is aligned diagonally through the intersection, any traffic signal agreement should also include active railroad warning devices and railroad-highway traffic signal interconnection at DelDOT's discretion.
4. The following bicycle and pedestrian improvements should be included:
 - a) A minimum of a five-foot bicycle lane should be striped along the Stockley Road and Cool Spring Road site frontage (in addition to any required turn lanes) in order to facilitate safe and unimpeded bicycle travel.
 - b) A fifteen-foot wide permanent easement should be established across the property frontage for a future ten-foot wide multi-use path.
 - c) Regulatory/warning signage should be added to any forthcoming plans to this project in order to alert motorists to the presence of bicycle traffic.
 - d) Utility covers should be moved outside of the designated bicycle lane or be flush with the pavement.
 - e) Internal sidewalks to promote walking as a viable transportation alternative should be constructed.
 - f) An ADA compliant crosswalk should be considered at the opposing access points along Stockley Road.

Please note that this review generally focuses on capacity and level of service issues; additional safety and operational issues will be further addressed through DelDOT's subdivision review process.

Additional details on our review of the TIS are attached. Please contact me at (302) 738-0203 or through e-mail at mluszcz@mtmail.biz if you have any questions concerning this review.

Sincerely,

McCormick Taylor, Inc.

A handwritten signature in black ink, appearing to read "Mark Luszcz", is positioned above the printed name.

Mark Luszcz, P.E., PTOE, AICP
Associate

Enclosure

General Information

Report date: January 19, 2006

Prepared by: Orth-Rodgers & Associates, Inc.

Prepared for: Ocean Atlantic Agency

Tax parcel: 2-34-5.00-30.00, 2-34-5.00-33.00

Generally consistent with DelDOT's Rules and Regulations for Subdivision Streets: Yes

Project Description and Background

Description: Development of 233 single-family detached houses

Location: Site is located on either side of Stockley Road, west of Cool Spring Road in Sussex County, Delaware

Amount of land to be developed: approximately 207 acres

Land use approval(s) needed: Subdivision Review

Proposed completion date: 2010

Proposed access locations: Two access points on Stockley Road are proposed to create a four-way intersection, and one access point is proposed on Cool Spring Road creating a t-intersection.

Livable Delaware

(Source: Delaware Strategies for State Policies and Spending, July 2004)

Location with respect to the Strategies for State Policies and Spending Map of Delaware:

The proposed Cool Springs Meadow Development is located within Investment Level 4.

Description of Investment Level 4:

Areas located within Investment Level 4 are predominantly agricultural; contain agribusiness activities, farm complexes and small settlements that are often found at historic crossroads. These areas contain undeveloped natural areas, including forestland and recreational parks, however may have scattered single-family detached residential homes located within them.

Transportation facilities and services will be preserved by the state while they continue to manage the transportation system in a manner that will support the preservation of the natural environment. The state will limit its investments in water and wastewater systems to existing public health, safety and environmental risks and discourage accommodating further development. In addition, the state will limit continued development of areas within Investment Level 4 to those that enhance agriculture and protect water supplies, preserve critical habitat and maintain existing education and public safety services. Although residential development is not desirable in Investment Level 4, conservation design techniques (protecting large portions of existing open space and farmland while clustering development on a smaller portion of the parcel and using environmentally friendly design innovations) can be utilized in some cases to help ensure that developments are compatible with the rural character and natural resources present in the area. However, it is the state's general intent to discourage additional development in Investment Level 4 areas that are unrelated to the areas' needs by limiting infrastructure investment.

Proposed Development's Compatibility with Livable Delaware:

The proposed Cool Spring Meadows Development falls within Investment Level 4. Residential development is generally not desirable in Investment Level 4. Developments within Investment Level 4 areas should focus on protection of large portions of existing open space and farmland on a site while clustering development on a smaller portion of the parcel. This proposed development would be developed using the cluster option under that zoning and therefore would be compatible with Livable Delaware. However, it should be noted that conservation design techniques should be utilized to ensure that the development is compatible with the rural character and natural resources present in the area.

Comprehensive Plans

Sussex County Comprehensive Plan: *(Source: 2003 Sussex County Comprehensive Plan Update)* The Sussex County Comprehensive Plan indicates that the parcel of land for the proposed development is in a Low Density Area. The purpose of the Low Density Area is to provide for a full range of agricultural activities and to protect agricultural lands as one of the County's most valuable natural resources from the depreciating effect of objectionable, hazardous and unsightly uses. Although this area is intended primarily for agricultural use, low density residential development is permitted. Density guidelines state that the minimum lot size in a Low Density Area is 20,000 square feet (about 0.46 acres).

Public water and wastewater systems are not planned for low density areas therefore the proposed development will use on-site septic systems or private wastewater treatment systems. Improvements to local roads will be limited to safety considerations and emergency evacuation.

Proposed Development's Compatibility with Comprehensive Plans: Since the average density of this proposed development would be approximately 1.12 dwelling units/acre (close to an average 0.89 acre lots sizes), this development would most likely be compatible with the Sussex County Comprehensive Plan.

Transportation Analysis Zone

Transportation Analysis Zones (TAZ) where development would be located:
637 (Peninsula Code TAZ)

TAZ Boundaries:



Current employment estimate for TAZ: 36 in 2005

Future employment estimate for TAZ: 39 in 2010

Current population estimate for TAZ: 841 in 2005

Future population estimate for TAZ: 938 in 2010

Current household estimate for TAZ: 351 in 2005

Future household estimate for TAZ: 397 in 2010

Relevant committed developments in the

TAZ: Beaver Creek (The Villages)

Would the addition of committed developments to current estimates exceed future projections: Yes

Would the addition of committed developments and the proposed development to current estimates exceed future projections: Yes

Relevant Projects in the DelDOT Capital Transportation Program (2005-2010)

There are currently no active DelDOT projects within the study area.

Trip Generation

Trip generation for the proposed development was computed using comparable land uses and equations contained in Trip Generation, Seventh Edition, published by the Institute of Transportation Engineers (ITE). The following land uses were utilized to estimate the amount of new traffic generated for this development:

- Single-Family Detached Houses (ITE Land Use Code 210)

Table 1.
COOL SPRING MEADOWS TRIP GENERATION

Land Use	AM Peak Hour			PM Peak Hour			Saturday Mid-Day		
	In	Out	Total	In	Out	Total	In	Out	Total
233 Residential Single-Family Detached Houses	43	130	173	145	85	230	118	100	218
TOTAL TRIPS	43	130	173	145	85	230	118	100	218

Overview of TIS

Intersections examined:

- 1) Stockley Road (Sussex Road 280) & Site Access
- 2) Cool Spring Road (Sussex Road 290) & Site Access
- 3) Cool Spring Road & Stockley Road
- 4) Cool Spring Road & Forest Road (Sussex Road 292)
- 5) Forest Road & Stockley Road
- 6) Cool Spring Road & Delaware Route 5 (Sussex Road 22)*
- 7) Cool Spring Road & US Route 9 (Sussex Road 18)*
- 8) Forest Road/Anderson Corner Road (Sussex Road 292) & Delaware Route 5*
- 9) Stockley Road & Beaver Dam Road (Sussex Road 23)*

The asterisks (*) indicate intersections for which Saturday conditions were analyzed.

Conditions examined:

- 1) 2005 existing conditions
- 2) 2010 without Cool Spring Meadows Development
- 3) 2010 with Cool Spring Meadows Development

Peak hours evaluated: Weekday morning and evening peak hours, Saturday mid-day.

Committed developments considered:

- 1) Heron Bay (352 Single Family Houses)
- 2) Beaver Creek
 - a. The Meadows (102 Single-Family Houses)
 - b. The Trails (170 Single-Family Houses)
 - c. The Villages (400 Single-Family Houses, 50 Condominiums, 50,000 Square Feet of General Retail)
- 3) Stonewater Creek
 - a. Phase 1-9 (712 Single-Family Houses)
 - b. Phase 10-13 (360 Single-Family Houses)
- 4) Oak Crest Pond (26 Single-Family Houses)
- 5) Oak Crest Farm (96 Single-Family Houses)

Intersection Descriptions

1) Stockley Road & Site Access:

Type of Control: Proposed two-way stop-controlled intersection

Northbound approach: (Site Access) stop-controlled shared left/through/right-turn lane

Southbound approach: (Site Access) stop-controlled shared left/through/right-turn lane

Eastbound approach: (Stockley Road) one shared left/through/right-turn lane

Westbound approach: (Stockley Road) one shared left/through/right-turn lane

2) Cool Spring Road & Site Access:

Type of Control: Proposed T-intersection

Northbound approach: (Cool Spring Road) one shared left-turn/through lane

Southbound approach: (Cool Spring Road) one shared through/right-turn lane

Eastbound approach: (Site Access) stop-controlled shared left/right-turn lane

3) Cool Spring Road & Stockley Road:

Type of Control: Two-way stop-controlled intersection

Northbound approach: (Cool Spring Road) stop-controlled shared left/through/right-turn lane

Southbound approach: (Cool Spring Road) stop-controlled shared left/through/right-turn lane

Eastbound approach: (Stockley Road) one shared left/through/right-turn lane

Westbound approach: (Stockley Road) one shared left/through/right-turn lane

4) Cool Spring Road & Forest Road:

Type of Control: Stop-controlled T-intersection

Northbound approach: (Cool Spring Road) one shared left-turn/through lane

Southbound approach: (Cool Spring Road) one shared through/right-turn lane

Eastbound approach: (Forest Road) stop-controlled shared left/right-turn lane

5) Forest Road & Stockley Road:

Type of Control: Stop-controlled T-intersection

Northbound approach: (Stockley Road) stop-controlled shared left-turn/right-turn lane

Eastbound approach: (Forest Road) one shared through/right-turn lane

Westbound approach: (Forest Road) one shared through/left-turn lane

6) Cool Spring Road & Delaware Route 5:

Type of Control: Two-way stop-controlled intersection

Northbound approach: (Delaware Route 5) one shared left-turn/through/right-turn lane

Southbound approach: (Delaware Route 5) one shared left-turn/through/right-turn lane

Eastbound approach: (Cool Spring Road) stop controlled shared left-turn/through lane and one yield controlled channelized right-turn lane

Westbound approach: (Cool Spring Road) one stop controlled shared left-turn/through lane and one yield controlled channelized right-turn lane

7) Cool Spring Road & US Route 9:

Type of Control: Two-way stop-controlled intersection

Northbound approach: (Cool Spring Road) stop-controlled shared left-turn/through/right-turn lane

Southbound approach: (Cool Spring Road) stop-controlled shared left-turn/through/right-turn lane

Eastbound approach: (US Route 9) one shared left-turn/through/right-turn lane

Westbound approach: (US Route 9) one shared left-turn/through/right-turn lane

Note: There is an active railroad line aligned diagonally through this intersection, as described below.

8) Forest Road/Anderson Corner Road & Delaware Route 5:

Type of Control: Two-way stop-controlled intersection

Northbound approach: (Delaware Route 5) one shared left-turn/through/right-turn lane

Southbound approach: (Delaware Route 5) one shared left-turn/through/right-turn lane

Eastbound approach: (Anderson Corner Road) stop-controlled shared left-turn/through/right-turn lane

Westbound approach: (Forest Road) stop-controlled shared left-turn/through/right-turn lane

9) Stockley Road & Beaver Dam Road:

Type of Control: Stop-controlled T-intersection

Northbound approach: (Beaver Dam Road) one shared left-turn/through lane

Southbound approach: (Beaver Dam Road) one shared through/right-turn lane

Eastbound approach: (Stockley Road) stop-controlled shared left/right-turn lane

At-Grade Railroad Crossing Description

Location: At the intersection of US Route 9 and Cool Spring Road:

Rail Line: This east-west active rail line is a Class III line called the Delaware Coastline line. It is owned by the Delaware Transit Corporation (DTC) and extends from Georgetown to Lewes, Delaware. Trains over the line are operated by the Delaware Coast Line Railroad.

Northbound approach: (Cool Spring Road) one shared left/through/right-turn lane with appropriate pavement markings and signage.

Southbound approach: (Cool Spring Road) one shared left/through/right-turn lane with appropriate pavement markings and signage.

Eastbound approach: (US Route 9) one through lane with appropriate pavement markings, signage and warning flashers

Westbound approach: (US Route 9) one through lane with appropriate pavement markings, signage and warning flashers

Description: This is an at-grade crossing of an active rail line that serves about 1 train/week of about 5 cars in length running through the intersection of US Route 9 and Cool Spring Road at a 35 degree angle. The trains along the rail line generally have a speed of approximately 15 MPH in this area. The crossing is currently equipped with pavement markings and railroad crossing signs at the stop signs on the northbound and southbound approaches of Cool Spring Road. On US Route 9, pavement markings, signing, and side-mounted warning flashers are present, but there are no gates. Traffic volumes at the intersection are expected to increase in the next few years due to the development in the area. Without improvements, the intersection is expected to operate at a level of service F in the AM, PM and Saturday peak hour with and without the development.

Transit, Pedestrian, and Bicycle Facilities

Existing transit service: None.

Planned transit service: In an email from David Dooley from DelDOT dated March 8, 2006, he stated that no transit routes are proposed in the area. Pedestrian and bicycle mobility access should be enhanced so that should transit be expanded to serve these developments in the future, pedestrian access to the frontage road would make transit trips more viable.

Existing bicycle and pedestrian facilities: The *Delaware Kent and Sussex Counties Bicycle Touring Map* designates Delaware Route 5 as a bike route; therefore a five-foot minimum shoulder must be maintained along any property frontage.

Planned bicycle and pedestrian facilities: In a letter dated November 14, 2005, Anthony Aglio from DelDOT commented that Livable Delaware's updated State Strategies for Spending Map indicates the site is located in an Investment Level 4 area, where the existing transportation network should preserve the natural environment. Per Livable Delaware's recommendations residential developments such as this are not encouraged in Investment Level 4 areas. However, should the development be approved, he requested the following improvements be incorporated into the project to facilitate bicycle and pedestrian transportation:

- a) Striped five-foot bicycle lanes with five-foot shoulders (in addition to any required turn lanes) along the Stockley Road and Cool Spring Road site frontages.
- b) An ADA compliant crosswalk should be considered at the opposing access points along Stockley Road.
- c) Internal sidewalks to promote walking as a viable transportation alternative.

Previous Comments

All comments from DelDOT's Scoping Letter dated May 27, 2005 were addressed in the Final TIS submission except for the following:

- In regards to compliance with DelDOT, AASHTO and MUTCD standards for geometry and traffic control devices, no evaluation was performed for the study intersections.
- In regards to compliance with DelDOT, AASHTO and MUTCD standards for geometry and traffic control devices, no evaluation was performed for Stockley Road from Delaware Route 23 to Forest Road, Cool Spring Road from Delaware Route 5 to US Route 9 and Forest Road from Delaware Route 5 to Cool Spring Road.
- No correspondence was present indicating that Mr. Mark Harbeson was contacted with regard to the Delaware Route 24 corridor project.

All comments from DelDOT's letter dated August 5, 2005 were addressed in the Final TIS submission.

All comments from DelDOT's Preliminary TIS Letter dated September 13, 2005 were addressed in the Final TIS submission.

General HCS Analysis Comments

(see table footnotes on the following pages for specific comments)

- 1) The TIS used the existing truck percentage for all approaches in all future cases. McCormick Taylor used the greater of either the existing truck percentage or 2% for all future cases.

Table 2
PEAK HOUR LEVELS OF SERVICE (LOS)
based on Traffic Impact Study for Cool Spring Meadows Development
Report dated January 19, 2006
Prepared by Orth-Rodgers & Associates, Inc.

Unsignalized Intersection ¹ Two-Way Stop Control	LOS per TIS		LOS per McCormick Taylor	
	Weekday AM	Weekday PM	Weekday AM	Weekday PM
2010 With Development				
Northbound Site Access	A (9.3)	A (9.8)	A (9.3)	A (9.8)
Southbound Site Access	A (9.7)	A (10.0)	A (9.7)	A (10.0)
Eastbound Stockley Road - Left	A (7.5)	A (7.5)	A (7.5)	A (7.5)
Westbound Stockley Road - Left	A (7.3)	A (7.5)	A (7.3)	A (7.5)

¹ For unsignalized analyses, the numbers in parentheses following levels of service are average delay per vehicle, measured in seconds. For signalized analyses, those numbers are X-critical, a composite volume-to-capacity ratio.

Table 3
PEAK HOUR LEVELS OF SERVICE (LOS)
based on Traffic Impact Study for Cool Spring Meadows Development
Report dated January 19, 2006
Prepared by Orth-Rodgers & Associates, Inc.

Unsignalized Intersection ² One-Way Stop Control	LOS per TIS		LOS per McCormick Taylor	
Cool Spring Road & Site Access	Weekday AM	Weekday PM	Weekday AM	Weekday PM
2010 With Development				
Northbound Cool Spring Road - Left	A (7.3)	A (7.5)	A (7.3)	A (7.5)
Eastbound Site Access	A (9.3)	A (9.8)	A (9.3)	A (9.8)

² For unsignalized analyses, the numbers in parentheses following levels of service are average delay per vehicle, measured in seconds. For signalized analyses, those numbers are X-critical, a composite volume-to-capacity ratio.

Table 4
PEAK HOUR LEVELS OF SERVICE (LOS)
based on Traffic Impact Study for Cool Spring Meadows Development
Report dated January 19, 2006
Prepared by Orth-Rodgers & Associates, Inc.

Unsignalized Intersection ³ Two-Way Stop Control	LOS per TIS		LOS per McCormick Taylor	
	Weekday AM	Weekday PM	Weekday AM	Weekday PM
2005 Existing				
Northbound Cool Spring Road	A (9.3)	A (9.6)	A (9.3)	A (9.6)
Southbound Cool Spring Road	A (9.9)	A (10.0)	A (9.9)	A (10.0)
Eastbound Stockley Road - Left	A (7.5)	A (7.3)	A (7.5)	A (7.3)
Westbound Stockley Road - Left	A (7.3)	A (7.3)	A (7.3)	A (7.3)
2010 Without Development				
Northbound Cool Spring Road	A (9.6)	B (10.2)	A (9.6)	B (10.2)
Southbound Cool Spring Road	B (10.3)	B (10.7)	B (10.3)	B (10.7)
Eastbound Stockley Road - Left	A (7.6)	A (7.4)	A (7.6)	A (7.4)
Westbound Stockley Road - Left	A (7.3)	A (7.5)	A (7.3)	A (7.5)
2010 With Development				
Northbound Cool Spring Road	B (10.1)	B (10.9)	B (10.1)	B (10.9)
Southbound Cool Spring Road	B (11.0)	B (11.4)	B (11.0)	B (11.4)
Eastbound Stockley Road - Left	A (7.7)	A (7.5)	A (7.7)	A (7.5)
Westbound Stockley Road - Left	A (7.4)	A (7.5)	A (7.4)	A (7.5)

³ For unsignalized analyses, the numbers in parentheses following levels of service are average delay per vehicle, measured in seconds. For signalized analyses, those numbers are X-critical, a composite volume-to-capacity ratio.

Table 5
PEAK HOUR LEVELS OF SERVICE (LOS)
based on Traffic Impact Study for Cool Spring Meadows Development
Report dated January 19, 2006
Prepared by Orth-Rodgers & Associates, Inc.

Unsignalized Intersection ⁴ One-Way Stop Control	LOS per TIS		LOS per McCormick Taylor	
	Weekday AM	Weekday PM	Weekday AM	Weekday PM
2005 Existing				
Northbound Cool Spring Road - Left	A (7.4)	A (7.4)	A (7.4)	A (7.4)
Eastbound Forest Road	A (9.2)	A (9.2)	A (9.2)	A (9.2)
2010 Without Development				
Northbound Cool Spring Road - Left	A (7.4)	A (7.4)	A (7.4)	A (7.4)
Eastbound Forest Road	A (9.3)	A (9.4)	A (9.3)	A (9.4)
2010 With Development				
Northbound Cool Spring Road - Left	A (7.5)	A (7.6)	A (7.5)	A (7.6)
Eastbound Forest Road	A (9.8)	B (10.2)	A (9.8)	B (10.2)

⁴ For unsignalized analyses, the numbers in parentheses following levels of service are average delay per vehicle, measured in seconds. For signalized analyses, those numbers are X-critical, a composite volume-to-capacity ratio.

Table 6
PEAK HOUR LEVELS OF SERVICE (LOS)
based on Traffic Impact Study for Cool Spring Meadows Development
Report dated January 19, 2006
Prepared by Orth-Rodgers & Associates, Inc.

Unsignalized Intersection ⁵ One-Way Stop Control	LOS per TIS		LOS per McCormick Taylor	
Forest Road & Stockley Road	Weekday AM	Weekday PM	Weekday AM	Weekday PM
2005 Existing				
Northbound Stockley Road	A (9.2)	A (9.3)	A (9.2)	A (9.3)
Westbound Forest Road - Left	A (7.4)	A (7.4)	A (7.4)	A (7.4)
2010 Without Development				
Northbound Stockley Road	A (9.5)	A (9.6)	A (9.5)	A (9.6)
Westbound Forest Road - Left	A (7.4)	A (7.5)	A (7.4)	A (7.5)
2010 With Development				
Northbound Stockley Road	A (9.7)	A (10.0)	A (9.7)	A (10.0)
Westbound Forest Road - Left	A (7.5)	A (7.6)	A (7.5)	A (7.6)

⁵ For unsignalized analyses, the numbers in parentheses following levels of service are average delay per vehicle, measured in seconds. For signalized analyses, those numbers are X-critical, a composite volume-to-capacity ratio.

Table 7
PEAK HOUR LEVELS OF SERVICE (LOS)
based on Traffic Impact Study for Cool Spring Meadows Development
Report dated January 19, 2006
Prepared by Orth-Rodgers & Associates, Inc.

Unsignalized Intersection ⁶ Two-Way Stop Control	LOS per TIS			LOS per McCormick Taylor		
Cool Spring Road & Delaware Route 5	Weekday AM	Weekday PM	Saturday Mid-Day	Weekday AM	Weekday PM	Saturday Mid-Day
2005 Existing						
Northbound Delaware Route 5 - Left	A (7.6)	A (7.6)	A (7.6)	A (7.6)	A (7.6)	A (7.6)
Southbound Delaware Route 5 - Left	A (7.7)	A (7.6)	A (7.6)	A (7.7)	A (7.6)	A (7.6)
Eastbound Cool Spring Road	B (10.9)	B (11.6)	B (11.3)	B (10.9)	B (11.6)	B (11.3)
Westbound Cool Spring Road	B (11.0)	B (11.2)	B (10.9)	B (11.0)	B (11.2)	B (10.9)
2010 Without Development						
Northbound Delaware Route 5 - Left	A (7.8)	A (7.8)	A (7.8)	A (7.8)	A (7.8)	A (7.8)
Southbound Delaware Route 5 - Left	A (7.8)	A (7.9)	A (7.9)	A (7.8)	A (7.9)	A (7.9)
Eastbound Cool Spring Road	B (12.5)	B (13.9)	B (13.6)	B (12.5)	B (13.9)	B (13.6)
Westbound Cool Spring Road	B (12.4)	B (13.4)	B (13.6)	B (12.5)	B (13.4)	B (13.6)
2010 With Development						
Northbound Delaware Route 5 - Left	A (7.8)	A (7.8)	A (7.8)	A (7.8)	A (7.8)	A (7.8)
Southbound Delaware Route 5 - Left	A (7.8)	A (7.9)	A (7.9)	A (7.8)	A (7.9)	A (7.9)
Eastbound Cool Spring Road	B (12.5)	B (14.1)	B (13.7)	B (12.5)	B (14.1)	B (13.7)
Westbound Cool Spring Road	B (12.6)	B (13.7)	B (13.8)	B (12.6)	B (13.7)	B (13.8)

⁶ For unsignalized analyses, the numbers in parentheses following levels of service are average delay per vehicle, measured in seconds. For signalized analyses, those numbers are X-critical, a composite volume-to-capacity ratio.

Table 8
PEAK HOUR LEVELS OF SERVICE (LOS)
based on Traffic Impact Study for Cool Spring Meadows Development
Report dated January 19, 2006
Prepared by Orth-Rodgers & Associates, Inc.

Unsignalized Intersection ⁷ Two-Way Stop Control	LOS per TIS			LOS per McCormick Taylor ⁸		
US Route 9 & Cool Spring Road	Weekday AM	Weekday PM	Saturday Mid-Day	Weekday AM	Weekday PM	Saturday Mid-Day
2005 Existing						
Northbound Cool Spring Road	B (13.5)	C (17.3)	C (24.9)	B (13.5)	C (17.3)	C (24.9)
Southbound Cool Spring Road	C (17.2)	C (20.4)	D (29.3)	C (17.2)	C (20.4)	D (29.3)
Eastbound US Route 9 - Left	A (8.1)	A (8.5)	A (9.1)	A (8.1)	A (8.5)	A (9.1)
Westbound US Route 9 - Left	A (8.3)	A (8.5)	A (9.2)	A (8.3)	A (8.5)	A (9.2)
2010 Without Development						
Northbound Cool Spring Road	D (30.4)	F (52.4)	F (375.5)	D (31.4)	F (56.2)	F (451.3)
Southbound Cool Spring Road	D (25.6)	D (34.0)	F (76.9)	D (25.9)	E (35.5)	F (90.6)
Eastbound US Route 9 - Left	A (8.5)	A (9.5)	B (10.4)	A (8.5)	A (9.5)	B (10.6)
Westbound US Route 9 - Left	A (9.0)	A (9.1)	B (10.9)	A (9.1)	A (9.2)	B (11.1)
2010 With Development						
Northbound Cool Spring Road	E (50.0)	F (128.0)	F (*)	F (53.0)	F (150.9)	F (1237)
Southbound Cool Spring Road	D (27.9)	E (45.4)	F (132.7)	D (28.5)	E (48.9)	F (159.7)
Eastbound US Route 9 - Left	A (8.5)	A (9.5)	B (10.4)	A (8.5)	A (9.5)	B (10.6)
Westbound US Route 9 - Left	A (9.1)	A (9.3)	B (11.4)	A (9.1)	A (9.5)	B (11.6)

Signalized Intersection ⁷	LOS per TIS			LOS per McCormick Taylor ⁹		
US Route 9 & Cool Spring Road	Weekday AM	Weekday PM	Saturday Mid-Day	Weekday AM	Weekday PM	Saturday Mid-Day
2010 With Development	B (0.59)	B (0.76)	B (0.88)	B (0.60)	B (0.77)	C (0.93)

⁷ For unsignalized analyses, the numbers in parentheses following levels of service are average delay per vehicle, measured in seconds. For signalized analyses, those numbers are X-critical, a composite volume-to-capacity ratio.

⁸ The TIS used a minimum PHF of 0.92 on the eastbound and westbound US Route 9 approaches for all future cases. Because this is a rural Level 4 area, McCormick Taylor used a minimum PHF of 0.88 on US Route 9 for all future cases.

⁹ McCormick Taylor used 6 seconds of yellow and red time; the TIS used 5 seconds of yellow and red time.

Table 9
PEAK HOUR LEVELS OF SERVICE (LOS)
based on Traffic Impact Study for Cool Spring Meadows Development
Report dated January 19, 2006
Prepared by Orth-Rodgers & Associates, Inc.

Unsignalized Intersection ¹⁰ Two-Way Stop Control	LOS per TIS			LOS per McCormick Taylor		
Anderson Corner Road/ Forest Road & Delaware Route 5	Weekday AM	Weekday PM	Saturday Mid-Day	Weekday AM	Weekday PM	Saturday Mid-Day
2005 Existing						
Northbound Delaware Route 5 - Left	A (7.5)	A (7.6)	A (7.5)	A (7.5)	A (7.6)	A (7.5)
Southbound Delaware Route 5 - Left	A (7.7)	A (7.8)	A (7.7)	A (7.7)	A (7.8)	A (7.7)
Eastbound Anderson Corner Rd	B (12.2)	B (13.3)	B (11.3)	B (12.2)	B (13.3)	B (11.3)
Westbound Forest Road	B (12.6)	B (13.6)	B (11.9)	B (12.6)	B (13.6)	B (11.9)
2010 Without Development						
Northbound Delaware Route 5 - Left	A (7.7)	A (7.8)	A (7.8)	A (7.7)	A (7.8)	A (7.8)
Southbound Delaware Route 5 - Left	A (8.0)	A (8.2)	A (8.1)	A (8.0)	A (8.2)	A (8.1)
Eastbound Anderson Corner Rd	C (15.1)	C (18.9)	C (16.3)	C (15.1)	C (19.0)	C (16.3)
Westbound Forest Road	B (14.2)	C (17.1)	B (14.3)	B (14.2)	C (17.1)	B (14.4)
2010 With Development						
Northbound Delaware Route 5 - Left	A (7.8)	A (7.8)	A (7.8)	A (7.8)	A (7.8)	A (7.8)
Southbound Delaware Route 5 - Left	A (8.0)	A (8.2)	A (8.1)	A (8.0)	A (8.3)	A (8.1)
Eastbound Anderson Corner Rd	B (14.4)	C (18.3)	B (14.9)	B (14.4)	C (18.3)	B (15.0)
Westbound Forest Road	C (15.3)	C (20.9)	C (17.5)	C (15.3)	C (21.0)	C (17.5)

¹⁰ For unsignalized analyses, the numbers in parentheses following levels of service are average delay per vehicle, measured in seconds. For signalized analyses, those numbers are X-critical, a composite volume-to-capacity ratio.

Table 10
PEAK HOUR LEVELS OF SERVICE (LOS)
based on Traffic Impact Study for Cool Spring Meadows Development
Report dated January 19, 2006
Prepared by Orth-Rodgers & Associates, Inc.

Unsignalized Intersection ¹¹ One-Way Stop Control	LOS per TIS			LOS per McCormick Taylor		
Stockley Road & Delaware Route 23	Weekday AM	Weekday PM	Saturday Mid-Day	Weekday AM	Weekday PM	Saturday Mid-Day
2005 Existing						
Northbound Delaware Route 23 - Left	A (7.5)	A (7.9)	A (7.7)	A (7.5)	A (7.9)	A (7.7)
Eastbound Stockley Road	B (11.4)	B (12.2)	B (11.6)	B (11.4)	B (12.2)	B (11.6)
2010 Without Development						
Northbound Delaware Route 23 - Left	A (8.0)	A (8.6)	A (8.2)	A (7.9)	A (8.6)	A (8.2)
Eastbound Stockley Road	C (16.8)	C (23.7)	C (20.1)	C (15.9)	C (23.7)	C (20.3)
2010 With Development						
Northbound Delaware Route 23 - Left	A (8.1)	A (8.7)	A (8.3)	A (8.0)	A (8.7)	A (8.3)
Eastbound Stockley Road	C (18.3)	D (30.6)	C (23.8)	C (17.2)	D (30.6)	C (24.1)

¹¹ For unsignalized analyses, the numbers in parentheses following levels of service are average delay per vehicle, measured in seconds. For signalized analyses, those numbers are X-critical, a composite volume-to-capacity ratio.

TAB “8”

From: [Laws, Susanne K \(DelDOT\)](#)
To: [Kevin Smith](#)
Cc: [Yates, Brian K. \(DelDOT\)](#); [Brockenbrough, Thomas \(DelDOT\)](#)
Subject: RE: RE: Cool Spring Meadows
Date: Thursday, February 20, 2020 5:32:17 PM
Attachments: [image003.png](#)
[image001.png](#)

Hi Kevin,
Thanks for providing the notes and edits. They generally agree with my notes and recollection from the meeting.
Thanks,
Susanne

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



From: Kevin Smith <kts@kerchergroup.com>
Sent: Thursday, February 20, 2020 1:39 PM
To: Laws, Susanne K (DelDOT) <Susanne.Laws@delaware.gov>
Cc: Yates, Brian K. (DelDOT) <Brian.Yates@delaware.gov>; Brockenbrough, Thomas (DelDOT) <Thomas.Brockenbrough@delaware.gov>
Subject: RE: RE: Cool Spring Meadows

Susanne:

I have made the correction to the notation regarding The Kercher Group, Inc. contacting DNREC to inquire about their position of new impervious along Cool Spring Road. If there are no additional comments, please let me know if DELDOT finds these minutes satisfactory.

Pre-submittal Meeting - Minutes

Location: Delaware Department of Transportation, 800 S. Bay Rd, Dover, DE 19901

Prepared by: Kevin T. Smith, The Kercher Group, Inc.

Date: February 11, 2020

Project: Cool Spring Meadows – Milton

Attendees:

Susanne Laws (DELDOT)
James Argo (DELDOT) via Skype
Brian Yates (DELDOT)
Bill Brockenbrough (DELDOT)
Kevin Smith (The Kercher Group, Inc.)

Items Discussed:

- Review of PLUS comments
- Requirements for design
- Site access located on Stockley Road (SCR 280) shall be designed per DELDOT

Coordination Manual

- This meeting meets the requirements of a Pre-submittal meeting, which is required prior to submittal of plans for review
- Noted that submittal fees are required for the LONOR (Initial Stage Fee) and for the Entrance Plans (Construction Stage Fee)
- Discussed DELDOT's TIS requirements on projects with over 500 daily trips
- Discussed right-of-way requirements. Local Road - requires 60' wide (30' from centerline).

- Requires a 15' Permanent Easement (PE) beyond the 10' R/W dedication
- Local road standards – 11' travelways, 5' shoulders for both Stockley Rd and Cool Spring Rd

Rd

- Discussed interconnectivity
- Level 4 area – requires 10' shared use path
- Discussed access ways to connect interior sidewalks to shared use paths
- Discussed transit stops
- Stormwater features to be at least 20' from the right-of-way
- Discussed design vehicles for entrances
- Discussed roadway improvement reductions required by DNREC for the originally approved layout
- All plans are to be submitted via the PDCA

Discussion Details:

- DNREC submitted a memorandum of understanding to DELDOT during the previous planning and approval stage, which stated that DNREC did not want any new impervious to be placed along Cool Spring Road due to lack of drainage. Plans were approved without new impervious being placed along Cool Spring Road. At the time of the meeting, DELDOT did not have access to this memorandum. Kercher shall contact DNREC to discuss any concerns they may have currently about the addition of new impervious along Cool Spring Road. Kercher, DELDOT, and DNREC will coordinate the improvement planning for both Cool Spring Road and Stockley Road.
- DELDOT's position is that the original approved TIS by Orth-Rodgers & Associates dated

January 19, 2006 meets their requirements. An updated TIS will not be required by DELDOT. This was noted in the PLUS comments and reinforced at the Pre-submittal meeting.

- DELDOT does not have improvements scheduled or funded for any intersections in the vicinity of this project. DELDOT and the developer previously entered into a signal agreement for the intersection of RT9 and Cool Spring Road. DELDOT received a check for \$22,000.00, which was placed in the Signal Agreement/Revolving Fund. It was discussed that a new signal agreement will be necessary for the intersection of RT5 and Forest Road. DELDOT shall discuss internally whether the funds they received for the RT9/Cool Spring Rd signal agreement can be transferred to the new location or whether a new separate fee will be required.
- DELDOT typically sends a liaison to Sussex County Public Hearings to answer any questions from the Commissions. The liaison varies depending of availability.
- Although this project is located outside of the Henlopen TID, it was discussed that Stockley Road was included in the conceptual planning for improvements located within the Henlopen TID. The recommendations included in the PLUS comments were part of that conceptual planning.
- As part of the PLUS comments, DELDOT requires the developer to meet DELDOT local road standards, as nearly as possible. Which is two 11' travel lanes and two 5' shoulders. This applies to both Stockley Road and Cool Spring Road.
- On the south side, DELDOT has requested an interconnection to tax parcel 234-5.00-24.00. Goldenrod Drive shall be extended to provide this interconnection.
- A pedestrian study shall be required due to the location of amenities on both sides of the road.
- Kercher Group shall contact DELDOT's Pavement Section to request pavement cores and a road widening pavement section recommendation.
- A SU-30 and a WB-40 vehicle shall be used for the entrance design. The vehicles shall be able to navigate the entrance without encroaching into the opposite lane of traffic.
- If vertical curbing is to be used in the right-of-way, 4" vertical curb shall be the maximum.
- At the intersection of Stockley Road and Cool Spring Road, the improvements shall extend past the intersection. Butt joints shall extend 60' beyond the end of the PT/PC of the radii.
- DELDOT shall require stop bars to be placed on Cool Spring Road, both north and south.
- At the time of submittal, separate Design Criteria forms shall be submitted. One for each road (Cool Spring Rd and Stockley Rd).
- For design grading, the shoulder is preferred to be designed at 2%, with a maximum of 4%.
- Access Ways shall be placed at Lot 16 and Lot 99 to provided interconnection with internal sidewalks and the shared use path.

Kevin T. Smith

37385 Rehoboth Ave. Ext, Unit #11, Rehoboth Beach, DE 19971

Direct [\(302\) 781-4346](tel:3027814346)

THE KERCHER GROUP, INC.

Strategic Infrastructure and Transportation Asset Management

Consulting | Systems | Engineering

TAB “9”



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 21, 2020

FUSCO PROPERTIES, L.P.
C/O Frank J. Vassallo IV
200 AIRPORT ROAD
NEW CASTLE, DE 19720

RE: Cool Spring Meadows Ability to Serve Letter

With reference to your request concerning Water and Wastewater Service (collectively, "Service") for the proposed Cool Spring Meadows Project, consisting of approximately 226 single family homes in Indian River Hundred, Sussex County, Delaware known as Tax Parcel Number 234-5.00-30.00, and 234-5.00-33.00 (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 has existing water and wastewater Certificates of Public Convenience and Necessity ("CPCNs") from the Delaware Public Service Commission.

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

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

Yours very truly,

ARTESIAN WATER COMPANY, INC.

A handwritten signature in blue ink, appearing to read "Adam Gould", written over a light blue circular stamp.

Adam Gould
Manager of Systems Planning and Design

TAB “10”

**Bruce B. Bagley, CPSS
420 Cosden Road
Barclay, Maryland 21607
(410) 708 3854**

February 11, 2020

Mr. Kevin T. Smith
The Kercher Group, Inc.
37385 Rehoboth Ave, Ext, Unit 11
Rehoboth Beach, DE 19971

RE: Non-Tidal Wetland for Fusco Properties, 2-34-5.00-30.00 and 33.00, Sussex County,
Delaware

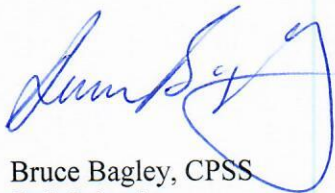
Dear Mr. Smith,

I have reviewed the information you have provided me regarding the isolation wetland area identified by me during a non tidal wetland delineation in 2004 on the above properties.

Based on current U. S. Army Corp of Engineers regulations, this area can be considered as isolated and possibly omitted as wetlands. If not, since the area is so small (2,336 s.f. – 0.05 ac.), that a permit could be obtained to fill in this particular wetland area.

If you should have any other questions regarding this matter, please do not hesitate to contact me at (410) 708-3854.

Sincerely,



Bruce Bagley, CPSS
Soil Scientist

From: [Bruce Bagley](#)
To: [Kevin Smith](#)
Subject: Re: Wetlands - Sussex County, DE, Tax Parcel: 234-5.00-30.00 & 33.00 - Fusco Properties
Date: Tuesday, January 7, 2020 3:22:58 PM

Kevin,
It is probably ok to make that area disappear, Bruce

On Tue, Jan 7, 2020 at 2:22 PM Kevin Smith <kts@kerchergroup.com> wrote:

Mr. Bagley:

You had performed a wetland delineation on this property some time ago for a project with Ocean Atlantic and Fusco Properties. It received Final approval on December 6, 2012. The project has been idle since that time and the subdivision plan has sunset. We are in the process of attempting to get Preliminary approval again, with a Preliminary hearing set for January 23, 2020. The client requested that we redesign the project to take up less "space" and to attempt to preserve as much woods as possible. The new layout has done just that, however, one of the lots (149) has been designed in a small isolated wetland area along the property line with Parcel 31.00. We are asking whether, if under the current regulations, that this area can be considered as isolated and possibly omitted as wetlands. If not, since the area is so small (2,336 s.f. – 0.05 ac.), that a permit could be obtained to fill in this particular wetland area.

I've attached the revised subdivision plan for your use.

If you have any questions, please contact me.

Thanks.

Kevin T. Smith

37385 Rehoboth Ave. Ext, Unit #11, Rehoboth Beach, DE 19971

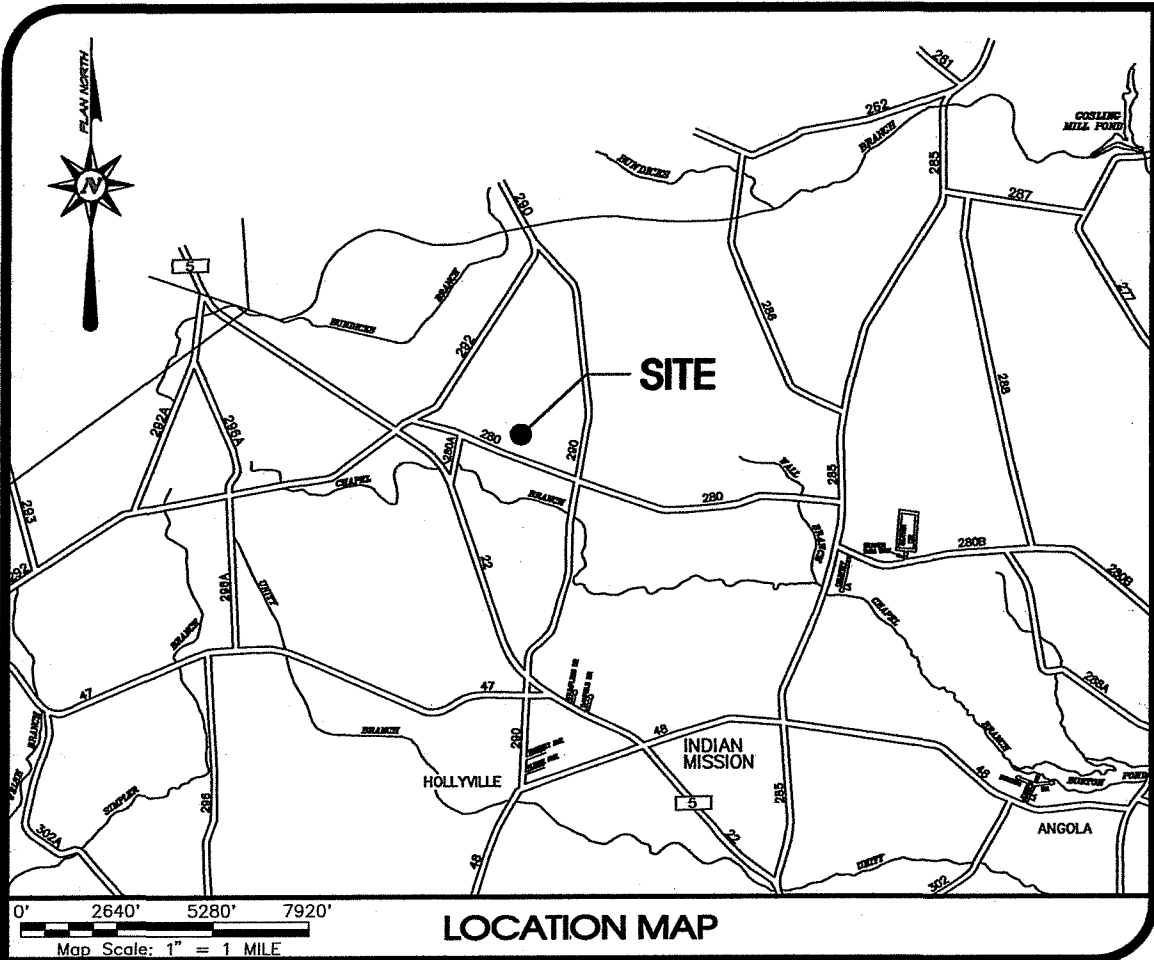
Direct [\(302\) 781-4346](tel:3027814346)

THE KERCHER GROUP, INC.

Strategic Infrastructure and Transportation Asset Management

Consulting | Systems | Engineering

TAB “11”



- PLAN LEGEND**
- SUPPLEMENTAL CONTOUR (1' INTERVAL)
 - INDEX CONTOUR (5' INTERVAL)
 - EXISTING STORM SEWER PIPING
 - EXISTING OVERHEAD UTILITY WIRES
 - EXISTING SOIL SERIES LIMITS
 - EXISTING TREE LINE
 - EXISTING WETLANDS LIMITS
 - EXISTING PROPERTY BOUNDARY
 - PROPOSED LOT LINE
 - PROPOSED EASEMENT/BUFFER
 - PROPOSED ROAD CENTERLINE

GENERAL NOTES

- THE PROJECT SITE IS KNOWN AS COOL SPRING MEADOWS, (T.P.: 2-34-S, PARCELS 30 & 33), AND IS LOCATED AT THE NORTHWEST CORNER OF THE SUSSEX COUNTY ROAD 280 AND SUSSEX COUNTY ROAD 290 INTERSECTION NEAR HARBESON, DELAWARE.
- THE BOUNDARY AND EXISTING CONDITIONS SHOWN WERE OBTAINED FROM A SURVEY TITLED "BOUNDARY & IMPROVEMENT LOCATION SURVEY PLAN" FOR THE PROPERTY KNOWN AS "LANDS OF GLATFELTER PULP WOOD COMPANY", TAX MAP PARCEL 2-34-5.00-33.00, PREPARED BY MERESTONE CONSULTANTS, INC., DATED DECEMBER 9, 2004 AND FROM A SURVEY TITLED "BOUNDARY AND TOPOGRAPHY PLAN" FOR THE PROPERTY KNOWN AS "LANDS OF FRANCIS HENRY PRETTYMAN", TAX MAP PARCEL 2-34-5.00-30.00, PREPARED BY MERESTONE CONSULTANTS, INC., DATED MAY 19, 2005.
- THE WETLAND DELINEATIONS SHOWN WERE OBTAINED FROM THE FOLLOWING SURVEYS:
 - "WETLAND DELINEATION PLAN" FOR THE PROPERTY KNOWN AS "LANDS OF GLATFELTER PULP WOOD COMPANY", TAX MAP PARCEL 2-34-5.00-33.00, PREPARED BY MERESTONE CONSULTANTS, INC., DATED MAY 19, 2005.
 - "WETLAND DELINEATION PLAN" FOR THE PROPERTY KNOWN AS "LANDS OF FRANCIS HENRY PRETTYMAN", TAX MAP PARCEL 2-34-5.00-30.00, PREPARED BY MERESTONE CONSULTANTS, INC., DATED MAY 19, 2005.
 - "BOUNDARY AND TOPOGRAPHY PLAN" FOR THE PROPERTY KNOWN AS "LANDS OF FRANCIS HENRY PRETTYMAN", TAX MAP PARCEL 2-34-5.00-30.00, PREPARED BY MERESTONE CONSULTANTS, INC., DATED MAY 19, 2005.
 - "BOUNDARY AND TOPOGRAPHY PLAN" FOR THE PROPERTY KNOWN AS "LANDS OF FRANCIS HENRY PRETTYMAN", TAX MAP PARCEL 2-34-5.00-30.00, PREPARED BY MCRONE, INC., DATED FEBRUARY 4, 2005.
- INFORMATION SHOWN ON THESE SHEETS IS ONLY ACCURATE TO THE EXTENT OF THE SURVEYS PREPARED BY THE ABOVE-MENTIONED ORGANIZATIONS.
- A BOUNDARY DISCREPANCY EXISTS BETWEEN THE VARIOUS SURVEYS USED TO CREATE THESE PLANS. KERCHER ENGINEERING, INC. ASSUMES NO LIABILITY FOR THE ACCURACY OF THE OVERALL BOUNDARY, AS PREPARED BY THE ABOVE-MENTIONED ORGANIZATIONS.
- MAINTENANCE OF THE STREETS WITHIN THIS SUBDIVISION WILL BE THE RESPONSIBILITY OF THE DEVELOPER, THE PROPERTY OWNERS WITHIN THIS SUBDIVISION OR BOTH. THE STATE ASSUMES NO RESPONSIBILITY FOR THE FUTURE MAINTENANCE OF THESE STREETS.
- ALL PROPOSED STORMWATER MANAGEMENT FACILITIES, BUFFERS AND OPEN SPACE ARE TO BE MAINTAINED BY THE DEVELOPER UNTIL SUCH TIME AS A HOMEOWNERS ASSOCIATION CAN PROVIDE FOR SAID MAINTENANCE.
- ALL LOTS SHALL HAVE ACCESS FROM THE INTERNAL SUBDIVISION STREETS AND DIRECT ACCESS TO SCR 280, SCR 290 AND SCR 292 WILL NOT BE PERMITTED. EACH LOT WILL BE PERMITTED TO HAVE ONLY ONE ACCESS POINT TO SERVE THE ENTIRE PARCEL. HORSESHOE DRIVEWAYS WILL NOT BE PERMITTED.
- THIS PLAN DOES NOT VERIFY TO THE LOCATION AND/OR EXISTENCE OF EASEMENTS OR RIGHT-OF-WAYS CROSSING SUBJECT PROPERTY AS NO TITLE SEARCH WAS PROVIDED.
- THE CONTRACTOR SHALL ENSURE THAT ALL NECESSARY PERMITS AND APPROVALS HAVE BEEN OBTAINED PRIOR TO COMMENCEMENT OF ANY SITE CONSTRUCTION ACTIVITIES.
- ALL CONTRACTORS WORKING ON THIS PROJECT SHALL BE RESPONSIBLE FOR ENSURING THAT ALL CONSTRUCTION ACTIVITIES RELATED TO THIS PROJECT ARE PERFORMED IN ACCORDANCE WITH ALL O.S.H.A. (OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION) STANDARDS AND REQUIREMENTS.
- ALL CONTRACTORS WORKING ON THIS PROJECT SHALL COMPLY WITH THE REQUIREMENTS OF THE DELAWARE EROSION AND SEDIMENT CONTROL HANDBOOK, 1989 OR LATEST EDITION.
- CONSTRUCTION MATERIALS AND PROCEDURES SHALL FOLLOW SUSSEX COUNTY SPECIFICATIONS AND STANDARD DRAWINGS (LATEST EDITION).
- EXISTING SUBSURFACE UTILITY INFORMATION INDICATED IS BASED UPON VISUAL FIELD INSPECTION BY MERESTONE CONSULTANTS, INC. AND MCRONE, INC. SUCH INFORMATION CONCERNING THE SIZE, LOCATION, DEPTH, QUANTITY, ETC. OF SUBSURFACE UTILITIES IS APPROXIMATIVE OF NATURE AND HAS BEEN OBTAINED AS AN AID IN THE PROJECT DESIGN. THE INFORMATION PROVIDED IS REPRESENTATIVE OF SUBSURFACE CONDITIONS ONLY AT LOCATIONS AND DEPTHS WHERE SUCH INFORMATION WAS OBTAINED. THERE IS NO EXPRESSED OR IMPLIED AGREEMENT THAT UTILITY SIZE, LOCATION, DEPTH, QUANTITY, ETC. AS SHOWN EXISTS BETWEEN EXPLORED LOCATIONS. ACCORDINGLY, UTILITY INFORMATION SHOWN SHOULD NOT BE RELIED UPON FOR CONSTRUCTION PURPOSES. IT IS INCUMBENT UPON THE CONTRACTOR TO VERIFY THE SIZE, LOCATION, DEPTH, QUANTITY, ETC. OF ALL UTILITIES BEFORE EXCAVATION.
- BASED ON THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) FLOOD INSURANCE RATE MAP (FIRM) 100029 0330 J, MAP NUMBER 1000SC0330J, DATED JANUARY 6, 2005, THIS PROPERTY IS IN A ZONE "X" UNSHADED WHICH IS AN AREA DETERMINED TO BE OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOODPLAIN.
- ALL FIRE LINES, FIRE HYDRANTS AND FIRE DEPARTMENT CONNECTIONS SHALL BE MARKED IN ACCORDANCE WITH THE DELAWARE STATE FIRE PREVENTION REGULATIONS.
- IN ACCORDANCE WITH THE DELAWARE STATE FIRE PREVENTION REGULATIONS PART V, CHAPTER 4, SECTION 4-1.1, THE DEVELOPER SHALL PROVIDE, TO THE EMERGENCY DISPATCH CENTER HAVING JURISDICTION, A PLOT PLAN OF THE DEVELOPMENT SHOWING EACH LOT LOCATION. THE DEVELOPER SHALL ALSO ASSIGN NUMBERS TO ALL PROPERTIES IN A CONSECUTIVE MANNER IN THE ORDER OF THE ASSIGNED NUMBER IN A READILY VISIBLE LOCATION ON EACH HOME TO ELIMINATE CONFUSION IN THE EVENT THAT AN EMERGENCY VEHICLE IS NEEDED.
- ALL CUL-DE-SACS ARE TO HAVE A 38' PAVED RADIUS. NO PARKING PERMITTED ON CUL-DE-SACS.
- ALL SINGLE FAMILY HOMES TO BE OF WOOD FRAME CONSTRUCTION WITH A MAXIMUM BUILDING HEIGHT OF THREE STORIES, NOT TO EXCEED 42'.
- THIS PROPERTY IS LOCATED IN THE VICINITY OF LAND USED PRIMARILY FOR AGRICULTURAL PURPOSES ON WHICH NORMAL AGRICULTURAL USES AND ACTIVITIES HAVE BEEN AFFORDED THE HIGHEST PRIORITY USE STATUS. IT CAN BE ANTICIPATED THAT SUCH AGRICULTURAL USES AND ACTIVITIES MAY NOW OR IN THE FUTURE INVOLVE NOISE, DUST, MANURE AND OTHER ODOORS. THE USE OF AGRICULTURAL USES AND ACTIVITIES, THE USE AND ENJOYMENT OF PROPERTY IS EXPRESSLY CONDITIONED ON ACCEPTANCE OF ANY ANNOYANCE OR INCONVENIENCE WHICH MAY RESULT FROM SUCH NORMAL AGRICULTURAL USES AND ACTIVITIES.
- MAINTENANCE OF THE MULTI-USE PATH SHALL BE THE RESPONSIBILITY OF THE DEVELOPER, THE PROPERTY OWNERS WITHIN THIS SUBDIVISION OR BOTH. THE STATE ASSUMES NO RESPONSIBILITY FOR THE FUTURE MAINTENANCE OF THE MULTI-USE PATH. ARTESIAN RESOURCES AND ITS SUBSIDIARIES HEREBY HAS ACCESS TO MAINTAIN FACILITIES WITHIN THE MULTI-USE PATH.
- BLANKET EASEMENTS WITHIN ALL PRIVATE RIGHT-OF-WAYS TO BE DEDICATED TO ARTESIAN RESOURCES FOR THE MAINTENANCE AND INSPECTION OF ALL INSTALLED UTILITIES.
- A 20' WIDE EASEMENT, 10' ON EITHER SIDE OF CENTERLINE OF PIPE, IS HEREBY CREATED WHERE A SANITARY SEWER OR WATER LINE EXISTS THE LIMITS OF THE PRIVATE RIGHT-OF-WAY.
- ALL SUBDIVISION LOTS SHALL HAVE TEN-FOOT-WIDE EASEMENTS ALONG ALL LOT LINES FOR A TOTAL OF AT LEAST TWENTY (20) FEET ALONG A LOT LINE COMMON TO TWO LOTS FOR THE PLACEMENT AND PERPETUAL MAINTENANCE OF ANY UTILITY.
- THE INTERIOR STREET DESIGN SHALL BE IN ACCORDANCE WITH OR EXCEED SUSSEX COUNTY STREET DESIGN REQUIREMENTS. STREET DESIGN SHALL INCLUDE: 1. STREET LIGHTS (AS SHOWN ON THE CONSTRUCTION PLANS) AND STREET LIGHTS.
- STREET LIGHTS SHALL BE PROVIDED WITHIN THE SUBDIVISION, THE EXACT LOCATIONS WILL BE DETERMINED BY THE ELECTRICAL SUPPLIER.

ROADWAY IMPROVEMENT NOTES

- THE OWNER AND/OR DEVELOPER OF COOL SPRING MEADOWS SHALL BE RESPONSIBLE FOR MAKING THE FOLLOWING OFF-SITE ROADWAY IMPROVEMENTS:
 - SUSSEX COUNTY ROAD 280 (STOCKLEY ROAD) SHALL BE IMPROVED TO HAVE AN OVERLAY ALONG THE EXISTING PAVEMENT WIDTH BEGINNING AT STATION 0+00 TO STATION 17+00.
 - SUSSEX COUNTY ROAD 280 (STOCKLEY ROAD) SHALL BE IMPROVED TO HAVE 11-FOOT WIDE TRAVEL LANES AND 5-FOOT WIDE SHOULDERS BEGINNING AT STATION 17+00 TO STATION 48+38.49.
 - SUSSEX COUNTY ROAD 290 (COOL SPRING ROAD) SHALL BE IMPROVED TO HAVE AN OVERLAY ALONG THE EXISTING PAVEMENT WIDTH BEGINNING AT STATION 1+28.93 TO STATION 15+50.49.
- UPON THE ISSUANCE OF THE ENTRANCE CONSTRUCTION PERMIT BY THE SOUTH DISTRICT PUBLIC WORKS OFFICE, THE ENTRANCE AND ROADWAY IMPROVEMENTS ALONG SCR 280 AND SCR 290 SHALL BEGIN CONSTRUCTION.
- PRIOR TO THE ISSUANCE OF THE 150th BUILDING PERMIT, THE ENTRANCE AND ROADWAY IMPROVEMENTS ALONG SCR 280 AND SCR 290 SHALL BE COMPLETELY CONSTRUCTED, INSPECTED AND ACCEPTED BY DELDOT. NO ADDITIONAL CERTIFICATE OCCUPANCIES SHALL BE ISSUED UNTIL THE ENTRANCE IMPROVEMENTS ARE COMPLETELY CONSTRUCTED, FINAL INSPECTED AND ACCEPTED BY DELDOT.
- THE OWNER AND/OR DEVELOPER OF COOL SPRING MEADOWS SHALL CONSTRUCT ALL OFF-SITE IMPROVEMENTS, AS PER THE APPROVED ENTRANCE AND ROADWAY CONSTRUCTION PLANS.
- IF ANY PHASE OF THIS DEVELOPMENT IS SOLD, IT SHALL BE THE RESPONSIBILITY OF THE NEW OWNER/DEVELOPER TO MAKE AND/OR COMPLETE THE NECESSARY IMPROVEMENTS ASSOCIATED WITH THIS DEVELOPMENT, AS OUTLINED IN THE FINAL ITS AND AS NOTED ON THE RECORD PLAN.



SITE DATA and ZONING SCHEDULE

EXISTING SITE USE:	PROPOSED SITE USE:	ZONING DISTRICT:	AGRICULTURAL FIELDS AND WOODLANDS	228-LOT, SINGLE-FAMILY DWELLING CLUSTER SUBDIVISION	AR-1, AGRICULTURAL/RESIDENTIAL
ORDINANCE ITEM	REQUIREMENT:	PROVIDED:			
MINIMUM LOT AREA	7,500 Sq. Ft.	10,168 Sq. Ft. (MIN.)			
MINIMUM LOT WIDTH	60 FL.	80 FL.			
MINIMUM LOT DEPTH	100 FL.	130 FL.			
MINIMUM SETBACKS:					
FRONT	25 FL.	25 FL.			
SIDE	10 FL.	10 FL.			
REAR	10 FL.	10 FL.			
MAXIMUM BUILDING HEIGHT	3 Stories (42 Ft.)	3 Stories (42 Ft.)			
SEWER SERVICE	CENTRAL	CENTRAL (PRIVATE)			
WATER SERVICE	WELL (MIN.)	CENTRAL (PRIVATE)			

GROSS PROPERTY AREA:	215.23 ACRES
LOT / R.O.W. AREA:	81.27 ACRES
WETLAND AREA:	21.98 ACRES
R.O.W. DEDICATION AREA:	4.31 ACRES
OPEN SPACE AREA:	107.67 ACRES (NON-INCLUSIVE OF WETLANDS)
OPEN SPACE %:	50 (NON-INCLUSIVE OF WETLANDS)

TRAFFIC FLOW SCHEMATIC DELAWARE ROUTE 290 ENTRANCE

DE RT 290 SPEED LIMIT = 50 MPH
ENTRANCE ADT = 1,086*
HIGHWAY AADT (2006) = 382
REQUIRED CLEAR ZONE = 30' EACH SIDE
CLASS "C" ENTRANCE

* ENTRANCE ADT IS TAKEN FROM ORTH-RODGERS ASSOCIATES, INC., AMENDED TRAFFIC IMPACT STUDY ANALYSIS, DATED MAY 23, 2007

TRAFFIC FLOW SCHEMATIC DELAWARE ROUTE 280 ENTRANCE

DE RT 280 SPEED LIMIT = 50 MPH
ENTRANCE ADT = 1,178*
HIGHWAY AADT (2006) = 724
REQUIRED CLEAR ZONE = 30' EACH SIDE
CLASS "C" ENTRANCE

* ENTRANCE ADT IS TAKEN FROM ORTH-RODGERS ASSOCIATES, INC., AMENDED TRAFFIC IMPACT STUDY ANALYSIS, DATED MAY 23, 2007

RECOMMENDED FOR APPROVAL BY THE PLANNING COMMISSION OF SUSSEX COUNTY
ON THIS 16 DAY OF Dec 2012.

SECRETARY (ATTEST) *Shane Albright*

RECOMMENDED FOR APPROVAL BY THE SUSSEX COUNTY COUNCIL
ON THIS 17 DAY OF Dec 2012.

PRESIDENT *Michael A. [Signature]*

OWNER CERTIFICATE

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

mbar 10/24/12
DATE

FUSCO PROPERTIES
P.O. BOX 668
200 AIRPORT ROAD
NEW CASTLE, DE 19720
Phone: 302.328.6251
Fax: 302.328.6332

WETLANDS CERTIFICATION

THIS PROPERTY HAS BEEN EXAMINED BY LAUREL OAK LAND CONSULTING, LLC FOR THE PRESENCE OF WATERS OF THE UNITED STATES INCLUDING WETLANDS (SECTION 404 AND SECTION 101), STATE SUBSIDIOUS LANDS AND STATE TRIM WETLANDS BASED ON THE CRITERIA SET FORTH BY THE REVIEWING AGENCIES IN THE FORM OF MANUALS, POLICIES AND PROCEDURES. THE INVESTIGATION WAS CONDUCTED IN ACCORDANCE WITH THE ABOVE RESOURCES THAT WERE FOUND ON THE PROPERTY ARE CLEARLY MAPPED ON THIS PLAN IN ACCORDANCE WITH OUR FIELD INVESTIGATIONS AND DETAILED IN REPORTS BY LAUREL OAK LAND CONSULTING, LLC USING THEIR BEST PROFESSIONAL JUDGEMENT.

Shane Albright 10/24/12
DATE

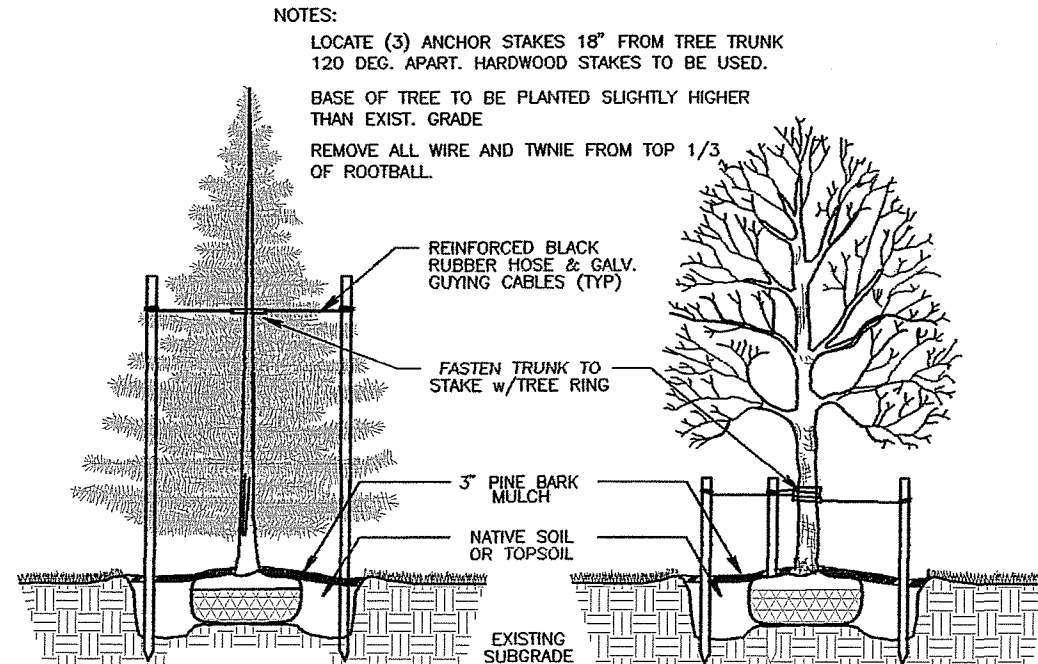
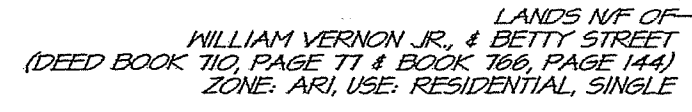
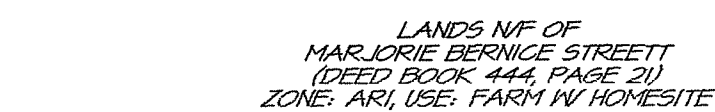
BRUCE B. BAGLEY, MS, CPESC, OAG, CCA
LAUREL OAK LAND CONSULTING, LLC
P.O. BOX 295
SUDERSVILLE, MD 21688-0295
410.708.3854 PHONE

NO.	DATE	DESCRIPTION	K.T.S.
2	10/15/12	REVISIONS PER SIDEWALK CONDITION UPDATE	K.T.S.
1	07/20/12	REVISIONS PER PAZ COMMENTS	K.T.S.
			BY:



SEMI	LENGTH	BEARING
L19	85.71°	S19° 31' 12"E
L20	31.22°	S30° 11' 35"E
L21	50.13°	S30° 25' 33"E
L22	50.13°	S5° 25' 29"E
L23	51.25°	S39° 00' 57"E
L24	29.82°	N88° 01' 00"E
L25	31.10°	N7° 15' 51"E
L26	35.37°	S47° 12' 27"E
L27	42.38°	S58° 38' 38"E
L28	46.56°	S68° 58' 58"E
L29	54.66°	S76° 34' 33"E
L30	62.21°	S64° 02' 42"E
L31	33.11°	S3° 31' 11"E
L32	47.05°	S75° 58' 29"E
L33	96.31°	S66° 04' 59"E
L34	72.05°	S77° 05' 55"E
L35	59.61°	N68° 54' 01"E
L36	24.82°	S30° 35' 09"E
L37	50.13°	S30° 25' 33"E
L38	35.64°	S3° 36' 36"E
L39	50.66°	S40° 10' 07"E
L40	54.16°	N56° 20' 38"E
L41	41.72°	N7° 15' 51"E
L42	68.99°	S85° 27' 35"E
L43	37.35°	N32° 26' 23"E
L44	48.96°	N55° 03' 22"E
L45	93.75°	S85° 03' 20"E
L46	102.76°	N89° 11' 30"E
L47	63.47°	S68° 04' 59"E
L48	50.96°	N83° 13' 20"E
L49	50.61°	S84° 26' 47"E
L50	69.33°	S76° 03' 22"E
L51	67.92°	S67° 16' 43"E
L52	99.58°	N27° 02' 49"E
L53	66.93°	S51° 09' 02"E
L54	46.31°	S31° 09' 02"E
L55	87.82°	S26° 34' 09"E
L56	43.63°	N40° 53' 09"E
L57	40.49°	N29° 05' 29"E
L58	126.80°	N36° 22' 35"W
L59	42.69°	S84° 34' 23"E
L60	48.49°	S84° 34' 23"E
L61	48.06°	S39° 45' 29"E
L62	30.81°	S58° 58' 05"W
L63	49.66°	S27° 56' 38"E
L64	36.92°	S38° 40' 00"E
L65	23.97°	S43° 23' 23"E
L66	74.23°	N70° 42' 22"E
L67	60.23°	S46° 09' 23"E
L68	28.34°	N78° 51' 56"E
L69	38.14°	S64° 34' 33"E
L70	80.93°	S70° 08' 18"W
L71	81.54°	N89° 19' 53"W
L72	13.72°	N8° 18' 51"E
L73	88.42°	N80° 52' 55"E
L74	110.58°	S42° 02' 08"W
L75	76.88°	S78° 42' 28"E
L76	76.88°	S78° 42' 28"E
L77	80.77°	S63° 38' 40"W
L78	76.28°	S47° 12' 27"E
L79	46.35°	S41° 15' 51"E
L80	66.23°	S66° 30' 23"E
L81	94.20°	N57° 49' 23"W
L82	118.47°	N57° 49' 23"W
L83	92.40°	N88° 52' 21"W
L84	64.67°	N88° 52' 21"W
L85	64.67°	N88° 52' 21"W
L86	81.00°	N89° 05' 43"W
L87	43.77°	N88° 58' 43"W
L88	67.92°	N67° 16' 43"E
L89	19.80°	N71° 30' 16"W
L90	29.10°	N57° 38' 56"W
L91	30.81°	S64° 34' 33"E
L92	29.82°	S65° 11' 12"W
L93	29.82°	S65° 11' 12"W
L94	26.98°	S74° 26' 42"E
L95	67.02°	S74° 26' 42"E
L96	82.02°	N89° 08' 08"E
L97	14.58°	N76° 04' 08"E
L98	295.12°	S68° 29' 21"E
L99	21.48°	S89° 29' 45"W
L100	40.81°	S89° 29' 45"W
L101	80.28°	S89° 29' 45"W
L102	58.35°	N89° 07' 01"E
L103	62.73°	S89° 26' 24"W
L104	55.81°	N89° 19' 53"W
L105	64.67°	N88° 52' 21"E
L106	11.50°	S83° 15' 07"W
L107	4.00°	S0° 43' 36"E
L108	11.46°	S80° 16' 43"E
L109	64.85°	S89° 35' 03"E
L110	55.96°	S87° 16' 20"E
L111	63.67°	S87° 16' 20"E
L112	38.68°	S89° 36' 36"E
L113	74.86°	S88° 55' 16"E
L114	44.89°	S87° 08' 34"E
L115	80.18°	S88° 23' 48"E
L116	82.56°	S88° 23' 48"E
L117	58.84°	S88° 23' 48"E
L118	18.93°	S43° 03' 36"E
L119	76.20°	S11° 14' 32"E
L120	74.88°	S4° 04' 08"E
L121	59.77°	S5° 25' 33"E
L122	51.73°	S5° 25' 33"E
L123	37.42°	S12° 23' 15"E
L124	40.49°	S13° 23' 15"E
L125	49.67°	S21° 42' 43"E
L126	50.07°	N11° 26' 02"E
L127	48.30°	N26° 11' 23"E
L128	144.35°	N14° 27' 30"E
L129	55.09°	S32° 48' 24"E
L130	65.05°	S68° 14' 05"E
L131	121.31°	S48° 17' 05"E
L132	93.57°	N87° 07' 05"E
L133	59.89°	S42° 49' 48"E
L134	161.77°	S87° 16' 43"E
L135	104.45°	S64° 59' 37"E
L136	77.45°	S55° 57' 58"E
L137	55.37°	S8° 15' 07"E
L138	91.28°	N1° 35' 17"E
L139	74.73°	S27° 00' 43"E
L140	56.66°	S68° 04' 59"E
L141	14.04°	N68° 36' 36"E
L142	12.21°	S7° 18' 44"E
L143	136.76°	S76° 03' 22"E
L144	259.35°	S86° 25' 32"E
L145	59.69°	S83° 25' 53"E
L146	96.48°	N74° 35' 03"E
L147	105.87°	N25° 25' 12"E
L148	57.47°	N8° 28' 11"W
L149	18.75°	S66° 24' 01"W
L150	115.97°	S60° 16' 43"E
L151	100.96°	N64° 55' 00"W
L152	76.75°	N76° 08° 39"W
L153	76.13°	N81° 15' 07"E
L154	106.22°	S85° 05' 49"W
L155	105.37°	S89° 09' 25"W
L156	76.13°	N81° 15' 07"E
L157	24.46°	N14° 15' 28"E
L158	70.10°	N81° 35' 26"E
L159	26.59°	N30° 44' 54"W
L160	58.69°	S78° 29' 45"E
L161	81.94°	N17° 21' 25"E
L162	88.96°	N26° 31' 47"W
L163	99.63°	N11° 11' 47"E
L164	53.67°	N22° 44' 25"E
L165	69.51°	N87° 45' 25"E
L166	102.56°	S84° 26' 47"E
L167	52.33°	S69° 32' 39"E
L168	64.91°	N70° 30' 09"E
L169	90.69°	S36° 16' 43"E
L170	52.87°	S79° 15' 41"E
L171	49.81°	N64° 06° 38"E
L172	68.72°	S86° 16' 43"E
L173	99.79°	S79° 35' 35"E

SEGMENT	LENGTH	RADIUS
P.C1	160.15'	6525.00'
P.C2	99.86'	1800.00'

SEGMENT	LENGTH	RADIUS
E.C1	158.96'	6475.00'
E.C2	101.25'	1825.00'



TREE PLANTING DETAIL
Not To Scale

PLANTING SCHEDULE						
PLAN SYMBOL	QUANTITY	BOTANICAL NAME*	COMMON NAME*	MINIMUM PLANTING HEIGHT	PLANTING SPREAD	REMARKS
EVERGREEN TREES						
	24 (CA)	*TREES TO BE GIANT ARBORVITAE AND DOUGLAS FIR (OR SIMILAR, NATIVE EVERGREEN SPECIES) THE DEVELOPER SHALL DETERMINE WHAT SPECIES IS TO BE USED AND PROVIDE THAT INFORMATION TO THE SUSSEX COUNTY PLANNING AND ZONING DEPARTMENT PRIOR TO ANY PLANTING ACTIVITY. ALTERNATING SPECIES/TYPE (EVERGREEN/DECIDUOUS) RECOMMENDED.			4'	14.25'
	23 (DF)					
	TOTAL:47					
DECIDUOUS TREES						
	35 (RM)	*TREES TO BE RED MAPLE, FLOWERING PEAR, AND WHITE ASH (OR SIMILAR, NATIVE DECIDUOUS SPECIES) THE DEVELOPER SHALL DETERMINE WHAT SPECIES IS TO BE USED AND PROVIDE THAT INFORMATION TO THE SUSSEX COUNTY PLANNING AND ZONING DEPARTMENT PRIOR TO ANY PLANTING ACTIVITY. ALTERNATING SPECIES/TYPE (EVERGREEN/DECIDUOUS) RECOMMENDED.			4'	14.25'
	15 (TP)					
	TOTAL:105					



REVISIONS		K.T.S.	
No.	DATE	DESCRIPTION	K.T.S.
2	10/15/12	REVISIONS PER DEPARTMENT OF AGRICULTURE COMMENTS	K.T.S.
1	01/30/12	REVISIONS PER PAZ COMMENTS	K.T.S.
			BY

[illegible]

OWNERS/APPLICANT: **FUSCO PROPERTIES**
 600 S. 80th Ave.
 HENRIETTA, NY 14750
 Tel: 585-368-3332 Fax: 585-368-3332

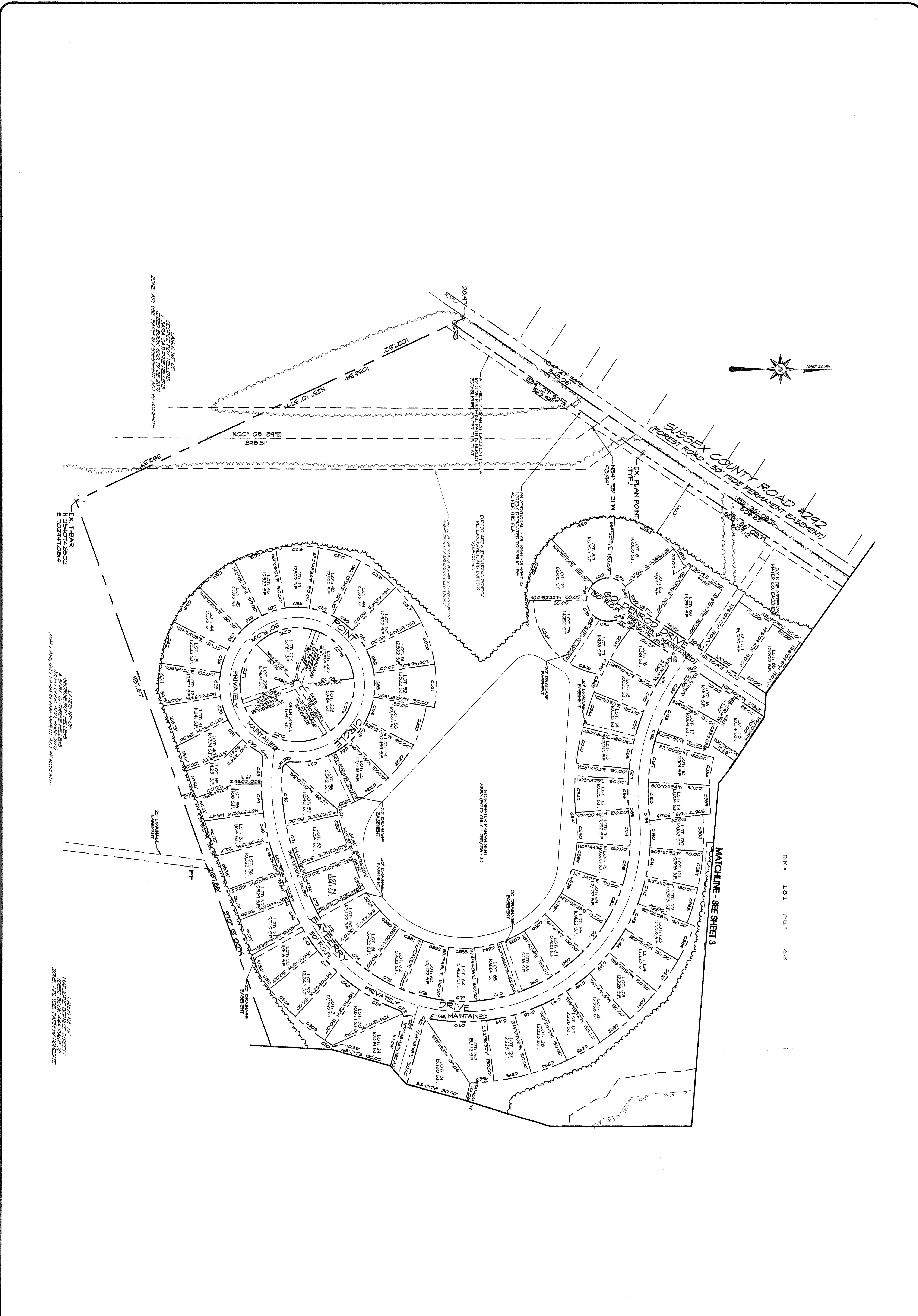
T.P.: 2-34-5, PARCELS 30 & 33
 GROSS ACREAGE: 21.333 Acres
 NET ACREAGE: 21.038 Acres

PARCEL INFORMATION:

RECORD PLAN
COOL SPRING MEADOWS
 INDIAN RIVER HUNDRED - SUSSEX COUNTY - DELAWARE

KERCHER ENGINEERING, INC.
ENGINEERS • PLANNERS • SURVEYORS
 415 EAST MARKET STREET
 GEORGETOWN, DELAWARE 19847
 302.651.5592 (PHONE) 302.651.5594 (FAX) www.kercherinc.com

JOB NO: 07-0307EG
 DATE: April 5, 2007
 SHEET NO. OF: 2



JOB NO. 07-030783 PLAN DATE: Apr. 5, 2007	SHEET NO.: 4	OWNER/APPLICANT: FUSCO PROPERTIES P.O. BOX 685 200 AIRPORT ROAD NEW CASTLE, DE 19720 Phone: 302.328.6551 Fax: 302.328.6332	APPROVED BY: A.S.K.	DESIGNED BY: J.O.M.	DRAWN BY: J.O.M.	LAYER LIST: B-02R4	REVISIONS 1 01/30/12 REVISIONS PER P&Z COMMENTS No. DATE: DESCRIPTION: BY:
RECORD PLAN COOL SPRING MEADOWS INDIAN RIVER HUNDRED - SUSSEX COUNTY - DELAWARE		PARCEL INFORMATION: T.P.: 2-34-5, PARCELS 30 & 33 GROSS AREA: 215.83 Acres ROW DED.: 4.31 Acres NET AREA: 210.92 Acres	SCALE IN FEET (1" = 100') 100' 0' 100' 200'		ONLY PLANS INCORPORATING A RAISED PROFESSIONAL SEAL ARE CONSIDERED TO BE OFFICIAL AND RELIED UPON BY THE USER. THIS PLAN HAS BEEN PREPARED SPECIFICALLY FOR THE CLIENT AND PROJECT DESCRIBED HEREON. ANY MODIFICATION, REVISION, DUPLICATION OR USE WITHOUT WRITTEN CONSENT OF KERCHER ENGINEERS, INC. IS PROHIBITED BY LAW. © COPYRIGHT 2012 KERCHER ENGINEERING, INC. ALL RIGHTS RESERVED.		JEFFREY C. WILSON PROFESSIONAL ENGINEER No. 13828 STATE OF DELAWARE
KERCHER ENGINEERING, INC. ENGINEERS • PLANNERS • SURVEYORS 413 EAST MARKET STREET - GEORGETOWN, DELAWARE 19347 302.854-9062 (Voice) 302.854-9064 (Fax) www.kercher.com							

TAB “12”



